

City of Imperial Beach General Plan/Local Coastal Program Land Use Plan

Final Draft- Revised

September ~~30~~March 25, 2019



This page intentionally left blank.

CONTENTS

1.0	Introduction	I-1
1.1	The General Plan/Local Coastal Plan	I-2
1.2	General Plan Format	I-2
1.3	Regional Setting	I-2
1.4	History	I-3
1.5	Characteristics of the City of Imperial Beach	I-5
	Physical Characteristics	I-5
	Focus of the General Plan Update.....	I-8
2.0	Land Use Element	L-1
	Goals	L-1
	Background	L-1
2.1	Land Use Framework	L-2
2.2	Sustainable Development	L-9
2.3	Residential Uses and Neighborhoods	L-10
2.4	Commercial and Mixed-Use Areas	L-11
2.5	Coastal Priority and Visitor-Serving Commercial Uses.....	L-14
2.6	Airport Land Use Compatibility and Military Coordination	L-15
2.7	Environmental Justice and Healthy Communities	L-16
3.0	Mobility Element	
	Under Separate Cover	
4.0	Conservation and Ecotourism	CE-1
	Goals	CE-1
	Background	CE-1
	California Coastal Act	CE-2
4.1	Climate Change	CE-3
4.2	Urban Forestry	CE-6
4.3	Biological Resources	CE-7
4.4	Water Quality	CE-14
4.5	Air Quality.....	CE-17
4.6	Cultural Resources/Tribal Cultural Resources	CE-18
4.7	Ecotourism.....	CE-19
5.0	Parks, Recreation, and Coastal Access Element	P-1
	Goals	P-1
	Background	P-1
	Looking Forward: Recreational Needs Assessment.....	P-1
	Coastal Act Policies	P-4
5.1	Parks and Recreation	P-6
5.2	Public Coastal Access	P-8
6.0	Facilities and Services Element	F-1
	Goals	F-1
	Background	F-1
	Coastal Act	F-1
6.1	Capital Improvement Planning and Financing	F-2
6.2	Fire and Emergency Services.....	F-3

6.3	Law Enforcement.....	F-3
6.4	Public Rights-of-Way	F-4
6.5	Schools	F-6
6.6	Solid Waste Disposal.....	F-7
6.7	Wastewater Services.....	F-7
6.8	Water Supply and Conservation	F-8

7.0 Safety Element **S-1**

	Goals	S-1
	Background	S-1
	Coastal Act	S-3
7.1	Sea Level Rise Monitoring, Planning, and Adaptation	S-3
7.2	Fire Hazards.....	S-15
7.3	Geological and Seismic Hazards.....	S-17
7.4	Disaster Preparedness.....	S-24

8.0 Design Element **D-1**

	Goals	D-1
	Background	D-1
	Coastal Act Policies	D-3
8.1	Community Design Character	D-4
8.2	Public Realm and Public Facilities.....	D-9
8.3	Sustainable Coastal Development Design	D-12

List of Abbreviations **1**

Housing Element

Under Separate Cover

Noise Element

Under Separate Cover



LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
Figure L-1 Land Use Map.....	L-4
Figure L-2 Land Use with the San Diego Unified Port District.....	L-6
Figure CE-1 Tijuana River National Estuarine Research Reserve.....	P-12
Figure P-1 Park and Recreation Facilities.....	P-3
Figure P-2 Quarter-Mile Walking Distance from City Schools and Parks.....	P-5
Figure P-3 Vertical and Lateral Coastal Access.....	P-10
Figure S-1A 100-Year Flood Plain.....	S-7
Figure S-1B 100-Year Flood Plain Zoon to San Diego Unified Port District Jurisdiction.....	S-8
Figure S-2 Geology.....	S-19
Figure S-3 Soils.....	S-23
Figure D-1 Coastal View Corridors.....	D-6
Figure D-2 Neighborhoods and Functional Areas.....	D-7

LIST OF TABLES

<u>Table</u>	<u>Page</u>
Table L-1 Imperial Beach Land Use Designations by Acreage.....	L-2
Table L-2 Land Use Designations.....	L-8
Table L-3 Issues Related to Health and Environmental Justice in the General Plan.....	18
Table CE-1 Issues Related to Climate Change in the General Plan.....	CE-4
Table P-1 City Parks, Beaches and Schools by Acreage.....	P-2
Table P-2 Vertical and Lateral Public Coastal Access.....	P-11
Table F-1 Imperial Beach School Data, 2016-2017.....	F-6

This page intentionally left blank.

1.0 Introduction

It is highly prized, that edge of California where the earth confronts the sea.

Paul Sedway

Imperial Beach is a community comprised of rich contrasts; it is loved by residents for its small town, classic California character, and is located in the heart of the San Diego/Tijuana metropolitan region – a bi-national metropolis. It is known for its quaint, human-scaled waterfront, while also offering sweeping views of the Pacific Ocean, San Diego Bay and Mexico. Imperial Beach is home to beautiful sandy beaches and the internationally acclaimed Tijuana River Estuary wetlands, yet is fiscally challenged to provide the matching world class services needed to ensure that the public can continue to enjoy these priceless resources. Roughly half of the City is developed, and half is set aside for open space and military uses. Imperial Beach is a small city measured in acreage and population, yet has a reach beyond its size as it has taken a leadership role in regional open space preservation and in its stance that all levels of government and industry need to be accountable to protect environmental quality.

This General Plan celebrates these seemingly contrasting characteristics as assets upon which to further implement the City’s longstanding “big picture” vision to maintain the City’s “small-town, quiet, casual atmosphere,” while also increasing tourism and appropriate levels of development to create greater economic stability. Accordingly, the General Plan provides guidance to leverage the City’s natural assets to achieve a more resilient and sustainable future. The plan also establishes a complete streets policy, includes a pragmatic methodology and slate of climate change policies, and integrates healthy communities policies throughout the plan.

Imperial Beach’s unique geography, surrounded on three sides by water and positioned as the most southwesterly city in the continental United States, is fundamental to its identity and key to understanding its challenges and opportunities. The City’s most important natural attributes are its beaches and open spaces, which are highly valued by residents and visitors, and contribute to the City’s economy. Imperial Beach functions as the south San Diego County beach destination, with estimates for beach attendance generally exceeding over 400,000 visitors per year and generating \$2.5 million in revenue per year. Additional visitors come to enjoy the rich wildlife and natural scenery of the Tijuana River Estuary and the San Diego Bay. Beach-goers and ecotourists frequenting local hotels, restaurants and other local businesses represent an important part of the City’s current and planned tax and economic base.

These same attributes also present the City with growing environmental and economic challenges. It is widely known that the most significant source of bacteria impacting ocean and estuary water quality in Imperial Beach is the frequent input of sewage-contaminated flows from Mexico, and from the Tijuana River and surrounding canyons in Mexico. This pollution results in negative impacts to the City’s beaches, public health and tourism. Sea level rise presents additional risks that Imperial Beach, like other coastal California cities, must plan for to reduce future damage, and more readily recover from impacts that may be unavoidable. It takes substantial fiscal resources to provide adequate everyday public health, safety and public access services and amenities to the City’s residents and sizable visitor population. Significant additional resources are needed to address the supplemental expenses related to regional sea level rise impacts, binational pollution, and reducing greenhouse gas emissions from vehicle miles traveled. These issues of regional, state-wide and international significance require a systems approach to solutions and funding commitments from all levels of government and the private sector.

The Imperial Beach General Plan supports a systems approach to many of the complex challenges facing the City. This refers to an approach that recognizes the interrelationships among environmental, economic and community-building strategies, and integrates actions of all levels of government as well as the private sector.

1.1 The General Plan/Local Coastal Plan

The Imperial Beach General Plan/Local Coastal Plan is the City's constitution for physical development and change within the city. Statewide, general plans are a legal mandate that governs both private and public actions. General plans are atop the hierarchy of local government law regulating land use. Subordinate to the general plan are specific plans, ordinances and zoning laws. All of the subordinate documents must conform to the adopted general plan.

State law requires every California city to adopt a general plan that contains seven mandatory topics called "elements," but are given flexibility in how elements are named and organized. The Imperial Beach General Plan Land Use, Mobility, Conservation and Ecotourism, Housing, Land Use, Noise, Open Space and Safety elements are mandatory elements. Cities may also adopt other optional elements. Imperial Beach has added Design; Facilities and Services; and Parks, Recreation and Coastal Access as optional elements. All elements carry equal weight and are designed to be consistent with each other. The Housing Element (updated in 2013) and Noise Element were not included in the General Plan/Local Coastal Plan Update of 2019, and are provided under separate cover.

Eighty seven percent of Imperial Beach lies within the Coastal Zone. The Coastal Act of 1976 requires the City to have a Local Coastal Program certified by the State Coastal Commission. This plan is a combined document meeting both the state general plan requirements and coastal plan requirements.

Imperial Beach's Planning Legacy - The "Big Picture" is a vision document prepared in 2000 that set forth the following goals:

- 🏛️ Maintain the small-town, quiet, casual atmosphere
- 🏛️ Create economic stability – sustainability
- 🏛️ Increase tourism while avoiding over-crowding
- 🏛️ Pursue appropriate development opportunities
- 🏛️ Pursue all available funding mechanisms to support the City
- 🏛️ Resolve conflict between the overall objective of maintaining a "small town, quiet atmosphere" and the need/desire for new development

1.2 General Plan Format

The Plan is divided into the elements (chapters) described above. The pages, tables and figures of each topic are numbered to correspond to that specific topic.

Each element starts with "Goals" that express a desired end state, followed by a brief "Background" section that describes the legal framework for each element and how it relates to Imperial Beach's unique attributes. Subtopics within each element are introduced with a "Discussion" section that provides context for the policies that follow.

Policies in each section are written as concise, action-oriented statements that establish explicit directives for both public and private actions aimed at preserving and creating a desirable Imperial Beach. Overall, the General Plan's goals and policies work together to help secure Imperial Beach's future.

1.3 Regional Setting

Imperial Beach is one of 18 incorporated cities located within San Diego County. It is bordered on the north by a U.S. Naval Communication Station within the City of Coronado's jurisdiction and the southern shore of San Diego Bay, on the east by the City of San Diego, on the south by the U.S./Mexican border, and on the west by the Pacific Ocean.

1.4 History

The first settlers came to the area known as Imperial Beach in the 1880s. The first subdivision was filed in 1887. Early subdivisions were intended to create a summer retreat beach resort for the residents of the warmer Imperial Valley, hence the name Imperial Beach. The pattern of development followed by the Southern California land promoters was common: (1) A subdivision (2) a hotel or some other attraction at the subdivision site (3) a gigantic land auction (4) the actual building of a community. Step four was the hardest to accomplish.

The first school was built in 1888 at Tenth Street and Elm. In 1920, the first school district was formed when the voters approved a bond issue to purchase the ten-acre site near 19th Street and Coronado.



The original use of the military owned land north of Imperial Beach, in 1880, was for a cavalry troop. The troop provided security along the International Border. On Sunday afternoons, the troop paraded for the entertainment of the residents of Imperial Beach. The old parade ground currently serves the youth of Imperial Beach under the jurisdiction of the YMCA.

In the early 1900s came improvement of the wooden sidewalks, a post office, general store, and dance pavilion and adjoining café. The original pier was built in 1909, at the foot of Donax Street to generate electricity for the town from wave action. Since it proved to be inadequate, the machinery was dismantled. The pier remained active, attracting large crowds until it was totally destroyed in a 1948 storm. In 1961, a fact finding committee made up of local citizens submitted to the Imperial Beach City Council a report recommending the construction a new fishing pier. In April 1962, the people of Imperial Beach overwhelmingly approved a bond issue of \$300,000 for construction of a fishing pier. A matching funds grant from State Wildlife Conservation Board added further impetus to the project, which was built at its present site at the foot of Evergreen Avenue.

In 1910, E.S. Babcock (builder of the Hotel del Coronado) dredged a channel down the Bay to what is now the north end of Tenth Street. Boats carrying up to 50 passengers made 3-4 trips per day from Market Street in San Diego. A tram met the boats and took the passengers down Palm Avenue to First Street, and back to the landing for their return trip to San Diego. In 1916, a heavy storm washed out the Otay Dam and the resulting flood caused the channel to fill with silt. The channel was never reopened.

The first subdivision called South San Diego encompassed most of the area between 5th Street to 13th Street, north of Palm Avenue and between 9th and 13th Street, south of Palm Avenue. From the southern shore of San Diego Bay, 13th Street ran

south for one mile and on into Oneonta. A branch line of the National City and Otay Railroad ran 300 or 400 feet west and parallel to 13th Street.

Imperial Beach was growing very slowly. Water was a problem and electricity was used only for lighting and ironing. Kerosene was used for heating and cooking, and sometimes, for lamps.

Cottages on the beach were used mainly for summer homes, with toilet facilities outside or adjoining the buildings as additions. One historian says that Jean Stratton Porter, author of "Girl of the Limberlost," used to spend summers at her uncle's cottage in the 200 block of Elm Avenue.

South San Diego, now known as Imperial Beach, bore the full brunt of the land boom and the eventual bust. The boom in South San Diego has been memorialized in a legend about a naive land buyer who purchased a lot for \$5,000. The next day, after examining his \$5,000 purchase he surmised that he had been cheated. While he was pondering his problem, he was approached by two strangers who asked if his property was for sale. The worried but puzzled land owner took a deep breath and blurted, "Yes, the price is \$12,000." Without batting an eyelash, one of the strangers agreed to purchase the property and handed over the cash on the spot. The former landowner thought it over and reasoned that he overcharged the stranger. The next day, he sought out the new owner of the property and offered to repurchase the land for \$12,000. "Too late," replied the stranger, "I sold it yesterday for \$16,000."

Although this may be just an entertaining tall tale, the fact remains that during the land boom in the South Bay area, fortunes were made. And at the end of the boom, many were lost.

The real estate picture in the south San Diego Bay area was grim at the end of the land boom. It was even more grim following the disastrous floods of 1916 when the Tijuana River overflowed and the Otay Dam broke, washing away everything in its path. This destroyed the railroad system and it was never completely rebuilt. There were no good highways in the area. The main highway through Palm City was not paved until the 1930s.

During the 1930s, the Michigan Investment Company was busy moving houses into Imperial Beach from Tent City Coronado. In 1976 there were multiple Tent City cottages still remaining in Imperial Beach. By putting two of these "shotgun" buildings on a lot and building between them and adding on, a fair-sized building could be constructed. The ones in use today have been remodeled more than one time.

In the latter part of the 30s, the area began to grow, largely due to government defense programs in and around San Diego. Many people came from Oklahoma, Texas and Colorado as well as other states, with hopes of working on these projects. Houses were at a premium, rising beyond what poor people could pay. People lived in tents, trailers and shacks-anything for a cover until they could better themselves. Some were said to have built homes or shacks of airplane packing crates. Building regulations didn't exist in the unincorporated part of the county.

The Depression and prohibition were both in full force but you could get bootleg whiskey at the old hotel on the beach. One area along Palm Avenue was known as Whiskey Flats and featured gambling, too, until a series of raids stopped them.

Ream Field, the Amphibious Base and the Imperial Beach Radio Station were built. Most people who had come here decided to stay after WWII and make their homes in the South Bay area.

Prior to incorporation, Imperial Beach was served by a number of civic organizations under the direction of the County of San Diego. The Imperial Beach Civic Group, formed in 1945, was instrumental in forming a Fire Protection District and acquiring a fire truck. It was at this time that many of the streets were renamed in order to facilitate directing the fire truck to fires in the area. The Sanitary District was formed in 1949 to secure County funds for development and attract private capital.

In the early 1950s, the first shopping center was built on the south side of Palm Avenue between Ninth Street and Delaware Avenue. By June 1955, a wide variety of businesses had moved into Imperial Beach.

Imperial Beach was incorporated as a General Law City on July 18, 1956. The first council was sworn into office on July 20, 1956 on the grounds of Coronado Savings and Loan Association (now the site of North Island Federal Credit Union) and its first meetings in the boardroom of the Association.

The boardroom soon proved to be too small to handle the large attendance at the council meetings. The Imperial Beach Fire Protection District had recently constructed new quarters next door to the old fire station so the council contracted for the use of the old building at 166 Palm Avenue, which after some remodeling became the first official City Hall.

The groundwork for the present Civic Center was laid on 1958. In January 1963, the City was awarded a matching funds grant for the construction of a new Civic Center and construction began with a groundbreaking on March 22, 1963.

1.5 Characteristics of the City of Imperial Beach

Physical Characteristics

The City of Imperial Beach has the distinction as the most southwesterly community in the continental United States and covers 4.4 square miles. The City is bordered by the City of Tijuana to the south, San Diego Bay and City of Coronado to the north, and City of San Diego to the east. Open space is the largest land use designation in the city, with 39 percent of the City's acreage consisting of environmentally protected open space habitat in the Tijuana River watershed, and 14 percent consisting of "Urban Reserve," which comprises the U.S. Navy Outlying Landing Field helicopter training facility.

Imperial Beach boasts 3.5 miles of beach frontage and is a well-known beach destination where visitors can walk along miles of shoreline, surf, swim, build sand castles, or enjoy the view from the quarter mile long wooden pier. The beachfront is managed in cooperation with the San Diego Unified Port District (SDUPD).



Imperial Beach boasts 3.5 miles of beach frontage. The beachfront is managed in cooperation with the San Diego Unified Port District.

Imperial Beach is bordered to the north by the South San Diego Bay Unit of the San Diego National Wildlife Refuge (managed by the U.S. Fish and Wildlife Service) and includes the tidally influenced area of the Otay River. The refuge boundary preserves and protects 2,620 acres of important intertidal mudflats, eel grass beds, salt marshes, and submerged tidelands in San Diego Bay. It supports numerous endangered and threatened species of plants and animals and provides vital habitat for tens of thousands of resident and over-wintering waterfowl, seabirds, shorebirds, and an important stop on the Pacific Flyway. Major habitat restoration of the former western salt ponds started in 2010 and is ongoing.

Along the City's southern border is the Tijuana River Valley which contains one of the largest intact coastal wetland systems in Southern California. The valley has contiguous beach, dune, salt marsh, riparian, and upland ecosystems. The lower section of the Tijuana River Watershed encompasses 2,293 acres of the Tijuana River National Estuarine Research Reserve (TRNERR).



The Tijuana River Valley is one of the largest intact coastal wetland systems in Southern California.

The United States Census Bureau has estimated that the City of Imperial Beach has a population of 27,418 (2017 data). The City's General Plan Housing Element, provided under separate cover, provides additional information on population and household characteristics including population growth, age characteristics, racial/ethnic composition, household type and size, and household income. In accordance with state law, the Housing Element is updated on a more frequent cycle than the General Plan as a whole. Accordingly, future updates to the Housing Element will include the most current available demographic data.

The San Diego Association of Governments (SANDAG) is another key resource for demographic and economic data, useful for regional and local planning. [SANDAG's latest demographic "Fast Facts" profile for the City of Imperial Beach is provided as Figure 1-1.](#)



Imperial Beach is a well-known beach destination where visitors can walk along miles of shoreline, surf, swim, build sand castles, or enjoy the view from the quarter mile long wooden pier.

Focus of the General Plan Update

This 2019 update of the General Plan/ Local Coastal Plan is a focused policy update that incorporates components of the plan that was adopted by the City in 1994. The 2019 update focuses on policy changes that have occurred since 1994, including climate change and resiliency, [assessment of sea level rise impacts and adaptation strategies](#), environmental justice, sustainability, housing, community health, economic prosperity, [and multi-modal mobility and sea level rise](#) issues that have become issues of concern at the state, ~~and~~ regional [and local](#) government levels. The updated plan addresses these and other issues in a manner that makes sense for Imperial Beach, and furthers local goals.

Overall the plan works to further implementation of Imperial Beach’s Mission Statement “*To maintain and enhance Imperial Beach as “Classic Southern California”; a beach-oriented community with a safe, small town, family atmosphere, rich in natural and cultural resources.*” It also focuses on working toward achieving the environmental and economic stability needed to build resiliency and retain the community character valued by residents.

Key features of the plan, by element include:

LAND USE ELEMENT

- ⌵ Furthers the “Big Picture” goal of retention and enhancement of a small beach-oriented town, while also advancing focused development and growth of the tourism industry.
- ⌵ Supports sustainable development through providing opportunities for transit-served, mixed-use, infill development with complementary Mobility and Urban Design Element policies.
- ⌵ Establishes the City’s land use framework through the Land Use Map (Figure L-1) and identification of Land Use Designations (Table L-2) that are applied to every parcel in the City.
- ⌵ Continues efforts to enhance the Seacoast Corridor and the Palm Avenue/State Route 75 Commercial/Mixed-Use Corridor.
- ⌵ Encourages creation of an ecotourism/recreation corridor along the Imperial Beach Bayfront.
- ⌵ Continues to maintain Open Space as the City’s predominant land use designation.
- ⌵ Works toward achieving environmental justice and a healthy Imperial Beach community.

MOBILITY ELEMENT

- ⌵ Includes goals, policies and a Street Typology System for “Complete Streets” where the needs of pedestrians, cyclists and transit users as well as vehicles are addressed, and greenhouse gas emissions are reduced.
- ⌵ [Promotes a sustainable transportation hierarchy that enhances public access to the coast and, through its multi-modal approach, increases resiliency to potential sea level rise impacts to infrastructure](#)
- ⌵ Advances active living policies that complement the Land Use Element’s sustainability and healthy community policies.
- ⌵ Recognizes and supports the growing role of innovative technology in meeting current and future mobility needs.
- ⌵ Supports continued collaboration with San Diego Association of Governments (SANDAG) and other agencies to help plan for, operate and monitor the performance of Imperial Beach’s mobility network.
- ⌵ Strives for the provision of a reasonable amount of parking, where and when it is needed to serve residents, businesses and visitors.

CONSERVATION AND ECOTOURISM

- ⌵ Provides policy support for preparation and monitoring of the City’s Climate Action Plan, and guidance on securing greenhouse gas emissions reductions.

- ‡ Calls for an increase in the City’s tree canopy to achieve multiple benefits.
- ‡ Continues the City’s longstanding commitment to preserving and enhancing the San Diego Bay and Tijuana River Estuary for their ecological and open space values.
- ‡ Seeks improvements to water quality which are critical to maintaining the City’s public health, visitor economy and overall quality of life.
- ‡ Highlights the interdependence of the City’s conservation and economic development/ecotourism strategies.
- ‡ Supports expansion of Bayfront visitor-commercial uses in manner that respects and showcases the City’s natural resource amenities.
- ‡ Recognizing new methods such as “blue carbon” for carbon capture.

PARKS, RECREATION AND COASTAL ACCESS

- ‡ Recognizes that Imperial Beach’s coastline, ocean, parks and open space preserves define its character, contribute to a healthy environment, and support the economy.
- ‡ Seeks to serve the public with parks, coastal access and amenities, and recognizes the role of parks in healthy communities.
- ‡ Emphasizes the importance of joint use and coordination with other government agencies to meet current and future park and recreation needs.
- ‡ Identifies coastal access, in accordance with the Coastal Act.
- ‡ Includes strategies to addresses sea level rise access impacts and improve resiliency.

FACILITIES AND SERVICES ELEMENT

- ‡ Provides baseline facilities information.
- ‡ Calls for the timely provision of public facilities.
- ‡ Supports relocation of the Public Works Yard to open up its Bayfront location.
- ‡ Includes goals and policies to consider sea level rise in planning and design, complementary to the Conservation and Ecotourism, and Safety elements.
- ‡ Includes composting and green infrastructure policies, complementary to Conservation and Ecotourism Element climate planning policies.

SAFETY ELEMENT

- ‡ Maintains goals for safety protection and shoreline management.
- ‡ Includes goals and policies for climate change preparedness and increased resiliency, complementary to the Conservation and Ecotourism, and Facilities and Services elements.
- ‡ Recommends sea level rise adaptation strategies organized around a tailored trigger approach that considers environment, economic and social values, and a systems approach to problem solving.
- ‡ Calls for continued collaboration with other government agencies that share responsibility and jurisdiction over Imperial Beach’s shoreline, preserved open spaces and coastal waters.
- ‡ Includes disaster preparedness policies and anticipates an update to the County’s Multi-Jurisdiction Hazard Mitigation Plan.

DESIGN ELEMENT

- ‡ Recognizes the importance of visual quality.
- ‡ Provides guidelines to support the design review function.
- ‡ Provides goals and policies for commercial and mixed use development, and sustainable coastal development, complementary to the Land Use Element.
- ‡ Identifies prominent public coastal views in accordance with Coastal Act.

-
- ‡ Complements the Land Use, Mobility, and Conservation and Ecotourism elements with goals and policies supporting mixed use corridors, transit and walkable design, sustainable development, and urban forestry.

Under separate cover:

HOUSING ELEMENT

- ‡ Provides an assessment of the various constraints to housing development and preservation.
- ‡ Includes an inventory of resources available for meeting the City's existing and projected housing needs.
- ‡ Outlines the City's commitments to providing and preserving housing opportunities in the community.

NOISE ELEMENT

- ‡ Includes noise standards to preserve a livable community.

Imperial Beach's unique character and setting offers a distinctive and desirable home to residents and a destination for visitors. Moving forward, the City is faced with challenges and opportunities to preserve and protect its greatest assets while addressing problems relating to environmental quality, aging infrastructure, sea level rise, and the rising costs of providing municipal services. Through an integrated land use plan and economic development strategy, the City seeks to foster a position of fiscal strength that will enable it to provide services and amenities for current and future generations. However, the City cannot address these complex issues in isolation; these issues must be resolved on a regional, and in some cases, international basis. Successful long-term implementation of the plan will require a systems approach with monitoring by a dedicated citizenry, and ongoing, proactive collaboration at all levels of government and the private sector. The plan as now updated presents a vision of the future for Imperial Beach that is ambitious, and yet, with dedicated civic leadership and community support, both practical and attainable. The plan celebrates and preserves Imperial Beach's natural assets, and leverages them to achieve an environmentally, economically, and socially sustainable future.



Imperial Beach’s unique character and setting offers a distinctive and desirable home to residents and a destination for visitors.

2.0 Land Use Element

Each City differs from every other City in its physical characteristics and in nature of its opportunities, so that the development of every City must be along individual lines. This very fact allows full scope for the development of that peculiar charm which, wherever discovered and developed irresistibly draws to that City people of discrimination and taste, and at the same time begets a spirit of loyalty and satisfaction on the part of the citizens.

Daniel Burnham
The American Plan

Goals

- ‡ Retention and enhancement of the quality of life and atmosphere of a small beach-oriented town characterized by:
 - An inclusive town with a human scale and a relaxed pace of life,
 - Vibrant mixed-use residential and commercial districts, and
 - A built form suitable to the beach-scale and location of the community that supports development of Imperial Beach’s ecotourism potential while avoiding overcrowding
- ‡ Increased climate resiliency, sustainability, and economic prosperity.
- ‡ A city with equitable and healthy communities that treats people of all races, cultures, and incomes with fairness and respect in the activities, development, and regulation of the City
- ‡ A Local Coastal Program integrated with the City’s overall framework for growth and development

Background

The Land Use Element establishes the framework for development of the City, providing for the general distribution, location, and extent of the use of public and private land. This Element focuses on residential, commercial, and mixed use land uses. The Parks, Recreation, and Coastal Access Element addresses land uses related to open space and recreation.

The Element includes both land use maps and text. The policies and maps have been harmonized with all other elements and policies of the General Plan. [For example, the Land Use Element is closely linked to the Mobility Element, which plans for a multi-modal mobility system to support development; the Design Element provides complementary policies on community design character; and the Safety Element describes how sea level rise adaptation affects development design and siting.](#) All elements of the General Plan carry equal weight and the Land Use Element does not supersede other elements.

The City of Imperial Beach (City) is distinguished by its spectacular natural setting with open space as the largest single land use by acreage. Within the urbanized land areas the City is committed to maintaining and enhancing a “classic Southern California” beach-oriented community with a safe, small town, family atmosphere, rich in natural and cultural resources. While meeting this long standing goal, Imperial Beach is also working to differentiate itself in the region and state by becoming a landmark



Imperial Beach is a “classic Southern California” beach-oriented community.

destination for ecotourism. The goals and policies of the Land Use Element are closely related to goals and policies in other elements that create a full picture of the long-term vision for Imperial Beach.

According to population and housing data from SANDAG, the City of Imperial Beach has approximately 9,860 residential dwelling units, and an estimated population of 26,324 (2010). The SANDAG projected regional growth forecast estimates a population of about 36,125 persons in 2050. New housing and services will be needed to support this growth.

Table L-1 summarizes land use designations by acreage.

**Table L-1
Imperial Beach Land Use Designations by Acreage**

	Designated Acreage	
Residential	1,010 Ac.	36%
Commercial	167 Ac.	6%
Open Space	1,108 Ac.	39%
Urban Reserve	384 Ac.	14%
Public Facility	170 Ac.	6%
Total*	2,840 Ac.	100%

*Acreage is rounded to whole acres and total acres do not sum.

2.1 Land Use Framework

Discussion

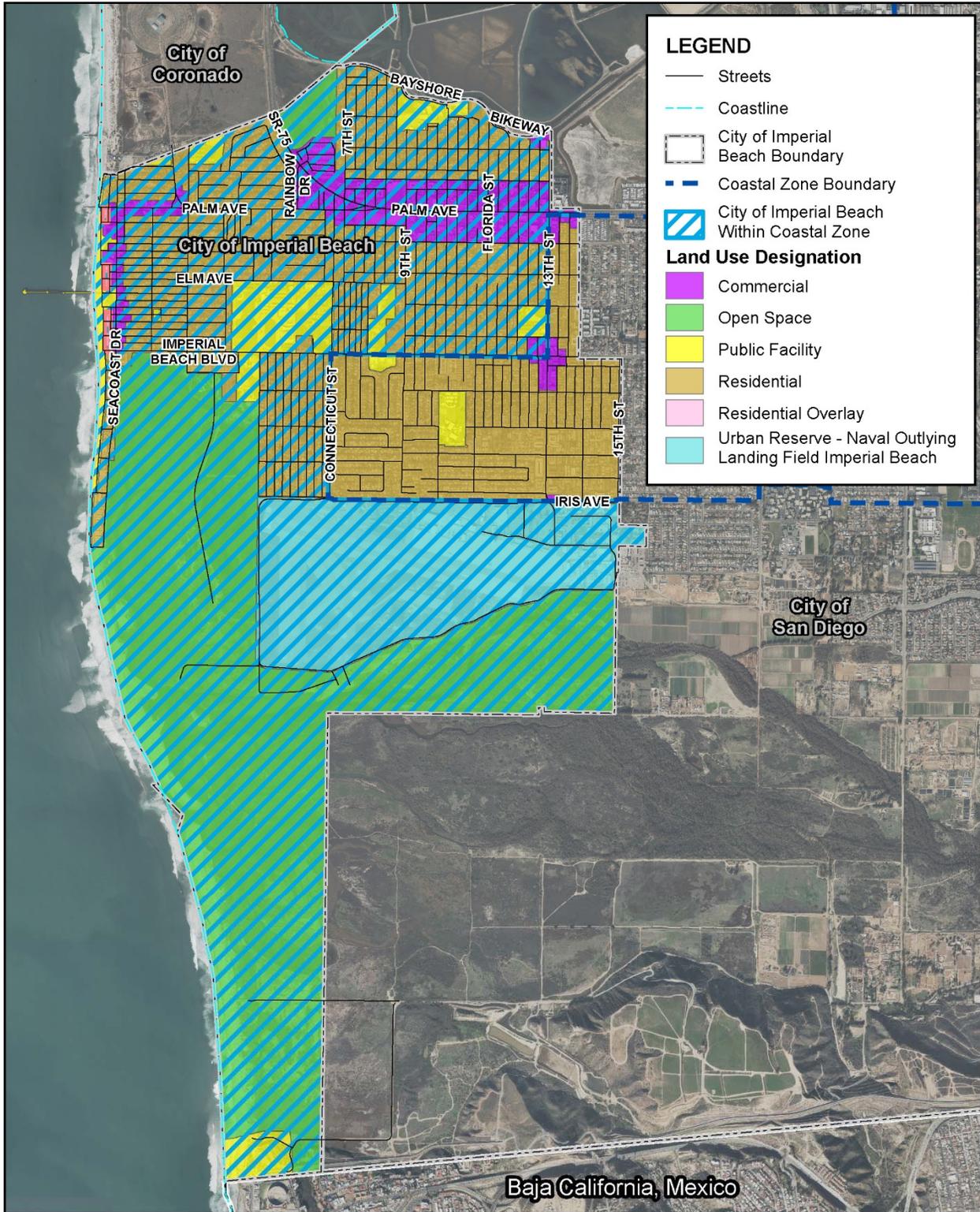
The California coast is an extremely desirable place to live, work and recreate that belongs to all the people. As such, congenial and cooperative use by both residents and visitors is a priority for the City. Such use should capture the best attributes of the City and creatively determine the acceptable place, scale, intensity, rate and methods for development consistent with resource protection and the retention of the character of a small, beach-oriented town. Environmentally protected open space habitat in the Tijuana River watershed is the predominant land use in the City. The urban areas are developed primarily with residential areas, small commercial businesses, and the U.S. Navy Outlying Landing Field Imperial Beach (NOLF IB), locally referred to as Ream Field. A limited number of buildings are utilized for industrial uses within commercial zones; the City does not have an industrial land use designation.



Imperial Beach has retained its character as a small, beach-oriented town.

The density and intensity of development are defined for each land use category depicted on the Land Use Plan, as shown in Figure L-1 and Figure L-2. Designations establish a range of maximum densities or intensities. Table L-2 establishes General Plan Land Use designations, describes the intent of each designation, and identifies zones that implement each designation. The zones are adopted in the City of Imperial Beach Zoning Ordinance. [The City's Open Space Land Use Designation also identifies its Area of Potential Environmentally Sensitive Habitat Area \(ESHA\) lands \(see also the Conservation and Ecotourism Element, Section 4.3\).](#)

Zoning is an important tool to implement the General Plan’s land use map and policy direction. Where the General Plan provides land use designations and density/intensity standards, the zoning code specifies permitted uses and development standards (such as building height and setbacks) that are consistent with the General Plan and furthers its implementation. The zoning code is also a part of the Local Coastal Program Implementation Plan (IP). Additional guidance on the design of the built environment is found in the Design Element.



Source: SanGIS 2014, 2017; City of Imperial Beach 2017; California Coastal Commission 2006

LEGEND

- Streets
- - - Coastline
- City of Imperial Beach Boundary
- - - Coastal Zone Boundary
- ▨ City of Imperial Beach Within Coastal Zone

Land Use Designation

- Commercial
- Open Space
- Public Facility
- Residential
- Residential Overlay
- Urban Reserve - Naval Outlying Landing Field Imperial Beach

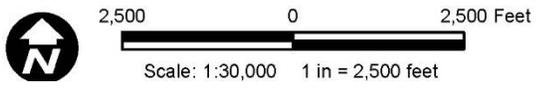
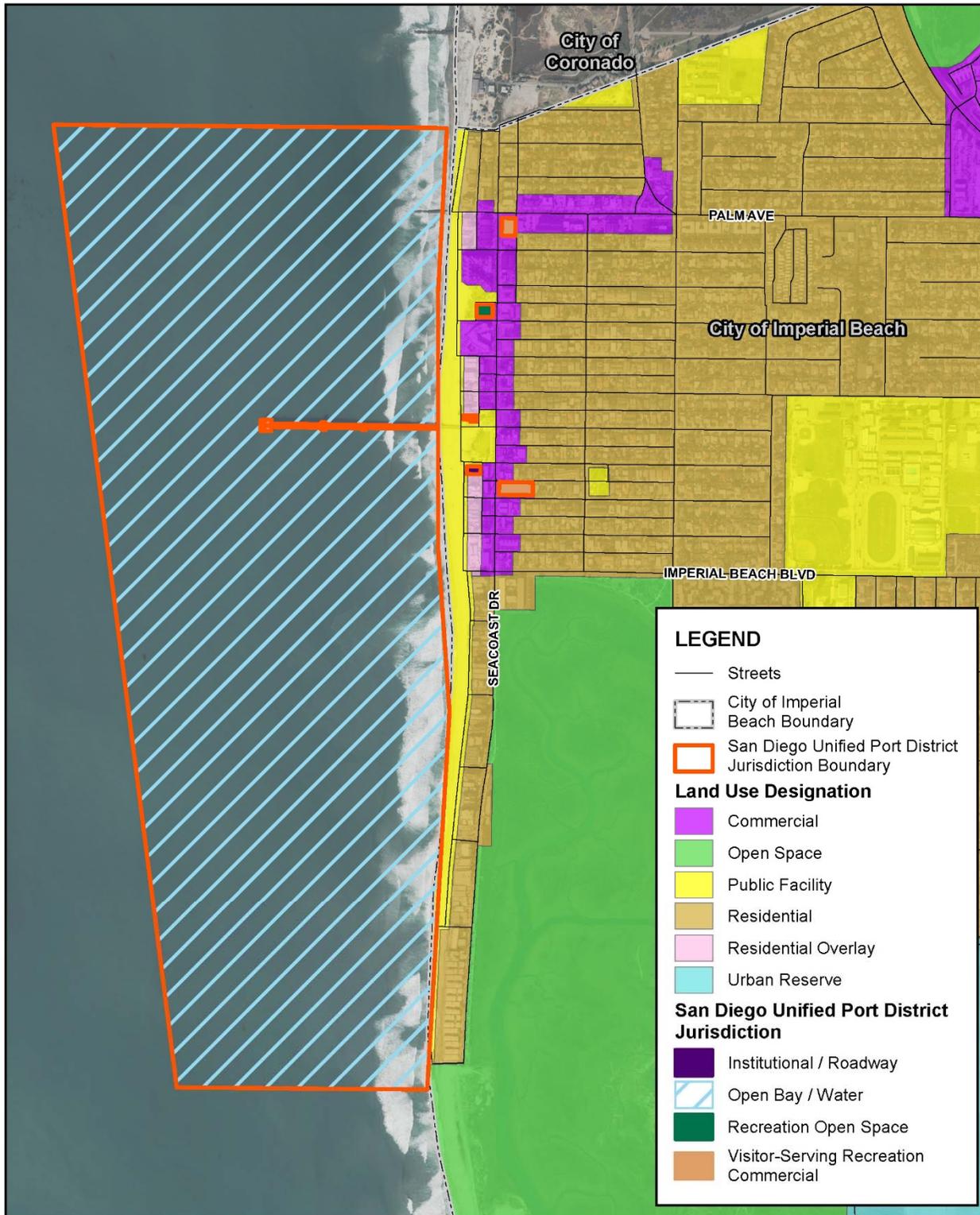


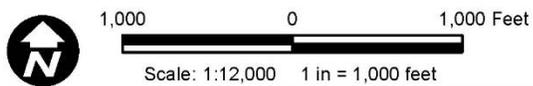
FIGURE L-1
LAND USE MAP
 LOCAL COASTAL PLAN UPDATE
 IMPERIAL BEACH



Source: SanGIS 2014, 2017; City of Imperial Beach 2017, 2018; California Coastal Commission 2008

FIGURE L-2
SAN DIEGO UNIFIED PORT DISTRICT JURISDICTION

LOCAL COASTAL PLAN UPDATE
IMPERIAL BEACH



Coastal Act Policies

Imperial Beach is a coastal community, bordered by the Pacific Ocean to the west, San Diego Bay to the north, and the Tijuana River watershed to the south. As a public agency administering or supporting activities within the coastal zone, the effect of actions on coastal resources shall be considered to achieve the policies of Chapter 3 of the California Coastal Act.

A broad policy goal of California's Coastal Management Program is to maximize the provision of coastal access and recreation consistent with the protection of public rights, private property rights, and coastal resources as required by the California Constitution and provided in Section 30210 of the Coastal Act. Several additional policies contained in the Coastal Act, which are herein incorporated into the General Plan/Local Coastal Program, work together to meet this objective. The Coastal Act requires that development not interfere with the public right of access to the sea (Section 30211); provides for public access in new development projects with limited exceptions where adequate access exists nearby (Section 30212); encourages the provision of lower cost visitor and recreational facilities (Section 30213); addresses the need to regulate the time, place, and manner of public access (30214); specifies the need to protect ocean front land suitable for recreational use (Section 30221); gives priority to the use of land suitable for visitor serving recreational facilities over certain other uses (Section 30222); requires the protection of upland areas to support coastal recreation, where feasible (Section 30223); ~~and~~ encourages recreational boating use of coastal waters (Section 30224); [requires that new development be located within or near existing development to minimize adverse effects on coastal resources \(Section 30250\)](#); [encourages the provision of transit service and recreation to alleviate stress on coastal roads \(Section 30252\)](#); [gives priority to coastal-dependent developments over other development on or near the shoreline \(Section 30255\)](#); [and protects coastal areas suited for water-oriented recreation for such activities \(Section 30220\)](#).

The public's right to access is supported by the availability of adequate parking, public transportation, and multi-modal facilities to serve coastal access and recreation uses. Support facilities such as parking lots, restrooms, and public use areas also contribute to ensuring maximum coastal access. Thus, the designation, administration, and development of land uses in the City are required to maintain maximum access and broad recreational opportunities for all in beach and coastal areas. Additionally, under the California Coastal Act, uses and facilities that are designed to enhance public opportunities for access, recreation, and use of coastal resources are of the highest priority. The Imperial Beach Land Use Plan identifies open space, beach and commercial areas that provide for local and visitor access to, and use of, the coastal resources. See Section 2.5 of this element and the Parks, Recreation, and Coastal Access Element for further information.

Coastal Act policies that are related to land use are provided in greater detail at the end of this element.

Policies

- 2.1.1 Maintain a balanced community, with an appropriate mix of residences, workplaces, and services.
- 2.1.2 Require all land use proposals to respect, preserve and enhance, to the extent feasible, the ocean, beach, San Diego Bay and the Tijuana River Valley as the most important natural resources of Imperial Beach.
- 2.1.3 Implement the Land Use Plan by applying consistent zoning designations that further the implementation of General Plan land uses and policies.
- 2.1.4 Regulate building intensity and housing unit density consistent with the designations established by the Land Use Plan (Figure L-1).
- 2.1.5 Determine the compatibility of uses not identified on Table L-2 through a discretionary permit process.
- 2.1.6 Evaluate discretionary project proposals on a case-by-case basis for their impacts on the economy, environment, and social and community character.

**Table L-2
Land Use Designations**

Land Use Designations	Minimum/Maximum Intensities	Implementing Zone(s)
<p>Single Family Residential Low density single-family detached neighborhoods that maintain the small-town beach character of the community. Uses should be limited to detached residential units and residential compatible uses.</p>	<p>Maximum Building Height: 2 stories or 26 feet Maximum Density: 7-11 units per net acre</p>	<p>R-1-6000 R-1-3800</p>
<p>Residential Low Low density single-family neighborhoods with detached or attached residential dwelling units on a single lot. Uses should be limited to residential units and uses deemed compatible.</p>	<p>Maximum Building Height: 2 stories or 26 feet (15 feet for accessory structures) Maximum Density: 14 units per net acre</p>	<p>R-3000 R-3000-D</p>
<p>Residential Medium Detached and attached single family and multi-family dwellings in a moderately intense residential living environment. Uses should be limited to residential units and uses deemed compatible.</p>	<p>Maximum Building Height: 2 stories or 26 feet (18 feet for accessory structures) Maximum Density: 21 units per net acre</p>	<p>R-2000</p>
<p>Residential High Multi-family units in a variety of configurations for a living environment that includes landscaping, recreational amenities, and a compact urban beach-living environment. Residential compatible uses permitted.</p>	<p>Maximum Building Height: 2 -3 stories or 30 feet (15 feet for accessory structures) Maximum Density: 29 units per net acre</p>	<p>R-1500</p>
<p>General Commercial Mixed-Use Business and services that meet local neighborhood and visitor-serving needs in a commercial or mixed-use format that may include multi-family residences. Variety in configuration is encouraged with all development providing a strong relationship to the street and supporting a pedestrian-oriented setting.</p>	<p>Maximum Building Height: 3-4 stories or 40 feet Maximum Density: 43 units per net acre</p>	<p>C/MU-1</p>
<p>Seacoast Commercial Mixed-Use Beach visitor-serving focused land use incorporating services, businesses, and multi-family units in a pedestrian-oriented community character along the primary beach area.</p> <p>Seacoast Commercial Mixed-Use/Residential Overlay Overlay area preserving opportunities for the continuation of single-family residential uses, in the area bounded by Ocean Boulevard (the beach) to the west, Ocean Lane on the east, Imperial Beach Boulevard on the south, and Palm Avenue on the north. Single-family land uses and mixed-use and multi-family residences are permitted in addition to uses permitted in the Seacoast Corridor.</p>	<p>Maximum Building Height: • Hotels: 4 stories or 40 feet by Specific Plan • Properties within the Seacoast Residential Overlay Zone: 2 stories or 26 feet • Properties east of Seacoast Drive that do not provide exclusively residential uses: 3 stories or 35 feet • All other uses: 3 stories or 30 feet</p> <p>Maximum Density: 29 units per net acre; an additional one unit per lot may be permitted subject to the compliance with specified development incentives and the approval of a conditional use permit.</p>	<p>C/MU-2 CMU/RO</p>
<p>Neighborhood Commercial Mixed-Use Business and services that meet local neighborhood needs in a commercial or mixed-use format that may include multi-family residences. Variety in configuration is encouraged with all development providing a strong relationship to the street and supporting a pedestrian-oriented setting.</p>	<p>Maximum Building Height: 3 stories or 30 feet; 3 stories or 35 feet with conditional use permit Maximum Density: 29 units per net acre; an additional one unit per lot may be permitted subject to the compliance with specified development incentives and the approval of a conditional use permit.</p>	<p>C/MU-3</p>

Land Use Designations	Minimum/Maximum Intensities	Implementing Zone(s)
<p>Commercial Recreation - Ecotourism</p> <p>Land provided to meet the demand for goods and services required primarily by the recreation and ecotourist visitor. Supports City economic development goals.</p>	Maximum Building Height: 2 stories <u>or</u> <u>26 feet</u>	C/R-ET
<p>Open Space</p> <p>Land set aside for the protection of sensitive and fragile natural resources that require carefully management such as the Tijuana River Valley. Limited uses allowed by Conditional Use Permit. <u>Also identifies Areas of Potential ESHA</u></p>		OS
<p>Urban Reserve</p> <p>Natural preserve and/or military service areas that may be maintained in the current state or adaptively reused as a different future uses. Specific Plan required for conversions and reuse of any Urban Reserve areas.</p>	Maximum Building Height / Density / Intensity: Future use and maximum density or intensity of will be determined as part of the Specific Plan.	UR
<p>Public Facility</p> <p>Land devoted to public facilities and utilities including but not limited to: public schools, parks, the beach and civic facilities. See the Facilities and Services Element and the Parks, Recreation, and Access Element for additional standards. Residential compatible uses permitted.</p>	Development characteristics are subject to a site plan review process	PF

2.2 Sustainable Development

Discussion

Sustainable development is often defined as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” The State of California has taken a leadership role in working toward sustainable, resilient, healthy communities, including mandating the reduction of greenhouse gas emissions that contribute to climate change.

Regional goals for sustainable development are expressed in the Sustainable Communities Strategy (SCS) incorporated into San Diego Forward: The Regional Plan, in accordance with the Sustainable Communities Act of 2008 (also known as Senate Bill (SB) 375, Steinberg). The regional SCS focuses on reducing greenhouse gas emissions from passenger vehicle use. It integrates the Imperial Beach General Plan land use plan, along with the other general plans in the region, that together show a regional commitment to a smart growth land use pattern with the highest development densities/intensities occurring within the transit-served urban core. The SCS links the land use pattern to transportation investments that will reduce greenhouse gas emissions to meet state-mandated targets.

The Imperial Beach General Plan is consistent with, and furthers implementation of the region’s Sustainable Communities Strategy through:

- Providing opportunities for infill and redevelopment, including supporting mixed-use development -to focus growth within areas served by transit and existing infrastructure;
- Preservation of open spaces for habitat conservation and recreational uses;
- Complete streets policies to enhance pedestrian and bicycle circulation throughout the City and to neighboring jurisdictions; and
- Inclusion of policies to reduce the City’s carbon footprint and prepare a climate action plan.

See the Conservation and Ecotourism Element Section 4.1 for additional information and a guide to where additional policies related to climate change and sustainability are found throughout the General Plan.

Policies

- 2.2.1 Locate and promote infill and new development in a manner that will not have adverse impacts on coastal resources.
- 2.2.2 Encourage land uses and improvements that reduce energy and water consumption, waste and noise generation, air quality impacts and support other comparable resource strategies for a sustainable Imperial Beach.
- 2.2.3 Encourage adaptive reuse of buildings and sites to utilize existing infrastructure while enhancing the character of the community.
- 2.2.4 Support concentration of redevelopment and higher-intensity residential and non-residential development in areas with existing supportive infrastructure and in proximity to transit access [within limits established by zoning and state law](#).
- 2.2.5 Adopt sea level rise adaptation approaches that both preserve public access and public and private infrastructure.
- 2.2.6 Implement and enforce up-to-date building codes to reduce vulnerability, increase public safety and protect public property from flooding, fire, extreme weather, [noise](#) and other risks.

2.3 Residential Uses and Neighborhoods

Discussion

The City of Imperial Beach is dedicated to preserving the small-town beach community character that makes it special for residents and visitors. However, limited land resources, increasing population across the State of California and a highly constrained housing market, continues to create pressure to increase the size, density, and intensity of development. Additionally the City strives to achieve a balanced housing stock that meets the varied needs of all income segments of the community. To manage these pressures, the approach to residential neighborhoods in Imperial Beach is to focus density and redevelopment at key locations, and remain committed to the retention of stable, owner-occupied, single family neighborhoods. See the Design Element for additional related policies.



The City focuses on density and redevelopment at key locations, and remains committed to the retention of single family neighborhoods.

Land use decisions, redevelopment, and City programs provide the means and incentives to encourage upgrading and rehabilitation of existing housing and, where possible, enhancement of public services. Implementation of land use policies related to residential neighborhoods are closely tied to needs and strategies discussed in the Housing Element.

Policies

- 2.3.1 Allow for a variety of housing types, densities, and sizes.
- 2.3.2 Maintain a high quality, livable residential environment that implements the Land Use Plan.
 - a. Protect single family neighborhoods from through traffic and overflow parking demands from other uses.
 - b. Avoid the introduction or intrusion of higher intensity uses into single family neighborhoods.
 - c. Permit residential uses and uses deemed compatible with residential uses in residential areas.
- 2.3.3 Locate the highest development intensities and residential densities along public transportation corridors and near key urban activity areas to encourage walking, bicycling and public transit use.

- 2.3.4 Maximize the proportion of residences within a quarter mile of uses like parks, schools, grocers, retailers, service providers, employment, public transportation, and other desirable community features.
- 2.3.5 Develop and adopt Zoning Ordinance amendments to appropriately integrate accessory dwelling unit regulations in accordance with state law (Chapter 720, Statutes of 2016).

2.4 Commercial and Mixed-Use Areas

Discussion

Commercial and mixed-use areas are fundamental to maintaining a healthy tax base that supports the City’s economy and the ability to provide quality coastal resource access. Community-serving commercial and mixed-use areas are envisioned to be enjoyable places to work, shop, and promote beach visitor patronage within the City. All development within the commercial/mixed-use zones is subject to the Commercial/Mixed-Use Zones Design Guidelines, per the City of Imperial Beach Zoning Ordinance, which provides specific direction for achieving high-quality, pedestrian-oriented, mixed-use retail and commercial areas. Development in these areas must also adhere to other applicable design guidelines and standards, including the Landscape Design Guidelines for Seacoast Drive. See the Design Element for additional discussion of the character of the built environment, and supportive policies.

[Providing opportunities for commercial and mixed-use development in the City’s transit corridors also supports sustainability and mobility goals. By locating development with easy access to transit, services and coastal resources, residents and visitors may be more efficiently served by new and enhanced mobility services. The Mobility Element contains additional information and policies on how the City’s approach to complete streets, active transportation, and innovative technologies and strategies support and serve existing and future development.](#)



The Seacoast Corridor is a pedestrian-oriented visitor-serving commercial and mixed-use area.

Seacoast Corridor

The Seacoast Corridor is an ever-evolving pedestrian-oriented visitor-serving commercial and mixed-use area that serves as the quintessential Southern California beach town destination. Beach access combined with pedestrian activity and small-town beach-focused businesses create a vibe and character for the area that is appreciated by residents and visitors alike. To maintain this key commercial and recreational destination, careful consideration and regulation of land uses, including active commercial uses, character of the built environment, and visitor-serving amenities is required. See Section 2.5 in this element for additional visitor-serving use discussion.

Bayfront Corridor

Commercial and mixed-use development located along Imperial Beach’s Bayfront offers excellent opportunities for visitor-serving commercial, recreation, and public services and access uses. See the Conservation and Ecotourism Element for policies relating to expanding Bayfront commercial uses in a manner that supports the City’s conservation and economic development goals.



Palm Avenue/State Route 75 serves as the major community entrance to Imperial Beach.

Palm Avenue/Former State Route (SR) 75

Palm Avenue/former SR 75 (now relinquished to the City) serves as the major community entrance to Imperial Beach whether entering the City from I-5 or the City of San Diego on the east side, or entering from Silver Strand Boulevard and the City of Coronado on the north side. The 1.2 mile segment of the former SR 75 serves as a major community artery and commercial/mixed-use business area. The corridor is a mix of pedestrian- and auto-oriented businesses that is expected to maintain its eclectic character even as additional pedestrian-oriented businesses and multi-family housing are added. See the Design Element for additional policies.

13th Street Corridor

The 13th Street Corridor is the neighborhood serving business district of Imperial Beach. Providing a mix of commercial and mixed-use development the area should provide goods and services primarily for the residents of Imperial Beach and employees/visitors to NOLF IB/Ream Field in a pedestrian-oriented format.

Policies

- 2.4.1 Provide for, and encourage, a range of visitor-serving and mixed-use development along Palm Avenue and Seacoast Drive that support use of coastal resources, provision of commercial services, and capture a greater share of local spending.
 - a. Maintain an appropriate balance between visitor-serving uses and neighborhood-supporting commercial uses.
- 2.4.2 Provide attractive and stimulating commercial and mixed use developments, that contribute to Imperial Beach's small beach town character and encourage walking and bicycling as a routine part of everyday life. Mixed-use development could include a mix of residential, retail, dining/entertainment, office, recreational, and educational facilities sited within close proximity to each other. [See also Mobility Element Policy 3.1.29&](#)
- 2.4.3 Foster new commercial and mixed-use businesses and development in proximity to transit access, to provide goods and services to residents and visitors.
- 2.4.4 Provide for and encourage the development of a broad range of uses in the City's commercial centers and corridors that reduce the need to travel to adjoining communities and capture a greater share of local spending.
- 2.4.5 Enhance the Palm Avenue/former State Route (SR) 75 Commercial / Mixed-Use Corridor.
 - a. Promote pedestrian activity by requiring ground floor active commercial uses for all properties with frontage along Palm Avenue.
 - b. Prepare and implement plans and tools that support modernization, improvement, and business attraction/retention; beautifies the area with pedestrian, landscape, and façade improvements; and manages parking and multi-modal access for improved business activity.
 - c. Support and encourage redevelopment.
 - d. Continue collaboration with neighboring jurisdictions to foster coordinated implementation of improvements.
 - e. [Collaborate with SANDAG, the Metropolitan Transit System and others to improve transit and explore other -mobility innovations to improve coastal access.](#)
- 2.4.6 Promote the Seacoast Corridor as a commercial and mixed-use area that maintains and enhances the visitor-serving, pedestrian-oriented character of the area.
 - a. Focus development in a manner that maintains and enhances multi-modal public access to the coast consistent with Coastal Act Section 30252.
 - b. Continue to transition existing residential uses to new visitor-serving commercial uses, except:
 - Allow exclusive residential development on properties that do not have frontage along Seacoast Drive and Palm Avenue; and
 - Allow exclusive residential projects in the Seacoast Residential Overlay Zone area
 - c. Promote pedestrian activity by requiring ground floor active commercial uses for all properties facing

Seacoast Drive and Palm Avenue; and by enhancing the pedestrian experience through infrastructure enhancement and design which could include but not limited to wider sidewalks, pedestrian lighting, and street redesign.

- d. Protect, encourage and where feasible, to provide a range of lower-cost and overnight accommodations.
- e. Provide opportunities for increased density with approval of a conditional use permit in accordance with the Imperial Beach Zoning Ordinance.

2.4.7 Cultivate the 13th Street Corridor as a multi-modal pedestrian-oriented commercial and mixed-use district that primarily serves neighborhood residents.

2.5 Coastal Priority and Visitor-Serving Commercial Uses

Discussion

Visitor-serving and recreation uses in Imperial Beach include the public beaches, beach access and coastal accessways, the Tijuana River Estuary, segments of the Bayshore Bikeway, and San Diego Bayfront areas. Visitor-serving uses increase public access to the coast, and contribute to the City's economy. Parks and recreation are further discussed in the Parks, Recreation, and Coastal Access Element.

Coastal Dependent Uses

Coastal dependent uses are those activities that rely on utilization of or access to coastal resources such as the ocean, water, or shoreline. We include in this definition, solely for purposes of internal consistency within this document, other environmentally sensitive tideland areas within the coastal zone such as the Bayfront and the Tijuana Estuary. These are uses that cannot be replaced or duplicated on inland property. The ocean, beach, and the land immediately adjacent to the coastline are recognized by the State of California and the California Coastal Act as an irreplaceable natural resource to be enjoyed by the entire City and region. This unique, narrow strip of land should receive careful recognition and planning. Consistent with the California Coastal Act, the purpose of the beach and coastline is to make available to the people, for their benefit and enjoyment forever, the scenic, natural, cultural, and recreational resources of the ocean, beach and related lands. The Imperial Beach Bayfront area is a unique and environmentally sensitive area of the San Diego Bay where public access could continue to be improved in a manner that respects the environment and contributes to the local economy.



The ocean, beach, and the land immediately adjacent to the coastline are an irreplaceable natural resource to be enjoyed by the entire City and region.

Coastal Related Uses

Imperial Beach is working toward providing, enhancing and expanding visitor-serving commercial uses and related public infrastructure to support coastal access and recreation in a manner that is compatible with the small town beach-oriented character of the City. Visitor-serving uses will include lower-cost visitor and recreational facilities in line with Chapter 3 of the Coastal Act. See also the Conservation and Ecotourism Element, Section 4.7.

Policies

- 2.5.1 While the opportunities for full deep-water bay access from the Imperial Beach portion of the San Diego Bayfront are limited by extensive environmental and economic constraints, the City should continue to evaluate opportunities for increased public access and recreation opportunities [and, if necessary, amend the LCP](#).
- [2.5.2 Assure priority for coastal-dependent and coastal-related development over other development on the coast.](#)
- [a.](#) Protect, encourage, and, where feasible, provide lower cost visitor and recreational facilities.
- [a-b.](#) Developments providing public recreational opportunities are preferred.
- [2.5.2.5.3](#) Support economic vitality by protecting existing visitor serving uses, and encouraging new visitor-serving facilities on underutilized property.
- Provide land use areas and actively pursue additional visitor-serving (tourist-oriented businesses) uses such as hotels/motels, entertainment attractions, restaurants, and shopping along the beachfront, San Diego Bayfront and inland areas.
 - Encourage visitor-serving retail uses in all commercial land use designations.
 - Prioritize development of visitor-serving and commercial recreational facilities designed to enhance public opportunities for coastal recreation in the Seacoast Corridor and along Palm Avenue over other residential

or non-residential development.

- d. Identify Visitor Serving Commercial uses as a permitted or conditionally permitted use with designated commercial zones.
- e. Enhance the pedestrian experience of visitors and residents by improving clean-up services in tidelands areas, widening sidewalks where possible and improving pedestrian lighting.

[2-5-32.5.4](#) Enhance coastal access and recreation through creation of an ecotourism/recreational corridor along the Imperial Beach Bayfront incorporating bicycle and pedestrian paths and complementary uses. See also the Mobility Element; the Conservation and Ecotourism Element; and the Parks, Recreation, and Coastal Access Element for supportive policies.

[2-5-42.5.5](#) Encourage new overnight accommodation development within the City, where feasible, to provide a range of room types, sizes, and room prices in order to serve a variety of income ranges.

- a. Permit short-term vacation rentals in all commercial land use designations.

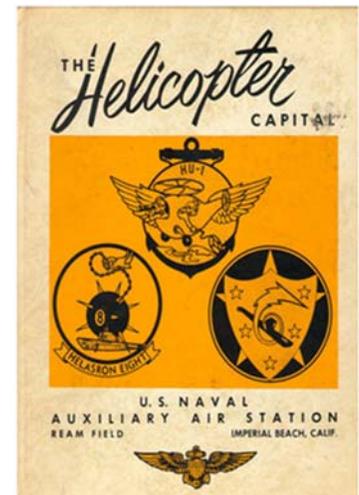
[2-5-52.5.6](#) Protect the character and integrity of residential neighborhoods by prohibiting rentals of less than 30 days in all residential land use designations.

2.6 Airport Land Use Compatibility and Military Coordination

Discussion

Naval Outlying Landing Field Imperial Beach (NOLF IB), locally referred to as Ream Field, is a U.S. Government Naval installation that is a part of Naval Base Coronado. Activities on the installation include naval operational handling of overflow helicopter squadrons traffic from adjacent North Island installations. The southeastern portion of the base is part of the Tijuana River National Estuarine Research Reserve (TRNERR).

NOLF IB is the site of much of the Navy's West Coast helicopter training. Helicopters stationed at Naval Air Station North Island (NASNI) routinely fly to NOLF IB to conduct training and practice. A diverse set of missions are flown by stationed and transient aircraft at NASNI and NOLFIB. Aircraft operations involving deployment to and from ships, post-Naval Aviation Depot (NADEP) maintenance check flights, fleet replacement training, operational support flights, transient operations, and pilot currency are routinely flown in the area. The U.S. Navy has continued to invest in the Naval Base, including construction of a 600-acre coastal campus for Navy Sea, Air, and Land (SEAL) crew training and support.



The City of Imperial Beach supports the Navy's mission and will continue to coordinate with the U.S. Government to ensure compatibility with military and airport planning and operational efforts. Ream Field is designated in the General Plan as an Urban Reserve, to indicate that a future specific planning effort would be required if the military were ever to relinquish use of the property. The Navy prepared an Air Installation Compatibility Use Zones (AICUZ) study for this facility as well as for the NASNI most recently in 2011. The current AICUZ has a planned operational horizon year of 2020. The completed AICUZ was incorporated into the draft Airport Land Use Compatibility Plan (ALUCP) that was presented to the City Council on Aug 6, 2014 for comments. The ALUCP was approved by the Airport Land Use Commission (ALUC)/San Diego County Regional Airport Authority on Oct 15, 2015.

Policies

- 2.6.1 Continue to support U.S. Government activities and personnel associated with military operations at Naval Outlying Landing Field Imperial Beach (NOLF IB)/Ream Field.
- 2.6.2 Coordinate with the Navy to address traffic, congestion, [noise](#), infrastructure, [coastal resilience](#), and habitat

conservation issues associated with base operations, ~~or~~ and expansion, ~~or~~ as deemed mutually beneficial by the City of Imperial Beach and the Navy.

- a. Strive to increase use of transit and alternative modes of transportation to the base. See also the Mobility Element.
 - b. Seek Department of Defense contributions to infrastructure improvements to achieve mutual benefits for the Naval Base and the City of Imperial Beach.
 - c. Pursue shared use facilities, including a fire station and public works yard, to address mutual needs.
- 2.6.3 Encourage development of supportive facilities and services to serve Naval base employees and visitors, while increasing Imperial Beach's tax base.
- 2.6.4 Notify the U.S. Government of land use or development activities within 1,000 feet of Naval Outlying Landing Field Imperial Beach (NOLF IB) to ensure compatibility with military plans and operations.
- 2.6.5 Support continued retention of 606 acres of the Tijuana Slough National Wildlife Refuge to remain under control of the U.S. Fish and Wildlife Service.
- 2.6.6 Maintain compatibility with Naval Air Station North Island (NASNI), Naval Outlying Landing Field Imperial Beach (NOLF IB) Air Installations Compatible Use Zones (AICUZ) noise and safety contours, and the NOLF IB Airport Land Use Compatibility Plan (ALUCP).
- 2.6.7 To implement and be consistent with the Airport Land Use Compatibility Plan (ALUCP) as approved by the Airport Land Use Commission (ALUC), adhere to the following requirements.
- a. New residential units proposed within the 60 dB CNEL noise contour of NOLF-IB shall be constructed to attenuate exterior noise levels down to an interior noise level of 45 dB, which may be satisfied by complying with the Energy Efficiency Standards of Title 24 California Building Standards Code.
 - b. Applicants for proposed construction or alteration that is subject to 14 CFR Part 77 shall submit a copy to the City of Imperial Beach prior to building permit issuance of the Federal Aviation Administration (FAA) determination (such as a No Hazard to Air Navigation document) that responded to the FAA notice that was required to be filed for the project.
 - c. Overflight notification as a real estate disclosure shall be provided for new dwelling units pursuant to California Business and Professions Code Sections 11010, 1102.6, 1103.4, and 1353, as amended.
 - d. The City will refer any general plan amendment or rezone to the ALUC for a consistency determination.

2.7 Environmental Justice and Healthy Communities

Discussion

Environmental justice is defined in state planning law as the “fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies” (Gov. Code § 65040.12(e)). Environmental justice is achieved when everyone, regardless of race, culture, gender, disabilities, or income, enjoys the same degree of protection from environmental and health hazards. Furthermore, it is achieved when everyone has equal access to, and meaningful participation



[Imperial Beach provides residents and visitors with opportunities for healthy outdoor activities. The physical environment has a profound effect on how healthy people are over the course of their lives.](#)

in, the decision-making process to have a healthy environment in which to live, learn, and work. The State of California requires that general plans identify disadvantaged communities within their boundaries and develop policies to: reduce health risks, promote civil engagement in the public decision-making process, and prioritize improvements and programs that address the needs of disadvantaged communities- [\(see also the sidebar on this page\)](#). [To assist in meeting this requirement, the state has provided a mapping tool called “CalEnviroScreen.” This tool helps identify California communities that are most affected by many sources of pollution, and where people are often especially vulnerable to pollution’s effects. Specifically:](#)

- [CalEnviroScreen uses environmental, health, and socioeconomic information to produce scores for every census tract in the state.](#)
- [The scores are mapped so that different communities can be compared to one another. Areas with higher scores generally experiences higher pollution burdens and fare more poorly on a range of health and socioeconomic indicators than areas with low scores.](#)
- [CalEnviroScreen ranks communities based on data that are available from state and federal government sources.](#)

[According to the June 2018 version of CalEnviroScreen 3.0, Imperial Beach did not have communities that meet the state’s current definition of “disadvantaged communities.” However, due to its statewide approach CalEnviroScreen 3.0 is not a particularly useful tool for identifying intraregional or intracity environmental justice disparities. The binational environmental pollution that Imperial Beach experiences warrants attention as an environmental justice issue, and is further discussed in the Conservation and Ecotourism Element Section 4.4.](#)

Disadvantaged, Marginalized, and Underserved Definition:

[SB 1000 \(Leyva\) \(Ch. 587, Stats. 2016\) added Government Code Section 65302\(h\)\(4\)\(A\), expanding the definition of “disadvantaged communities” for the purpose of general plans to mean “an area identified by the California Environmental Protection Agency pursuant to Section 39711 of the Health and Safety Code or an area that is a low-income area that is disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation.”](#)

[This policy uses the terms “disadvantaged”, “marginalized” and “underserved” interchangeably; it intends to encompass not only the definitions contemplated by SB 1000, but also to include other low-income and minority populations that are disproportionately burdened by or less able to prevent, respond, and recover from adverse environmental impacts.](#)

As applied to implementation of the Coastal Act, the California Coastal Commission views environmental justice as inherent in its efforts to protect California’s coast and ocean commons for the benefit of all the people. [The Coastal Commission’s Environmental Justice Policy affirms the Coastal Commission’s commitment to implement the Coastal Act for the benefit of all people. The policy is designed to achieve more meaningful engagement, equitable process, and stronger coastal protection benefits that are accessible to everyone.](#) When acting on a Coastal Development Permit, the issuing agency, or the Coastal Commission on appeal, may consider environmental justice, or the equitable distribution of environmental benefits, as a part of its deliberation. Environmental justice-supportive policies related to [meaningful engagement, equitable process](#), protecting coastal resources, and providing public coastal access and lower-cost recreation for everyone, is found in the Conservation and Ecotourism Element, as well as the Parks, Recreation and Coastal Access Element.

Environmental justice and social equity goals relate closely to policies supporting healthy communities. The physical environment, as well as the conditions in the environments in which people are born, live, learn, work, play, and age (collectively known as the social determinants of health) have a profound effect on how healthy people are over the course of their lives. Accordingly, communities that have open space and recreational opportunities, high quality and affordable housing, and safe multi-modal transportation options, as well as access to resources such as affordable healthy foods, medical services, living-wage jobs, and quality educational services experience better health outcomes.

In Imperial Beach, and the South Region of San Diego County more broadly, there are three particular risk factors — tobacco use, poor nutrition, and physical inactivity — that contribute to four chronic diseases (cancer, heart disease & stroke, diabetes, and lung disease) that cause almost 60 percent of all deaths. The City of Imperial Beach is committed to collaborating with local and regional health organizations and agencies on programs to reduce exposure to tobacco, promote access to healthy food, and encourage opportunities for physical activity. In addition, general plans can affect many of these social determinants of health by addressing the following issues:

- ‡ Clean air, water, and soil
- ‡ Access to parks and open space
- ‡ Access to healthy food
- ‡ Preservation of agricultural land
- ‡ Access to good jobs and economic opportunity
- ‡ Healthy and affordable housing
- ‡ Safe, convenient, and accessible transportation systems
- ‡ Sustainable development and climate change
- ‡ Social connection and community engagement

Because [environmental justice and community health are](#) interdisciplinary issues, a range of policies that address these social determinants of health are interwoven throughout the elements contained in the General Plan, [as summarized on Table L-2](#). However, key [community health](#) policies are included below and in the Mobility Element to provide a focus on the City’s efforts to provide leadership in community health matters. [Additional details and reference citations regarding community health are provided in a background paper available on the City’s webpage. In addition \(add a description and web link to CalEnviro Screen 3.0 here\).](#)

Table L-3 Issues Related to Health and Environmental Justice in the General Plan (new table)

Environmental Justice Topic	General Plan Element	General Plan Section
Housing Supply and Affordability	Land Use	Sec. 2.1 Land Use Framework Sec. 2.3 Residential Uses and Neighborhoods
	Housing	Entire Element (under separate cover)
Meaningful Engagement	Land Use	Sec. 2.7 Environmental Justice

Equity, Accountability and Transparency	Land Use	Sec. 2.7 Environmental Justice
	Conservation & Ecotourism (Conservation)	Sec. 4.7 Ecotourism
	Parks, Recreation, and Coastal Access (Parks)	Sec. 5.1 Parks and Recreation
Public Transportation/Active Living/Complete Streets	Mobility	Entire Element
	Design	Sec. 8.2 Public Realm and Public Facilities Sec. 8.3 Sustainable Coastal Design
Climate Change Resilience/Adaptation	See Table CE-1	
Public Health/Pollution Burden	Conservation	Sec. 4.3 Biological Resources Sec. 4.4 Water Quality Sec. 4.5 Air Quality
Cultural and Tribal Resources	Conservation	Sec. 4.6 Cultural Resources/Tribal Cultural Resources
Coastal Access	Land Use	Sect. 2.5 Coastal Priority and Visitor-Serving Commercial Uses
	Conservation	Sec. 4.7 Ecotourism
	Parks	Sec. 5.1 Parks and Recreation Sec. 5.2 Public Coastal Access
Environmental Hazards	Safety	Sec. 7.1 Sea Level Rise Sec. 7.2 Fire Hazards Sec. 7.4 Disaster Preparedness

Policies

REDUCE HEALTH RISKS

- 2.7.1 Pursue environmental justice for Imperial Beach by advocating for implementation of all legislation, standards and agreements pertaining to local, regional, national and binational pollution and environmental quality.
- 2.7.2 Ensure community health is a priority by developing programs to foster collaboration between local health officials, City staff, and elected officials in decisions about the built environment.
- 2.7.3 Increase community food sovereignty by encouraging, through healthy retail, community food production and other means, that fresh fruits, vegetables and other healthy foods are available in all neighborhoods of Imperial Beach.
- 2.7.4 Support provision of convenient access to healthy foods in all neighborhoods and commercial areas.
- 2.7.5 Promote the economic feasibility of agriculture and preserve farmland in the Tijuana River Valley while encouraging the development of urban agriculture.
- 2.7.6 Encourage both indoor and outdoor smoke-free workplaces, multifamily housing, and parks (other outdoor gathering places) to reduce exposure to second-hand smoke.
- 2.7.7 Reduce alcohol, tobacco, and other drug use by fostering a social, retail and physical environment that supports healthy choices, access to treatment services, and enforcement of existing regulations.
- 2.7.8 Continue to maintain, and adopt policies that support use by residents of, beach front and interior public parks, promote use of bicycles, increase number of bicycle lanes, and encourage day and evening pedestrian activity through improved sidewalks and lighting.
- ~~2.7.8~~ 2.7.9 [Use the CalEnviroScreen Mapping Tool, or City adopted alternative, -to identify the location, if any, of disadvantaged communities when considering General Plan amendments.](#)
- ~~2.7.9~~ 2.7.10
- ~~2.7.10~~ [Pursue grant funding for investments that increase the climate resiliency and adaptive capacity of low-income households and communities.](#)

PROMOTE CIVIC ENGAGEMENT

- 2.7.11 Proactively and meaningfully engage community residents in the planning and development process by using culturally-appropriate and accessible channels, including: providing appropriate language services; providing child care; holding meetings, focus groups, and/or listening sessions at a variety of venues throughout the community; and using participatory facilitation techniques.
- 2.7.12 Consult with California Native American tribes to provide them with an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to cultural places. See also the Conservation and Ecotourism Element.
- 2.7.13 Implement development policies to protect the public health, safety, and welfare equitably among all segments of the population. Address the needs of those who are disenfranchised in the process.

PRIORITIZE PUBLIC FACILITIES

- 2.7.14 Prioritize and allocate citywide resources to provide public facilities and services to communities in need. Greater resources should be provided to communities where greater needs exist. See also the Parks, Recreation and Coastal Access; and Facilities and Services elements.
- 2.7.15 Strive to achieve meaningful participation for all community residents in the siting and design of public facilities.
- 2.7.16 Provide equal access to public facilities and infrastructure for all community residents.
- 2.7.17 Facilitate the involvement of community residents, businesses, and organizations in the development, adoption, and implementation of community health and built environment initiatives and consider their input throughout the decision-making process.

COASTAL DEVELOPMENT PERMITS

- 2.7.18 When acting on a Coastal Development Permit (CDP), the issuing agency, or the Coastal Commission on appeal, may consider environmental justice, or the equitable distribution of environmental benefits throughout the state. The analysis of impacts and benefits will be fully transparent in staff reports and presentations. In all instances the standard of review for issuance of a CDP shall be the Coastal Act or certified LCP.



Photo credit: Bryan Brillhart

Coastal Act Policies – Land Use

Section 30213 Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred

Section 30221 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 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 30250 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

Section 30252 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, and 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.

Section 30255 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 30220 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. (Amended by Ch. 380, Stats. 1978.)

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 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.

4.0 Conservation and Ecotourism

People should treat the oceans like we do anything else that we care about - with consideration, with care, and affection. That's it. For that we must educate.

~ Walter Munk, PhD ~ "Einstein of the Oceans"

Scripps Institution of Oceanography at the University of California, San Diego

Goals

- ‡ Protection of the natural, coastal, and cultural resources of Imperial Beach, including water bodies
- ‡ Reduced greenhouse gas emissions to meet state and local goals
- ‡ Improved water and air quality
- ‡ Restored or enhanced coastal resources
- ‡ Promotion of ecotourism and economic health consistent with the protection of coastal resources

Background

California planning law requires the General Plan to include both a Conservation Element and an Open Space Element to address the conservation, development, and use of natural resources; and the importance of open space for habitat and conservation, recreational, and visual resource uses. Because conservation and open space issues are closely interrelated, they are discussed in this element with respect to conservation of resources; and in the Parks, Recreation, and Coastal Access Element with respect to recreation and visual resource purposes. In addition, this Conservation and Ecotourism Element serves as the Water and Marine Resources component of the Imperial Beach Local Coastal Program and [addresses/meets](#) the [intent of the](#) Environmentally Sensitive Habitat Areas (ESHA) component of the Coastal Act.

Open space and conservation planning are fundamental components of the Imperial Beach General Plan. From the standpoint of actual physical patterns and form, these components can be viewed as coordinating and guiding decisions related to the land and water areas which influence and shape the quality of the City. The Conservation and Ecotourism Element takes into consideration those open space areas necessary for the preservation and conservation of natural resources, for the enjoyment of scenic beauty, and for the protection of areas with historic/cultural value.

Imperial Beach's natural resources, including its 3.5 miles of beach frontage and the Tijuana River Estuary, are central to its character, image, quality of life, and economy. Conservation and protection of ocean, beach, bay, estuary, and natural ecosystems are a key focus of the General Plan/Local Coastal Program (LCP). The unique physiographic characteristics of Imperial Beach are recognized as the foundation for all other aspects of the community. These characteristics are highly valued as they enhance the quality of life for residents and visitors alike and provide the basis for the many of the scenic, historic, economic, recreation, open space, and ecological values of the community.

Imperial Beach is also an integral part of the larger California coastal community, linked by shared public coastal resources that are prized by the state, national and international community. Cooperative, accessible, and equitable use of these resources by both residents and visitors is an important goal. The Conservation and Ecotourism Element guides the City in protecting and preserving natural and cultural resources and reducing

Environmentally Sensitive Habitat Area (ESHA) is defined in Section 30107.5 of the Coastal Act. Three main elements must be met for an area or habitat to be considered ESHA.

- 1) A geographic area can be designated ESHA either because of the presence of individual species of rare plants or animals or because of the presence of a particular rare habitat.
- 2) An area is especially valuable due to its special nature or role in an ecosystem, and
- 3) Areas that could be easily disturbed or degraded by human activities and developments.

greenhouse gas emissions all in the context of meeting community needs and planning for future development, redevelopment, and ecotourism.

The following natural and cultural resource topics are discussed in this element:

- 📄 Climate Change
- 📄 Urban Forestry
- 📄 Beach and Coastline
- 📄 Biological Resources
- 📄 Wetlands
- 📄 Water Quality
- 📄 Air Quality
- 📄 Cultural Resources
- 📄 Ecotourism

California Coastal Act

DISCUSSION

A chief objective of the Coastal Act is the preservation, protection, and enhancement of coastal resources, including land and marine habitats and sensitive habitat areas, and water quality. The rarest and most ecologically important habitats are protected from development. Several policies contained in the Coastal Act, which are herein incorporated into the General Plan/Local Coastal Program, work together to meet this objective. Wetlands, streams and associated riparian habitat are protected in order to maintain the biological productivity and quality of coastal waters. Marine resources are also protected to sustain the biological productivity of coastal waters and to maintain healthy populations of all species of marine organisms. The Coastal Act sections related to the Conservation and Ecotourism Element are provided at the end of this element.



Imperial Beach's natural resources, including its 3.5 miles of beach frontage and the Tijuana River Estuary, are central to its character, image, quality of life, and economy.

4.1 Climate Change

DISCUSSION

California has made reducing greenhouse gas (GHG) emissions a priority, with a growing body of legislative and regulatory actions that extend mandates and opportunities to California's local governments, businesses, and residents. The City of Imperial Beach is committed to doing its part to curtail GHG emissions, and to build resilience to current and projected impacts. [Efforts to build resiliency to climate change impacts is also referred to climate adaptation. In the California Natural Resources Agency's 2014 Safeguarding California report, climate adaptation refers to "efforts that respond to the impacts of climate change – adjustments in natural or human systems to actual or expected climate changes to minimize harm or take advantage of beneficial opportunities."](#) The General Plan ~~provides policies to~~ addresses [climate adaptation with policies related to](#) sustainability, environmental justice, healthy communities, sea level rise and other stressors resulting from climate change. For information on climate adaptation and sea level rise resiliency, see the Safety Element. Additional cross-references are found in Table CE-1 in this section.

The General Plan provides the policy framework for GHG reduction measures detailed in the City's Climate Action Plan (CAP). The CAP includes: a baseline emissions inventory, GHG reduction targets, measures to achieve the reductions, and a plan for future monitoring. CAP measures were selected based on their: ability to achieve reduction targets; cost-effectiveness; consistency with local goals and priorities; and potential to provide secondary, or indirect environmental, economic, health, or community co-benefits. The City's regional contribution to wetlands conservation is an ongoing climate mitigation measure. Studies show that wetland soils sequester carbon at rates 10 to 50 times greater than forest lands. Wetlands restoration and protection efforts are known as "blue carbon" strategies.

Major emissions categories addressed in the CAP are:

- ‡ **Energy** (electricity and natural gas). In general, energy emissions are generated through the combustion of fossil fuels to generate electricity or directly provide power (e.g., natural gas combustion for water heating). The energy sector includes the use of electricity and natural gas in residential, commercial, industrial, and government land uses within the jurisdictional boundaries of Imperial Beach. San Diego Gas and Electric (SDG&E) provides electricity and natural gas service within Imperial Beach
- ‡ **Transportation.** Using travel models and vehicle fuel emissions factors, the transportation sector estimates emissions for vehicle trips occurring within the community. Generally, the inventory and measures reflect half of the length of vehicle trips that start or end within the community as well as all that occur solely within the community and the estimated efficiency of the vehicle fleet over time. For more information on reducing vehicle trips, see the Mobility Element.
- ‡ **Solid Waste.** Solid waste emissions are generated from the waste decomposition process, during which only organic (i.e., carbon-based) materials release GHGs. Carbon dioxide (CO₂) emissions are generated under aerobic conditions (i.e., in the presence of oxygen), such as when composting. Methane (CH₄) and CO₂ emissions, two common greenhouse gases, are generated under anaerobic conditions (i.e., in the absence of oxygen), as in many landfill environments. Only methane emissions are addressed and targeted for reductions in the CAP since CO₂ emissions from waste are considered biogenic.
- ‡ **Potable Water.** The water sector includes energy emissions associated with water treatment, distribution, and conveyance.
- ‡ **Wastewater.** The wastewater sector includes emissions resulting from the wastewater treatment process.

Table CE-1 Issues Related to Climate Change in the General Plan *(Note, while not shown in track-changes, this table has been re-formatted and expanded since the March 2019 draft)*

Climate Planning Topic	GP/LUP Element	Section
Sustainable Development	Land Use	Sec. 2.2 Sustainable Development Sec. 2.4 Commercial and Mixed-Use Areas Sec. 2.7 Environmental Justice and Healthy Communities
	Conservation and Ecotourism (Conservation)	4.7 Ecotourism
GHG Emissions	Design	Sec. 8.3 Sustainable Coastal Development
	Mobility	Sec. 3.1 -3.4 Complete Streets and Multi-Modal Uses
Urban Heat Island	Conservation	Sec. 4.1 Climate Change Sec. 4.2 Urban Forestry Sec. 4.5 Air Quality (including City Fleet)
	Conservation	Sec. 4.1 Climate Change Sec. 4.2 Urban Forestry
	Design	Sec. 8.3 Sustainable Coastal Design
Water Supply	Facilities and Services (Facilities)	Sec. 6.8 Water Supply and Conservation
Climate Change Adaptation	Land Use	Sec. 2.7 Environmental Justice and Healthy Communities
	Conservation	Sec. 4.1 Climate Change Sec. 4.2 Urban Forestry Sec. 4.3 Biological Resources/Natural Systems Sec. 4.4 Water Quality
	Land Use	Sec. 2.7 Environmental Justice
Sea Level Rise Resiliency	Facilities	Sec. 6.1 Capital Improvement Planning and Financing Sec. 6.8 Water Supply and Conservation
	Parks, Recreation and Coastal Access	Sec. 5.2 Public Coastal Access
	Safety	Sec. 7.1 Sea Level Rise (includes flooding)
Wildfire Risk	Design	Sec. 8.3 Sustainable Coastal Design
	Safety	Sec. 7.2 Fire Hazards
Hazard Mitigation	Safety	Sec. 7.4 Disaster Preparedness

POLICIES

OVERALL

4.1.1 Adopt and implement a Climate Action Plan ([CAP](#)) that is aligned with state requirements for greenhouse gas emission reductions, while achieving local co-benefits.

- a. [Strategically prioritize implementation actions that achieve greenhouse gas emissions reductions while also achieving co-benefits, including but not limited to those that pertain to climate adaptation and resiliency, the economy, public health, and community character.](#)

a-b. Prioritize investments, programs and services to be responsive to community members who are most vulnerable to the potential impacts of climate change.

b. _____

4.1.2 Monitor implementation of the Climate Action Plan (CAP) to ensure its effectiveness over time, and adjust measures as needed to achieve mandated targets.

a. Collaborate with public, private, and nonprofit partners to foster attainment of CAP emission reduction goals and to increase the City's resilience to risks.

e-b. Consider the impacts of actions or no-actions on the most vulnerable populations including people with chronic illnesses, the poor, the elderly and children.

~~4.1.2~~4.1.3 Support regional coordination on Climate Action Plan implementation to help ensure estimated reductions occur while leveraging ongoing partnerships and actions among neighboring jurisdictions.

4.1.4 Pursue federal, state, and regional funding and collaboration opportunities to implement the Climate Action Plan.

4.1.5 Expand the City's 2019 Climate Action Plan to include potential climate impacts, such as sea level rise, extreme heat, drought, and air quality on vulnerable assets and populations, and adaptation strategies to reduce vulnerabilities and increase resiliency as a part of a future update, or alternatively prepare a stand-alone climate adaptation plan.

EMISSIONS CATEGORIES

~~4.1.3~~4.1.6 Encourage greater use of multi-modal transportation options, including walking, biking, and transit.

~~4.1.4~~4.1.7 Collaborate with SANDAG to include mobility system improvements in Regional Transportation Plan updates, that serve Imperial Beach and contribute to vehicle miles traveled -based GHG reductions.

~~4.1.5~~4.1.8 Increase energy efficiency in existing buildings and outdoor lighting.

~~4.1.6~~4.1.9 Increase use of renewable energy sources community-wide.

~~4.1.7~~4.1.10 Promote the efficient use of water in buildings and landscapes.

~~4.1.8~~4.1.11 Increase diversion of waste materials that can be composted, recycled, or otherwise beneficially reused.

~~4.1.9~~4.1.12 Enhance and expand the City's urban forest.

~~4.1.10~~4.1.13 Seek to quantify "blue carbon" greenhouse gas benefits and identify opportunities to sequester emissions through restoration, enhancement, expansion, and conservation of wetlands and other natural habitats.

~~4.1.11~~4.1.14 Improve access to healthy local food.

~~4.1.12~~4.1.15 Implement and enforce state green building code requirements for multifamily homes to reducing building energy use, conserve water and reduce wastewater generation.

~~4.1.13~~4.1.16 Reduce GHG emissions from City operations, including the City's fleet (see Policy 4.5.4).

4.2 Urban Forestry

DISCUSSION

Trees in the urban environment provide significant contributions to the quality of life for residents and visitors. The City's urban forest includes publicly and privately-owned trees and vegetation. Trees help clean the air, create aesthetically pleasing, pedestrian-friendly neighborhoods, and increase property values. Trees contribute to Climate Action Plan and climate resiliency goals through sequestering carbon, providing shade that saves energy used for air conditioning, and reducing the urban heat island effect. The term "heat island" describes urban areas that are hotter than nearby rural or open space areas. [See also the Design Element, Sustainable Development section.](#)

POLICIES

- 4.2.1 Increase the City's urban tree canopy cover and maximize the [co](#)-benefits of trees, [such as the reduction of the urban heat island effect, energy use, and urban runoff.](#)
- Seek resources and take actions needed to plant, care for, and protect trees in the public right-of-way and parks.
 - Plant large canopy shade trees, where appropriate and with consideration of habitat and water conservation goals.
 - Seek to retain significant and mature trees.
 - [d.](#) Foster partnerships, volunteerism, and citizen action to support the urban forest.
- 4.2.2 Require the planting of trees through the development permit process, and consider tree planting as mitigation for carbon emissions, storm water runoff, and other environmental impacts as appropriate. See also the Design Element.
- 4.2.3 Support public outreach efforts to provide information on the environmental and economic benefits of trees.
- 4.2.4 Develop and maintain an active civic landscaping plan for all public landscaped areas under City management to promote the urban forest.
- Strive to allocate funds in the annual budget for the landscaping and maintenance of street medians and parkways.
 - Develop priorities for landscaping projects to which annual budgets are keyed.
 - Investigate outside sources of funding for landscape improvement projects and subsequent maintenance, such as volunteer programs, public/private partnerships, and special districts.
 - Develop a list of plant materials (especially trees) most suitable to the City of Imperial Beach in terms of ecological suitability, compatibility with adjacent infrastructure, [\(including but not limited to NOLF\),](#) cost, form (preferably tall, broad form and densely foliated), hardiness, maintenance and aesthetic value. Give preference to species that are drought- and salt-tolerant, [and](#) native, and [prohibit non](#)invasive plants to the extent feasible.
 - Develop street tree master plans for key corridors in association with future corridor planning efforts.
 - Prepare a tree preservation ordinance to protect heritage and significant trees in the community.

*Urban Forestry is the cultivation and management of native or introduced trees and related vegetation in urban areas for their present and potential contribution to the economic, physiological, sociological, and ecological well-being of urban society.
– California Urban Forestry Act of 1978*

4.3 Biological Resources

DISCUSSION

This section provides an overview of local topography, vegetation, and wildlife. The City is rich in biological resources due to its unique position on the San Diego Bay, the Tijuana River Estuary, and the Pacific Ocean. In Imperial Beach, sensitive habitat areas around San Diego Bay and the Tijuana River have been preserved and protected [in perpetuity since 1982 through federal and state designations including the establishment of the Tijuana River National Estuarine Research Reserve \(TRNERR\) and the through City initiatives and partnerships with state and federal agencies. Information on the California Marine Protected Areas at the Tijuana River Mouth State Marine Conservation Area \(see the is found in the Parks and Coastal Access Element for additional information. Biologically rich areas may also be considered potential Environmentally Sensitive Habitat Area \(ESHA\) as defined in the Coastal Act \(see box\) on p. CE-1\). The TRNERR has also been designated a "Wetland of International Importance" by the United Nation's Ramsar Convention on Wetlands since 2005.](#)

[Climate change, including sea level rise and potential future adaptation measures may have an impact on biological resources. The 2016 Imperial Beach Sea Level Rise Assessment reported that almost all adaptation strategies \(as well as no action\) have secondary impacts associated with them, with potential positive or negative impacts to ecology or recreational opportunities. See the Safety Element Section 7.1 for information on how effective adaptation and reduction of risks will require maintaining and enhancing natural infrastructure, such as beaches and wetlands, and Policy 7.1.4 for direction to consider biological impacts when evaluating adaptation strategies.](#)

~~-ESHA~~

[Biologically rich areas may also be considered potential Environmentally Sensitive Habitat Area \(ESHA\) as defined in the Coastal Act \(see text box\) on p. CE-1\). For purposes of the Local Coastal Program, the City's mapped Open Space Land Use Designation \(in the Coastal Zone\) shown on the Land Use Map - Figure L-1 also identifies its "Area of Potential ESHA." These "Area of Potential ESHA" lands include biological resources that have not been formally mapped, quantified, or verified as ESHA by the City at this time. Natural areas within the City cannot be definitively identified as ESHA without further detailed and site-specific study. This additional evaluation may occur as a part of a future LCP update, or on a site-specific basis as a part of future development project proposals in accordance with Policy 4.3.6.](#)

[Since these formally designated open space areas are already federally- and state-protected, there is no risk to the existing habitat as it is already fully protected on all sides and the existing surrounding roadways and development define the boundaries. In this context, the existing patterns of land use and development serve to protect and buffer the natural lands from further encroachment and increased development pressures. Moreover, the development of the City and the Navy facilities, and the preservation of the natural lands have now mutually co-existed for nearly four decades thus further reinforcing the foundation for continued harmonic co-existence.](#)

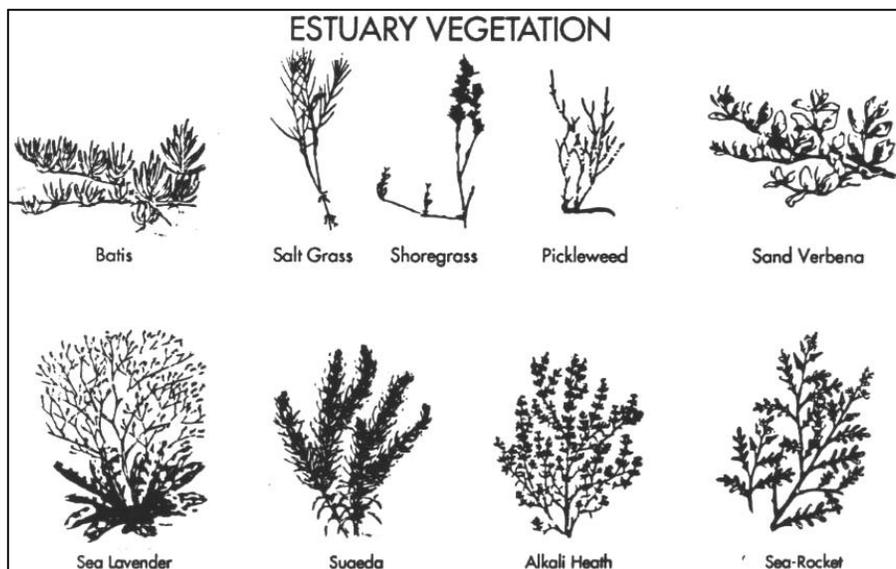
[Consistent with Coastal Act Section 30240, this plan includes policies intended to avoid any significant disruption of habitat values. The LCP further requires that development adjacent to an Area of Potential ESHA be sited and designed to prevent effects that would significantly degrade ESHA and to ensure continued compatibility with the natural areas. The General Plan/LCP also includes policies calling for the protection of areas adjacent to Area of Potential ESHA lands through the provision of buffers. The City's determination of whether a setback/buffer is needed to avoid a direct adverse impact to natural habitats mapped within the Open Space areas, and/or the appropriate minimum setback/buffer width if warranted, should include analysis of environmental, economic and community impacts and must demonstrate a clear benefit to the natural habitat.](#)

TOPOGRAPHY

Imperial Beach is characterized by relatively flat topography compared to the rest of the San Diego region. There is, however, some vertical relief, with the highest ground level in the urbanized area located at forty-five feet above mean sea level (AMSL). Most of the area lies at less than thirty feet above sea level. The extreme southern end of the City has bluffs which rise to approximately fifty feet above sea level. Some natural dunes exist along the beaches and are most pronounced in the estuary area. Surface drainage is generally to the west, towards the ocean, and to the north, towards San Diego Bay.

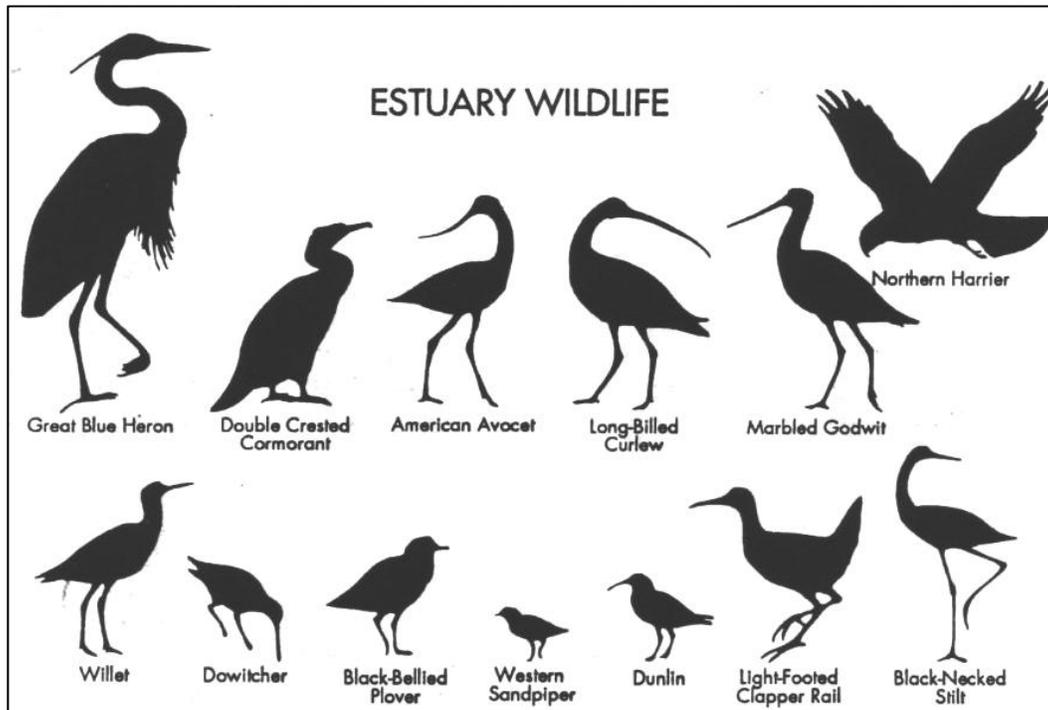
VEGETATION

Imperial Beach can be divided into two general areas: (1) the urbanized area, and (2) the undeveloped area. Little natural vegetation is present in the urbanized area. The domestic vegetation consists of landscaping, mainly ornamental trees, some street trees, shrubbery and a variety of ground covers. Most of the landscaping can be found on private property. Landscaping on City streets, school grounds and playgrounds is conspicuously lacking which is most evident along major streets, in the commercial areas and in the beach area. In that the Tijuana River Estuary occupies most of the City's undeveloped land and is still in its natural state, the native vegetation that exists is abundant, life supporting, and in some cases, unique.



WILDLIFE

Because of the urbanized nature of the developed area of the City, existing significant wildlife habitats within such areas are nonexistent. The types of wildlife that do exist are those that have adapted to, or are compatible with, urbanization and do not have to compete with humans for survival. The undeveloped area primarily consists of the Tijuana River Estuary that includes significant wildlife.



SAN DIEGO BAY AND TIJUANA RIVER

The San Diego Bay and the Tijuana River Estuary are the two primary areas supporting biological resources, within and adjacent to the City.

SAN DIEGO BAY

Imperial Beach is bordered on the north by the South San Diego Bay Unit of the San Diego National Wildlife Refuge (managed by the U.S. Fish and Wildlife Service) which includes the portions of the Otay River subject to tidal influence. The refuge encompasses 2,620 acres of intertidal mudflats, eel grass beds, salt marshes, and submerged tidelands in San Diego Bay. It supports numerous endangered and threatened species of plants and animals, provides habitat for resident and over-wintering waterfowl, seabirds, and shorebirds, and is an important stop on the Pacific Flyway. Major habitat restoration of the former western salt ponds started in 2010 and is ongoing.



Imperial Beach is bordered on the north by the South San Diego Bay Unit of the San Diego National Wildlife Refuge.

WETLANDS AND THE TIJUANA RIVER ESTUARY NATIONAL ESTUARINE RESEARCH RESERVE

Along the City's southern border is the Tijuana River Valley which contains one of the largest intact coastal wetland systems in Southern California. Unlike most other coastal ecosystems in the region, which have been fragmented or lost altogether,

the valley has contiguous beach, dune, salt marsh, riparian, and upland ecosystems. The lower section of the Tijuana River Watershed encompasses 2,293 acres of the Tijuana River National Estuarine Research Reserve (TRNERR). The National Estuarine Research Reserve System (NERRS) is a network of protected areas established for long-term research, education, and stewardship. Through a partnership between the National Oceanic and Atmospheric Administration's Estuarine Reserves Division and the coastal states, the NERRS plays a critical role in sustaining the nation's estuaries and coastal communities. There are currently 29 rReserves located throughout the United States, comprising more than one million acres of estuarine land and water. The Reserve is also designated by the Ramsar Convention as a wetlands of international importance. Ramsar Convention wetlands are sites containing representative, rare or unique wetlands that are important for conserving biological diversity.



The Tijuana River Valley is one of the largest intact coastal wetland systems in Southern California.

The TRNERR includes the Tijuana Slough National Wildlife Refuge (managed by the U.S. Fish and Wildlife Service) and Border Field State Park (managed by California State Parks), [that encompasses the beach \(and its resources\) to the Mexican border. The Southwest Wetlands Interpretive Association funds and works in collaborative partnerships with these agencies and others to work toward preserving and restoring wetlands.](#) Approximately 928 acres of the TRNERR are located within Imperial Beach city limits.



The Tijuana River Estuary occupies most of the City's undeveloped land and is still in its natural state.

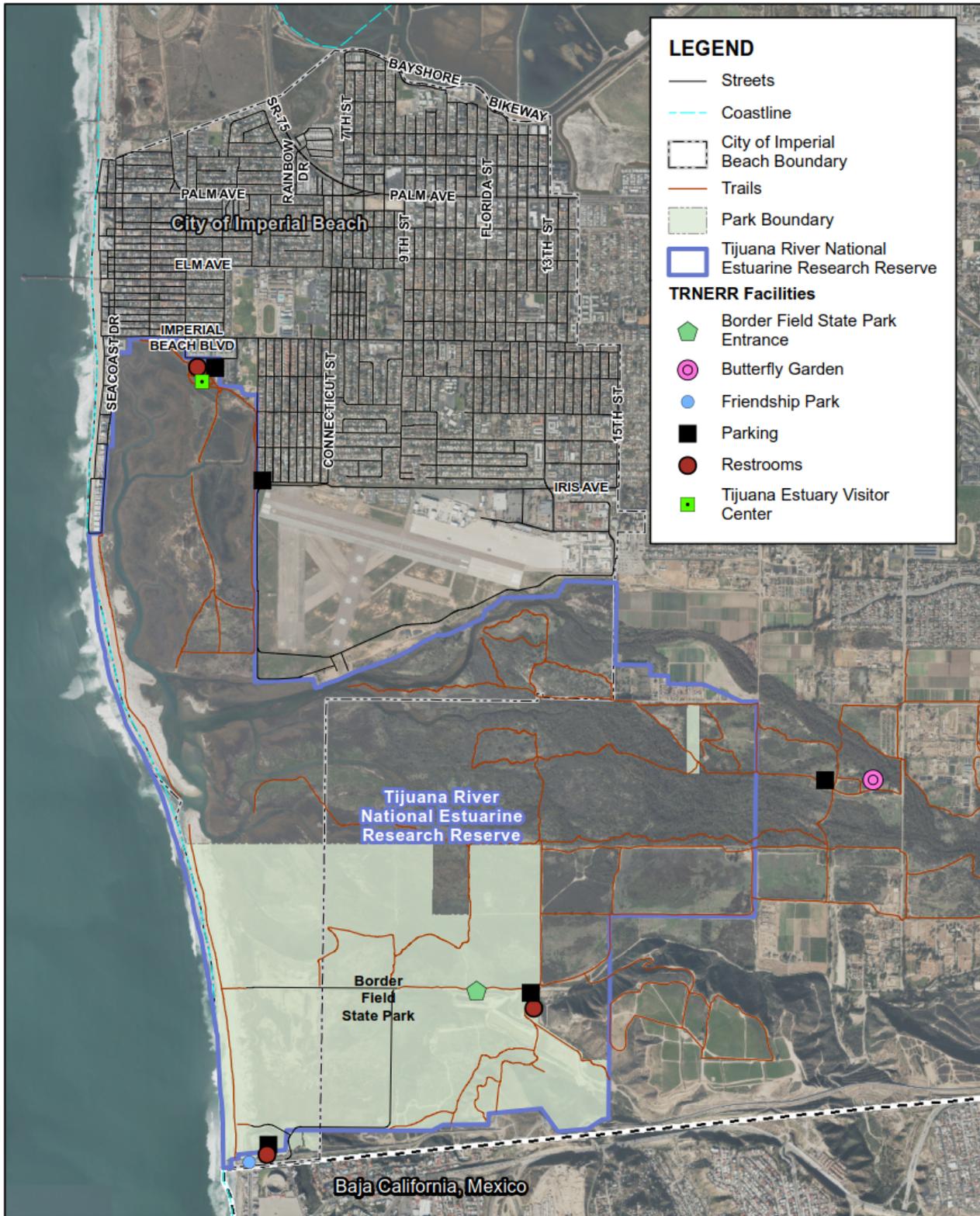
The TRNERR contains a highly variable system that may best be termed an "intermittent estuary." It is a coastal body of water that is influenced by both marine and river waters. During the winter-wet season, its waters are diluted by rainfall and stream flow, while during the rest of the year; it is an extension of the ocean. It supports a range of natural plant and animal communities that are especially adapted to withstand the variable salinities that occur when sea and fresh waters mix and provides habitat for a variety of rare and endangered species, [including the Western Snowy Plover, the California Least Tern, and the Light-footed Rail.](#)

The TRNERR has been ecologically influenced by its highly variable environment, which is very much a function of both its watershed and adjoining land uses. Land management practices on both sides of the border have greatly influenced the quantity and quality of water entering the estuary.

Eight major natural habitats exist within the TRNERR. They include transition from upland to wetland, riparian salt marsh, salt panne, brackish marsh, estuarine channels and tidal creeks, intertidal flats, and dunes and beach. The estuary has been substantially altered by catastrophic events and human disturbances. However, with the exception of the brackish marsh habitat, which appears to be directly dependent on urban runoff, most of the habitats present today represent variations on what existed at the turn of the century.

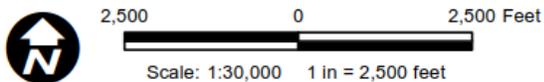


TRNERR has been ecologically influenced by its highly variable environment.



Source: SanGIS 2014; City of Imperial Beach 2017; TRNERR 2017; CA State Parks 2016

FIGURE CE-1
TIJUANA RIVER NATIONAL
ESTUARINE RESEARCH RESERVE
 LOCAL COASTAL PLAN UPDATE
 IMPERIAL BEACH



In 2010, the TRNERR prepared an updated "Comprehensive Management Plan". The key goal of the Comprehensive Management Plan is "to protect, restore and enhance the viability of key coastal habitats and species and preserve the region's cultural heritage while encouraging compatible public use, education and research." In addition, as of 2017, planning was underway for the Tijuana Estuary Tidal Restoration Program- a large multi-phased wetland restoration program involving up to 500 acres of restoration. Its primary objective is to restore valuable habitat processes that have been lost, and to increase the exchange of water in a tidal cycle. This will enhance flushing, improve water quality, and enhance natural processes that deliver sediment from the watershed to the ocean (Revell, 2016). The City recognizes and supports the importance of the TRNERR for its ecological and open space values.

POLICIES

- 4.3.1 Require that new development avoid or minimize impacts to, and provide mitigation for, any adversely impacted special status, threatened, listed, or endangered plant and animal species consistent with all state and federal regulations.
- 4.3.2 The City recognizes and supports the importance of the Tijuana River Natural Estuarine Research Reserve both for its ecological and open space values. In this regard, the City shall: Assist in the implementing of the Estuaries Resource protection program, which includes the following development restrictions:
"A buffer area will be established for each development adjacent to wetlands. The width of a buffer area will vary depending upon an analysis. The buffer area should be a minimum of 100 feet unless the applicant can demonstrate to the satisfaction of the State Department of Fish and [Wildlife Game](#) and U.S. Fish and Wildlife that 100 feet is unnecessary to protect the resources of the habitat area. If the project involves substantial improvements or increased human impacts, such as a subdivision, a wider buffer area may be required. For a wetlands the buffer area should be measured from the landward edge of the wetland."
- 4.3.3 Minimize urban run-off into the Tijuana River Estuary and San Diego Bay to the maximum extent feasible.
- 4.3.4 Support the efforts of habitat preserve managers to adaptively manage the TRNERR to ensure adequate connectivity, habitat range, and diversity of topographic and climatic conditions are provided for species to move as climate shifts.
- ~~4.3.5~~ The City shall coordinate with other agencies such as the TRNERR to achieve shared objectives in planning studies.

~~Require that new development in or adjacent to areas that could qualify as potential ESHA conduct site specific biological studies and determine appropriate buffers as a part of the discretionary review process.~~

- 4.3.6 Require that new development in or adjacent to the City's mapped Open Space/Areas of Potential ESHA lands (See Figure L-1) that has the potential to result in a direct, adverse effect on natural habitats, conduct site-specific biological studies. The purpose of the studies is to locate the edge of the existing natural habitat and determine if any setback/buffer is necessary to avoid a direct and adverse impact on natural habitats, as a part of the City's discretionary review process.
 - a. Recognize that the boundaries of the City's Open Space/Area of Potential ESHA lands respects existing established patterns of development and natural areas that are being preserved are critical to the City reaching its local ecotourism and state-mandated housing goals.
 - b. Where necessary and feasible, a setback / buffer, shall be maintained or provided around Open Space/Area of Potential ESHA lands, except where establishment of such a buffer is prevented by existing development. In those circumstances, where a buffer is warranted, the largest feasible buffer will be established. In most cases, a buffer already exists in the form of a public street and related right of way. Any setback/buffer areas shall extend from the outer edge of the tree or shrub canopy of natural habitat areas or the Area of Potential ESHA.
 - c. Development in areas adjacent to Area of Potential ESHA lands shall be compatible with the continuance of such habitat areas. Development allowed within buffer areas including but not limited to: multi-modal

[mobility facilities; ecotourism-dependent uses; and typical residential amenities that currently exist such as patios, awnings, landscaping, hardscaping, fencing, swimming pools and spas.](#)

- d. [Consider the role of project level design, mitigation measures, and mix of uses in minimizing or avoiding impacts to areas adjacent to an Area of Potential ESHA lands when determining if a buffer is needed. Where a buffer is needed, determine required widths and allowable uses through a site-specific analysis. Nominal or minimum buffers shall be allowed where it is demonstrated, through submittal of site specific biological study that provides evidence from qualified biologists, that the proposed narrower buffer would prevent impacts that would significantly degrade and/or disrupt the biological integrity and habitat values of the natural area. See also Policy 4.3.1.](#)

4.4 Water Quality

DISCUSSION

The City of Imperial Beach is committed to reducing the impacts of urban activity on receiving water quality within City boundaries to the maximum extent practicable. The City's approach to managing watersheds and protecting water quality is found in its Water Quality Improvement Plan and Jurisdictional Runoff Management Program. The City of Imperial Beach is also working regionally and bi-nationally to reduce water pollution originating in Mexico and affecting the City's public beaches as well as public health. [The City is also responsible for protecting and where feasible, restoring the quality of coastal waters to implement Coastal Act policies \(see Coastal Act sections 30230 and 30231, provided in the text box at the end of this element\).](#)

MUNICIPAL SEPARATE STORM SEWER SYSTEM PERMIT (MS₄)

The San Diego Regional Water Quality Control Board (RWQCB) is the regulatory agency responsible for ensuring water quality protection of receiving waters from discharges of storm water out of the municipal separate storm sewer system. The Municipal Storm Sewer System (MS₄) Permit, issued by the RWQCB, requires all development and redevelopment project to implement storm water source control and site design practices to minimize the generation of pollutants. Additionally, the MS₄ Permit requires new development and significant redevelopment projects to implement Structural Storm Water Best Management Practices to reduce pollutants in storm water runoff and control runoff volume. The San Diego RWQCB requires Imperial Beach, and other jurisdictions ("copermittees") that have responsibilities to implement the MS₄ Permit, to develop a Water Quality Improvement Plan to improve the water quality of storm water discharges into the receiving waters of the Tijuana Estuary, Pacific Ocean, and the tidally influenced area of the Otay River. The City collaborates with San Diego County jurisdictions on the development and implementation of watershed protection principles and implementation of best management practices and plans for specific land uses. [The City implements the MS₄ permit through the Municipal Code Title 8 \(see text box\).](#)

The City of Imperial Beach Jurisdictional Runoff Management Program (JRMP) is a comprehensive plan that documents the multiple storm water management programs that the City implements to effectively prohibit non-storm water discharges to the MS₄, and reduce the discharge of pollutants to the maximum extent practical. The purpose of the JRMP is to organize and describe the strategies the City will implement to protect water quality. The strategies in the JRMP are informed by the adaptive management process built into the Water Quality Improvement Plans and are intended to be reviewed and updated as necessary to achieve the desired outcomes in water quality.

PACIFIC OCEAN SHORELINE AND TIJUANA RIVER ESTUARY

Imperial Beach boasts 3.5 miles of beach frontage and approximately 928 acres of the TRNERR. It is widely known that the most significant source of bacteria impacting ocean and estuary water quality in Imperial Beach is the frequent input of sewage-contaminated flows from Mexico, and from the Tijuana River and surrounding canyons in Mexico. During winter months the shoreline from the international border to Coronado experiences frequent beach closures from elevated bacteria levels when rainfall causes Tijuana River flows to exceed the capacity of the diversion systems that are operated jointly by the U.S. and Mexico governments.

The City of Imperial Beach has been impacted by polluted water, and trash and debris that flows into the municipal boundaries of Imperial Beach. Much of the polluted water, trash and debris finds its way from various sources through Imperial Beach to the Pacific Ocean and in turn pollutes the City's coastal waters and beaches. The pollution causes beach closures and creates deleterious impacts to individual health and the economic health of the City. The City of Imperial Beach has been aggressively working to remedy this pollution and in 2018 the City filed a lawsuit against Federal Government, specifically the International Boundary and Water Commission (IBWC) alleging the IBWC is violating the Clean Water Act and the Resource Conservation and Recovery Act. The City efforts and leadership on this matter are necessary as clean water and clean beaches should and must be provided for all of the residents and visitors to Imperial Beach, and must be done with all urgency.

City Municipal Code Title 8, Chapter 8.3 (note, this text box is new since the March 2019 draft)

The purposes of the ordinance codified in Imperial Beach Municipal Code Chapter 8.3 are to restore and maintain the water quality of receiving waters and further protect the health, safety and general welfare of city of Imperial Beach residents; to effectively prohibit non-storm water discharges to the MS₄; to cause the use of storm water best management practices by the city, its residents, and businesses that will reduce polluted storm water runoff discharging from the MS₄ to receiving waters to the maximum extent practicable; and to ensure the city is compliant with applicable state and federal law. This chapter seeks to promote these purposes by:

- A. Preventing prohibited non-storm water discharges to the storm water conveyance system, receiving waters, and the environment;
- B. Establishing minimum best management practices for storm water management for existing developed areas;
- C. Establishing requirements for the design of storm water best management practices for development projects;
- D. Establishing requirements for the management of storm water flows from construction projects;
- E. Controlling the contribution of storm water pollutants through the development and implementation of watershed-based plans and through interagency agreements;
- F. Controlling the contribution of storm water pollutants from discharges not covered under NPDES Permit No. CAS0109266 or as amended such as Caltrans, U.S. Federal Government, and Mexico through interagency agreements and other collaborative efforts;
- G. Establishing standards to meet the requirements of state and federal law and the NPDES Permit No. CAS0109266 or as amended;
- H. Assessing the effectiveness of BMPs and updating the City's storm water management program through an adaptive planning and management process to reduce the discharge of pollutants in storm water from the storm water conveyance systems to the maximum extent practicable (MEP);
- I. Requiring enforcement of the Storm Water Management and Discharge Control Ordinance Chapter 8.30 to hold dischargers to the storm water conveyance system accountable for their contribution of pollutants and flows

POLICIES

- 4.4.1 Continue to collaborate on bi-national solutions to control Tijuana River pollution and improve conditions, while pressing for infrastructure improvements on both sides of the border to foster desired outcomes.
- 4.4.2 Collaborate with San Diego Regional Municipal Separate Storm Sewer System (MS4) Storm Water Permit Copermittees to implement Water Quality Improvement Plans for the San Diego Bay, Tijuana River and Otay River watershed management areas.
- 4.4.3 In coordination with stakeholders, Preserve, and coordinate with stakeholders where possible, create or restore areas that provide water quality benefits, such as riparian corridors and wetlands, and promote the design of new developments so that it protects the natural integrity of drainage systems and water bodies. Plan, site, and design development to protect and, where feasible, restore hydrologic features such as stream corridors, drainage swales, topographical depressions, groundwater recharge areas, floodplains, and wetlands.
- 4.4.4 Avoid conversion of areas particularly susceptible to erosion and sediment loss and/or establish development guidance that identifies these areas and protects them from erosion and sediment loss.
- 4.4.5 Minimize the amount of impervious surface and directly-connected impervious surfaces in areas of new development and redevelopment and maximize the on-site infiltration of runoff.
- 4.4.6 Incorporate green street features into street improvement projects where appropriate and feasible.
- 4.4.7 Require implementation of runoff management practices that minimize the volume of urban runoff discharged to receiving waters in areas where minimizing impervious surface is not possible.
- 4.4.8 Existing and new development shall not degrade Imperial Beach’s coastal resources or water quality.
- a. Require development projects to comply with water quality and watershed protection requirements per the San Diego Regional Municipal Separate Storm Sewer System (MS4) Storm Water Permit, Coastal Act sections 30230 and 30231, and Municipal Code Chapter 8.30.0207, whichever is most stringent for the protection of coastal water quality.
- b. Require all Coastal Development Permit applicants proposing development that has the potential for adverse water quality or hydrologic impacts to coastal waters to:
1. Protect and restore water quality
 2. Minimize pollutants in runoff from development.
 3. Plan, site, and design development to minimize the transport of pollutants in runoff from the development into coastal waters.
 4. Plan, site, and design development to 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).
- 4.4.9 Require new development and encourage existing development to use drought-tolerant non-invasive landscaping with preference for the use of California native plantings. Plan, site, and design development to preserve or enhance noninvasive vegetation to achieve water quality benefits such as transpiration, interception of rainfall, pollutant uptake, shading of waterways to maintain water temperature, and erosion control.
- ~~4.4.8~~4.4.10 Require new development and redevelopment to give precedence to the use of a Low Impact Development (LID) approach to storm water management, which integrates site design strategies (e.g., minimizing the building footprint, preserving vegetation, and protecting natural drainage features) with small-scale, distributed Best Management Practices (BMPs) (e.g., permeable pavement surfaces, rain barrels and cisterns, and bioretention techniques) to replicate the site’s natural hydrologic balance through infiltration, evapotranspiration, harvesting, detention, or retention of storm water close to the source, to the maximum extent appropriate and feasible.

~~4.4.9~~~~4.4.11~~ New development should be planned, sited, and designed to minimize the installation of impervious surfaces, where feasible, especially in areas directly connected to the municipal storm drain system, in order to minimize increases in stormwater or dry weather runoff. Redevelopment projects shall, where feasible, increase the area of pervious surfaces.

~~4.4.10~~~~4.4.12~~ New development should be planned, sited, and designed to maintain or enhance on-site infiltration of runoff, where appropriate and feasible.

~~4.4.11~~~~4.4.13~~ If on-site infiltration of runoff may potentially result in adverse impacts, including, but not limited to, geologic instability, flooding, or pollution of coastal waters, the development shall substitute alternative BMPs (e.g., flow-through planter box, green roof, or cistern) that minimize changes in the runoff flow regime to the extent appropriate and feasible.

~~4.4.12~~~~4.4.14~~ Alternative BMPs may be used where infiltration BMPs are not adequate to treat a specific pollutant of concern attributed to the development, or where infiltration practices would conflict with regulations protecting groundwater.

~~4.4.13~~~~4.4.15~~ The City will review new development and landscape improvements for potential degradation of water quality and water resources and to ensure that project site, design, and management protects coastal waters from nonpoint source pollution. Projects shall minimize the transport of pollutants in runoff and minimize post-development changes in the site's runoff volume, flow rate, timing, and duration.

4.5 Air Quality

DISCUSSION

Air quality is defined by the concentration of pollutants related to human health. Ambient concentrations of air pollutants are determined by the rate and location of pollutant emissions released by pollution sources, and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and sunlight.

The City of Imperial Beach is located in the San Diego Air Basin (SDAB), which comprises the entire San Diego region. Ambient air quality conditions in the San Diego Air Basin are influenced by such natural factors as topography, meteorology, and climate, in addition to the amount of air pollutant emissions released by existing air pollutant sources.

The climate of Imperial Beach is largely controlled by the strength and position of the semi-permanent high pressure center over the Pacific Ocean. Because coastal areas are well ventilated by fresh breezes during the daytime, they generally do not experience the same frequency of air pollution problems found in some areas east of Imperial Beach. A common atmospheric condition known as a temperature inversion affects air quality in the Basin. The atmospheric pollution potential of an area is largely dependent on a combination of winds, atmospheric stability, solar radiation, and terrain. The combination of low wind speeds and low inversions produces the greatest concentration of air pollutants.

Since 1970, air quality has been regulated at the federal level under the Clean Air Act (CAA). The CAA authorized the U.S. Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for air pollutants of nationwide concern. The EPA has established six criteria air pollutants. These pollutants include ozone (O₃), carbon monoxide (CO), nitrogen oxide (NO_x), sulfur dioxide (SO₂), suspended particulate matter (PM₁₀), and lead (Pb). PM_{2.5} particulate matter has recently been added to this listing; however, data to document ambient conditions or quantify these emissions do not yet exist. Primary standards for air pollutants were established to protect public health, while secondary standards were established to protect the public welfare by preventing impairment of visibility and damage to vegetation and property.

Poor air quality can lead to negative health outcomes and can affect quality of life. People most likely affected by air pollution include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. The following uses are considered sensitive because they tend to support those more vulnerable to poor air quality conditions: residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Moreover, certain air pollutants also contribute to depletion of the beneficial stratospheric ozone layer in the upper atmosphere, are recognized as contributing to acid rain and climate change, and cause damage to man-made materials through processes including metal deterioration, paint erosion, and damage to structural surfaces such as glass, concrete, brick, and tile.

Planning measures to improve air quality can help reduce the level of pollutants in the air, thereby leading to improvements in public health, welfare and quality of life. [Mobility Element Complete Streets principles and policies are designed to reduce vehicle miles traveled which in turn results in reduced air pollutant emissions.](#) Air pollution falls beyond the limits of control of any one jurisdictional authority. While there are certain actions which can be taken locally, positive control of air pollution requires a coordinated program including federal agencies, the state government, all general-purpose governments, and many of the special purpose districts in the air basin.

POLICIES

- 4.5.1 Work with the San Diego County Air Pollution Control District (SDAPCD) to meet state and federal ambient air quality standards in order to protect residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution.
- 4.5.2 Review new developments to ensure that they meet acceptable air quality standards as set forth by the state and SDAPCD, preferably through the environmental review process.
- 4.5.3 Coordinate with SDAPCD in evaluating exposure of sensitive receptors, such as residences, schools, and playgrounds, to toxic air contaminants, and require that projects incorporate strategies to protect public health and safety.
- ~~4.5.4 Prioritize the purchase of zero-emissions City fleet vehicles or, in cases where zero emissions vehicles are not cost-effective, purchase low emissions and/or alternative-fuel vehicles that put the City fleet on a path to zero emissions and align with the City's climate action plan targets.~~
- ~~4.5.4 Purchase low and zero emission vehicles for the City's fleet and use available clean fuel sources for trucks and heavy equipment, whenever feasible.~~
- 4.5.5 Advocate for attainment of all air quality legislation, standards and agreements at the local, regional national and binational levels.
- 4.5.6 Pursue traffic management approaches that support Complete Streets principles and reduce vehicle emissions, as further discussed in the Mobility Element.

4.6 Cultural Resources/Tribal Cultural Resources

DISCUSSION

ARCHAEOLOGICAL RESOURCES

Archaeological resources include sites that represent the material remains of Native American societies and their activities, and ethnohistoric sites that represent Native American settlements occupied after the arrival of European settlers in California. Such archaeological sites may include villages, seasonal campsites, burial sites, stone tool quarry sites, hunting

sites, traditional trails, and sites with rock carvings or paintings. Archaeologically sensitive areas are sites that contain or have the potential to contain archaeological resources.

Paleontological resources are the remains and/or traces of prehistoric life, exclusive of human remains, and including the localities where fossils were collected and the sedimentary rock formations from which they were obtained/derived.

A review of archaeological records for the Imperial Beach area indicates that there are presently no identified archaeological sites of major importance. Several minor sites have, however, been identified; the largest of which covers approximately ten acres along the Otay River channel along the northern City boundaries. Two smaller sites also have been recorded in the same general area along the farthest southern reach of the San Diego Bay. For the most part, these identified sites are composed of the remains of shellfish gathering activities, and associated discarded tools. No evidence of permanently inhabited villages have been found to date. All three sites in the northern part of the City are currently heavily impacted by existing urban uses. Another site has been located and excavated at the far southern end of Imperial Beach at Border Field State Park. All these sites appear to be associated with the Early Milling La Jolla culture, which dominated the South Bay area between 7000 and 5000 years ago. Other sites have reportedly been encountered near the Oneonta Slough during construction activity, although it is not known whether steps were taken to preserve the reported sites or whether it was in fact a true archaeological site.

HISTORICAL RESOURCES

Previous reviews of historical records for the Imperial Beach area indicated that there are no identified historical sites of major importance (historical record reviews were not conducted for the 2018 LCP-focused General Plan Update). In terms of historical resources, there appears to have been a U.S. cavalry post on the present site of Westview Elementary School. There is also photographic evidence that at one time a "wave-action" device was constructed at or near the municipal pier. The purpose of this device was apparently to harness the energy from the waves falling to shore.

POLICIES

- 4.6.1 The City shall develop or ensure compliance with protocols that protect or mitigate impacts to archaeological and cultural resources. Determinations of impacts, significance, and mitigation shall be made by qualified archaeological (in consultation with recognized local Native American groups), historical, or paleontological consultants, depending on the type of resource in question.
- 4.6.2 The City shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.

4.7 Ecotourism

DISCUSSION

The long-term economic health of Imperial Beach is intimately linked to its rich natural amenities and classic small Southern California beach town character. Its sandy beaches, access to the Tijuana Estuary, and the San Diego Bay make it a regional destination. Visitors from around the region, state, country, and Mexico come to enjoy the sandy beaches, surf, and natural scenery. For many neighboring cities and communities Imperial Beach functions as the south San Diego County beach destination. As a result tourism, and particularly ecotourism, forms the primary base sector of the local economy and the foundational component for future economic development and a strong fiscal base. Revenues from tourism and visitors

including transit occupancy and sales taxes make up a significant portion of the City's tax base and overall economic activity. Maintaining and enhancing these natural amenities and visitor-serving uses while preserving community character should remain priorities in the future.

Beaches throughout the San Diego region that maintain wide sandy beaches consistently attract more attendance than other narrower beaches. An established and growing body of studies and surveys shows this to be a trend throughout the state as a whole. Estimates for beach attendance in Imperial Beach generally have averaged well over 400,000 visitors per year. These visitors include both overnight and daytime visitors that spend money at hotels, restaurants, grocery stores, and other establishments.

Additional visitors come to enjoy the rich wildlife and natural scenery of the Tijuana River Estuary and the San Diego Bay. Visitor attractions within the Tijuana River National Estuarine Research Reserve (TRNERR) include Border Field State Park and the Tijuana Estuary Visitor Center. Border Field State Park provides, picnic areas, barbecues, horse corrals, and interpretive displays. Visitors enjoy surf fishing, beach combing, hiking, horseback riding trails and beach access, and bird watching. The Estuary Visitor Center offers a variety of hands-on, interactive activities for all ages; education programs for students as well as tours; informative lectures and other outreach opportunities for adult audiences; training workshops and technical assistance to coastal decision-makers from Point Conception (north of Santa Barbara) to San Quintin (on the Baja California Coast 190 miles south of the border); and special events throughout the year. In addition, the public can access an extensive network of trails within the Tijuana River Valley Regional Park, managed by the County of San Diego.



Appropriate development along the San Diego Bay supports coastal access and economic development goals.

Imperial Beach shares borders and interests with numerous local, state, federal, and international agencies, as well as the San Diego Unified Port District (SDUPD). These entities impact Imperial Beach's natural resources and economic development. Strong partnerships and collaboration will continue to be important.

The following policies are intended to ensure that Imperial Beach's natural resources are core considerations moving forward in its economic development strategy. See also the Land Use Element Section 2.5.

POLICIES

- 4.7.1 Prioritize development of visitor serving and commercial recreational facilities designed to enhance public opportunities for coastal access and recreation on land planned for visitor-serving commercial and/or recreational facilities.
- 4.7.2 New visitor-serving uses should not displace existing low-cost visitor-serving uses unless an equivalent low-cost replacement is provided where feasible.
- 4.7.3 Encourage the development of lower-cost overnight and extended stay accommodations and suitable for families and ecotourism visitors.
- 4.7.4 Collaborate with local, regional, or state education and research institutions, and natural resource-focused non-profits to support or provide ecotourism information and activities.
- 4.7.5 Support ecotourism to increase understanding and enjoyment of coastal resources.
- 4.7.6 Consider using a portion of Transient Occupancy Tax ("TOT") revenues for uses such as supporting and promote area businesses, and sand replenishment/retention programs that will benefit both residents and visitors.

- 4.7.7 Continue to support visitor-serving development along the Bayshore Bikeway that emphasizes the growth of ecotourism and is consistent with protecting and enhancing the natural resources, processes and aesthetics of the San Diego Bay shoreline.
- 4.7.8 Explore opportunities to relocate the City Public Works Yard and develop the site and other suitable San Diego Bay shoreline properties for visitor serving and ecotourism purposes [compatible with nearby sensitive habitats and with sea level rise considerations](#).
- 4.7.9 Pursue opportunities to increase pedestrian access to the San Diego Bay including improving street ends and expanded pedestrian facilities along the Bayshore Bikeway, [while minimizing adverse impacts to sensitive biological resources](#).
- 4.7.10 Market Imperial Beach as a pre-eminent beach recreation and ecotourism destination.
- 4.7.11 Continue collaboration with agencies such as the SDUPD, the U.S. Fish and Wildlife Service, [the Navy](#), the County of San Diego and the TRNERR to enhance the beach, San Diego Bay shoreline, Tijuana River Estuary, and trail networks.
- a. Upgrade beach street ends and the Imperial Beach Pier to enhance public access and community character.
 - b. Support wetland restoration of Pond 20.
 - c. Maintain and improve access to coastal resources and the estuary [while minimizing impacts](#)
 - d. Improve water quality.
 - e. Support research, cultivation, and farming (aquaculture) of coastal resources, and other ecotourism endeavors, in a manner that is sustainable and designed to minimize impacts on coastal resources to the maximum extent feasible.
 - f. Seek opportunities to enhance and expand the existing trail network, including the California Coastal Trail.
- 4.7.12 Implement a signage and wayfinding program to attract Bayshore Bikeway and Border to Bayshore cyclists to visit the Bikeway Village, Seacoast Commercial District, and the Tijuana Estuary Visitor Center consistent with the signage policies of the LCP.

Coastal Act Policies - Conservation

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 30236 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 floodplain 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 30230 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 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 (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.

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 protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impact on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded, where feasible.

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 floodplain 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 30240 (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.

5.0 Parks, Recreation, and Coastal Access Element

"The nation behaves well if it treats its natural resources as assets which it must turn over to the next generation increased, and not impaired, in value." – Theodore Roosevelt

Goals

- ‡ A city with abundant public beaches, parks and recreational amenities to support a healthy environment and high quality of life for residents and visitors
- ‡ Preservation and enhancement of public beaches and coastal resources that contribute to the city's identity and scenic beauty
- ‡ Recreational amenities that support a healthy community and a strong economy
- ‡ A city that provides access to beaches and parks that supports the enjoyment of recreational opportunities for all

Background

Imperial Beach's coastline, ocean, parks, and preserves define its character, contribute to a healthy environment and quality of life for residents and visitors, and support the area's economy and emerging eco-tourism sector. These resources reinforce the City's identity as a small beach-oriented town, and make the City an enjoyable, scenic and aesthetically pleasing place to live, work, play, and visit. The Parks and Recreation Element is an optional element of the General Plan, while the Coastal Public Access section is required by the California Coastal Act. This element focuses on the recreational value of the City's parks and beaches. Additional complementary policies are found in the Conservation and Ecotourism Element, and the Mobility Element.

The City of Imperial Beach owns, operates, and/or maintains approximately 21.4 acres of park land in seven sites consisting of Sports Park, Reama Park, Dunes Park, Veterans Park, Teeple Park, Serenity Gardens Pocket Park, and Pier Plaza. The recreational programs within these parks are operated by the Imperial Beach Boys and Girls Club. In addition to City parks, the following recreational facilities are located within the City limits: Border Field State Park, the City Beach, the Imperial Beach Boys and Girls Club, the Mar Vista High School's athletic fields, Pier Plaza, Tijuana River Estuary Visitor Center and related trails, and the playgrounds of six elementary schools. Other recreational facilities include Marina Vista Center, the Senior Center, and the Conference Center located in the Civic Center complex. Parks and open spaces draw visitors that contribute to the economy, are amenities that make Imperial Beach a desirable place to live and work, and provide opportunities for exercise for a healthy active lifestyle.



Sports Park

The City's parks, beaches and other active recreational facilities are listed on Table P- I, and mapped on Figure P- I. In addition, the existence of two state parks/beaches in the immediate area (Border Field State Park to the south and Silver Strand State Beach to the north) and the Tijuana River National Estuarine Research Reserve (TRNERR) also help to provide additional public recreational and beach access points and open space for City residents and visitors.

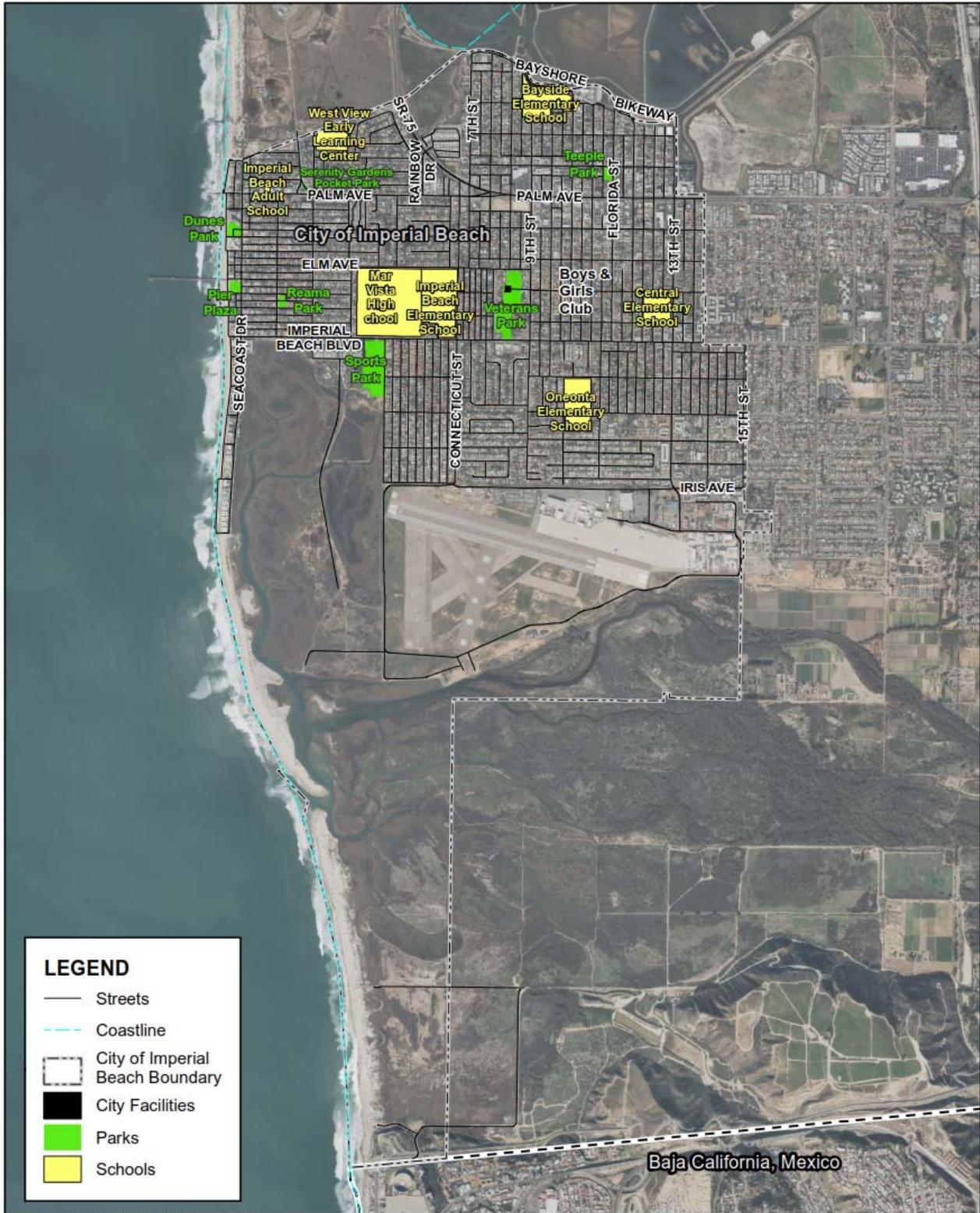
Looking Forward: Recreational Needs Assessment

The City's existing park land, including school sites, parks, and the beach but excluding the estuary and Border Field State Park, total approximately 76.9 acres.

**Table P-1
City Parks, Beaches and Schools by Acreage**

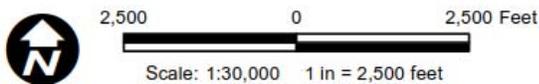
Facilities	Designated Acreage	Facilities
Parks Total	31.3	
Dunes Park	.7	Volleyball, horseshoe, picnicking, children's playground
Pier Plaza & Pier	2.6	Fishing, picnicking, benches
Reama Park	.7	Tot lot, picnic, grass area
Sports Park	7.8	Gym and indoor recreation facilities, picnic areas, six fully lighted ball fields, a skate park, children's playground, an outdoor basketball court, a large (passive) grass play area and restrooms
Veterans Park	6.69	Picnic, grass play areas, children's playground, bandstand/gazebo, dog park, and a senior/ community center with kitchen and restrooms
Serenity Gardens Pocket Park	.20	Need description
Teeple Park	.70	Playgrounds, picnic benches, and barbecues
Sandy Beach	43.7	<ul style="list-style-type: none"> • Carnation to South Seacoast – 16 • South Seacoast to Tijuana River Outlet – 18 • Tijuana River Outlet to International Border 9.7
Imperial Beach Boys & Girls Club	1.7	Recreation building, baseball field, basketball court
Schools Total (Park and Recreation Acreage Only)	45.6	
Bayside Elementary School	7.7	Mini-park, 2 baseball fields, basketball, volleyball & wall board courts, running track, and play equipment
Central Elementary School	3.1	2 baseball fields, basketball, volleyball and 2 wall board courts, and play equipment
Imperial Beach Elementary School	2.7	Soccer/baseball field, basketball and volleyball courts, and play equipment
Mar Vista High School	20	Basketball, football field, running track, two swimming pools, and baseball and soccer fields
Oneonta Elementary School	7.6	2 soccer/baseball fields, baseball and volleyball courts, and play equipment
West View Early Learning Center	4.5	Mini-park, baseball fields, baseball, volleyball & wall board courts, and play equipment
Parks and Schools Total	76.9	
Total Regional Facilities (within City Limits)	92.8	
Border Field State Park	31.7	Picnic, beach, hiking and horseback trails
California Coastal Trail		TBD
Tijuana River National Estuarine Research Reserve (outside of Border Field State Park)	61.1	Visitor center and trails

*Acreages are rounded and may not sum.



**FIGURE P-1
PARK AND RECREATION FACILITIES**

LOCAL COASTAL PLAN UPDATE
IMPERIAL BEACH



Within the City's urbanized lands, the City is focused on maintaining and enhancing existing active use facilities, looking for new and diverse strategies to expand park and recreation opportunities, and striving for equity in the distribution of programs and facilities. Consequently, the City will strive to meet recreational needs through joint use agreements, investments in existing facilities, seeking creative ways to meet park needs, and taking advantage of opportunities that may arise as new development occurs. For example, many of the residents' needs are being accommodated due to the joint use agreements between the City and the Elementary School District and the San Diego Unified Port District (SDUPD). The SDUPD agreements are for public areas along San Diego Bay and the Pier, and the waterfront plaza area adjacent to the Pier. Passive recreational opportunities in open space lands are further discussed in the Conservation and Ecotourism Element.

Figure P-2 identifies which areas of the City are within walking distance of City parks and schools; the areas most in need of additional parks are the northeast and southeast areas of the City.

Coastal Act Policies

DISCUSSION

A broad policy goal of the State of California is to maximize the provision of coastal access and recreation consistent with the protection of public rights, private property rights, and coastal resources as required by the California Constitution and provided in Section 30210 of the Coastal Act. Several additional policies contained in the Coastal Act, which are herein incorporated into the General Plan/Local Coastal Program, work together to meet this objective.

The Coastal Act requires that development not interfere with the public right of access to the sea (Section 30211); provides for public access in new development projects where adequate access does not exist nearby, with limited exceptions (Section 30212); encourages the provision of lower cost visitor and recreational facilities (Section 30213); addresses the need to regulate the time, place, and manner of public access (Section 30214); provides for public facilities and their distribution (Section 30212.5); specifies the need to protect ocean front land suitable for recreational use; (Section 30221); gives priority to the use of land suitable for visitor serving recreational facilities over certain other uses (Section 30222); requires the protection of upland areas to support coastal recreation, where feasible (Section 30223); and encourages recreational boating use of coastal waters (Section 30224).

The public's right to access is supported by the availability of adequate parking and multi-modal facilities to serve coastal access and recreation uses. Support facilities such as parking lots, restrooms, and picnic areas also contribute to ensuring maximum coastal access in the City. The Coastal Act policies related to parks, recreation, beaches, and public shoreline access are provided for reference at the end of the element.



The Coastal Act requires that development not interfere with the public right of access to the sea.

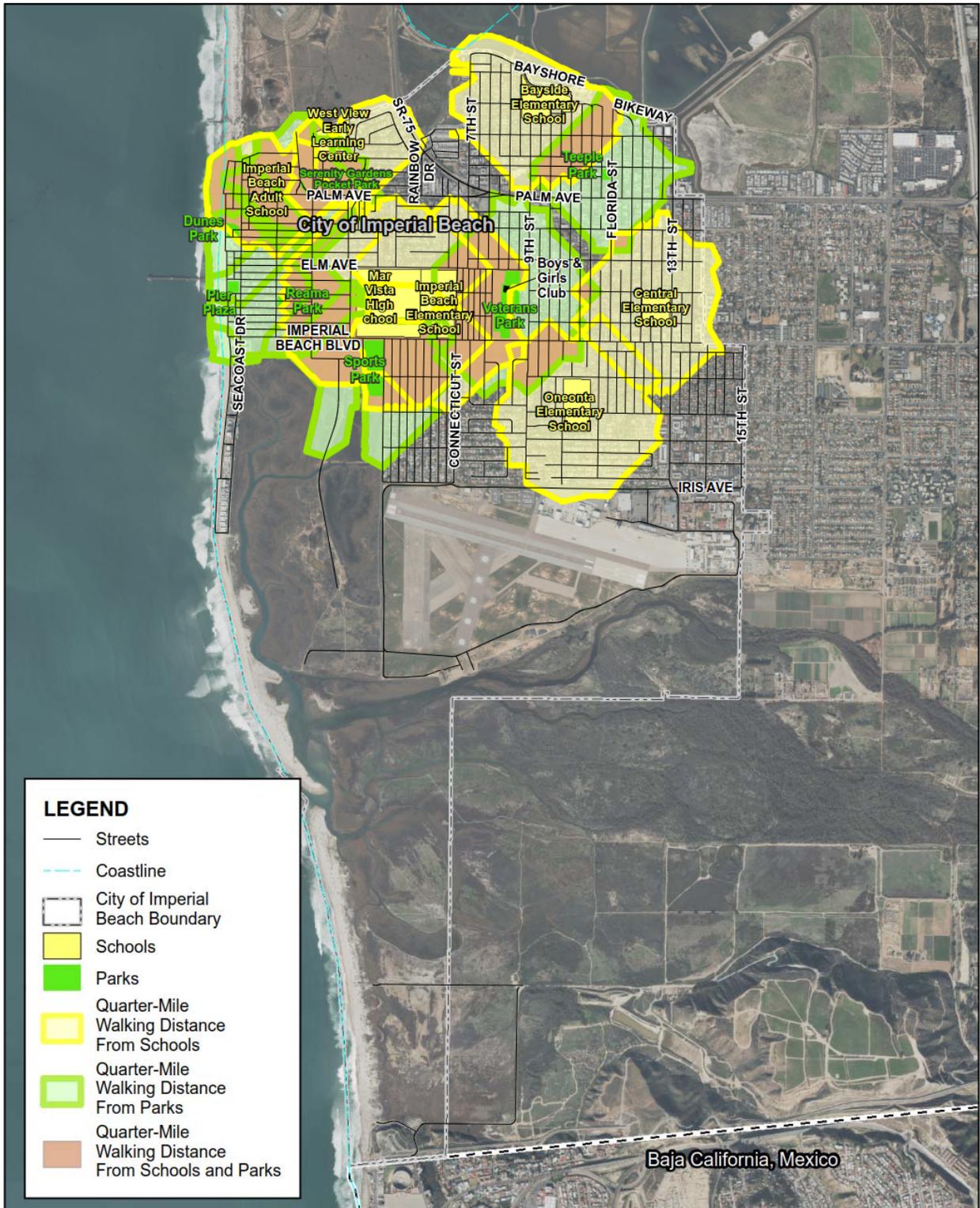


FIGURE P-2
QUARTER-MILE WALKING DISTANCE
FROM CITY SCHOOLS AND PARKS
 LOCAL COASTAL PLAN UPDATE
 IMPERIAL BEACH

5.1 Parks and Recreation

Discussion

To fully utilize the natural advantages of Imperial Beach's location and climate, a variety of park and recreational opportunities are provided for residents and visitors of all ages, incomes and lifestyles. City residents and visitors benefit from a variety of parks including mini-parks, neighborhood parks, community parks, activity centers, special use and all-purpose parks.

Shared or "joint use" of parks, athletic fields, open space resources and other recreational facilities is an important strategy to cost-effectively expand recreational opportunities available to the public, made possible by the City's continued coordination with the school districts, the SDUPD, and other county, state, and federal agencies. The City's Park and Recreation facilities are described in this section. The City's coastal resource-based parks are addressed in Section 5.2 of this element.

DUNES PARK

This .73-acre park is located at the Daisy Avenue Street end, four blocks north of Pier Plaza between the beach and Seacoast Drive. Improvements currently include picnic tables, bathrooms, showers, grassy area, water fountains, basketball hoop, a play structure, fitness station, and public parking.



Dunes Park

VETERANS PARK

This centrally located 6.69-acre city park includes a picnic area, very large (passive) grass play areas, children's playground, bandstand/gazebo, dog park, restrooms, and a senior/ community center with kitchen and restrooms. Adjacent to the park is the Boys and Girls Club facility (on City land) and the County library, which includes a shared community room. With modification of the grassy play area, there would be space available for additional active recreational facilities, if desired.

REAMA PARK

This small neighborhood park of approximately 0.72 acre is located on Second Street between Elkwood and Elder Avenues. Dedicated in 1962, this park was named after the late Councilmember Harold Reama. Facilities include a children's playground, picnic area and passive grass area. No organized recreational programs occur at this location.

SPORTS PARK

This fully developed park and recreation center is located at 425 Imperial Beach Boulevard. Facilities include: gymnasium and indoor recreation facilities, picnic areas, six fully lighted ball fields, a skate park, children's playground, an outdoor basketball court, a large (passive) grass play area and restrooms. The two T-ball fields on the southern edge of the Sports Park are located on Tijuana Estuary property. The Boys and Girls Club's recreational program which is operated from this facility includes dance lessons, softball leagues and organized activities for the Boys and Girls Club.

TEEPLE PARK

Rose Teeple was a beloved community member who is the namesake of this park. The park, formally named the Rose Teeple Memorial Park, was dedicated in 1995. The park serves the northern portion of the community and is a common site for hosting various community events such as the recent clean cities initiatives spearheaded by community leaders aimed at cleaning up and enhancing the area.

SERENITY GARDEN

Located next to the Fleet Reserve Association, the Serenity Garden is a small pocket park that was created by IB Beautiful, Inc. and dedicated in January 2003. The Serenity Garden is intended to be a place of peace and beauty and has been created for contemplation and memory. The Garden is landscaped with drought-tolerant plants suited to the coastal environment and contains a public art installation.

ELEMENTARY SCHOOLS

The City of Imperial Beach has a history of joint use agreements with the South Bay Union Elementary School District that allow the City to use school facilities for recreational purposes. The Boys and Girls Club offers after school programs on all six of the District's school sites in Imperial Beach. While the school district's policy is to permit the public to use the school grounds in the evenings and on the weekends when school is not in session, use agreements to implement have proven unfruitful and need to be continually championed so sustained implementation may occur. The elementary school sites have a mix of sports fields and courts, playground equipment, running tracks and work-out stations.

MAR VISTA HIGH SCHOOL

Approximately 20 acres of the 33-acre school site is devoted to outdoor recreation. Facilities include a football field and track, two outdoor swimming pools, and baseball/soccer fields. The community has access to the basketball courts and athletic fields when they are not in use by the school.



Mar Vista High School

IMPERIAL BEACH BOYS AND GIRLS CLUB

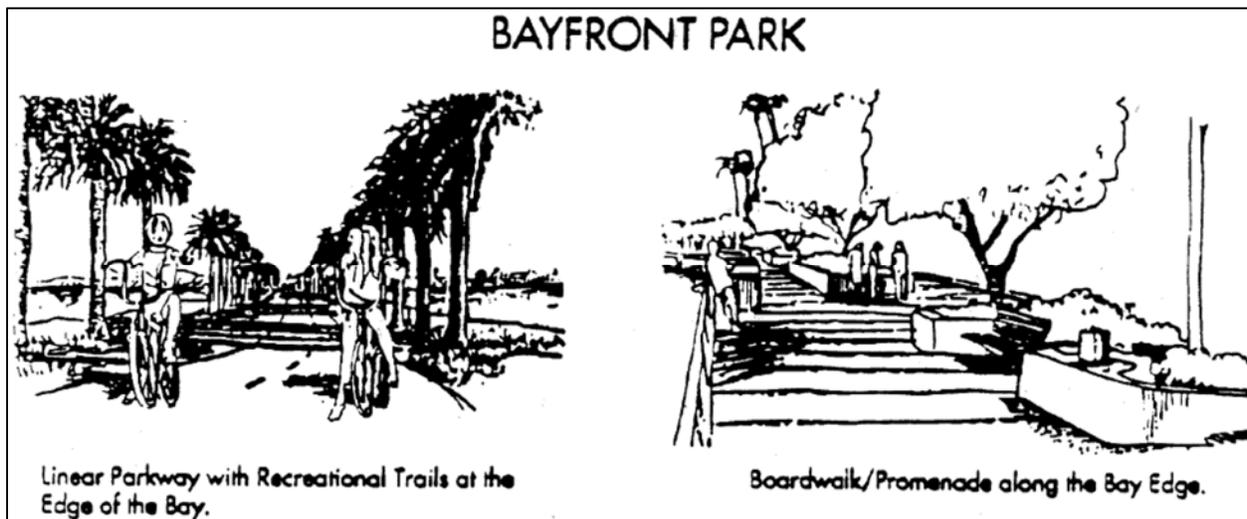
This 1.7-acre recreational facility is located on City property and is bounded on two sides by Veterans Park. In addition to the large recreational building, there is one lighted softball field, and one basketball court on the site. Programs offered include arts and crafts, athletics, social recreation, and youth group programs.

Policies

- 5.1.1 Provide a variety of facilities and programs to meet the recreational needs of a diverse population, including children, teens, adults, persons with disabilities, elderly, and visitors.
 - a. Balance the scheduling of programmed and non-programmed use of parks and recreation facilities to provide access to a diversity of users.
 - b. Provide free and lower cost opportunities for residents and visitor to enjoy the coastal environment.
- 5.1.2 Pursue increased active and passive recreational opportunities for the general public in the Tijuana River National Estuarine Research Reserve (TRNERR), Border Field State Park, the beach and the San Diego Bayfront.
- 5.1.3 Provide safe and convenient linkages within and between park facilities and open space areas.
- 5.1.4 Use oceanfront land for recreational and recreation-related uses whenever feasible.
- 5.1.5 Continue to maintain coordination with the school districts to maximize the shared use of school and City facilities for park and recreational purposes.
- 5.1.6 Develop parks or public spaces in conjunction with schools if future opportunities arise as a result of changing enrollment patterns, charter school development, school relocation or expansion, or other unforeseen conditions.
- 5.1.7 Recognize the contribution of the private sector to parks and recreation and encourage cooperative continuation and expansion of such contributions.
- 5.1.8 Develop recreation programs to meet the needs of citizens and visitors. Monitor and adjust programs as necessary over time.
- 5.1.9 Pursue joint use and cooperative recreational programs with City residents, businesses, nonprofit organizations,

neighboring cities, the SDUPD, the County of San Diego, and state and federal agencies.

- 5.1.10 Evaluate opportunities for enhancing public coastal access in the City through the creation of a linear park or other activating uses along the City Bayfront that incorporates features such as walkways, bike trails, landscaped areas, rest areas with benches and tables, a promenade bridge over the Otay River Channel to enhance pedestrian connectivity, an amphitheater for community and other events, gazebo, information center and other features. [Engage with the California Coastal Commission early in the planning process to proactively address Coastal Act issues including biological impacts, size/intensity, and siting options.](#)
- 5.1.11 Pursue expansion of the park system. Options to be considered include but are not limited to:
- Work with the Navy to pursue [compatible](#) joint use of the Navy lands for recreation/open space resource.
 - Encourage the school districts to expand the school sites as property may become available and as needs warrant.
 - Pursue a park at the northwest corner of Silver Strand and Carnation Avenue.
 - Encourage provision of public spaces, such as plazas and pocket parks, space in association with new development.
- 5.1.12 Strive for equity in the provision of park/recreational/open space facilities so that all residents live within ¼ mile walking distance of a park, beach or open space resource.
- 5.1.13 Ensure that parks and recreation facilities, community services, public facilities, public transportation, bicycle facilities, and pedestrian amenities are equitably distributed and accessible throughout the City.
- 5.1.14 In addition to park land, pursue other park system improvements such as enhanced sports fields, fitness stations along pedestrian routes, trailhead amenities, and recreation center building expansions.



Bayfront activation is a longstanding City goal.

5.2 Public Coastal Access

DISCUSSION

The public's right of access to the state's navigable waters is protected by the California Constitution, which states: "No individual, partnership or corporation, claiming or possessing the frontage for tidelands of a harbor, bay inlet, estuary, or other navigable water in this State, shall be permitted to exclude the right-of-way to such water whenever it is required for any public purpose, not to destroy or obstruct the free navigation of such water, and the Legislature shall enact such laws as will give the most liberal construction to this provision, so that access to the navigable waters of this State shall be always attainable for the people."

The ocean and the beach are the principal recreational and visitor-serving land uses and attractions in Imperial Beach and provide no-cost and low-cost recreational opportunities for residents and the general public. The City of Imperial Beach has 17,600 linear feet of shoreline. Approximately 12,000 feet (68%) is either publicly owned or has direct vertical or lateral access to the ocean. This includes 6,000 linear feet of sandy beach owned by the State of California within the Border Field State Park in the southwestern corner of the City.



The ocean and the beach are the principal recreational and visitor-serving land uses and attractions in Imperial Beach.

The Coastal Commission requires both “lateral” and “vertical” coastal access. The Coastal Commission Shoreline Access Interpretive Guidelines define “lateral access” as a way of providing public access and use along and parallel to the shoreline. Lateral access in Imperial Beach consists of Ocean Boulevard and usable areas of the City’s dry sandy beach, which fluctuates in size with daily, monthly, and seasonal tidal activity and based on beach nourishment activities and other sediment loading occurring locally and regionally, and access along the San Diego Bay provided by the Bayshore Bikeway and parallel pedestrian facilities. It is anticipated that some public access facilities would be affected over time by rising seas as noted in the 2016 City of Imperial Beach Sea Level Rise Assessment (IB SLR Assessment). This topic is addressed further in the Safety Element. Coastal views are discussed in Design Element Section 8.1.



Lateral access in Imperial Beach includes access along the San Diego Bay provided by the Bayshore Bikeway and pedestrian facilities.

“Vertical” access refers to access from the first public roadway to the shoreline and is not necessarily vertical in the context of an elevation change. Vertical and Lateral Accessways are mapped in Figure P-3.



The public’s right of access to the beach is protected by the California Constitution.



Source: SanGIS 2014; City of Imperial Beach 2017



1,500 0 1,500 Feet

Scale: 1:18,000 1 in = 1,500 feet

FIGURE P-3
VERTICAL AND LATERAL
COASTAL ACCESS
 LOCAL COASTAL PLAN UPDATE
 IMPERIAL BEACH

The most heavily used public accessways are located at Pier Plaza and the surrounding beaches where there is public parking both on and off-street. Throughout the City Beach area, there are frequent access-ways which supports maximum public access to the coast (Table P-2).

**Table P-2
Vertical and Lateral Public Coastal Access**

Access-way	Use	Type	Width	Condition
1) Imperial Beach Pier	Active ¹	V	30'	Improved
2) Palm Avenue	Active	V	80'	Paved
3) Dahlia Avenue	Active	V	53.3'	Paved
4) Dunes Park	Active	V	Varies	Improved
5) Daisy	Active	V	53.3'	Paved
6) Date	Active	V	53.3'	Paved. Planned for improvement
7) Elm	Active	V	53.3'	Paved
8) Evergreen	Active	V	53.3'	Paved
9) Elder	Active	V	53.3'	Paved
10) Elkwood	Active	V	53.3'	Paved
11) Ebony	Active	V	53.3'	Paved. Planned for improvement
12) Imperial Beach Blvd.	Active	V	80'	Paved
13) Admiralty Way	Active	V	53.3'	Paved. Planned for improvement
14) Beach	Active	V	53.3'	Parking & walkway. Planned for improvement
15) Cortez	Active	V	53.3'	Unimproved. Planned for improvement
16) Descanso	Active	V	53.3'	Unimproved. Planned for improvement
17) Encanto	Pass & Repass ²	V	53.3'	Unimproved. Planned for improvement
18) Carnation	Pass & Repass	V	18'	Paved. Planned for improvement
19) Ocean Lane	Active	L	20'	Improved to alley standards
20) Ocean Boulevard	Active	L	Varies	Sand
21) Border Field Horse Trails	Active	L & V	Varies	Sand

V = Vertical Access L= Lateral Access

¹ Active use includes the full range of beach-oriented activities. Alternatively, "passive" use include those activities normally associated with beach use, such as walking, swimming, jogging, etc., but does not include use of the access-way for organized sport activities, campfires, or vehicular access for other than emergency vehicles.

² Pass and Repass indicates an area where topographic constraints of the site makes use of the beach dangerous, where habitat values of the shoreline would be adversely impacted by public use of the shoreline, or where the access-way may encroach closer than 20 feet to a residential structure. When any of these conditions exists, the access-way may be limited to the right of the public to pass and repass along an access area.

For the purposes of public access, the beach area can be divided into five resource areas. These resource areas are:

- ‡ Imperial Beach Pier and Pier Plaza
- ‡ Imperial Beach City Beach
- ‡ Tijuana River National Estuarine Research Reserve
- ‡ Borderfield State Park
- ‡ San Diego Bayfront and Bayshore Bikeway

IMPERIAL BEACH PIER AND PIER PLAZA

The City pier is one of Imperial Beach's main public visitor serving and recreational facilities. The pier was reconstructed most recently in 1987 and is approximately 30 feet wide and 1,500 feet long and is used for both sightseeing and fishing. Lights on the pier allow for visitor and fishing uses at night. As the owner of the pier, the SDUPD may in the future add charter boat fishing and restaurant concessions.

Imperial Beach Portwood Pier Plaza includes grassy expanses, picnic areas, a tot-lot, entertainment stage, and access to the pier and beach. Portwood Pier Plaza also includes tributes to Imperial Beach's long history as a surfing destination, including

a colorful collection of surfboard benches. Each bench bears a plaque that tells the story of how Imperial Beach’s big waves had an impact on the surfing pioneers from 1937 to the 1950s. The crowning piece of the plaza is Surfhenge – a towering colorful public art monument to surfing.



The crowning piece of Imperial Beach Portwood Pier Plaza is Surfhenge – a color public art monument to surfing.

IMPERIAL BEACH CITY BEACH

Imperial Beach is known for its 3.5 miles of white sand beaches and big waves. The City Beach is the open sandy beach area both north and south of the city pier. The beach is accessible from the Pier Plaza parking lot and has wide vertical access points for easy egress and ingress to the beach and ocean. The entire City Beach area is subject to daylight lifeguard monitoring.

TIJUANA RIVER NATIONAL ESTUARINE RESEARCH RESERVE

As discussed in the Conservation and Ecotourism Element, approximately 928 acres of the Tijuana River National Estuarine Research Reserve (TRNERR) are located within the City limits of Imperial Beach. The remaining acreage is within the jurisdiction of the City of San Diego. California State Parks operates the TRNERR Visitor Center and maintains Border Field State Park. The U.S. Fish and Wildlife Service manages the Tijuana Slough National Wildlife Refuge. In addition, several regional agencies and local municipalities share ownership and management responsibilities at the Reserve.



The TRNERR Visitor Center includes an exhibit hall, education laboratory, audio/visual room, offices, and libraries.

The Reserve provides four miles of trails through uplands, saltmarsh and mudflats as well as access to the beach. Located next to one of the four entrances to the Refuge is the Visitor Center at 301 Caspian Way. The Visitor

Center's 6,800 square feet of space provide for an exhibit hall, education laboratory, audio/visual room, administrative offices, reference library and map and photo library.

BORDER FIELD STATE PARK

Border Field State Park is located adjacent to Mexico generally within the City limits of Imperial Beach. The Tijuana River National Estuarine Research Reserve Estuary separates the State Park from the populated areas of the City. Border Field State Park comprises approximately 396.4 acres of land, with 317.0 acres located within the City of Imperial Beach. Nearly 372 acres of the park is operated by the State Department of Parks and Recreation. This property includes the lagoon and salt marshes, about 30 acres of steep slopes at the edge of the floodplain, and about 10 acres of flat plateaus overlooking the floodplain and beach.

The State Park is accessed through Monument Road, which runs through the City of San Diego. Monument Road is a two-lane road in poor condition and subject to flooding. Within the State Park, public beach access is provided via the parking area on the coastal strand directly adjacent to the beach and efforts to continue access and vehicle traffic must be maintained and enhanced. Additionally, a lateral (parallel) passive access-way exists along the beach. No direct access to the beach is provided from Monument Mesa due to the bluff top topography of the area. An active access-way does however exist along the top of the mesa. Beach access is supported by a 280-car parking lot, and amenities include picnic sites, restrooms, a historical monument on Monument Mesa, and a parking area at a horse staging area.

The facility is devoted to passive recreation such as picnicking, hiking, walking along the beach, swimming in the ocean, and horseback riding. Horse-riding trails traverse through the Tijuana River Valley to the Pacific Ocean and a large picnic area on the bluff overlooking the Pacific Ocean. The State Park is landscaped with walking paths and supports light sports activities and contains tables and benches for those wishing to have a picnic. There is a 10-foot paved walkway from the picnic area down the bluff to the beach.

TIJUANA RIVER MOUTH STATE MARINE PROTECTED AREA

The Tijuana River Mouth State Marine Conservation Area (SMCA) Marine Protected Area (MPA) is located in the waters adjacent to Border Field State Park. MPAs are established by the State of California to conserve and restore ocean wildlife and habitat. MPAs contribute to healthier, more resilient ocean ecosystems that can better withstand a wide range of impacts such as pollution and climate change. By protecting entire ecosystems rather than focusing on a single species, MPAs are powerful tools for conserving and restoring ocean biodiversity, and protecting cultural resources, while allowing certain activities such as marine recreation and research.

SAN DIEGO BAY TIDELANDS-SAN DIEGO UNIFIED PORT DISTRICT

The SDUPD manages the Imperial Beach tidelands (which is defined as the area located between the mean high tide line to a point in the submerged lands no longer subject to tidal action/influence of the Pacific Ocean), and the Imperial Beach Pier. The SDUPD leases from the City all of Ocean Boulevard from the north end of the City to a point 300 feet south of South Seacoast Drive. Other property in the City of Imperial Beach, which is leased (as opposed to owned) by the SDUPD include Dunes Park, Pier Plaza and easements over the street ends of Imperial Beach Boulevard and Palm Avenue.

The beach is located approximately five miles east of Interstate 5, and a mile south and west of State Route 75, a state highway (currently in the relinquishment process) bisecting Imperial Beach as it passes from the City



The SDUPD manages the Imperial Beach tidelands and the Imperial Beach Pier.

of Coronado to the City of San Diego. Access to the City of Imperial Beach from Interstate 5 is taken from either Palm Avenue, or from the Coronado Avenue/Imperial Beach Boulevard corridors. Imperial Beach is served by the Metropolitan Transit System, which provides bus service to the area, as well as the Bayshore Bikeway which is a bike path that runs along the Silver Strand from Coronado to the South San Diego Bayfront in Imperial Beach. See the Mobility Element for additional information.

THE SAN DIEGO-EASTERN ARIZONA RAILROAD RIGHT-OF-WAY

This right-of-way located at the northern boundary of the City was originally dedicated in 1876 as an 80 to 120 foot wide, by .9 mile long strip of land. In 1912, the San Diego-Eastern Arizona Railroad obtained part of the right-of-way for a line to transport people from San Diego to the Hotel Del Coronado and back. Currently, the City has an agreement with the Railway Company that allows the City to use portions of the right-of-way for the Bayshore and Bernardo Shores bikeways, as well as community park purposes. The existing railroad track within the property is covered and protected in place.

CALIFORNIA COASTAL TRAIL

The California Coastal Trail is a continuous trail system traversing the length of the state's coastline. The alignment of both existing and proposed sections can be seen in Mobility Element Figure M-5. The California Coastal Trail is intended to:

- ‡ Provide a continuous walking, biking and hiking trail as close to the ocean as possible;
- ‡ Provide maximum access for a variety of non-motorized uses by utilizing alternative trail segments where feasible;
- ‡ Maximize connections to existing and proposed local trail systems;
- ‡ Ensure that all segments of the trail have vertical access connections at reasonable intervals;
- ‡ Maximize ocean views and scenic coastal vistas; and,
- ‡ Provide an educational experience where feasible through interpretive facilities.

The City is collaborating with the Coastal Commission and other agencies to implement the Coastal Trail in the City.

POLICIES

- 5.2.1 Maintain free public beach access.
- 5.2.2 Maintain a comprehensive network of improved beach access facilities at all designated primary beach access points to ensure safe access to all public beaches and continue to improve, maintain, enhance and maximize public use of the beach access points and beach facilities.
- 5.2.3 Provide physical access to the City's coastal resource areas for all segments of the population, consistent with public safety needs, ~~such as ensuring safe pier operations, and without overburdening the City's public improvements, or causing substantial adverse impacts to adjacent private property owners.~~
- ~~5.2.4~~ Site, design, and manage access-ways to seabird nesting and roosting sites, sensitive rocky points and intertidal areas, and coastal dunes to avoid adverse impacts to these sensitive habitats, ~~including areas as shown on Figure L-1 – Land Use Map Area as Open Space lands. The Open Space land use designation also identifies Area of Potential areas that may be considered potential Environmentally Sensitive Habitat Area (ESHA) lands, as defined in the Coastal Act (see box on p. CE-1)~~
- ~~5.2.4~~
- 5.2.5 Design and site new development to ensure continued public access to, and recreation along, the shoreline and trails.
 - a. If there is no feasible alternative that can eliminate or avoid an adverse access impact, then the feasible alternative that would result in the least significant adverse impact shall be required.

- b. Some impacts may be mitigated through the dedication of an access or trail easement where the project site encompasses an LCP mapped access or trail alignment, where the City, county, state, or other public agency has identified a trail used by the public, or where prescriptive rights exist.
 - c. Do not displace public parking areas serving recreational uses unless a strategy to provide comparable public access is provided.
 - d. As feasible, new non-visitor serving office or commercial development should provide public parking for beach access during weekends and holidays.
- 5.2.6 Continue collaboratively working with the SDUPD to ensure that the Port Master Plan (PMP) adequately addresses lands the SDUPD owns and leases in Imperial Beach.
- a. Ensure that the Imperial Beach Pier provides maximum public enjoyment and a wide variety of recreational opportunities, and is adequately maintained for the long term.
 - b. Develop new coastal-related and coastal-dependent uses on both SDUPD owned property and on property leased to them by the City.
- 5.2.7 Coordinate with state and federal agencies to develop guidelines for the use of the Tijuana Estuary.
- a. Control access and utilization by the installation of appropriately designed and posted access-ways.
 - b. Continue to develop a working relationship with California State Parks staff in a coordinated effort to make the Border Field State Park area, and its access to the beach, a resource that is available to the public.
- 5.2.8 Maintain and enhance the environmental integrity of all beach areas.
- 5.2.9 Gain and improve access-ways located in proximity to public parking areas and public transportation routes.
- a. Encourage the use of access-ways through the installation of appropriate signage that indicates, where applicable, the existence and location of nearby public parking areas.
 - b. In the unimproved right-of-way of Ocean Boulevard north of Imperial Beach Boulevard, the City may construct improvements that provide, preserve or enhance public access at the street ends and parks, whether vertical or lateral or both, and which will continue to allow access for equipment for emergency and maintenance purposes.
- 5.2.10 Retain all existing street ends under City ownership that provide public access to coastal resources, including bays, for streets, parks, open space or other public use.
- a. Protect public view corridors and do not permit buildings to be located within or bridging the streets.
 - b. Prepare detailed design plans that demonstrate resiliency to sea level rise for each street end to maximize public access and enjoyment.
- 5.2.11 In the event that public access and the public interest may be served by the alteration or development of Ocean Lane or alleys west of Seacoast Drive, the City may consider vacation when:
- a. Ocean Lane or alley vacation would permit development requiring consolidation of two or more lots, including the public right of way, and;
 - b. A development would involve a use related to public recreation and/or visitor serving facilities, and;
 - c. In either a or b above, the new development shall incorporate within its planning and building design:
 - (1) A means of maintaining or restoring physical public access to the shoreline and ensuring no adverse effect on public parking, and;
 - (2) A means of maintaining visual public access to the shoreline, and;
 - (3) A means of ensuring multi-modal access. See also the Mobility Element.
- 5.2.12 No individual, partnership or corporation claiming or possessing the frontage of a harbor, bay inlet, estuary, or other navigable water in Imperial Beach, shall be permitted to exclude the right-of-way to such water whenever it is required for any public purposes, including public rights obtained by prescriptive easement, nor destroy or obstruct the free navigation of such water. The City of Imperial Beach shall protect and enhance beach access and continue to formalize prescriptive rights.
- 5.2.13 Limit new public beach structures to those that support or enhance public recreation or marine safety related activities. No development, other than shoreline protection devices permitted pursuant to the LUP, may be

permitted on sandy public beach areas, except lifeguard stations, public beach access, and trash and recycling receptacles, and such structures must be sited and designed to avoid adverse impacts to coastal resources to the maximum extent feasible.

- 5.2.14 Accessible improvements may be permitted when sited and designed to minimize adverse impacts to coastal resources including public access, visual resources, wetlands and marine resources.
- 5.2.15 New development should be designed to be the alternative with the least impact on coastal resources and recreation, the minimum size necessary while still meeting the basic objectives of the development, and shall provide any necessary mitigation if adverse effects on public access are anticipated.
- 5.2.16 In general, concessions should be confined to non-sandy public beach areas.
- 5.2.17 Coordinate with the County of San Diego, [the Coastal Commission](#), [the Coastal Conservancy](#), SANDAG, the City of San Diego, the SDUPD, and other appropriate agencies to plan and implement the California Coastal Trail, a continuous public right-of-way, and other public trail facilities, as close to the California coastline as possible.
 - a. Design the trail to foster appreciation and stewardship of the scenic and natural resources of the coast through hiking and other complementary modes of non-motorized transportation.
 - b. Complement the trail through the provision of linkages to additional recreational resources such as Border Field State Park and International Friendship Park, as a means to maximize public access to the trail, beaches, and scenic vistas.
 - c. Collaborate with other agencies to work toward the establishment of additional, complementary pedestrian and bicycle facilities and multi-use corridors, including, but not limited to, the San Diego-Eastern Arizona Railroad Right-of-Way/Public Easement.
- 5.2.18 [Design trails and manage public access along trails to minimize adverse impacts to sensitive biological resources, including, including Area of Potential Environmentally Sensitive Habitat Area \(ESHA\) lands, mapped as Open Space on Figure L-1 -Land Use Map.](#)
 - c. [areas that meet the Coastal Act definition for Environmentally Sensitive Habitat Areas, as discussed in the Conservation and Ecotourism Element.](#)



Photo credit: Bryan Brillhart

Coastal Act Policies – Parks, Recreation and Coastal Access

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 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. "New Development" is further defined in Section 30211 (b).

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 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 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, 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 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 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 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 agricultural or coastal-dependent industry.

Section 30223 Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

Section 30224 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 30234.5 The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.

Section 30252 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 non-automobile 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, and 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.

6.0 Facilities and Services Element

We will strive for the ideals and sacred things of the city, both alone and with many; we will unceasingly seek to quicken the sense of public duty; we will revere and obey the city's law--; we will transmit this city not only, not less, but greater, better and more beautiful than it was transmitted to us.

Oath of the Athenian City-State

Goals

- ‡ Provision of adequate public facilities concurrent with new construction
- ‡ Timely upgrades and improvements to public facilities and services to protect the health and welfare of residents and visitors to Imperial Beach
- ‡ Consideration of sea level rise in the planning and design of public facilities

Background

The manner in which public facilities and services are provided in California jurisdictions, as well as the manner in which they are funded, has changed considerably since the 1970s. Continued population growth and technological advances require a more regional approach to the planning and provision of some facilities and services that were once the exclusive concern of municipalities. At the same time, fiscal constraints and legislative actions have shifted funding methods from a reliance on the general obligation of taxpayers to a greater emphasis on requiring new development to "pay its own way." The Facilities and Services Element is a guideline to indicate future needs as the City continues to evolve. Funding to meet these needs will come from a variety of sources that must be considered in the annual capital improvement and budget planning processes.

In the following discussion, not all services and facilities are under the direct control of the City. However, the policy commitments of the City greatly affect the ability of other agencies to provide appropriate levels of service to Imperial Beach residents and visitors. Mobility facilities are discussed in the Mobility Element, and parks and recreational facilities are discussed in the Parks, Recreation and Coastal Access Element of this Plan.

Coastal Act

DISCUSSION

The Coastal Act policies related to Facilities and Services require a number of measures, including the following: the distribution of public facilities throughout an area to mitigate against the impacts of overcrowding or overuse by the public of any single area (Section 30212.5); a plan to assure development would not result in any detrimental increase in runoff water (Section 30170); the protection of facilities serving the commercial fishing and recreational boating industries (Section 30234); the protection of the economic, commercial, and recreational importance of fishing activities (Section 30234.5); that the capacity of new or expanded public works facilities be limited to the capacity necessary to address the needs of the development (Section 30254 and Section 30254.5); that permits associated with proposed development will not modify, adopt conditions, or take any action in conflict with any determination by the State Water Resources Control Board or any California regional water quality control board in matters relating to water quality or the administration of water rights (Section 30412 of the California Public Resources Code); the identification and protection of sensitive resource values (Section 30525); and that no sewer projects will be denied, restricted, or conditioned in order to implement housing policies or programs (Section 30607.2).

The Coastal Act policies that are related to Facilities and Services are provided at the end of this element.

6.1 Capital Improvement Planning and Financing

Discussion

Imperial Beach is an established City with a framework of public facilities in place. As the City matures and changes over time, it will continue to address an ongoing need to fund upgrades, retrofits, and replacement of aging infrastructure. In addition, the City faces new and growing challenges as a result of sea level rise and other impacts of a changing climate.

Key public facilities include:

Public Works Yard. The Public Works Yard is presently located on Cherry Avenue between 10th and 11th Streets on the San Diego Bayfront. These facilities house the City maintenance and operations personnel, and equipment. The fully developed site is approximately 1.79 acres. Although the facilities are adequate, they do not need to be located on a bayfront site.

Civic Center. The majority of municipal facilities of the City of Imperial Beach, including the Sheriff's station, Fire department, City Council chambers, City Hall conference center and administrative offices, are located in the Civic Center complex on Imperial Beach Boulevard. This complex consists of four separate buildings and related parking on approximately 2.7 acres. The existing size and location of the facilities are considered adequate for the City's staffing needs.

Library. The Imperial Beach Library, located at 810 Imperial Beach Boulevard, is part of the greater San Diego County library system. A new, beach-themed 15,000 square-foot library opened in 2017, replacing the previous 5,000 square-foot facility. Many elements and amenities of the new library are a result of collaboration with the County, Friends of the Imperial Beach Library, the City of Imperial Beach, and community members. The library is owned and maintained by the County.



Imperial Beach Library

Policies

6.1.1 New development in the City shall pay its own way.

6.1.2 Maintain an up-to-date Capital Improvement Program in order to effectively plan and budget for needed

facilities and upgrade service deficiencies. Locate public utilities and public works facilities that are not dependent on the ocean or bay away from the ocean or bayfront to the extent possible. These facilities should be screened from public view and designed in a manner that is compatible with surrounding land uses.

- 6.1.3 Consider [climate resiliency, including](#) sea level rise in the design and location of public facilities. [See also the Land Use Element Section 2.7 - Environmental Justice regarding prioritization, and the Design Element Section 8.2 - Public Realm and Section 8.3 - Sustainable Coastal Development Design.](#)
- 6.1.4 Pursue relocating the Public Works Yard to a non-bayfront site. Alternative sites include, but are not limited to: Ream Field, sites outside the City limits, and splitting the yard into more than one site.
 - a. Investigate alternative locations to allow for the redevelopment of this property.
 - b. Pursue private/public partnerships to facilitate redevelopment of the Public Works Yard site. c. Pursue an evaluation of city assets to determine highest and best use for the community.
 - c. Incorporate public amenities into any redevelopment proposal.
- 6.1.5 Consider green infrastructure, such as planting trees and blue carbon capture, as part of an overall climate mitigation and resilience strategy.
 - a. Explore hybrid projects that combine both green and grey (facilities engineered by people) infrastructure to address needs.
 - b. Consider the value and benefits of green infrastructure and environmental factors when defining infrastructure investments.

6.2 Fire and Emergency Services

Discussion

Fire protection and emergency medical services are provided by the City of Imperial Beach Fire Department located in the Civic Center complex. The Fire Department operates one engine daily and houses a reserve engine at the fire station. The engine has a 24-foot ground extension ladder, which can reach the second story of a building.

Though the Fire Department does not have a Ladder Truck Company on-site, the cities of San Diego, Coronado, and Chula Vista are available to respond, via automatic aid agreements, to all structural fires and rescue emergencies. Additional discussion and policies regarding fire hazards is found in the Safety Element, Section 7.2.

Policies

- 6.2.1 Explore ways to improve the City's fire rating at every opportunity, to maintain a rating no higher than 4.

6.3 Law Enforcement

Discussion

The demand for law enforcement services in Imperial Beach is determined not only by the needs of residents but also by visitors to the City, particularly the beach area. As tourist activities increase, there may be a need for additional law enforcement activities.

The San Diego County Sheriff's Department provides contract law enforcement services to the City of Imperial Beach. Based out of the Imperial Beach Station at the Civic Center Complex, the Sheriff's Department personnel provide all aspects of law enforcement services, including patrol, traffic, crime prevention and investigations, and Community Oriented Policing and Problem Solving (COPPS) to the City's residents, businesses, and visitors. Additionally, the Imperial Beach Station provides law enforcement services to residents who reside in the unincorporated communities of Bonita, Sunnyside, Lincoln Acres, Proctor Valley, Otay Valley, and Otay Mesa.

There is no accepted uniform standard for number of police per 1,000 population. Additionally, there is no direct correlation between number of police and crime rates. Communities vary substantially based on density, characteristics of land use, and other factors.

Additional law enforcement is provided by the Sheriff's F-7 involvement program, which is a volunteer patrol program consisting of retired persons trained for community protection and patrol assignments. Activities include: daily senior citizen safety checks, vacation property checks, and an "eyes on the road" patrol program. The Sheriff's office will continue to enhance and maintain this program.

San Diego County's overall crime rate for the 2017 calendar year was 20.53, and the City of Imperial Beach's rate was 18.07 reported crimes per 1,000 people. Reported crimes include homicide, rape, robbery, aggravated assault, burglary, larceny, and motor vehicle theft. The violent crime rate (per 1,000 population) in the San Diego region increased in the later part of the 1980s, reaching a peak of 9.76 in 1992. Since then, it generally declined to a 37-year low in 2014 (3.28) followed by small changes in 2016 (3.33) and 2017 (3.4). According to the 2017 crime statistics kept by SANDAG, the City of Imperial beach ranked 11th out of 18 cities for crime (1 being best).¹



The Sheriff's Department provides all aspects of law enforcement services.



Policies

- 6.3.1 Maintain public information and school educational programs in crime prevention and drug education.
- 6.3.2 Assist residents and businesses in developing neighborhood and commercial protection programs.
- 6.3.3 Strive to maintain crime rates below the County average and better than the majority of San Diego County cities.

6.4 Public Rights-of-Way

Discussion

ALLEYS

Most of the alleys within the City limits are paved. It is the City's policy to pave all unimproved alleys. Many have been paved in 2016-2018 and the City has plans to pave the remaining unimproved alleys.

DRAINAGE

Surface run-off, a condition intensified by development as a result of soil compaction and an increase in the amount of impervious surfaces, is presently handled by the street system and a small storm drain system. Most of the captured run-off is deposited directly into the San Diego Bay, Pacific Ocean or the Tijuana Estuary.

The risk of flooding due to surface run-off and coastal flooding is increasing due to sea level rise and climate change. Key findings from the Imperial Beach Sea Level Rise Assessment Study (SLR Study, 2016) include:

- ‡ Tidal inundation already impacts many of the key storm water outlets that drain into the Bay and Estuary particularly during high tides.

¹ Source: SANDAG, Thirty-Eight Years of Crime in the San Diego Region: 1980 Through 2017, April 2018.

- ‡ Nearly 800 feet of wastewater pipe is currently exposed to existing erosion hazards.
- ‡ Five wastewater pump stations are currently vulnerable to coastal flooding.
- ‡ Presently, 1.7 miles of roads are potentially subject to coastal erosion from a 100-year wave erosion event.
- ‡ All of the beach accesses and oceanfront properties are in existing coastal erosion and coastal flood hazard zones associated with a 100-year wave event.

See the Safety Element for additional information on sea level rise hazards and resiliency strategies.

SIDEWALKS

Although much of the City is served by sidewalks, sidewalks are missing in a variety of areas. Sidewalks can be particularly important in providing access to schools, parks, the beach and commercial areas. Installation of new sidewalks or improvements to existing sidewalks, if necessary, is required with all building permits for construction projects above a designated threshold.

Many parts of the City have non-contiguous parkways, which provide a landscaped buffer between the sidewalk and the street. When landscaped and planted with trees, parkways help create pleasant and attractive pedestrian ways with greater separation between vehicles and pedestrians. See also the Conservation and Ecotourism Element, and the Design Element for additional guidance regarding street trees.

STREETS

The public roads in Imperial Beach have been improved with pavement. Generally, the public right-of-way has also been improved with curbs, gutters and sidewalks. Regular maintenance to the City's road system has been financed through the City's share of "Prop A" funds - a sales tax passed by the voters of San Diego County. Additional funding sources will be needed when the sales tax measure expires.

UNDERGROUNDING UTILITIES

The City has completed the undergrounding of utilities along the former State Highway 75/Palm Avenue corridor and Imperial Beach Boulevard. The City Council prioritizes undergrounding projects as funding becomes available.

Policies

- 6.4.1 New construction adjacent to alleys shall be required to bring the alley up to City standards or provide an approved lien contract.
- 6.4.2 Continue to pave all alleys in the City. Pursue improvements in storm water conveyance facilities in response to sea level rise impacts.
- 6.4.3 Develop programs to solve localized Imperial Beach drainage problems. Such programs shall include working with the City of San Diego and the U.S. Navy as necessary.
- 6.4.4 Provide sidewalks in an area that is not contiguous with the paved street and curb. The area between the street curb and the sidewalk shall be used for a landscaped parkway planted with street trees. This policy shall be implemented as part of development approvals except in areas already committed to curb side sidewalks. Parkway shall not be paved except where satisfactory trees have been planted and decorative paving material is used, such as bricks or pavers.
- 6.4.5 Encourage property owners to complete missing portions of sidewalks and, for larger areas, to sponsor the creation of sidewalk assessment districts.
- 6.4.6 Require improvements to existing sidewalks, or construction of new sidewalks with all building permits for construction above a certain threshold. Seek to maintain non-contiguous landscaped parkways to foster an attractive and safe pedestrian environment, and to help capture stormwater. Where a wider clear sidewalk path is desired, paving may occur with City oversight to achieve a pedestrian and environmentally friendly design.

6.4.7 Pursue the undergrounding of utilities on major streets as funding becomes available.

6.5 Schools

Background

Public school education in Imperial Beach is provided by South Bay Union School District for preschool and kindergarten through sixth grade (eighth grade at a dependent charter school). Sweetwater Union High School District serves seventh through twelfth grade.

The South Bay Union School District presently has 11 elementary schools, two dependent K-8 charter schools, and one preschool within District boundaries. Four of the elementary school sites and the preschool are located within the City limits of Imperial Beach. Table F-1 summarizes the situation regarding the schools within the City limits of Imperial Beach.

**Table F-1
Imperial Beach School Data, 2016-2017**

School Site	Size	Capacity of Fixed Facility	Portable Classrooms	Student Enrollment	Multi-Track
Bayside STEAM Academy	10 ac.	512	14	532	no
Central Elem.	10 ac.	608	12	565	no
Imperial Beach Charter	12 ac.	1,280	9	913 (includes Imperial Beach Charter, West)	no
Oneonta Elem.	10 ac.	640	13	520	no
Imperial Beach Charter, West	10 ac.	608	2	195 (included in Imperial Beach Charter)	no
Mar Vista Academy	30.0 ac.	1246	0	861	no
Mar Vista High School	33.0 ac.	1300	5	1673	no

The Sweetwater Union High School District provides 7th through 12th grade education and Adult Education to the citizens of Imperial Beach. Two secondary schools and one adult school service the City: they are Mar Vista Academy, Mar Vista High School and Mar Vista Adult School located on the Mar Vista High School Campus.

The middle school, located approximately a quarter mile outside the City's eastern boundaries (1267 Thermal, San Diego), provides 7th to 8th grade education. The high school, located at 505 Elm Street, Imperial Beach, provides 9th to 12th grade education. The Adult Schools, located at 503 Elm Street and 170 Palm Ave, provide a variety of classes including but not limited to, GED, English as a Second Language (ESL), High School Diploma Program, Business Education and Child Care classes.



At the time of the 2019 General Plan/LCP Update, the middle school and high school both exceeded their capacities. New residential development in the City and in the Nestor and the San Ysidro communities have added students to these and neighboring schools. To meet student enrollment needs, the District plans to construct a new 2,400-student high school in Otay Mesa. In planning new schools, the Sweetwater School District uses a student generation factor of .29 students per household.

The recommended standard for new elementary school sites is ten acres of land, which will provide adequate land for 18 to 20 classrooms, playgrounds and other related uses. For new junior high schools (or middle schools), 20 acres of usable land is needed for 1,500 students. High schools require 50 acres of land for 2,400 students.

State Assembly Bill (AB) 2926 authorized school districts to assess all new development a fee to offset impacts proposed projects might have on the school facilities. In January of 1994, a fee of \$1.65 per square-foot for residential developments and \$.27 per square foot for commercial development is permitted. Currently, South Bay Union School District sets its level of assessment for development at \$.73 per square-foot for residential and \$.12 per square-foot for commercial development. These fees, along with funds provided by the State, allow for the district to acquire portable classrooms and to construct new school facilities when deemed necessary. Sweetwater Union High School District assesses new residential development at \$.92 per square-foot and commercial development at \$.15 per square-foot.

Fees collected pursuant to AB 2926 account for less than a third of the cost to construct classrooms. Because of this, whenever possible, the Districts have requested that developers provide full impact mitigation on development. The establishment of special tax districts, full cost recovery agreements or the provision of relocatable classrooms in lieu of fees are just a few examples of such mitigation measures employed by the Sweetwater Union High School District.

Southwestern Junior College, located in Chula Vista, serves Imperial Beach as well as a good portion of the South Bay area.

Policies

- 6.5.1 Support the Sweetwater Union High School District's long-term plans to construct a new high school in the Otay Mesa area.
- 6.5.2 Work closely with the school districts to foster joint use of school facilities where mutually beneficial. Buildings may be used for evening meetings, adult education, counseling or other community functions. Grounds may be used for a variety of recreation activities, in accordance with an approved Joint Use Agreement.
- 6.5.3 Consider sea level rise and flood hazards in the renewal of any future school leases.

6.6 Solid Waste Disposal

Discussion

Solid waste and recycling collection and disposal services for Imperial Beach is currently provided through an exclusive City franchise agreement with EDCO. The Otay Landfill Solid Waste Facility that is utilized by EDCO has an estimated remaining capacity of 33,070,879 cubic yards and an estimated closure date of April 2021 (CalRecycle 2011). The City of Imperial Beach has already instituted the separation of yard clippings from the remainder of the trash and the recycling of aluminum cans, tin cans, glass bottles, newspapers and two types of plastic. In addition, this element includes policies to support composting, which would encourage further diversion of solid waste from the landfill.

Policies

- 6.6.1 Emphasize source reduction to residents and businesses to decrease the amount of solid waste generated.
- 6.6.2 Maintain a recycling program to minimize impacts on regional solid waste disposal sites.
- 6.6.3 Diversify collection and processing of compostable materials to prioritize their highest and best local use.
- 6.6.4 Adopt streamlined regulations that support composting by local residents, community groups and businesses.
- 6.6.5 Support purchasing of locally produced compost and mulch for applications in water-wise landscaping, carbon sequestration, stormwater and erosion control projects.

6.7 Wastewater Services

Discussion

The City of Imperial Beach is a member of the San Diego Metropolitan Sewerage System (Metro). The City operates its own sewerage collection system and transports the sanitary waste to Metro's South Bay Interceptor which conveys it to the regional wastewater treatment plant on Point Loma.

Infiltration, defined as water entering the sewer system from the groundwater table, is a significant problem. Portions of the City's system are already susceptible to sea water infiltration. For example, the 2016 Revell Sea Level Rise Vulnerability Assessment report found a number of pump stations, manholes, and a substantial portion of pipe along the coast, San Diego Bay, and Tijuana Estuary to be vulnerable to coastal flooding under existing conditions. This vulnerability will be exacerbated as sea level rise increases due to the close proximity of the ocean, and the depth of the pipe relative to sea level. Impacts are anticipated to extend progressively inward and occur during high tides, coastal flooding, and from coastal erosion. These vulnerabilities can be decreased through flood proof retrofits of pump stations, pipes, and manholes; coastal protection; and elevation of electrical and other similar components.

Policies

- 6.7.1 Develop whatever agreements are necessary with the San Diego Area Wastewater Management District to provide sewer treatment capacity to accommodate the General Plan's projected growth.
- 6.7.2 Encourage federal, state, and other responsible agencies to address the problems of drainage, sewage and beach pollution associated with the Tijuana River Valley.
- 6.7.3 Continue to upgrade the sewage system based on the 2018 Wastewater System Master Plan. Evaluate the need to incorporate results from the City's Sea Level Rise Assessment and ongoing monitoring into future updates.

6.8 Water Supply and Conservation

Discussion

Water service to the City of Imperial Beach is provided by the California-American Water Company's (CalAm) San Diego County District. CalAm is an investor owned utility regulated by the California Public Utility Commission. In addition to serving Imperial Beach, CalAm Water's San Diego County District serves the City of Coronado (excluding the North Island Naval Air Station), a section of the City of San Diego located south of San Diego Bay, and a small portion of the City of Chula Vista. The District encompasses approximately 11,962 acres and has a service population estimated to be 94,043 in 2015.

CalAm is responsible for the preparation and maintenance of an Urban Water Management Plan (UWMP) to help ensure that water supplies will be available to serve existing and future needs. The UWMP is required by state law and must:

- ‡ Assess the reliability of water sources over a 20-year planning time frame;
- ‡ Describe demand management measures and water shortage contingency plans report progress toward meeting a targeted 20 percent reduction in per-capita (per-person) urban water consumption by the year 2020; and
- ‡ Discuss the use and planned use of recycled water.

The targeted 20 percent reduction in per capita water consumption was set in motion by California's Water Conservation Act of 2009 (Senate Bill X7-7). The state requires that UWMPs be updated every five years.

Water Use Reduction Plan

CalAm employs multiple tactics to conserve water including conservation measures, implementation of California Urban Water Conservation Council (CUWCC) Best Management Practices (BMPs), and use of conservation rate structures. Actions

taken by individuals also play an important role in achieving water conservation goals. Many households have replaced lawn areas with drought-tolerant landscape planting or artificial turf, and installed new water efficient plumbing fixtures and appliances. CalAm's San Diego County District expects to achieve the state per capita water use targets through continued implementation of BMPs, participation in regional conservation campaigns, and potential utilization of recycled water for non-potable needs.

Water Resources

All of CalAm San Diego County District's water is purchased from the City of San Diego, which in turn secures water from multiple sources. A brief summary of the roles and responsibilities of key agencies that provide water to California American Water's San Diego County District is provided below.

‡ **Metropolitan Water District of Southern California (MWD)**

MWD is a public agency that serves wholesale water supplies to the Southern California coastal plain, from Oxnard in the north to the U.S.-Mexico border in the south. MWD's total service area is approximately 5,200 square miles. MWD currently receives imported water from two sources: (1) the Colorado River via the Colorado River Aqueduct (CRA), and (2) the State Water Project (SWP) via the California Aqueduct.

‡ **San Diego County Water Authority (SDCWA)**

The SDCWA is a public agency that serves the San Diego region, from Orange and Riverside counties in the north to the U.S.-Mexico border in the south. The total service area is approximately 1,486 square miles. SDCWA has 24 member agencies, the largest of which is the City of San Diego. SDCWA purchases water from MWD, the Imperial Irrigation District (IID), supplies from the Carlsbad Desalination Plant, canal lining projects that are wheeled through MWD's conveyance facilities, and spot water transfers that are pursued on an as-needed basis.

‡ **City of San Diego**

The City of San Diego's public water system treats and delivers water to its service area in the south central part of San Diego County, which encompasses approximately 340 square miles. The City sells water both to retail customers and to other water agencies, including CalAm, for retail distribution within their service areas. The City's supply is largely made up of imported water purchased from SDCWA and MWD. Imported water accounts for up to 93 percent of the City's supply. The City purchases both raw water and treated water. The City treats the raw water at three treatment plants (Miramar, Alvarado, and Otay). In addition, the City's system utilizes local groundwater, recycled water and has nine local surface water reservoirs to capture rainwater and runoff. Pure Water San Diego is the City of San Diego's multi-year program to clean recycled water to produce safe, high-quality drinking water. The program is planned to provide one-third of San Diego's water supply by 2035.

‡ **California American Water's San Diego County District**

California American Water's San Diego County District (CalAm) purchases all of its water supply from the City of San Diego and the water is received [from](#) four primary connections and one standby connection.

Groundwater

Although CalAm does not currently extract groundwater, the San Diego County District area lies above two groundwater basins: the Otay Valley and the Tijuana Groundwater Basins. The District has produced groundwater in the past from the Otay Valley Groundwater Basin through a single well, known as Well No. 8. While the District no longer operates this well, opportunities for groundwater production from the Otay Valley and Tijuana Groundwater Basins may exist.

Desalinated Water Opportunities

The Carlsbad Desalination Plant opened in 2015, and desalination is expected to continue to provide the San Diego area with a local source of supply. SDCWA's Desalination Action Plan calls for additional evaluation of project sites, including smaller projects like brackish water desalination plants. SDCWA and other local agencies have been actively pursuing funding at the federal, state, and local levels to evaluate and develop desalination projects. With the desalinated water pursuits occurring in the San Diego area, the San Diego County District may have the opportunity to purchase desalinated water which would reduce its dependence on imported supplies and/or the City of San Diego.

Recycled Water Opportunities

Wastewater generated within the San Diego County District's service area is collected by each of the respective overlying cities (Coronado, Imperial Beach, San Diego and Chula Vista). Wastewater treatment and disposal is provided by the City of San Diego's Metropolitan Wastewater Department (MWW). Most of the San Diego County District's wastewater is currently treated at MWW's Point Loma Wastewater Treatment Plant. Some of the wastewater generated in the San Diego County District's service area is diverted to MWW's South Bay Water Reclamation Plant (SBWRP), which is located in the Tijuana River Valley near the U.S.-Mexico border. Recycled water is not currently delivered to or used in the District but may be an option in the future. The primary potential use for recycled water in the District is landscape irrigation at public parks, golf courses, government facilities and schools.

In 2014, the Navy and the City of Coronado began exploring a possible water reclamation plant located on Navy property that would service the Navy and City facilities. In 2015, the CalAm's San Diego County District contracted with an engineering firm to assess the potential of providing recycled water to existing customers within the Coronado and Imperial Beach service areas. This proposed capital investment project includes the delivery of recycled water for landscaping for existing customers such as parks, schools, city landscaping, and golf courses. This project is still in the very preliminary planning stages, with preliminary engineering design and permitting activities continuing into 2019-2020. At this time, initial construction is not planned to commence until 2024 or later.

Climate Change and Water Supply

The State of California Department of Water Resources (DWR) expects that climate change will affect water demand, water supply and quality, sea level, and frequency of natural disasters statewide. The effects of climate change on the CalAm San Diego County District are difficult to predict due to the complexity of factors, including the uncertainty in future temperature, the District's close proximity to the ocean and the District's reliance on imported water that is transported through multiple water agency systems.

Dealing with uncertainties like these requires an approach that is both flexible and robust. The recommended method to adapt to climate change effects on water systems is adaptive management. While adaptive management has been used in traditional water supply planning, it is also capable of integrating climate change uncertainties into water system management. The goal of adaptive management is to, "embrace uncertainty, accepting partial understanding of processes, and producing policies and designs that are less sensitive to the unexpected." Adaptive management is a continuous cycle consisting of four steps: (1) plan, (2) act, (3) monitor, and (4) evaluate. Evaluation results feed back into planning and the iteration process continues, yielding a closed-loop management process. This framework encourages future decisions that are based on actual results.

As climate change impacts are encountered, employing the adaptive management process allows management of these impacts on a continuous basis by evaluating alternatives, testing hypotheses, determining causes, and incorporating results into planning.

Policies

WATER CONSERVATION AND SUSTAINABLE DESIGN PRACTICES

- 6.8.1 Require water conservation features in all new developments including Xeriscape landscaping and low water use irrigation improvements.
- 6.8.2 Use sustainable design practices including water-saving systems and best management practices in developments.
- 6.8.3 Promote the use of on-site gray water and rainwater collection systems.

ADAPTIVE MANAGEMENT AND COLLABORATION

- 6.8.4 Collaborate with the California American Water Company in implementing adaptive management strategies that address [drought and](#) climate change conditions.
- 6.8.5 Support regional water conservation efforts and prevention of water quality degradation.
- 6.8.6 Collaborate with the California American Water Company in its efforts to diversify and safeguard local water supplies.



The Seacoast Drive corridor is bordered by water on both sides.

Coastal Act Policies – Public Facilities

Section 30212.5 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 30170 No development may occur in the area described in this subdivision until a plan for drainage of the parcel to be developed has been approved by the local government having jurisdiction over the area after consultation with the commission and the Department of Fish and Game. The plan shall assure that no detrimental increase occurs in runoff of water from the parcel to be developed and shall require that the facilities necessary to implement the plan are installed as part of the development.

Section 30254 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 30254.5 Notwithstanding any other provision of law, the commission may not impose any term or condition on the development of any sewage treatment plant which is applicable to any future development that the commission finds can be accommodated by that plant consistent with this division. Nothing in this section modifies the provisions and requirements of Sections 30254 and 30412.

Section 30412

- (a) In addition to Section 13142.5 of the Water Code, this section shall apply to the commission and the State Water Resources Control Board and the California regional water quality control boards.
- (b) The State Water Resources Control Board and the California regional water quality control boards are the state agencies with primary responsibility for the coordination and control of water quality. The State Water Resources Control Board has primary responsibility for the administration of water rights pursuant to applicable law. The commission shall assure that proposed development and local coastal programs shall not frustrate this section. The commission shall not, except as provided in subdivision (c), modify, adopt conditions, or take any action in conflict with any determination by the State Water Resources Control Board or any California regional water quality control board in matters relating to water quality or the administration of water rights.

Except as provided in this section, nothing herein shall be interpreted in any way either as prohibiting or limiting the commission, local government, or port governing body from exercising the regulatory controls over development pursuant to this division in a manner necessary to carry out this division.

- (c) Any development within the coastal zone or outside the coastal zone which provides service to any area within the coastal zone that constitutes a treatment work shall be reviewed by the commission and any permit it issues, if any, shall be determinative only with respect to the following aspects of the development:
 - (1) The siting and visual appearance of treatment works within the coastal zone.
 - (2) The geographic limits of service areas within the coastal zone which are to be served by particular treatment works and the timing of the use of capacity of treatment works for those service areas to allow for phasing of development and use of facilities consistent with this division.

- (3) Development projections which determine the sizing of treatment works for providing service within the coastal zone.

The commission shall make these determinations in accordance with the policies of this division and shall make its final determination on a permit application for a treatment work prior to the final approval by the State Water Resources Control Board for the funding of such treatment works. Except as specifically provided in this subdivision, the decisions of the State Water Resources Control Board relative to the construction of treatment works shall be final and binding upon the commission.

- (d) The commission shall provide or require reservations of sites for the construction of treatment works and points of discharge within the coastal zone adequate for the protection of coastal resources consistent with the provisions of this division.
- (e) Nothing in this section shall require the State Water Resources Control Board to fund or certify for funding, any specific treatment works within the coastal zone or to prohibit the State Water Resources Control Board or any California regional water quality control board from requiring a higher degree of treatment at any existing treatment works.

Section 30525 Sensitive resource values; identification; protection in promulgation of local coastal program

- (a) Every state agency that owns or manages land or water areas within the coastal zone, including public beaches, parks, natural areas, and fish and wildlife preserves, shall identify the sensitive resource values within those areas that are particularly susceptible to adverse impacts from nearby development that is not carefully planned. Every such agency shall also identify the location and type of development that would have a significant adverse impact on those sensitive resource values.
- (b) Every agency subject to this section shall advise the appropriate local government of particular considerations that should be evaluated during the preparation of a local coastal program and which, in the opinion of such agency, may be necessary to protect identified sensitive resource values. In addition, the work undertaken pursuant to this section shall be completed in a timely manner in order to maximize the opportunity for the public, affected local governments, and the commission to consider this information fully during the preparation, review, and approval of the appropriate local coastal program.
- (c) Work already completed pursuant to former Chapter 7 (commencing with Section 31300) of Division 21 of the Public Resources Code, added by Chapter 1441 of the Statutes of 1976, and in conformity with this section, that identifies sensitive resource values within publicly owned or managed land and water areas of the coastal zone shall be considered by local government and the commission in the course of carrying out this chapter.
- (d) For purposes of this section, "sensitive resource values" means those fragile or unique natural resources which are particularly susceptible to degradation resulting from surrounding development, the adverse effects of which have not been carefully evaluated, mitigated, or avoided. Examples include, but are not limited to, environmentally sensitive areas, as defined in Section 30107.5, areas uniquely suited for scientific or educational purposes, and specific public recreation areas where the quality of the recreational experience is dependent on the character of the surrounding area.

Section 30607.2

- (a) No new coastal development permit or amendment to any existing permit for a sewer project shall be denied, restricted, or conditioned in order to implement housing policies or programs.

This page intentionally left blank.

7.0 Safety Element

Men come together in cities for security; they stay together for the good life.

Aristotle

Goals

- ‡ A resilient City that is prepared to reduce risk to life and property from fire, flood, climate change, geologic and seismic-related, and other hazards.
- ‡ Shoreline management that enhances the shoreline environment while also providing recreational opportunities and property protection.
- ‡ Cost-effective shoreline management tactics that have a positive impact on the region's economy and equitably allocates costs among local, regional, state, and federal sources.
- ‡ Increased disaster preparedness and resiliency through regional collaboration.

Background

California General Plan law requires the Safety Element to address means of protecting the community from unreasonable risks associated with fire, flood, climate change, geologic and seismic hazards. This Element also implements provisions of the California Coastal Act pertaining to minimizing hazard potential in the Coastal Zone. Climate change represents one of the greatest challenges for cities throughout the state; sea level rise, increased temperatures, drought, wildfires, and degraded habitat are just a few of its wide-ranging impacts that present challenges to public safety, health, and the economy. In Imperial Beach, sea level rise is a particularly critical challenge due to its low-lying elevation and location adjacent to the Pacific Ocean, San Diego Bay and Tijuana River Estuary shorelines, that essentially bound it with water on three sides. However, Imperial Beach, through its long-standing commitment to open space preservation, has increased its resiliency to coastal hazards as its open spaces buffer the City from ocean processes (such as natural erosion, tides, and storm events). The City's open space resources also have recreational, economic, and biological importance, as discussed in the Conservation and Ecotourism, and Parks, Recreation and Coastal Access elements.

The Imperial Beach coastline is part of the Silver Strand Littoral Cell, which is a segment of coastline involved in the complete cycle of littoral transportation and sedimentation. Under natural conditions, a littoral cell is supplied with sand and sediment by rivers and streams that flow into the ocean within the limits of the cell. Since the mid-1800s, sand migration from the Tijuana river delta and the seacliffs at Playas de Tijuana, along with periodic City beach replenishment projects, have been the primary source of new beach sand in Imperial Beach. Sand supplied to the coast have been affected by three dams: Morena, Barrett and Rodriguez. These dams impound about 70 percent of the entire watershed area draining through the Tijuana River (Patsch and Griggs 2007) and have reduced the sand supply by an estimated 49 percent (Willis and Griggs 2003). Sand transport in this area of the Pacific Ocean is predominantly to the north, although some material moves to the south. The width of the City's beach has varied greatly over the years with beach erosion and sand loss being particularly evident during the winter storm season.

The problem became acute during the winter of 1952-53 when wave-induced erosion caused rapid shoreline retreat and property damage. Winter storms during the next several years continued to cause problems so that local and private interests were forced to install a stone revetment along the shoreline. In 1959, the U.S. Army Corps of Engineers started construction of a system of five stone groins starting at the U.S. Naval Radio Station proceeding southward to a point approximately 400 feet south of Imperial Beach Boulevard. Four groins were eventually constructed, but the compartments between two groins were never completed which caused the destruction of the remaining groins. The ineffectiveness of these groins eventually necessitated further investigations and the development of a new plan.

The Corps of Engineers studied several alternative solutions including fixing the groins system, periodic beach nourishment, and offshore breakwaters. In 1978, the recommended plan was to construct a 5,000-foot offshore-submerged breakwater, extend one of the existing groins, and construct a new groin approximately 600 feet long. In 1985, construction of the breakwater was to start but was halted when courts determined that the Environmental Impact Statement (EIS) did not address all the relevant issues. A revised EIS was never adopted.



In the 1950s, groins were constructed in Imperial Beach in an effort to combat erosion.

During this period, private property owners initiated their own shoreline protection arrangements. Older buildings developed along the shore without benefit of engineered structures have been previously damaged and may continue to be damaged as the beach recedes. Newer structures have been built with stone revetments or vertical seawalls or both. These devices protect both private and public property that would otherwise be vulnerable to flooding and storm damages, but can have negative impacts on beaches and the shoreline when used as a stand-alone strategy. At the same time, it is anticipated that additional strategies will also be needed to preserve the beaches, habitat, recreational resources, and neighborhoods that are critical to the economy, environment, and community of Imperial Beach. Revetments and seawalls currently protect most of the beachfront properties in the City, which constitutes only about one-third of the Imperial Beach shoreline. The remaining two-thirds of the shoreline has been permanently preserved as a natural, living buffer. The 2019 GP/LCP Update reaffirmed the City's commitment to preserving beachfront open spaces.

In 1991, the San Diego Association of Governments (SANDAG) initiated steps to develop comprehensive countywide Shoreline Protection Strategy to manage the coastal sediment resource and protect coastal property from damage caused by breaking waves and marine flooding. The Shoreline Protection Strategy has four main objectives:

- a. Manage the region's shoreline to provide environmental quality, recreation, and property protection.
- b. Develop and carry out a cost-effective combination of shoreline management tactics that will have a positive impact on the region's economy.
- c. Develop a program to pay for the Shoreline Management Strategy which equitably allocates costs throughout the region, and among local, state and federal sources.
- d. Obtain commitments to implement and finance the Shoreline Management Strategy

Imperial Beach has been a participant in SANDAG's Regional Shoreline Monitoring Program (Program) since its inception in 1996. The Program measures beach width and sand volume on a biannual basis and the data has been used to determine where beach replenishment efforts should take place. Imperial Beach participated in the 2001 and 2012 Regional Beach Sand Projects and multiple other opportunistic beach replenishment projects since the mid-1990s, totaling approximately 950,000 cubic yards of sand since 2001. Sand volume and beach width loss has generally been gradual with sand loss primarily occurring during winter storms and gains primarily during the summer. Summer gains have generally not offset winter losses since 2000. The 2015-16 El Niño resulted in substantial coastal erosion and sand volume loss that was not fully recovered the following summer. Continued rising sea levels and more frequent and powerful storms are expected to exacerbate beach width and sand volume loss requiring more frequent beach replenishment and other adaptation strategies. A long-term loss of beach width and sand volume would expose the large number of existing revetments and seawalls to waves and flooding more frequently and with greater intensity, further accelerating the degradation of the beach.

The 2016 City of Imperial Beach Sea Level Rise Assessment (IB SLR Assessment) included an analysis of potential future sea level rise impacts on the City's shorelines and potential adaptation strategies and their estimated costs and benefits. Under existing conditions portions of the City's storm water and wastewater systems are vulnerable to tidal inundation, flooding,

and erosion. Additionally, all existing beach accesses and oceanfront property are in existing coastal erosion and coastal flood hazard zones associated with a 100-year storm event.

According to the study, Imperial Beach may see approximately 1.6 feet of sea level rise by 2047. The most severe impacts from sea level rise are beyond the timeframe of the 2019 General Plan/LCP Update; however, it is critical that the City begin crafting and implementing policies, programs, and actions that will increase its resiliency to existing and near-term impacts, and also support the longer term more substantial adaptations that will be necessary as sea level rise accelerates in the latter half of the century. The [range of shoreline adaptation strategies included in the 2016 IB SLR Assessment, available on the City's webpage, identifies a range of shoreline adaptation strategies. is presented in the Sea Level Rise Adaptation Strategies discussion box.](#) Other policies and strategies that focus on increasing the resiliency of buildings and infrastructure along the shoreline and in the interior of the City are also needed to increase the overall community resiliency to sea level rise and climate change.

Imperial Beach faces additional safety challenges from tsunamis, earthquakes, and urban fires. Tsunamis represent a threat to Imperial Beach due to the City's low-lying geography. Earthquakes can trigger tsunamis and can cause liquefaction that could dramatically impact the city. Wildfires do not represent a significant threat due to an elevated water table and the urbanized nature of the area; however, fire is always a threat in an urbanized environment. The Safety Element includes policies and actions related to each of these hazards to reduce risk, and increase community resiliency and adaptive capability.

This Safety Element complies with Senate Bill (SB) 379 requirements, codified as California Government Code section 65302(g)(4), to address climate change mitigation, adaptation, and resiliency in general plans. These issues are also addressed in the City's Climate Action Plan, and discussed in the Conservation and Ecotourism Element, and elsewhere in the General Plan. The integration of climate change policies throughout the plan helps to ensure that climate change will be a core consideration of future planning decisions, programs, and actions.

Coastal Act

DISCUSSION

Managing development to respond to coastal hazards is a key component of a local coastal program. The Coastal Act policies direct new development to reduce risks to life and property and avoid substantial changes to natural landforms. The Coastal Act policies that are related to the Safety Element are provided at the end of the element. In 2015 the California Coastal Commission (CCC) adopted the Sea Level Rise Policy Guidance document to aid jurisdictions in incorporating sea level rise into their plans. This includes specific issues such as extreme weather and tidal events, maintenance of public access, addressing vulnerability of property and structures, environmental justice, and consistency with the Coastal Act. It also details the current science, technical, and other information into a single resource to facilitate implementation of the Coastal Act at the state and local level and policy guidance for reducing vulnerabilities and guiding planning. The policy guidance includes a strong emphasis on green adaptation strategies as opposed to coastal hardening and armoring.

7.1 Sea Level Rise Monitoring, Planning, and Adaptation

Discussion

Effective adaptation and reduction of risks will require maintaining and enhancing natural infrastructure, such as beaches and wetlands, and improving the resiliency of manmade infrastructure. Implementation to address the near- and long-term hazard risks from sea level rise will require substantial funding and collaboration. Potential funding sources at the federal, state, regional, and local levels must be identified and pursued, and collaboration among Imperial Beach, the San Diego Unified Port District (SDUPD), SANDAG, neighboring jurisdictions and communities, and other regional, state, federal, and international agencies is crucial. The SDUPD has jurisdiction over the Pacific Ocean shoreline, Tidelands and submerged

lands along Imperial Beach including Imperial Beach Pier and Pier Plaza, Dunes Park, and street endings as shown in Figure S-1A and Figure S-1B. Imperial Beach is not equipped with the funding or authority to handle sea level rise on its own. Sea level rise requires a broader systems approach in addition to the policies and programs the City can implement of its own accord.

An important component in the long-term capacity of Imperial Beach to adapt to an increase in hazards associated with sea level rise is a regular reassessment of the amount and rate of change over time as well as physical impacts from flooding, storms, and tidal inundation. This will be influenced by future emissions levels and other global and regional factors. Utilizing the best available science is necessary to more fully understand future risks.

In support of SLR monitoring and adaptation, the City is working with the UCSD Scripps Institution of Oceanography (SIO) assessing beach nourishment, sediment management, and SLR projections for the City and intends to continue this collaboration as well as identify additional opportunities in the future.-

THE ADAPTATION TIMELINE AND STRATEGIES

The timing of adaptation strategies will need to respond to these regular reassessments. Rather than set a hard timeframe for adaptation strategies, it is important to base the need for action on them on trigger points using quantifiable data obtained from local and regional monitoring and market indicators. Consistent monitoring of sea level rise and related impacts such as changes in beach sand volume, - beach area/width, quantity and severity and frequency of damage to property and structures are necessary to evaluate, identify trigger points and the adequacy of existing and potential future adaptation strategies and the timing for implementation of additional one or more adaptation/resiliency building strategies. The City intends to utilize an adaptive management approach to evaluate adaptation strategies. The triggers are not yet identified or quantified as the need to establish a baseline set of data through a process-oriented methodology is necessary. The methodology will be aided by the Sea Level Rise Strategy Checklist, which is designed to monitor the impacts of SLR on the various areas of the City and identify strategies that provide the best options to preserve and enhance the environment, economy, and social character of the City. The checklist provides a framework for the collection and evaluation of monitoring data that can be used to maintain up-to-date information on vulnerabilities. This data driven approach will allow for continued community engagement to aid in policy making direction.



Past storms have resulted in adaptive responses such as the construction of hard armoring protection devices.

The 2016 City of Imperial Beach Sea Level Rise Assessment (IB SLR Assessment) provides sea level rise estimates based on current science. As the science evolves and human and natural factors change sea level rise, these estimates will change. Additionally, it has generally been storms and the resulting coastal erosion, flooding, and property damage that have driven historical adaptive responses such as the construction of groins, the construction of hard armoring protection devices, and periodic beach nourishment. More frequent and powerful storms combined with sea level



South Seacoast

rise resulting from climate change will increase this episodic damage potential while tidal inundation will become more frequent and persistent and impact private and public property. The IB SLR Assessment found there are public infrastructure components, including but not limited to stormwater, wastewater, and transportation facilities, estimated to be vulnerable to sea level rise impacts throughout the economic lifetime of the respective infrastructure. Resiliency measures to better withstand these vulnerabilities can include but are not limited to: raising of infrastructure and structures, establishment of permanent or temporary alternative routes for public transit and bikeways, green infrastructure that reduces flooding, and addressing drainage of stormwater and resiliency of wastewater systems.

The implementation of these strategies has historically occurred without a comprehensive strategy to address shoreline protection that takes into account the range of their impacts on the community, economy, and environment. Successfully adapting to the increasing threat of sea level rise requires a more strategic and comprehensive approach. Shoreline protection that prioritizes the use of soft and/or living shoreline protection, and actions such as beach nourishment, dune creation/enhancement, wetlands protection, and other similar strategies in conjunction with existing protection devices is the preferred path forward in the near-[to medium](#) term. The employment of these strategies should be based upon events and their impacts, including severity and frequency, and an evaluation of the suitability of various strategies to protect the economy, environment, and community.

The costs of shoreline protection will also be considerable and strain the ability of Imperial Beach, other jurisdictions, and the state and federal governments to fund adaptation efforts. This heightens the importance of investing resources strategically and collaborating effectively with the SDUPD and other agencies to plan, pursue, and implement strategies. Since the SDUPD has jurisdiction over the coastal shoreline, the strategies that agency employs will serve as the first line of defense. Additionally, as managers of the Tijuana Estuary, TRNERR will be a key partner in any sand reclamation initiatives and ensuring any adaptation strategies are evaluated for their potential impacts on the Tijuana Estuary.



Consistent monitoring of sea level rise and related impacts are necessary to evaluate the adequacy of adaptation strategies.

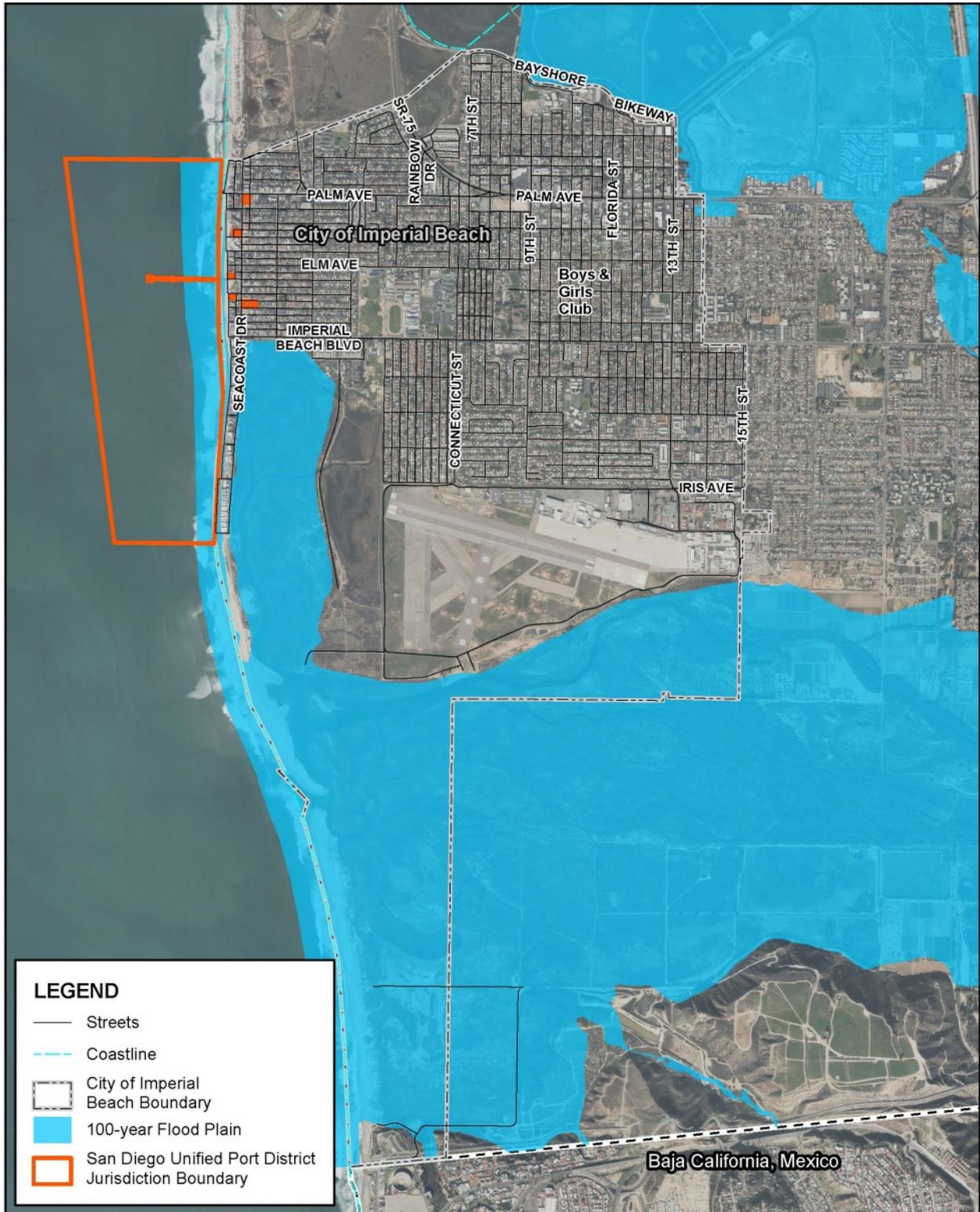
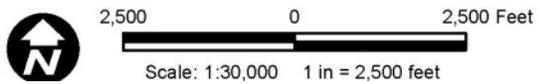


FIGURE S-1A
100-YEAR FLOOD PLAIN

LOCAL COASTAL PLAN UPDATE
IMPERIAL BEACH





Source: SanGIS 2014, City of Imperial Beach 2017, FEMA 2017

FIGURE S-1B
100-YEAR FLOOD PLAIN ZOOM TO SAN DIEGO UNIFIED PORT DISTRICT JURISDICTION

LOCAL COASTAL PLAN UPDATE
 IMPERIAL BEACH

~~Trigger points that include both sea level rise change and impact thresholds can more effectively signal the proper time and scale to implement adaptation strategies.~~ The protection of natural resources, [including biological resources](#), and public and private property is critical to the economy, community character, and quality of life of Imperial Beach. The beach, San Diego Bayfront, and estuary are core elements in Imperial Beach’s visitor-serving, recreational, and ecotourism economy and overall economic development vision. They are also the areas that are generally most at risk. The planning and implementation of adaptation strategies that focus on the protection and enhancement of public and private property and preservation of natural resources is a priority. Strategies and measures will be evaluated to determine their effectiveness in increasing the resiliency of existing and future infrastructure, properties, and development; and in meeting overall objectives to protect and enhance the economy, environment, and community character of Imperial Beach. Strategies and measures such as beach nourishment, dunes and living shorelines in conjunction with existing hard armoring and other resiliency measures may be considered.

As previously noted, the most severe impacts of sea level rise and climate change are not expected until the latter half of the century, but there are substantial existing and likely future impacts that are occurring or will occur before then. Table S-1 provides a high-level summary of some of the key physical vulnerabilities that may come to fruition over time absent effective adaptation, according to the IB SLR Assessment. **It is important to note that the identification of vulnerabilities described in the IB SLR Assessment assumed that no additional adaptation strategies would be employed other than those in place in 2016.** These potential impacts could be mitigated in part or in whole with additional adaptation efforts.

Imperial Beach has long been susceptible to local, nuisance flooding, and flood plain inundation. Nuisance flooding associated with high tides is currently the most frequent form of flooding. Stormwater flooding occurs during combined rainfall and high tides. The extent of flooding and coastal erosion and related impacts are expected to begin accelerating beyond the estimated 1.6 feet (.5 meters) threshold of sea level rise estimated to be breached around 2047; however, the uncertainty of these events further requires [close monitoring and tracking of future events that may lead to the implementation of one or more adaptation measures to be implemented.](#) ~~a measured and event-based trigger approach.~~

Based on the findings of the 2016 City of Imperial Beach Seal Level Rise Assessment (IB SLR Assessment), the City can continue to utilize strategies currently in place such as shoreline protection devices and beach nourishment, continued adaptation of public infrastructure, and additional strategies that include but are not limited to living shorelines to adapt to sea level rise throughout the lifetime of the 2019 General Plan/Local Coastal Program Update and beyond. As a result, while managed retreat was included as a potential strategy in the IB SLR Assessment, the City does not consider it a viable or necessary adaptation strategy in the foreseeable future and does not intend to pursue it. This position was strongly mirrored by community feedback received during the update process, through a series of meetings and discussions with community members.

The City intends to continue to build on its efforts to pursue adaptation strategies that preserve and enhance its environment, economy, and community character. This includes the two-thirds of the Imperial Beach shoreline that has been left undeveloped and acts as an extended living shoreline. Additionally, along the developed shoreline, the City’s preferred approach is to employ adaptation strategies, such as beach replenishment and living shorelines, in combination with existing shoreline protection devices, to preserve property, [protect marine resources and biological productivity](#), and maintain critical natural and economic resources such as the shoreline. These strategies will be continually assessed for deployment at the community, neighborhood, area, and sub-area levels. In the near-term it is likely that periodic beach replenishment will be an effective strategy for the Pacific coastline as a whole; however, certain neighborhoods, such as South Seacoast and Carnation that already experience flooding and episodic coastal erosion, may warrant earlier hybrid strategies. Similarly, the estuary and Bayfront shorelines will also likely warrant different approaches, such as enhanced wetlands and berms that reduce flooding and protect and improve habitat.

Table S-1
 Summary of Imperial Beach Sea Level Rise Vulnerabilities from 2016
 Imperial Beach Sea Level Rise Assessment, With No New Adaptation Measures*

Existing Conditions	
Structures and Parcels	<ul style="list-style-type: none"> • The South Seacoast neighborhood is impacted during a 100-year coastal wave flood event • Buildings at Bayview Elementary School exposed to coastal flooding during storm events • Tidal inundation impacts are limited overall
Transportation	<ul style="list-style-type: none"> • Some roads impacted by wave events and tidal inundation
Storm Water and Wastewater	<ul style="list-style-type: none"> • Limited amount of wastewater pipe and stormwater system impacted by coastal erosion and/or tidal inundation
2047: 1.6 feet (.5 meters) of Sea Level Rise	
Structures and Parcels	<ul style="list-style-type: none"> • The Carnation neighborhood north of Palm Avenue is exposed to 100-year coastal wave flood events • Tidal inundation impacts increase modestly • Buildings at Bayview Elementary School routinely flooded by tidal inundation • Westview Elementary School exposed to tidal inundation and coastal flooding
Transportation	<ul style="list-style-type: none"> • 90% of Seacoast Drive is vulnerable to coastal erosion
Storm Water and Wastewater	<ul style="list-style-type: none"> • One wastewater pump station exposed to coastal erosion and oceanfront storm water system exposure doubles
2069: 3.3 feet (1 meter) of Sea Level Rise	
Structures and Parcels	<ul style="list-style-type: none"> • Tidal inundation increases dramatically with oceanfront, Bayfront, estuary, and interior neighborhoods experiencing more persistent and regular inundation
Transportation	<ul style="list-style-type: none"> • Coastal flooding could result in temporary closure of up to 20 miles of roads • Coastal erosion could destroy more than 4 miles of roads
Storm Water and Wastewater	<ul style="list-style-type: none"> • More than half of storm water drainages impacted by tides about 50% of the time
2100: 6.5 feet (2 meters) of Sea Level Rise	
Structures and Parcels	<ul style="list-style-type: none"> • 30% of all parcels exposed to one or more coastal hazards including episodic coastal flooding, tidal inundation, and coastal erosion
Transportation	<ul style="list-style-type: none"> • 40% of City roads vulnerable to coastal storm flooding • Over 5 miles at risk of being lost to coastal erosion including all of Seacoast Drive • Major bus routes and bikeways at risk of closure
Storm Water and Wastewater	<ul style="list-style-type: none"> • Widespread wastewater and storm water system exposure
<p>* Note that the 2016 City of Imperial Beach Sea Level Rise Assessment assumes that no additional adaptation strategies would be employed other than those currently in place. These potential impacts could be mitigated in part or in whole with additional adaptation efforts.</p>	

The purpose of the 2016 SLR Assessment was to identify areas and resources in the City that may be vulnerable to rising seas in the future, so the City could begin to consider ways to improve and enhance coastal resiliency for the long term. The report looked at future scenarios and the potential effects (coastal erosion, flooding and inundation) on the City with 0.5 meters, 1 meter and 2 meters of SLR through a long-term planning horizon year of 2100. The report identified potential future SLR effects on public and private structures, transportation facilities, critical public utilities and other infrastructure.

The 2016 City SLR Assessment assumed that no additional adaptation strategies would be employed by the City or by other agencies other than those currently in place such as periodic beach nourishment. Without any additional action, City infrastructure as well as private development was determined to be at risk in the future from rising seas. Potential future projected impacts could be avoided or mitigated in part or in whole with additional adaptation efforts such as those described in the 2016 SLR report which include a full range of coastal resiliency building strategies that would enable the

[City to maintain its community character with strong preferences for a sustainable economy and healthy environment in the future.](#)

[Long-term monitoring of sea levels \(through tide gauge data or other quantifiable/measurable data\) has emerged as another essential component to understanding the big picture. As SLR science continues to evolve and become more refined, and as our understanding of the key variables of climate science modeling grows, we will have a better understanding of the most probable SLR trajectory.](#)

[The planning horizon year for this GP/LCP is XX. Just as this document will need to be periodically updated by the City, the SLR assessment must be updated on a regular basis as needed as additional information becomes available and as new projections are issued based on improved understanding of the dynamics, correlations and variables involved in sea level rise science. Implementing one or more SLR adaptation strategies can then be phased in as needed based on observed data and with community input on the best path\(s\) forward.](#)

The informed selection of adaptation strategies requires the City to **establish** a robust monitoring program. This includes: monitoring the severity and frequency of flooding, coastal erosion, storm, and other sea level rise related events; identifying the feasibility of continuing existing strategies; and identifying alternative strategies and their lead time for implementation, should they be needed. The purpose of such a process would be to select strategies that preserve and enhance the City's environment, economy, and community character. This includes prioritizing the preservation of beaches and habitat that are critical to the City's tourism and ecotourism economic development strategy, and the protection of public and private property.

Development Design and Siting

While many adaptation strategies apply at regional, community and neighborhood-scales, it is also necessary to improve the resiliency of structures and infrastructure. It is important to take the economic lifetime of structures into account when evaluating the siting, design, and planning of infrastructure and development. Adaptation strategies incorporated into siting, design, and planning, that are consistent with anticipated vulnerabilities in the development area, will increase resiliency of any structures throughout their anticipated economic lifetime and the community overall.

Unlike many other coastal communities, the Imperial Beach coastal shoreline is comprised almost entirely of low-lying sandy beach. Development and redevelopment that incorporates multiple adaptive strategies including but not limited to increased setbacks, increased base floor elevation, and innovative design will be more effective than single strategy approaches. Because the City's developable lands are already urbanized, strategies will be incrementally implemented as properties redevelop.

Building on Community Strengths

While its location, topography, and other characteristics make Imperial Beach vulnerable to sea level rise, there are also aspects of Imperial Beach's existing urban form that can be capitalized on to increase resilience to sea level rise. The significant acreage conserved as permanently preserved open space serves as an example of a living shoreline and helps create a natural buffer from developed areas, and the grid street network in particular can be utilized to enhance safety and emergency access to the coast, the San Diego Bay, and the Tijuana Estuary. Coastal erosion, flooding, and inundation may negatively impact the use of frontage roads that run parallel to the coast and San Diego Bay in particular; however, the grid network can provide continued access to the shoreline via the perpendicular orientation of streets. Streets that are multi-modal in nature maintain and enhance safe access for both emergency services and the public, and promote sustainability and quality of life. For example, strategies that pair the phased raising of roads and public infrastructure, and incorporation of other elements such as green infrastructure, can reduce the sea level rise vulnerability of the facility itself, and have broader community benefits such as reducing the strain on the storm water system. This multi-benefit approach to ongoing capital improvements planning and programming can lessen the anticipated impacts of future sea level rise.

Policies

ADAPTATION PLANNING AND PROGRAMS

- 7.1.1 Update the 2016 Sea Level Rise Assessment approximately once every ten years consistent with the best available and recognized climate change science as determined by the City
- 7.1.2 Collaborate with regional partners to establish a comprehensive beach and shoreline management plan to support adaptation of beach and shoreline areas along the coast, the San Diego Bay, and the Tijuana Reserve Estuary.
- Seek to maintain a continuous walkable beach and access to the beach for recreational use and economic benefit except for temporary inaccessibility from extreme tides and storm events.
 - Evaluate and utilize the adaptation strategies that are best suited to maintain and enhance the City's environmental, economic, and social viability.
 - Evaluate and pursue funding for natural infrastructure pilot projects that protect assets from sea level rise and increased storm surges, and achieve co-benefits that enhance natural and recreational resources and improve public access.
 - Identify and seek out other federal, state, regional, and local revenue sources for the City's shoreline protection, management actions and programs.
 - Explore the establishment of an assessing entity and/or local revenue sources such as a Transient Occupancy Tax to fund shoreline adaptation, including, but not limited to, beach nourishment and living shoreline protection.
- 7.1.3 Monitor beach ~~profiles, and~~ shoreline conditions and sea level rise impacts along the coast, San Diego Bay, and the Tijuana Estuary to inform the beach and shoreline management plan.
- Monitor Imperial Beach shoreline changes in beach width and sand volume using SANDAG Regional Shoreline Monitoring Program annual data and reports.
 - Utilize the best available data source to track sea level rise trends.
 - Track frequency, duration, and severity of flooding and coastal erosion events.
 - Track annual sea level rise related impacts such as structure and infrastructure damage from storm events, flooding, and tidal inundation.
 - ~~Encourage community input in ongoing adaptation strategy planning and implementation.~~
 - ~~Track progress towards trigger point adaptation strategy implementation thresholds. Utilize monitoring data, the Sea Level Rise Checklist, community input, and additional tools adopted by the City. to evaluate the effectiveness of existing adaptation strategies and inform the need for additional strategies.~~
- ~~e.a. Encourage community input in ongoing adaptation strategy planning and implementation~~
- ~~7.1.4 Incorporate resiliency measures and adaptation strategies into capital improvement planning and other investment decisions. Resiliency measures can include but are not limited to: raising of infrastructure and structures, establishment of permanent or temporary alternative routes for public transit and bikeways, green infrastructure that reduces flooding, and adaptation of stormwater and wastewater systems.~~
- ~~Resiliency measures can include but are not limited to: raising of infrastructure and structures, establishment of permanent or temporary alternative routes for public transit and bikeways, green infrastructure that reduces flooding, and adaptation of stormwater and wastewater systems.~~
- ~~a.b. Use the Develop a CIP-appropriate Sea Level Rise Checklist included as a part of the City's Local Coastal Program Implementation Plan to help e~~Evaluate the adaptive capacity of planned capital projects and identify suitable strategies to contribute towards maintaining and enhancing the City's environmental, economic, and community viability.
- ~~b. Consider impacts to biological resources when evaluating adaption strategies.~~

~~7-1-47.1.5~~ Pursue the reestablishment of a Sand Compatibility and Opportunistic Use Program (SCOUP) program in Imperial Beach. Once in place, inform applicants, for new development in the City and in surrounding areas that do not have permitted SCOUP programs, of the City's SCOUP program and encourage them to participate.

SHORELINE PROTECTION DEVICES

~~7-1-57.1.6~~ Allow the repair, maintenance, and enhancement of existing shoreline protective devices, or the extension of ~~shoreline protection, armoring~~, that do not result in feasibly avoidable negative community impacts and are necessary to protect structures from identified coastal hazards.

- a. Seek to avoid repair and maintenance projects that result in seaward encroachment of the shoreline protective device.
- b. Work to ensure that repair and maintenance projects address and mitigate all coastal resource impacts the shoreline protective device is having, including with respect to local sand supply, public views and public recreational access.
- c. Repair and maintenance that increases a shoreline protection device by more than 50 percent of its existing size constitutes replacement and is subject to requirements pertaining to new shoreline protection devices, unless those requirements preclude the City from protecting its economy, environment, and community character.
- d. Enhancements and new development may be allowed provided no ~~new~~ negative community impacts are created and a walkable beach is maintained at low tide.

~~7-1-67.1.7~~ Allow ~~coastal armoring shoreline protection~~ to protect and maintain safe ~~public~~ beach accessways, ~~including new coastal armoring shoreline protection associated with~~ for beach restoration ~~off the public beach or a publicly owned beach~~.

- a. Limit the size and scope of the ~~protective device armoring~~ to the minimum amount necessary for the protection of public beach areas and public accessways, unless the size and scope provides a broader ~~public systems~~ benefit ~~such as public safety or maintaining a walkable public beach at high tide~~.
- a. Consider placing armoring as far landward as possible to minimize impacts to natural beach processes and maximize the provision of safe lateral beach access.
- b. Limit armoring to revetments and/or seawall, unless it can be demonstrated that such devices are enhancing the City's economy, environment, and community character.

~~7-1-77.1.8~~ Evaluate modifications to the existing groins consistent with the goal of enhancing the shoreline environment, maintaining and/or increasing beach width, and public access, while also providing recreational opportunities and property protection.

- c. Evaluate any potential negative impacts resulting from groin modification and employ feasible mitigations.

~~7-1-87.1.9~~ Continue the sand mitigation fee for replacement or construction of ~~armoring shoreline protection~~ and require the utilization of fees for sand replenishment ~~and/or retention as a first priority. Allow fees to be utilized for public access and/or recreation projects where no near term sand replenishment and/or retention projects are available for allocation.~~

~~7-1-97.1.10~~ Utilize suitable sand excavated during grading for permitted development for beach replenishment.

~~7-1-107.1.11~~ Permit revetments, breakwaters, groins, harbor channels, seawalls, shoreline protection devices and other such construction that alters natural shoreline processes when required to serve coastal-dependent uses or to protect existing principal structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply.

- a. Interim devices may be allowed prior to completion of a comprehensive shoreline protection plan designed for the area.

~~7-1-117.1.12~~ New development fronting of the coast shall incorporate an engineered vertical seawall in its design if it is determined that shoreline protection is necessary. Such a seawall shall, except for required toe protection, be

located within the private property of the development and designed to be sufficient to protect the development from flooding during combined design storm and high tide events.

~~7-1-127.1.13~~ Design public improvements to minimize shoreline protection devices, if possible and require the minimum necessary protection that does not extend onto the beach further seaward than the authorized vertical shoreline protection on either side of the access improvements.

- a. Evaluate and prioritize shoreline protection alignment options that would not extend further seaward than the inland extent of Ocean Boulevard right-of-way in areas without continuous shoreline protection devices.
- b. Where shoreline protection devices are necessary for public improvements shoreline protection devices may extend seaward a sufficient distance to accommodate a transition to the existing groin. Design all improvements to minimize impacts to shoreline sand supply.

~~7-1-137.1.14~~ Develop a coastal shoreline protection device manual for the design and construction of new and replacement seawalls and revetments.

- a. Include erosion management measures such as irrigation controls, landscaping ordinances, and other measures suitable to the changing nature of the Imperial Beach shoreline.

COORDINATE AND COLLABORATE

~~7-1-147.1.15~~ Coordinate with federal, state, and local agencies to research and develop adaptation strategies and projects and establish, identify, and access funding opportunities for implementation including but not limited to the following:

- a. Periodic sand nourishment of beaches.
- b. Living shoreline strategies such as dunes, wetlands and habitat restoration and enhancements.
- c. Green streets and infrastructure that increase sea level rise resilience.
- d. Pilot adaptation projects.
- e. Flood control strategies and adaptations.
- f. Sea level rise program and project planning.

~~7-1-157.1.16~~ Continue to coordinate with SANDAG and other coastal cities to implement the regional beach replenishment program and the adopted "Shoreline Preservation Strategy for the San Diego Region."

~~7-1-167.1.17~~ Partner with the Tijuana River National Estuarine Research Reserve (TRNERR) to pursue joint adaptation planning and strategies to ensure that existing and future sea level rise impacts do not restrict emergency and public access to the Tijuana Estuary and identify potential negative impacts City adaptation strategies may have on the estuary.

~~7-1-177.1.18~~ Partner with the TRNERR to explore the feasibility of utilizing sand from the Tijuana River for beach nourishment, dunes, and living shoreline protection.

~~7-1-187.1.19~~ Explore the feasibility of cooperation with the Navy to increase [resiliency and adaptation strategies-berm protection](#) for Naval Outlying Landing Field Imperial Beach (NOLF IB) and residential communities in Seaside Point.

[7.1.20](#) Pursue increased planning and collaboration with coastal, Bayfront, and estuary front property owners to address the challenges of sea level rise on a community and neighborhood wide basis as a method to monitor and receive input from those property owners directly impacted.

~~7-1-197.1.21~~ [REPI Policy](#)

DEVELOPMENT DESIGN AND SITING

~~7-1-207.1.22~~ Require the completion of geo-technical investigations concerning potential soils, geologic, seismic and/or flood hazards, and sea level rise (see also Policy 7.1.1).

- b. Determine which land uses are appropriate for the site.
- c. Determine what measures could be undertaken to reduce risks to life, public and private property, and natural systems throughout the anticipated economic life of the development.

~~7-1-23~~ 7.1.23 Establish incentives to encourage the retrofit, redevelopment, and replacement of buildings and properties to meet or exceed construction building codes, including increased building elevation, setbacks, and other measures that would reduce sea level rise hazard risks, and increase resiliency and adaptive capacity.

~~7-1-22~~ Encourage the preparation of a Removal and Restoration Plan as a condition of approval for development subject to coastal hazards throughout the development's life, to ensure that should the development become abandoned the property owner would be responsible for removal.

~~7-1-23~~ 7.1.24 Require new development to provide adequate drainage and erosion control facilities that convey site drainage in a non-erosive manner to minimize hazards resulting from increased runoff and erosion.

- a. Restore disturbed or degraded natural drainage systems where feasible, except where there are geologic or public safety concerns.
- b. Employ construction and post-development Best Management Practices (BMP) plans that specify BMPs and how they will be implemented, monitored, and maintained.

~~7-1-24~~ 7.1.25 Evaluate hazard risks when reviewing proposals to adjust lot lines in areas subject to existing or future sea level rise impacts consistent with the IB SLR Assessment and future updates.

~~7-1-25~~ 7.1.26 Review City CIP projects for location and avoid siting new public facilities in hazardous areas. ~~strict emergency and critical use facilities from all high risk areas. Consider re~~ Relocating existing public facilities, located in hazardous zones, at the end of their economic life if feasible rather than rebuilding in place.

- a. Identify and implement adaptive measures to increase resiliency to existing and future sea level rise throughout the anticipated economic life of facilities where relocation is not feasible.

FLOODING

~~7-1-26~~ 7.1.27 Develop and maintain an adequate flood control program.

- a. Seek to minimize development in areas of future flooding identified by the 2016 Imperial Beach Sea Level Rise Assessment and future updates unless adequate flood protection measures are developed.
- b. Require the minimum finished floor level for structures be above the known or projected flood plain level wherever feasible.
- c. Prevent encroachment on existing water courses.
- d. Restrict development in open 100-year floodplain areas that remain uncommitted to development as identified on Figure S-1, unless it can be demonstrated that de minimus impacts result and the City's economy, environment, and social character are enhanced. No habitable structures or filling shall be permitted in the floodplain and only uses compatible with periodic flooding shall be allowed.

~~7-1-27~~ 7.1.28 Educate property owners of existing development and proposed development and redevelopment about the Federal Emergency Management Agency (FEMA) flood insurance incentives to increase finished floor elevation above the required minimum base flood elevation.

~~7-1-28~~ 7.1.29 Identify and establish temporary and/or permanent vehicle, public transit, and pedestrian and bicycle routes and facilities that can be used safely during flooding events.

- a. Implement alternate routes based on increased frequency of flooding and erosion impacts based on beach and shoreline monitoring data and estimated sea level rise consistent with the 2016 Imperial Beach Sea Level Rise Assessment or the most recent subsequent updates.

7.2 Fire Hazards

Discussion

Fire hazards, including brush land and structure type, are a significant problem in San Diego County and throughout California. State law requires cities to update their general plan safety elements to address the risk of fire in state responsibility areas and very high fire hazard severity zones. Imperial Beach does not have any Very High Hazard Fire Hazard Severity Zones (VHFHSZ) within its boundaries, although there are areas that are adjacent to the City (to the southwest and to the east) that fit this classification. There is a small area within TRNERR that is called out as a "State or Federal Responsibility Area VHFHSZ." Although Imperial Beach is an urbanized community surrounded by water on three sides and is not considered at high risk for wildland-urban interface fires, the catastrophic fires that swept through California in 2017 and 2018 demonstrated that even areas of low fire hazard risk can experience extreme fire events. Climate change appears to play an increasing role in contributing to these disasters. Increasing knowledge about ember casting during Santa Ana wind events may show additional areas that could be at risk of wildland fires. It was discovered in 2016 that the native vegetation in the Tijuana River Valley was threatened with an infestation of the Kuroshio shot hole borer beetle. With such vulnerable vegetation possibly becoming fuel for extreme fire events, the various jurisdictions in the Tijuana River Valley will need to closely monitor the conditions in the Valley and propose contingency measures to protect life and property in the event the conditions appear ripe for a wildland fire to occur. Therefore, while urban fire hazards are the main concern in Imperial Beach, conditions in the Tijuana River Valley will need to be monitored to see if dry or dying vegetation poses as an additional fire hazard concern.

Population density, proximity of structures and different uses, electric and natural gas use and infrastructure, and other factors present a high risk of fire. Some of the primary structures and land uses that present fire risks in Imperial Beach are:

- ‡ Single Family Residential Buildings
- ‡ Multi-Story Buildings
- ‡ Medical Facilities
- ‡ Schools
- ‡ Community centers, senior centers, and other indoor public assembly facilities
- ‡ Gas and electric utility lines
- ‡ Transportation, storage, and use of flammable materials
- ‡ The Imperial Beach Pier

Generally, adequate water supplies for fire suppression exist throughout the City. Water is a critical element in fire protection. Of all the factors considered by fire insurance underwriters, water supply is the most heavily weighed (see Facilities and Services Element).

FIRE PREVENTION AND SAFETY

Fire prevention measures are usually undertaken for the safety of residents and property, as well as to reduce insurance premiums. Regulations that reduce fire risks are described in this section.

- ‡ The Building and Fire Codes are the most important regulatory codes from the standpoint of fire safety, but are intended to serve only as minimum standards.
- ‡ The Zoning Ordinance helps prevent the construction of unsuitable or hazardous structures.
- ‡ Subdivision regulations are used to reduce the risk of fire as they govern the process of dividing land into building sites.
- ‡ Weeds are a fire hazard. Weed abatement ordinances, strictly enforced, can eliminate this potential hazard.

Certain structures can be classified as "fire hazardous" and should be considered as public nuisances. Fire hazardous buildings are those which, upon ignition, permit the rapid spread of fire. They are generally characterized by substandard electrical wiring, open stairwells and obsolete heating facilities. Emergency access is another critical aspect for addressing

fire hazards. As mentioned previously in Section 7.1, the grid street network facilitates emergency access. Focused street improvements can improve fire access throughout the city, including to shoreline development. As the City evolves, and especially as Sea Level Rise increases, emergency fire access to certain parts of the city, especially areas such as South Seacoast Drive, may become more restricted.

Policies

- 7.2.1 Ensure that new development and redevelopment has or provides sufficient emergency fire access and that it is maintained throughout the anticipated economic life of the development.
- 7.2.2 Ensure that individual street and transportation improvements do not result in loss of emergency fire access. In cases where an individual improvement diminishes or eliminates access on that street ensure there are alternate routes with sufficient access.
- 7.2.3 Ensure that the latest versions of the adopted Building and Fire Codes are adopted and enforced.
- 7.2.4 Ensure that public and private landowners implement site specific safety measures that mitigate to a low risk condition fire hazards to neighboring public and private properties.
- 7.2.5 Work cooperatively with other agencies and private interests to educate private landowners on the benefits of fire-safe measures (including fire-rated roofing and construction materials) and vegetation management, to achieve a low risk condition.
- 7.2.6 Monitor conditions in the Tijuana River Valley to assess fire risk to nearby uses due to climate change and habitat impairment events.

7.3 Geological and Seismic Hazards

Discussion

LOCAL GEOLOGY

Like most of the South Bay area, Imperial Beach is underlain by the San Diego Formation, a tertiary shallow water marine deposit of Pliocene Age. An important feature of this formation is the fact that it is locally fossiliferous. The formation consists of chiefly dense, easily pulverized, silty, very finely bedded sandstones.

The more recent Quaternary deposits include three general types of material. A narrow strip of beach deposits, whose deposition is mainly caused by ocean currents and wave action, is found along the entire coastline of Imperial Beach. The urbanized area of the City is almost entirely underlain by the Baypoint formation, which consists of recent marine mud. The surface geology of the Tijuana River Estuary consists of alluvial material. This deposition was caused by the Tijuana River's erosive action upstream. The alluvial material consists of layers of sand and gravel, as well as larger stones. Imperial Beach's geology is shown in Figure S-2.

SEISMIC HAZARDS

Virtually any land bordering the Pacific Ocean is subject to those effects of the movements of the earth's crust known as earthquakes. Even though Southern California is known for its earthquakes, actual losses to life and property have been small. In fact, these losses have been much less than other areas of the world, which routinely suffer from tornadoes, epidemics, hurricanes or earthquakes. It is generally agreed, however, that the potential for severe earthquake damage does exist, and that local authorities should provide some measure of security against that potential. The purpose of the Safety Element is, therefore, to set forth policies and programs which will help protect life and property from preventable damage due to seismic activity.

Available data indicate there are three major regional zones of faulting within the San Diego region: (1) the San Jacinto Fault Zone, located in the eastern part of the county, is considered to be a major active branch of the San Andreas fault system,

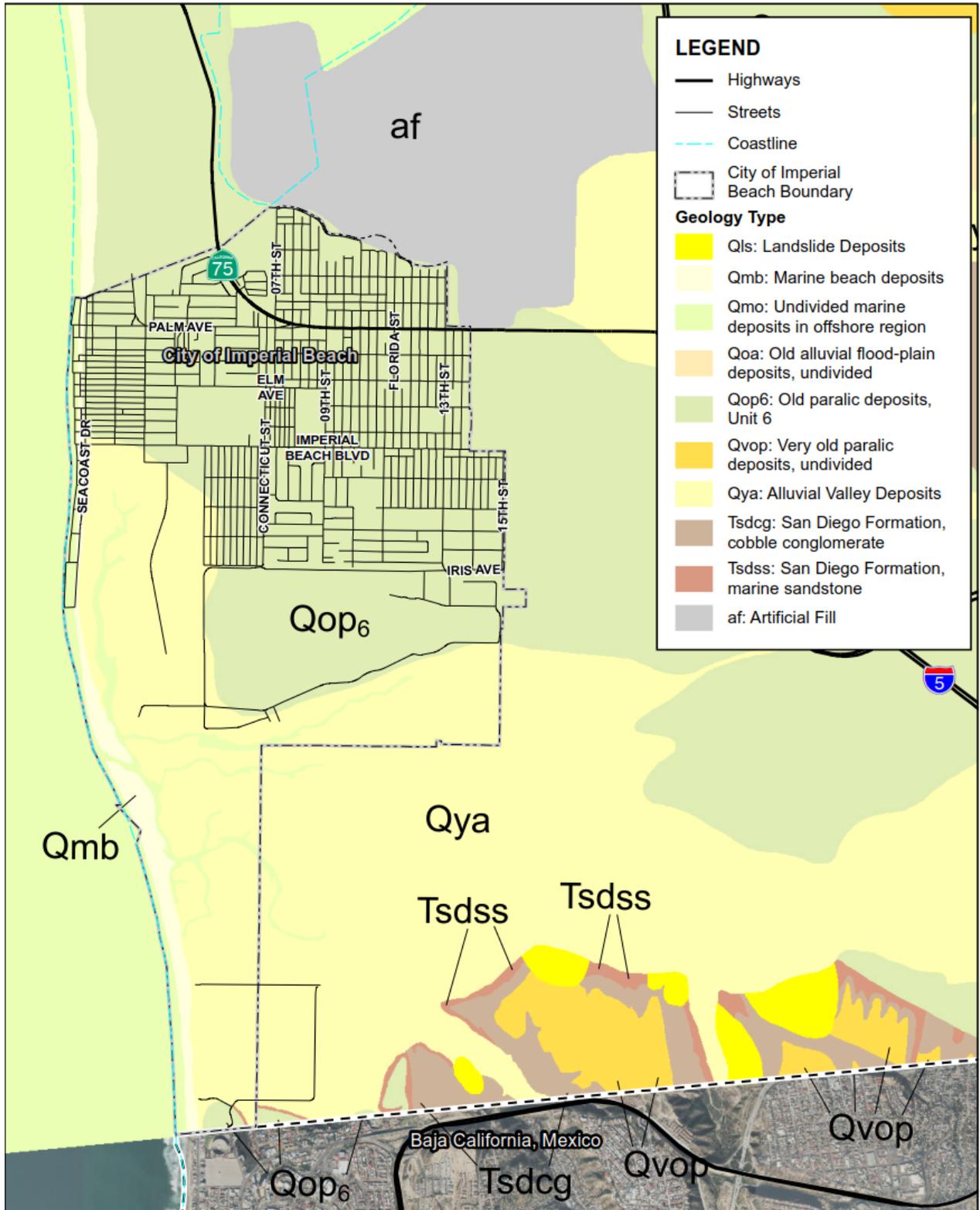
the maximum probable earthquake from this fault is between 7.5 and 7.8 on the Richter scale; (2) the Elsinore fault zone paralleling the San Jacinto fault zone is the largest known active fault in the county of San Diego. It is approximately 135 miles long. The area of most probable activity is between Lake Elsinore and Vallecito Valley, a distance of about 60 miles. The maximum probable earthquake magnitude from this fault is 7.6; and (3) the Rose Canyon fault zone, paralleling the Pacific coastline, is considered to be the possible southeasterly extension of the Newport-Inglewood fault zone, which was the source of the 1933 Long Beach earthquake.

The Sweetwater and La Nacion Faults are located 4 to 6 miles inland from and parallel to the Rose Canyon fault and San Diego Bay. Presumably, they are related to the fault system which created the depression now occupied by San Diego Bay and Mission Bay. These two faults do not appear to have been active in recent time. The La Nacion is the closest fault to Imperial Beach, being located about two miles east of the City.

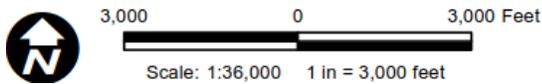
The San Diego region has historically been seismically quiet (less than 4.0 on the Richter scale) although at least 23-recorded epicenters of 2.0 to 3.0 have been recorded since 1948. Historic records in the San Diego region date back 200 years. Of that period, the last 40 years represent accurate technical data. The Elsinore and San Jacinto faults have exhibited enough activity to warrant making statements on their respective degree of activity as follows:

- ‡ For the Elsinore fault: one in 60 years at 7.3 magnitude; one in 100 years at a magnitude of 7.6 (maximum credible); and
- ‡ For the San Jacinto fault: one in 90 years at 7.3; and one in 100 years at 7.8 magnitude (maximum credible, McEven and Pinkey).

Recent research also suggests that the Rose Canyon Fault has considerable destructive potential and is capable of producing a magnitude 6.9 earthquake. Its proximity to Imperial Beach would mean an earthquake could dramatically impact Imperial Beach and could trigger a near-shore tsunami. Estimates suggest that the fault produces one substantial earthquake every 700 years with the most recent one occurring in 1862 that may have measured around 6.0. Potential geologic or seismic hazards are described below.



Source: SanGIS 2014, 2017; City of Imperial Beach 2017; CA Dept. of Conservation 2010



**FIGURE S-2
GEOLOGY**

LOCAL COASTAL PLAN UPDATE
IMPERIAL BEACH

GROUND SHAKING

Ground shaking is the oscillation or vibration of earth materials resulting from an earthquake. It is the most commonly experienced earthquake phenomenon because it may be felt tens or hundreds of miles from the earthquake epicenter. Assuming there are no known faults within Imperial Beach, and the nearest fault is the La Nacion, located 2 miles east of the City, it can reasonably be predicted that any damage from future earthquakes will be due to local ground shaking originating from a more distant source.

Ground shaking hazards are most likely to occur in areas of Imperial Beach underlain by loose, water-saturated, unconsolidated materials commonly referred to as deposits. The severity and type of ground shaking depends on several factors including: (1) earthquake magnitude and duration; (2) distance from the earthquake's epicenter; (3) local subsurface conditions; and (4) type of construction material used.

In general, much of Imperial Beach lies upon deposits which are poorly consolidated or unconsolidated aggregates of silt, sand and gravel. There is high potential of earthquake damage to structures located on this material.

LIQUEFACTION, LATERAL SPREADING AND DIFFERENTIAL COMPACTION

LIQUEFACTION

Resultant ground shaking during an earthquake will tend to compact loose deposits of cohesionless soils. It is generally recognized the higher the groundwater level the greater the shaking. If the soils are saturated, the compaction will result in an increase in the water pressure in the soil. With increased water pressure, the water within the soil will tend to flow upward and may turn the soil deposit into "quicksand" due to loss of shear strength. Flow to the ground surface may be manifested by sand boils and a gradual sinking or differential settlement of structures. Liquefaction of deeper strata may be manifested by ground cracking and lurching. Where soil thicknesses vary or where subsoil conditions are erratic, differential compaction of the soil layers may occur resulting in differential settlement of the ground surface.

The results of laboratory tests and investigations of liquefaction sites indicate that uniformly graded materials (those predominantly of one size such as beach sand) are more susceptible to liquefaction than well-graded materials and that, for uniformly graded soils, fine sands tend to liquefy more easily than do coarse sands, graded soils, silts or oil. In addition, loose soil deposits will tend to liquefy more readily than denser deposits and shallower strata, more than deeper strata. Further, intensity of ground shaking and duration of ground shaking play an important role. The longer the duration of strong shaking, the more likely it is that liquefaction will occur. Since the intensity and duration of ground shaking are somewhat proportional to earthquake magnitude, liquefaction is more likely to occur during moderate to strong earthquakes. When it does occur, the effects are severe with extensive damage resulting from shifting, tilting and floating.

It is emphasized that liquefaction potential depends upon many factors; in addition to ground water levels, are factors such as soil type, relative density and the intensity and duration of ground shaking. Due to the structure of the soils and the high water table within the City limits, liquefaction poses the biggest threat of serious damage in the event of moderate or major seismic activity.

LATERAL SPREADING

Lateral spreading is caused by ground shaking that triggers the movement of soils towards an unsupported surface or slope (not necessarily steep). Extensive damage to buildings can result from the mass flow of land areas, particularly along waterfront areas and on soft, saturated clays.

DIFFERENTIAL SETTLEMENT

The occurrence of differential settlement has been well documented in many major earthquakes and results from the non-uniform settlement of loose and medium-dense granular soils during ground shaking. Differential settlement often results in serious structural damage to buildings and underground utilities.

A general lack of available data precludes a detailed evaluation of ground failure hazards in Imperial Beach. A review of the data that have been collected and a review of the history of seismic events in the San Diego region has not revealed any documented instance of ground failure, other than that of landslides. It should not be concluded, however, that ground failure may not occur due to future seismic activity. It is likely that the soil and ground water conditions in the coastal areas, bay margins, and especially the bay fill areas are places for the potential hazards identified above to occur.

FAULT DISPLACEMENT

Ground fractures may occur during an earthquake where there are uncompacted soils or an abrupt change in depth of the bedrock beneath the subsoil. Some soils affected by seismic vibrations may be compacted or lurch sideways causing cracks in the ground.

The closest fault to Imperial Beach is the La Nacion Fault, located about 2 miles east (running in a north/south direction) of Imperial Beach. It is not likely, therefore, that extensive fault displacement will occur in Imperial Beach.

SUBSIDENCE AND UPLIFT

Subsidence and Uplift often accompany fault movement. Such movement affects harbor levels, the flow of water in canals and tunnels and distorts land survey lines. This phenomena is typically associated with the withdrawal of groundwater or petroleum, with large limestone deposits; with volcanism; or with hydro compaction. None of these constitute a significant problem in Imperial Beach.

GROUNDWATER PROBLEMS

Because of the presence of the estuary and lands that are periodically inundated, the groundwater level in Imperial Beach is relatively high, less than 25 feet in the urban areas of the City, and as close as eight feet to the surface at Ninth Street and Imperial Beach Boulevard.

The presence of shallow groundwater, in conjunction with other soil parameters, can be of great consequence in terms of ground stability during an earthquake i.e., liquefaction. The largest area subject to this hazard is around the margin of the San Diego Bay.

Studies of recent earthquakes have concluded that some liquefaction has occurred in every major earthquake observed around the world in the past ten to fifteen years.

For liquefaction to potentially occur, three conditions are necessary: 1) generally cohesionless soils, 2) groundwater, and 3) moderate or major earthquake. In Imperial Beach, as in other areas along the Pacific Coast, as well as throughout the world, all three conditions or potential conditions exist in varying degrees.

Additionally, sea level rise may impact groundwater and should be monitored when feasible to do so.

EXPANSIVE SOILS

An expansive soil is one which will substantially increase in volume when wetted and, because the process is reversible, will shrink when it dries. This is characteristic of cohesive, clay-like soils.

Expansive soils are a common feature and problem throughout Southern California. Not only do direct damage costs amount to many millions of dollars each year (for Southern California), but the damage is usually reflected in lower property values and resulting tax revenues. The problems resulting from expansive soils can be controlled by proper engineering and construction practices. The presence or absence of expansive soils is therefore not considered a critical factor in overall land planning. What is critical is to ensure that proper engineering and construction practices are observed. The City should remain cognizant of the problem. Soils in Imperial Beach are shown in Figure S-3.

LANDSLIDES

Since the terrain of Imperial Beach is generally flat, landslides cannot be considered a significant hazard. There are, however, small cliffs within Border Field State Park and at the south end of Seacoast Drive. Limited landslides may occur in these areas during an earthquake of sufficient magnitude.

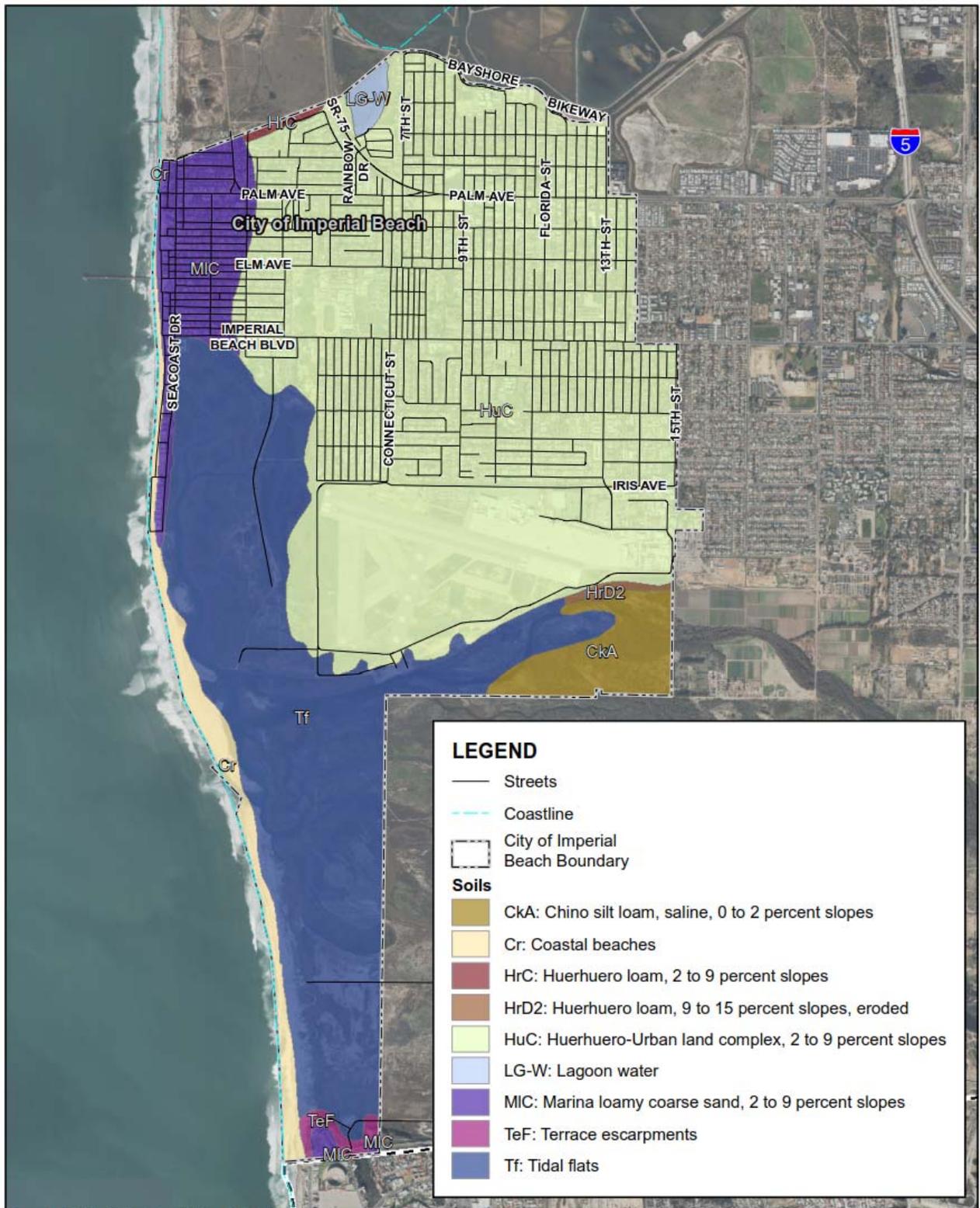
TSUNAMIS

A Tsunami is a sea wave generated by a submarine earthquake, landslide or volcanic action. While the possibility of a major tsunami from either of the latter two events is considered to be extremely remote for Imperial Beach, a tsunami caused by a submarine earthquake is considered possible. Submarine earthquakes are common around the edges of the Pacific Ocean, as well as other areas. Therefore, all of the Pacific Coastal areas are subject to this potential hazard to a greater or lesser degree.

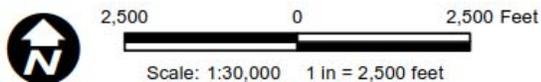
Tsunamis travel across the ocean as powerful, long, but low waves; perhaps 50 miles long and only one or two feet high. Traveling at almost 500 mph in the Pacific, such a wave in the open causes no problems; and, in fact, the slope of the wave front may be imperceptible to a ship at sea. However, as the tsunami waves approach the coastline, they are affected by shallow bottom topography and the configuration of the coastline, which transform the waves into very high, potentially devastating waves. Even if large waves do not occur, strong currents (as high as 40 feet per second) can cause extensive damage. Near-source tsunamis can occur from earthquakes that are generally less than 200 kilometers away and of 6.5 magnitude or greater. The waves from these tsunamis are likely to be extremely powerful and can impact the shore in 3 – 15 minutes. Faults such as Rose Canyon could trigger such an event. Even though most of Imperial Beach lies within the category of low-lying shoreline, it is not possible to predict the likelihood or magnitude of a major tsunami.

Policies

- 7.3.1 Restrict development so that no portion of any habitable structure should be built across any fault should one be discovered.
- 7.3.2 Ensure that the City keeps up-to-date on the seismic potential of the Rose Canyon fault as further research is conducted.
- 7.3.3 Seek out opportunities to collaborate with agencies involved in monitoring the impacts of sea level rise on groundwater supplies and dynamics and liquefaction potential in the region.



Source: SanGIS 2014; City of Imperial Beach 2017; USDA 2016



**FIGURE S-3
SOILS**

LOCAL COASTAL PLAN UPDATE
IMPERIAL BEACH

7.4 Disaster Preparedness

Discussion

The possibility of major disasters, including earthquakes and tsunamis, requires ongoing preparation. Imperial Beach and San Diego County actively participate in a program of disaster preparedness and relief for those extraordinary emergency operations of both governmental and nongovernmental groups. Imperial Beach has taken steps to increase disaster preparedness through its Emergency Operations Plan (EOP), and as a participating jurisdiction in preparation of the San Diego County Multi-Jurisdiction Hazard Mitigation Plan.

The Multi-Jurisdiction Hazard Mitigation Plan is a countywide plan that identifies risks and ways to minimize damage by natural and manmade disasters. The document presents a risk assessment for coastal storms, erosion, tsunamis, dam failures, earthquakes, flooding, rain-induced landslides, liquefaction, wildfires, and manmade hazards. The plan is a comprehensive resource document that serves many purposes such as enhancing public awareness, creating a decision tool for management, promoting compliance with state and federal program requirements, enhancing local policies for hazard mitigation capability, and providing inter-jurisdictional coordination. The federal Disaster Mitigation Act of 2000 requires all local governments to create such a disaster plan in order to qualify for hazard mitigation funding.

San Diego County's plan was last revised in 2010, and is currently being revised to reflect changes to the hazards threatening San Diego as well as the programs in place to minimize or eliminate those hazards. This revision will include an evaluation of the impact climate change is having on the natural hazards facing San Diego.

In advance of the update to the multi-jurisdictional plan, the City of Imperial Beach has taken steps to improve resiliency to climate change through preparation of the Imperial Beach Sea Level Rise Assessment Report (2016) and Local Coastal Program-focused General Plan Update (2019).

Policies

- 7.4.1 Minimize injury, loss of life, and property damage from natural and manmade hazards.
- 7.4.2 Continue to maintain an Emergency Operations Plan (EOP), which is compatible with, and complementary to, that of the County. Update the plan as the understanding of the threat of earthquakes, tsunamis, fire, and other potential disasters evolves.
- 7.4.3 Participate in the development of, and adopt future updates to the San Diego County Multi-Jurisdictional Local Hazard Mitigation Plan as necessary to maintain eligibility for federal post-disaster grant funding.
- 7.4.4 Coordinate across City and County departments and seek to align the Local Hazard Mitigation Plan (LHMP) with the LCP to ensure that proactive adaptation efforts are coordinated and responses to damage from future coastal hazards are streamlined. Identify future adaptation projects that meet the goals of both the LCP and LHMP and leverage FEMA funding opportunities for hazard mitigation and other related funding mechanisms to implement such projects.
- 7.4.5 Continue to promote public awareness of potential hazards and disaster preparedness.
- 7.4.6 Initiate education programs in lower grades using displays and demonstrations that would expose younger children to the nature and danger of fire. Such programs would tend to replace their natural curiosity with a sense of respect.
- 7.4.7 Support or sponsor exhibits and presentations in secondary schools which demonstrate the more involved aspects of fire dynamics; i.e., major contributing factors to fire hazard and the relationship of fire to the natural ecology. Encourage parental cooperation and assistance in overall fire education programs.
- 7.4.8 Develop a public information program to familiarize the citizens of the region with the Public Safety Element. School Districts and agencies which deal with the aged, handicapped and susceptible industries should be encouraged to develop educational programs relative to public safety awareness.

- 7.4.9 Seek out opportunities to educate the public about the threats from, and disaster preparedness for, earthquakes, tsunamis, and other hazards.
- 7.4.10 Continue to seek public input to inform strategies, response plans, evacuation routes, and prioritization of public improvements related to disaster preparedness and resiliency.

Coastal Act Policies - Safety

Section 30235 Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.

~~Section 30236 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

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.

This page intentionally left blank.

8.0 Design Element

Communities should be planned with an eye to the effect made upon the human spirit of being surrounded by beauty instead of ugliness.

Thomas Jefferson

Goals

- ‡ Preservation of Imperial Beach's small beach-town character
- ‡ Preservation and enhancement of public views that celebrate the City's relationship to the coast and visually connect people to Imperial Beach's distinctive environment
- ‡ A built environment that contributes to the aesthetic enjoyment of both residents and visitors, supports healthy active living, and contributes to the economic well-being of the community
- ‡ A City that is designed for walkability, sustainability, and coastal resiliency

Background

The Design Element is an optional General Plan topic under the state planning law. The intent of this Element is to meet Coastal Act requirements for the protection of scenic and visual qualities of the City and promote integrity of the community's small beach-town character. Imperial Beach's location along the Pacific Ocean coastline shapes its character and provides scenic views of the ocean from numerous vantage points. The relationship to the ocean and bay are critical components of the Imperial Beach identity. The interplay between the built and natural environment poses unique opportunities and challenges in balancing community life with resiliency and environmental stewardship along the coast.

The character of Imperial Beach's environment presents both special opportunities and special perils. The opportunity lies in the richness of the City's natural, coastal setting. The peril lies in the fragile nature of Imperial Beach's environment and in the speed with which it can be destroyed. The community is located within the "square-shaped" confines of the San Diego Bay and Silver Strand; the Oneonta Slough and Tijuana River Estuary; and the Pacific Ocean, and one is always aware of the setting in a way that is not true of other areas. In such a restricted and exposed environment, it takes little in the way of inappropriate buildings, tangles of overhead wires or jumble of signs and lost views to create ugliness in the place of beauty.

From a natural and built environmental standpoint, Imperial Beach has a number of unique qualities. These include:

- ‡ **A large variety of views and natural settings**
Generally, wherever a person may find themselves in Imperial Beach, there is a vista within close proximity. This may be an open vista to the Pacific Ocean, a panorama of surf and ocean, views of tidal infill at sunset or the sweeping view of the Playa de Tijuana skyline and Tijuana bullfight ring contrasting with the natural openness of the Tijuana River Estuary.
 - ‡ **A sense of place**
The natural elements of the terrain in Imperial Beach create an identifiable sense of enclosure, while a strong focal point is evident in the Pacific Ocean.
 - ‡ **A small-scale, man-made environment**
Imperial Beach neighborhoods are primarily comprised of one or two story buildings, with higher heights permitted in certain areas.
 - ‡ **Linear Movement**
In Imperial Beach the major vehicular routes generally follow the natural configurations of the land, allowing for convenient routes of travel within the community, scenic views, and an enhanced sense of place.
 - ‡ **Extensive Open Space**
-

The open space in Imperial Beach presents an extraordinary design opportunity not only because of its extent, but also because of its location and specific characteristics.

Visual and scenic resources specific to Imperial Beach include the following:

‡ **The Pacific Ocean**

The ocean is perhaps the most scenic resource in Imperial Beach. The views of the Pacific Ocean in Imperial Beach can be enhanced if they are enframed or seen through an appropriate screen. The ocean is open space, a focus of major views, an attraction to visitors and a place of human activity.

‡ **The Tijuana River Estuary**

The Tijuana River Estuary offers one of the most unique scenic resources. The Tijuana River Estuary can be viewed from several vantage points, a few of which are the Mesa bluff-top in Border Field State Park, the southern terminus of Seacoast Drive and along Imperial Beach Boulevard.

Depending from where the Tijuana River Estuary is viewed, the perception of the area changes dramatically. This is due to the interplay of different visual aspects. Views from along Imperial Beach Boulevard focus on the Tijuana bullfight ring and Mesa Bluff-top area, which act as the terminal features of the vista. This terminal point sets the theme of the view; a vast expanse of open space separating two urban areas, in fact, two countries.

From the end of the Seacoast Drive, a different perspective of the Tijuana River Estuary is achieved. Here, the narrow waterways form a visual axis. The axis, essentially, is a linear element transversing the view. The waterways, in fact, become the dominant feature. The perceived view is of a wet-land type habitat between the shore and inland development.

The final viewing point is the Mesa bluff-top of Border Field State Park. This spot, itself a terminal point of another vista, produces a reverse interest view. From the bluff-top, one views a panoramic coastline scene ranging from the beaches below, along the coast past the estuary to Imperial Beach and Coronado.

The Estuary and Slough define the boundary between the urbanized City and the natural undeveloped City. This space has had an influence on all the people of Imperial Beach, either as a recreational resource, a place to go for solitude, or as an environmental resource.

‡ **Naval Outlying Landing Field Imperial Beach (NOLF IB)/Ream Field.**

This represents a scenic resource in that it draws spectators to view the helicopters. This particular vista is ideally suited to passive recreational activities for many, while simultaneously representing a prime source of noise pollution to others.

‡ **The City Beach**

A unique scenic resource, the City beach encompasses the area from the northern City limits, south to the International Border. This area has numerous focal points ranging from the City Pier, to the variety of building types, to the sandy beach. Daytime views include the Coronado Islands, the beach itself, the ocean, the Silver Strand, Coronado, Point Loma, and Downtown San Diego. Nighttime views include lights on the pier, lights on the ocean, Point Loma, the Coronado Bridge, Coronado and Downtown San Diego.

‡ **Salt Ponds and South San Diego Bay**

The Salt Ponds act as the gateway to Imperial Beach as one enters into the City along former State Route 75/Palm Avenue (now relinquished to the City) from either the Silver Strand area or from Interstate 5. They serve as important gateways to the City, and excellent nighttime views of the Coronado Bridge and Downtown San Diego are visible from these resources.

Coastal Act Policies

Imperial Beach residents and visitors enjoy spectacular scenic resources and unique coastal amenities and resources. Scenic resources include the shoreline including beaches, bluffs, canyons, natural landforms and designated scenic view corridors from publicly-owned properties along or through public rights-of-way, as defined in the Coastal Act or designated by the City.

One of the primary objectives of the Coastal Act is the protection of scenic and visual resources, particularly as viewed from public places. Section 30251 requires that development be sited and designed to protect views to and along the ocean and other scenic coastal areas. New development must minimize the alteration of natural landforms. This policy also requires that development is sited and designed to be visually compatible with the character of surrounding areas. Where feasible, development shall include measures to restore and enhance visual quality in visually degraded areas.

Imperial Beach strives to be an environmentally and economically sustainable community showcasing its unique seaside character, natural resources and setting near the international border. The City embraces environmental stewardship, fostering healthy living, and promoting economic and social diversity. The City desires to promote and maintain commercial/visitor-serving areas that contribute to the City's coastal design and character. Figure D-1 identifies the primary public coastal view corridors in the City.



Imperial Beach strives to be an environmentally and economically sustainable community showcasing its unique seaside character, natural resources and setting near the international border.

8.1 Community Design Character

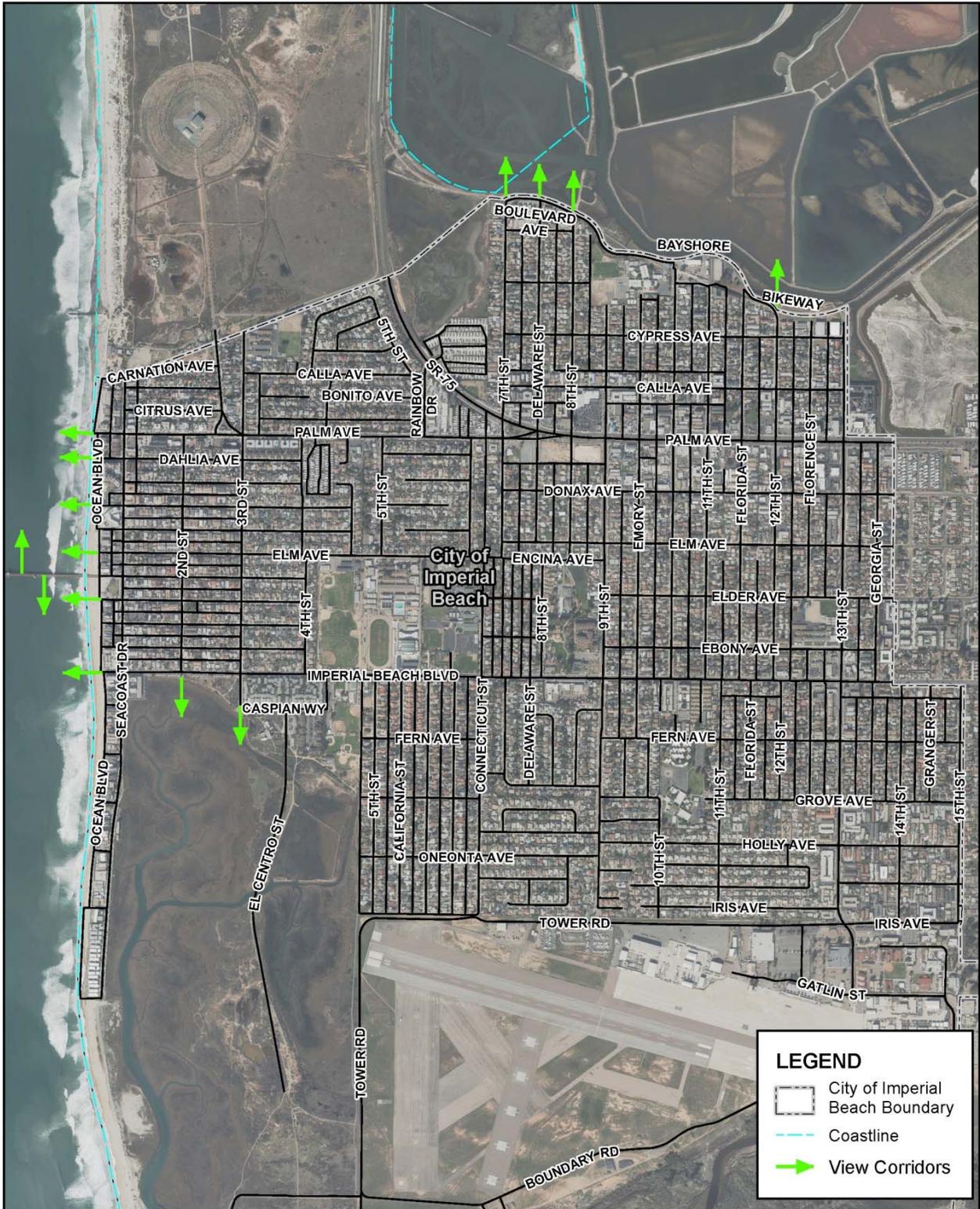
Discussion

As discussed in the Land Use Element, the small scale “classic Southern California” beach-oriented community is important to the identity of Imperial Beach. The City has maintained a fairly low-intensity scale that is rich in character and diversity. Imperial Beach is primarily comprised of one- and two-story buildings organized in neighborhoods and functional areas that are generally compact and well defined. These neighborhoods and functional areas are shown in Figure D-2:

- ‡ Seacoast. The area comprised of the municipal pier and the City beach north of Imperial Beach Boulevard; this area has important physical and built form relationships to the San Diego Unified Port District (SDUPD) jurisdiction and coastal resource areas.
- ‡ South Seacoast. The linear beach front residential developments south of Imperial Beach Boulevard along Seacoast Drive.
- ‡ Tijuana Estuary District. The area encompasses the Tijuana River National Estuarine Research Reserve, Slough National Wildlife Refuge, and Border Field State Park.
- ‡ Naval Outlying Landing Field Imperial Beach/Ream Field
- ‡ Bayside District, located north of Palm Avenue/former State Route 75.
- ‡ Residential neighborhoods of Mar Vista, Central, Seaside Point and Oneonta.



The small scale "classic Southern California" beach-oriented community is important to the identity of Imperial Beach.



Source: SanGIS 2014; City of Imperial Beach 2017



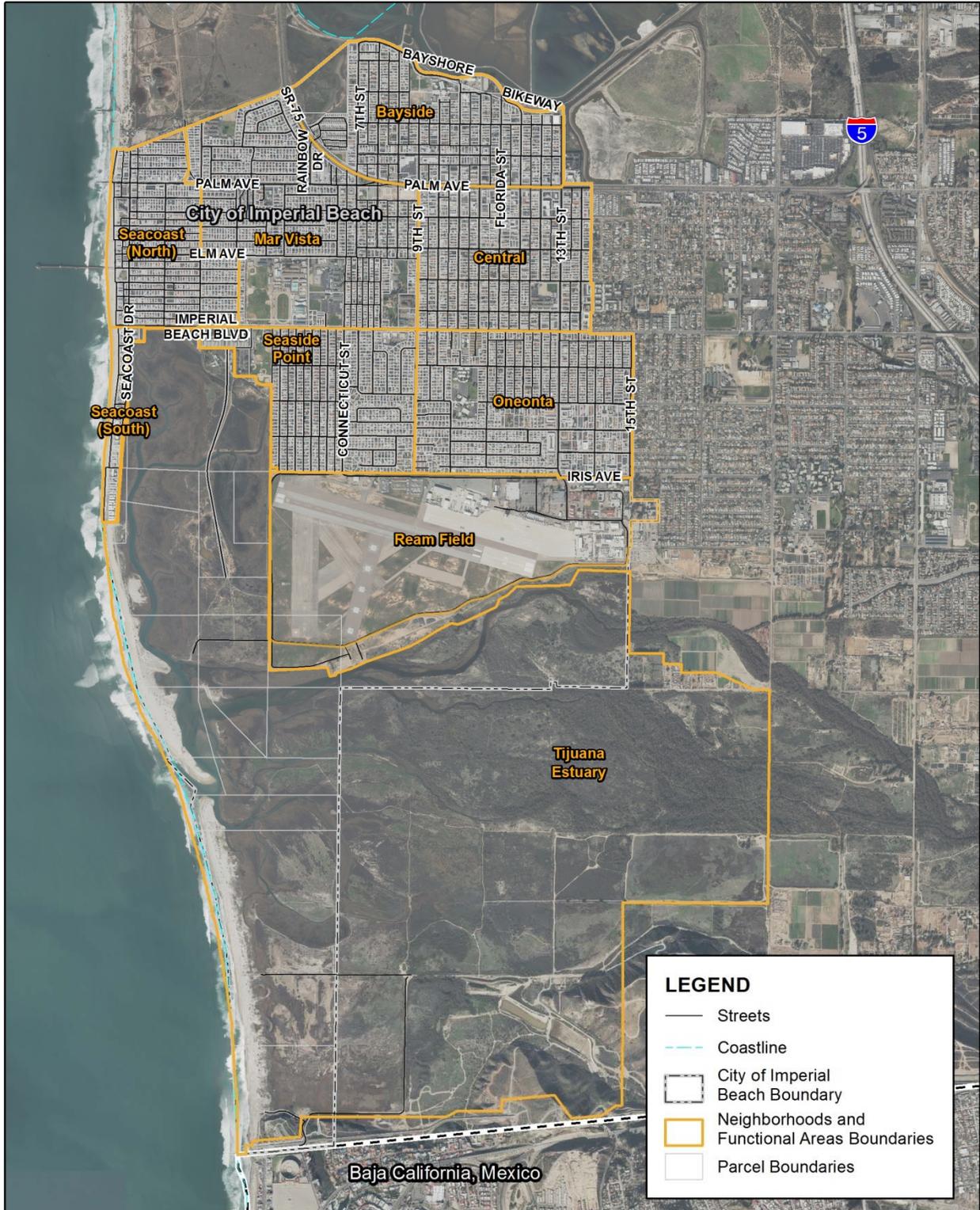
1,500 0 1,500 Feet



Scale: 1:18,000 1 in = 1,500 feet

**FIGURE D-1
COASTAL VIEW CORRIDORS**

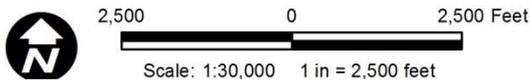
LOCAL COASTAL PLAN UPDATE
IMPERIAL BEACH



Source: SanGIS 2014; City of Imperial Beach 2017

FIGURE D-2
NEIGHBORHOODS AND FUNCTIONAL AREAS

LOCAL COASTAL PLAN UPDATE
IMPERIAL BEACH



Policies

CITYWIDE DESIGN AND COASTAL VIEWS

- 8.1.1 Develop sites adjacent to environmentally sensitive habitat areas in a manner that maintains public view corridors and prevents impacts consistent with Coastal Act Section 30240.
 - 8.1.2 Protect public views to the beach, bay, estuary as well as to other scenic resources from major public viewpoints (see Figure D-1). Development that may affect a public view shall be designed and sited in a manner so as to preserve or enhance designated view opportunities. Street trees and vegetation should be chosen and sited so as not to block views upon maturity.
 - 8.1.3 Require development design - including neighborhoods, streets, and individual properties - that is pleasing to the eye, rich in variety, harmonious with existing development, and emphasizes the relationship to the ocean and bay.
 - 8.1.4 Design new development to relate to Imperial Beach's existing and evolving high quality design.
 - a. Require that all development is located, sited, and designed to maintain compatibility with established or desired community character, scale, and diversity of architectural design.
 - b. Encourage architectural designs reflective of a traditional California seaside community.
 - c. Strive for excellence and diversity in design through consideration of the following:
 - Avoid uniformly repetitious buildings and modules and unbroken expanses of wall.
 - Encourage balanced and coordinated variety in height, materials and color.
 - Vary setbacks of buildings. Additionally, setbacks should be considered where transitions occur between mixed-use development and single-family residential.
 - d. Use simple palettes of landscape materials in masses to complement or screen various parts of the building(s) and achieve a park-like setting.
 - e. Size and design signs, walkways and parking area lights and other elements of development to be low keyed, but effective in scale, color and brightness.
 - 8.1.5 Design development projects to respect, work with, and enhance the natural features of the land.
 - a. Integrate natural scenic amenities such as mature trees, watercourses and views into project design.
 - b. Orient and construct structures to take advantage of the beneficial features of the climate and be protected from the negative ones in order to reduce energy consumption and increase the enjoyment of the residents.
 - 8.1.6 Regulate project uses and design to create harmonious relationships between adjoining uses.
 - a. The pattern of existing neighborhoods should be respected. A development should be integrated with the adjacent neighborhood if the project size or natural boundaries dictate, or the design should create one or more separate and strong neighborhood identities.
 - b. Structures should relate to neighborhood structures both within and adjacent to the development and not create a harsh contrast of scale, style or color.
 - c. Areas of noisy activity and areas of quieter use should be separated by space or buffers, both within and between projects.
 - d. Lighting and signs should be designed, located and directed so as not to disturb adjacent uses to consider sensitive resources, and to avoid effects on wildlife.
 - e. Where 3- or 4-story structures are developed adjacent to existing 1- or 2-story structures, the new development shall be designed to respect the scale of the 1- and 2-story structures. Such designs could include a wider side yard setback for the 2nd and 3rd story, hip roofs, or similar features. Within the commercial/mixed-use areas, such scale-reducing design features could include varying wall planes,
-

setbacks, and upper-story setbacks that reduce overall massing and provide roof treatments that are complementary to adjacent properties.

REVIEW PROCESS

- 8.1.7 Adopt City design guidelines to be used in the design review process.
- 8.1.8 Require design review for all residential properties of 2 dwelling units or more, all new mixed-use development, and all new non-residential development structures.

RESIDENTIAL DEVELOPMENT

- 8.1.9 Provide open space in all residential developments as appropriate to the needs of the residents and the types of units.
 - a. In lower density areas, generally provide yards or patios.
 - b. In medium or higher density developments, provide usable private outdoor areas, and indoor and outdoor common areas that foster a sense of community such as interior courts, community rooms, patios or roof gardens.
- 8.1.10 Group buildings into "neighborhoods" or clusters and be oriented so that building entryways are visible to encourage neighborhood surveillance.
- 8.1.11 Where separate units face onto a common open space, the design should relate specific portions of the open space to each unit. This has been shown to increase individual responsibility for surveillance as well as upkeep.
- 8.1.12 Include and provide for a number of amenities such as adequate storage areas, pathways, and attractive landscaped areas.

COMMERCIAL AND MIXED USE DESIGN

- 8.1.13 Require active uses on the ground floor facing primary commercial corridors and in proximity to transit access.
- 8.1.14 Integrate pedestrian scale design and user amenities into mixed-use development.
 - a. Provide visual and physical transitions between new and lower scale buildings by incorporating building relationships to the street and incorporating pedestrian-oriented features.
 - b. Design building street-facing facades to provide transparency and support active ground floor uses.
- 8.1.15 Where appropriate, the residential component of mixed-use developments should be informed by residential design policies and zoning requirements.
- 8.1.16 Implement visitor serving commercial development standards that encourage pedestrian activity through the design and location of building frontages and parking provisions. Reduce the visual prominence of parking lots along major corridors when new development or redevelopment occurs.
- 8.1.17 Continue to enhance the Seacoast Corridor as a pedestrian-oriented visitor-serving destination by managing and regulating redevelopment and use transitions to reinforce scale and character through strong building relationships to the street and pedestrian-oriented features.
- 8.1.18 Encourage safe and enjoyable browsing by customers through coordinated and attractive signs, walkways, patios, display windows, and entrances. Optimally, the entrance to such an enjoyable area should be designed to be obvious to the passing motorist and pedestrian, and be linked to the public sidewalk and the parking area.
- 8.1.19 Design parking lots to be attractively landscaped, and safe for the motorists and pedestrians walking from their cars or the street.

8.2 Public Realm and Public Facilities

Discussion

An attractive, walkable City promotes healthy community activities and supports a quality environment for a strong economy. The character and form of Imperial Beach exudes attractive community attributes especially in beach-visitor focused areas. Public realm features such as civic buildings, public spaces, continuous sidewalks, thematic palm street trees and right-of-way landscaping further contribute to the visual quality of the City. The design and architecture of public buildings and facilities provides opportunities to meet multiple public needs, enhance the identity of the community and serve as a catalyst for private investment. The Imperial Beach Library, which opened in 2017, is an outstanding example of a design that conveys the City's beach-town character and is a landmark destination. It is a coastal-themed building with materials reminiscent of beach cottages, and a roof that was designed to capture the feel of a breaking wave. The library was constructed as a net zero energy building and with sustainable building materials.



The Imperial Beach Library is a landmark destination.

Policies in this section focus on the quality, location, and maintenance of public realm and public facilities for long-term community quality.

Policies

CIVIC ARCHITECTURE AND PUBLIC SPACES

- 8.2.1 Celebrate the City with thoughtful and prominent civic architecture.
 - a. Projects should be fiscally sound and environmentally sustainable.
 - b. Projects should consider designing for co-benefits to serve multiple needs.
- 8.2.2 Where feasible, provide distinctive public open space, public art, greens, and/or plazas around civic buildings and facilities.



Rendering for a new Community Center

TREE-COVERED CITY IMAGE

-
- 8.2.3 Promote the evolution of a green, tree-covered image for the City (see also the Conservation Element - Urban Forestry). Require appropriate specimen-sized trees as part of new development or City projects.
- a. Preserve whenever possible mature trees, tree masses, and tree rows of significant aesthetic or historic quality, consistent with the public safety.
 - b. Require public and private projects to avoid destruction of significant trees when preservation is economically realistic and consistent with sound planning and horticultural practices.
 - c. Protect the City's most significant landmark trees, tree masses, and tree rows on a permanent basis and not just at the time of project review.
 - d. Encourage the planting of additional new trees throughout the City.
- 8.2.4 Provide landscaping, including the preservation and planting of large trees and maintaining open space, to ensure a pleasing and open landscaped vista to residents and passersby.
- 8.2.5 Design and landscape visible public improvements to blend into their backdrop.
- a. Major linear improvements, such as major roadways should be well landscaped.
 - b. Design water and stormwater management structures to be constructed of materials and colors so as not to draw attention to their alteration of nature. Where the purpose of the structure permits, it should be landscaped to aid in its camouflage.
- 8.2.6 Utilities that cannot be feasibly placed underground due to their high voltage or other safety or cost considerations should be located and designed in such a fashion as to provide the least visual and environmental impact on the community.

REVITALIZATION

- 8.2.7 Support long-term property maintenance and community revitalization to retain and enhance the attractive, human-scale, beach- oriented small town atmosphere.
- a. Continue and expand a public and private graffiti removal program, and utilize innovative programs such as the promotion of murals.
 - b. Consider the provision of rehabilitation assistance in residential neighborhoods to eliminate code violations and enable the upgrading of residential properties.
 - c. Promote aggressive enforcement of City codes, including building, zoning, and health and safety, to promote building and property maintenance. Particular attention shall be given to removal of illegal uses.
 - d. Promote commercial area revitalization through storefront and landscape improvement loan and grant programs.
 - e. Promote revitalization of the City through the installation of public improvements such as street and alley lighting, undergrounding of utilities, and street, sidewalk, alley, median and landscape improvements.
 - f. Complete, through the use of assessment districts or other means, the construction of missing sidewalks with high priority to:
 - Streets leading to the beaches,
 - Streets used by children walking to school, and
 - Streets that provide good pedestrian access to commercial areas and transit.
 - g. Actively pursue grant programs to accomplish the above activities.
- 8.2.8 Encourage the provision of public art and spaces for cultural use as a means to distinguish and enliven spaces.
- 8.2.9 Design projects to encourage "eyes on the street" as a means to discourage and deter crime through the location of physical features, activities and people to maximize visibility.

SIGNS

- 8.2.10 Design and locate signs to minimize impacts to visual resources.
-

-
- a. Signs approved as part of commercial development shall be incorporated into the design of the project and shall be subject to height and width limitations that ensure that signs are visually compatible with surrounding areas and protect scenic views.
 - b. Free-standing pole or roof signs are prohibited.
 - c. Advertising signs and banners are prohibited in public beaches and beach parks.
- 8.2.11 Prohibit placement of signs other than traffic or public safety signs, which obstruct views to the ocean, beaches, bay or estuary from public viewing areas, and scenic roads.
- 8.2.12 Develop a uniform public information sign program.
- a. Reduce visual clutter associated with signage.
 - b. Limit the size, design, and location of signage consistent with legibility and legal parameters.
 - c. Relate signs in character, material, size, shape, height, placement and color to the sites and buildings of which they are a part.
- 8.2.13 Provide curbside visible street numbers or directory maps for all types of structures and be visible at night for the convenience of police, fire, guests and customers.
- 8.2.14 Build an identity sign at "Old Palm" Avenue to strengthen the sense of place in this commercial corridor and complement economic development objectives.
-

8.3 Sustainable Coastal Development Design

Sustainable design features cover a wide range of strategies to support more healthy, multi-modal, energy-efficient, economically sound and resilient communities. Resilience describes the capacity of communities to adapt to change and continue to function and thrive even when faced with ongoing stressors, such as climate change, and extreme events, such as a major storm. Resilient communities are also able to recover more quickly after disasters. The following policies convey the City's approach to pursuing design strategies to support resiliency that support its' environmental, economic and community goals.

Policies

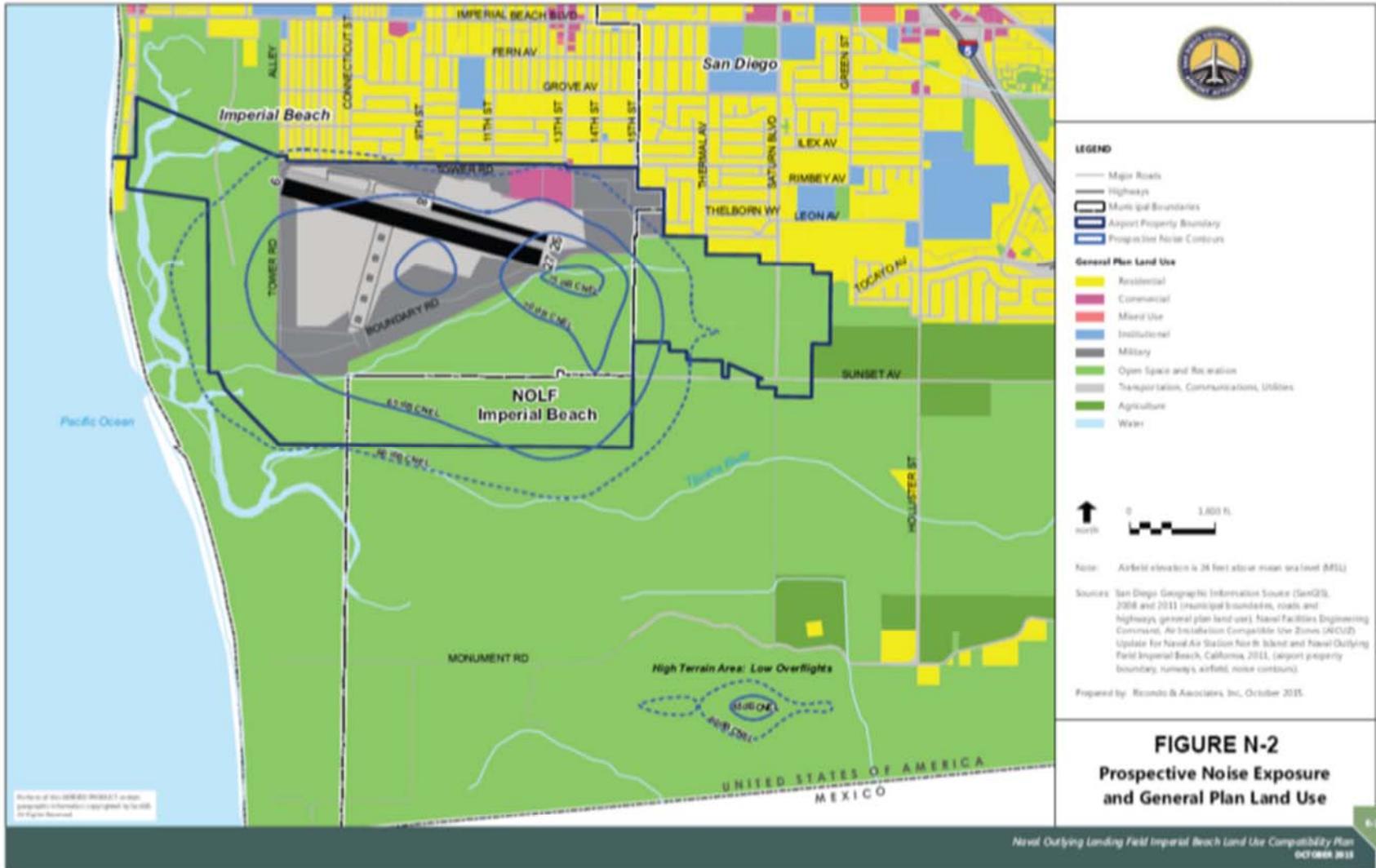
- 8.3.1 As a part of a future LCP amendment, consider development and implementation of modified site planning and building design regulations to build resiliency to sea level rise.
- a. Develop incentives to encourage the thoughtful development, redevelopment and retrofitting of vulnerable properties.
 - b. Evaluate options to adjust building envelope regulations to offset potential loss of site area due to sea level rise.
 - c. Consider requiring increased setbacks as needed to preserve public walkways and sandy beach areas.
 - d. Implement and enforce of up-to-date building codes as they offer an effective, incremental approach to increasing safety and resiliency.
 - e. Consider aesthetics and community character when implementing sea level rise adaptation measures.
- 8.3.2 Expand Bayfront commercial uses in a manner that supports the City's conservation, resiliency and economic development goals (see also Land Use Element Sections 2.4 and 2.5).
- 8.3.3 Encourage and develop building and design techniques that address future flooding events.
- 8.3.4 Integrate public coastal access, open space, public view corridor enhancements, and pedestrian amenities, in conjunction with new development and redevelopment.
- 8.3.5 Design projects to encourage the use of transit.
- a. Collaborate with transit planners to incorporate transit facilities into the design of public and private projects. This may include: architectural integration of transit into project design; site planning that focuses
-

-
- higher intensities/densities near transit; and the provision of bus shelters/benches, turnouts, schedule signs, and real-time information.
- b. Design safe, convenient accessible sidewalks and connections from transit stops to building entrances.
- 8.3.6 Create street frontages with architectural and landscape interest that provide visual appeal to the streetscape and enhance the pedestrian experience.
- a. Consider design features such as street facing windows and entrances, planting of street trees and front yard landscape, or other means.
- b. Minimize the visual impact of parking. Where parking lots are provided in retail and business centers encourage them to be located in the rear of the property, unless the lot may be used to address adaptation strategies.
- 8.3.7 Design development to respect and enhance the view and safety of the passerby.
- a. Structures and open space areas should be arranged so that open space qualities of a development are apparent from outside the development.
- b. Public rights of way should be designated not only for the safety and enjoyment of the motorist, but also for the pedestrian, jogger and bicyclist.
- 8.3.8 Design developments with an eye to safety without giving the appearance of a fortress or a sea of concrete or asphalt.
- a. Parking lots along Seacoast Drive, Palm Avenue, and Imperial Beach Boulevard shall have internal landscaping to visually break the hard lines of the parking lot.
- b. Design parking areas to separate vehicles and pedestrians whenever possible and ensure adequate visibility when the two must cross.
- 8.3.9 Design developments using sustainable or “green” building practices to conserve energy and water, work toward healthful air quality,⁷ and achieve other environmental benefits.
- a. Incorporate energy-saving design features such as appropriate building and roof orientations, [materials](#), and architectural features;⁸ reduced glass area where appropriate, adequate insulation, heat efficient spaces and arrangements, solar and wind energy capturing systems and energy efficient utilities and appliances.
- b. Use water-saving systems and encourage best management practices in developments.
- c. Explore implementation of alternative conservation measures and technology as they become available.
- d. [Encourage developments to exceed code requirements to maximize use of sustainable or “green” building techniques and help implement the Climate Action Plan.](#)

[8.3.10](#) Require developments to protect water quality and provide for watershed protection (see also Conservation and Ecotourism Element – Section 4.4 Water Quality).

- [8.3.11](#) [Reduce heat build-up in developed areas \(the urban heat island effect\) through increasing tree and vegetation cover and strategic selection of green and cool roofing and paving materials.](#)
- a. [Increase tree and vegetation cover to lower surface and air temperatures, reduce stormwater runoff and protect against erosion.](#)
- b. [Encourage green roofs \(a vegetative layer on a rooftop\) to lower temperatures, building energy use, and improve stormwater management.](#)
- c. [Evaluate options to incentivize or require the use of cool roofing materials in new and retrofitted buildings to lower temperatures and building energy use.](#)
- d. [Encourage the use of cool-paving and pervious materials on sidewalks, parking lots, and streets that remain cooler than conventional pavements and reduce stormwater runoff.](#)
-





List of Abbreviations

ADA	Americans with Disabilities Act
AICUZ	Air Installation Compatibility Use Zones
ALUC	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plan
ASML	Above mean sea level
AVs	Autonomous Vehicles
BMPs	Best Management Practices
CAA	Clean Air Act
CAP	Climate Action Plan
CCC	California Coastal Commission
CH ₄	Methane
CO	Carbon monoxide
CO ₂	Carbon dioxide
COPPS	Community Oriented Policing and Problem Solving
CWA	County Water Authority
DDW	Division of Drinking Water
EIS	Environmental Impact Statement
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
ESHA	Environmentally Sensitive Habitat Area
ESL	English as Second Language
FEMA	Federal Emergency Management Agency
GED	General Education Development
GHG	Greenhouse Gas
IB	Imperial Beach
IB SLR Assessment	2016 City of Imperial Beach Seal Level Rise Assessment
IP	Implementation Plan
ITS	Intelligent Transportation Systems
JRMP	Jurisdictional Runoff Management Program
LCP	Local Coastal Program
LHMP	Local Hazard Mitigation Plan
LID	Low Impact Development
MPA	Marine Protected Area
MS ₄	Municipal Storm Sewer System
MTS	Metropolitan Transit System
MWD	Metropolitan Water District of Southern California
NAAQS	National Ambient Air Quality Standards
NADEP	Naval Aviation Depot
NASNI	Naval Air Station North Island
NERRS	National Estuarine Research Reserve System
NOx	Nitrogen oxide
NOLF IB	Navy Outlying Landing Field Imperial Beach
O ₃	Ozone

Pb	Lead
PM ₁₀	Particulate matter
RWQCB	Regional Water Quality Control Board
RTP	Regional Transportation Plan
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCS	Sustainable Communities Strategy
SCOUP	Sand Compatibility and Opportunistic Use Program
SDAB	San Diego Air Basin
SDAPCD	San Diego County Air Pollution Control District
SDG&E	San Diego Gas and Electric
SDUPD	San Diego Unified Port District
SEAL	Navy Sea, Air, and Land
SLR	Sea level rise
SMCA	State Marine Conservation Area
SO ₂	Sulfur dioxide
SR	State Route
SWRCB	State Water Resources Control Board
TDM	Transportation Demand Management
TOT	Transient Occupancy Tax
TRNERR	Tijuana River National Estuarine Research Reserve
U.S.	United States
UWMP	Urban Water Management Plan
VHFHSZ	Very High Hazard Fire Hazard Severity Zones
VMT	Vehicle Miles Traveled