9001-9019 LONG BEACH BOULEVARD HABITAT FOR HUMANITY PROJECT

Appendix H

Statutory Checklist Reference Documents

- FEMA FIRM Map
- State Coastal Management Plan
- CDFW CNNDB Map and List
- SCAG Data/Map Report for City of South Gate
- Important Farmland City of South Gate
- Sole Source Aquifer Map
- National Wild and Scenic Rivers (NWSRS) Map
- Explosive and Flammable Hazards

9001-9019 LONG BEACH BOULEVARD HABITAT FOR HUMANITY PROJECT

Appendix H
Statutory Checklist Reference Documents

FEMA FIRM Map

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole–foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures.** Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 11. The **horizontal datum** was NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum.** For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov/ or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC–3, #9202
1315 East–West Highway
Silver Spring, MD 20910–3282

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713–3242,** or visit its website at http://www.ngs.noaa.gov/.

Base map information shown on this FIRM was derived from U.S. Geological Survey Digital Orthophoto Quadrangles produced at a scale of 1:12,000 from photography dated 1994 or later and from National Geospatial Intelligence Agency imagery produced at a scale of 1:4,000 from photography dated 2003 or later.

This map reflects more detailed and up–to–date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables *in the Flood Insurance Study report (which contains authoritative hydraulic data)* may reflect stream channel distances that differ from what is shown on this map.

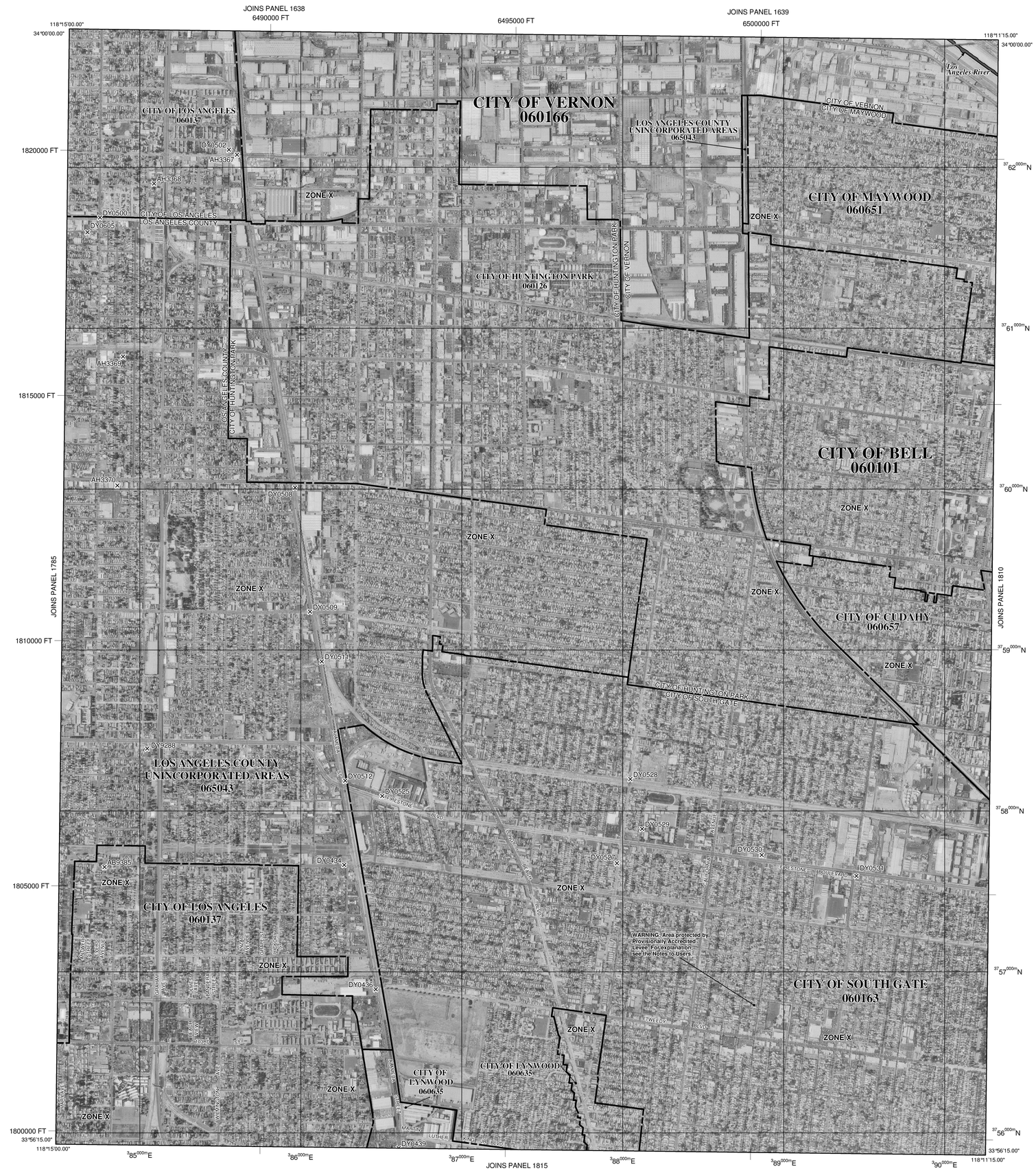
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de–annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1–800–358–9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, *a Flood Insurance Study report*, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1–800–358–9620 and its website at http://www.msc.fema.gov/.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1–877–FEMA MAP** (1–877–336–2627) or visit the FEMA website at http://www.fema.gov/.

WARNING: This levee, dike, or other structure has been provisionally accredited and mapped as providing protection from the 1-percent-annual-chance flood. To maintain accreditation, the levee owner or community is required to submit documentation necessary to comply with 44 CFR Section 65.10 by October 16, 2009. Because of the risk of overtopping or failure of the structure, communities should take proper precautions to protect lives and minimize damages in these areas, such as issuing an evacuation plan and encouraging property owners to purchase flood insurance.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE A99 Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988 (NAVD 88)

- A — A — Cross section line
- 23 — 23 — Transect line
- 97°07'30", 32°22'30" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 4275000mN — 1000-meter Universal Transverse Mercator grid values, zone 11
- 6000000 FT — 5000-foot grid ticks: California State Plane coordinate system, V zone (FIPSZONE 0405), Lambert Conformal Conic
- DX5510 — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- M1.5 — River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE
FLOOD INSURANCE RATE MAP
September 26, 2008
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1–800–638–6620.

MAP SCALE 1" = 1000'
500 0 1000 2000 FEET
300 0 300 600 METERS

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1805F

FIRM

FLOOD INSURANCE RATE MAP

LOS ANGELES COUNTY, CALIFORNIA

AND INCORPORATED AREAS

PANEL 1805 OF 2350
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
LOS ANGELES COUNTY	065043	1805	F
BELL, CITY OF	060101	1805	F
CUDAHY, CITY OF	060657	1805	F
HUNTINGTON PARK, CITY OF	060126	1805	F
LOS ANGELES, CITY OF	060137	1805	F
LYNWOOD, CITY OF	060635	1805	F
MAYWOOD, CITY OF	060651	1805	F
SOUTH GATE, CITY OF	060163	1805	F
VERNON, CITY OF	060166	1805	F

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06037C1805F

EFFECTIVE DATE
SEPTEMBER 26, 2008

Federal Emergency Management Agency

9001-9019 LONG BEACH BOULEVARD HABITAT FOR HUMANITY PROJECT

Appendix H
Statutory Checklist Reference Documents

State Coastal Management Plan

CALIFORNIA COASTAL COMMISSION
455 MARKET STREET, SUITE 300
SAN FRANCISCO, CA 94105
VOICE & TDD (415) 904- 5200
FAX (415) 904- 5400
WWW. COASTAL. CA. GOV

California Coastal Commission
Coastal Management Program
Final 309 Assessment and Strategy
2021 to 2025 Enhancement Cycle



Huntington Beach, CA

Prepared pursuant to the provisions of Section 309 of the federal Coastal Zone Management Act for the Office for Coastal Management, National Ocean Service, National Oceanic and Atmospheric Administration and with financial assistance from grant award NA19NOS4190073.

By

California Coastal Commission
455 Market Street, Suite 300
San Francisco, CA 94105

January 2021

Table of Contents

Introduction 3
Summary of Recent Section 309 Achievements 4
Assessment 10
Phase I Assessment 10
Wetlands 10
Coastal Hazards 19
Public Access 31
Marine Debris 40
Cumulative and Secondary Impacts 46
Special Area Management Planning 58
Ocean and Great Lakes Resources 65
Energy and Government Facility Siting 82
Aquaculture 90
Phase II Assessment 94
Coastal Hazards 94
Public Access 103
Marine Debris 112
Special Area Management Planning 119
Strategy 130
Strategy 1. Building Resilient and Sustainable Communities through Planning and Permitting 130
Strategy 2. Public Access for All with Sea Level Rise 139
Strategy 3. Marine Debris Reduction Measures Program 145
Summary of Stakeholder and Public Comment 151
Stakeholder Input 151
Public Comment on Draft 309 Assessment and Strategy 152
Response to Public Comments Received 153
Appendix A – Public Comment Letters 158

Introduction

Overview of the Section 309 Program

Section 309 of the Coastal Zone Management Act (CZMA), as amended in 1990 and 1996, establishes a voluntary coastal zone enhancement grant program to encourage Coastal Management Programs (CMPs) to develop innovative approaches to improving the following nine enhancement areas: (1) wetlands, (2) coastal hazards, (3) public access, (4) marine debris, (5) cumulative and secondary impacts, (6) special area management planning, (7) ocean/great lakes resources, (8) energy and government facility siting, and (9) aquaculture. Under the Section 309 program, the Secretary of Commerce is authorized to make awards to states and territories to develop and submit for federal approval of program changes that support one or more enhancement area objectives.

This document considers the portions of the California CMP administered by California Coastal Commission (Coastal Commission or the Commission) and applies only to the Pacific coast elements. The San Francisco Bay Conservation and Development Commission (BCDC), which administers CCMP activities within San Francisco Bay, has its own Assessment and Strategy document. The State Coastal Conservancy (Conservancy) does not currently participate in the Section 309 program; however, relevant work completed by the Conservancy during the assessment period is included to the extent possible in this update.

Purpose of the Assessment and Strategy

To be eligible for Section 309 funding, CMPs must successfully complete an Assessment and Strategy for review and approval by the National Oceanic and Atmospheric Administration's (NOAA) Office for Coastal Management (OCM). The Assessment considers the extent to which problems and opportunities exist with regards to the enhancement area objectives and the effectiveness of current efforts to address those problems.

The Assessment results provide the basis for the CMP and OCM to cooperatively determine priority needs for program improvement. The Strategy is a comprehensive, multi-year statement that identifies program changes and implementation activities needed to address enhancement area objectives identified as high priority in the Assessment. The Strategy is based on priority needs and information gaps identified in the Assessment, informed by the agency's Strategic Plan, and covers proposed 309 activities for the 5-year period from fiscal year 2021 to fiscal year 2025.

The 309 Enhancement Grants Program is an important asset to coastal management in California, providing crucial funding for analyzing problems and developing solutions to emerging coastal management issues that result in a program change. Completing this 309 Assessment and Strategy process allowed the Commission to reflect upon its 309 accomplishments, to focus in on the state's coastal management needs identified in

development of 2021-2025 Strategic Plan and create an updated 309 Strategy to support Commission efforts to address those needs.

Developing the Assessment and Strategy and Public Review Process

The Assessment was developed using OCM's June 2019 guidance document and template provided for reporting on the nine enhancement areas. For the initial assessment, Commission staff used the templates and information sources as directed in NOAA's guidance in addition to known state information sources that provide more context and detail for coastal California. For more detailed assessment in the priority enhancement areas, staff consulted additional information sources such as measures developed under the Coastal Zone Management Act Performance Measurement System (CZMPMS), additional research of past Commission actions, interviews with various district and other staff members on activities and outcomes, information from partner agencies and public comments from stakeholder groups and others.

To develop the 309 Strategy, the Commission used the high priority enhancement areas identified through the Assessment and evaluated these areas as they related to on-going high priority needs of the agency. Development of the 309 Assessment and Strategy coincided with the update of the Commission's Strategic Plan for 2021-2025; as such, Commission staff was able to leverage the public input during the Strategic Plan process for use in developing the 309 Strategy.

Summary of Recent Section 309 Achievements

Below is a summary of the agency's 309 program changes and major achievements since 2015 that were accomplished using the Commission's Section 309 funding. The changes and achievements are classified by enhancement area and include efforts identified as program enhancement strategies in the previous assessment, the 2016 to 2020 Assessment and Strategy.

Enhancement Area: Coastal Hazards

Coastal Commission Sea Level Rise Policy Guidance

On August 2015, the Coastal Commission unanimously adopted a Science Update to the 2015 CCC Sea Level Rise Policy Guidance. The Guidance provides an overview of the best available science on sea level rise for California and a recommended methodology for addressing sea level rise in Coastal Commission planning and regulatory actions. In November 2018, the Commission then unanimously approved the science update to the 2015 guidance to reflect the best available science on sea level rise projects and potential for significant contributions to West Coast sea levels from ice-sheet melting.

<u>Related Accomplishments</u>

- Commission staff developed and carried out an outreach and education strategy to

support implementation and use of the adopted sea level rise guidance.
- Vulnerability Assessment Checklist for Commission staff and local governments.
- The Commission worked on an interagency team with a number of state and federal agencies (e.g. NOAA, USGS, FEMA, OES, OPR, OPC, and SCC). The team produced the Coastal Plan Alignment Compass in 2019 to support California's coastal communities as they develop local plans such as Local Hazard Mitigation Plans, Adaptation Plans, General Plans, and LCPs, to prepare for sea level rise and coastal flooding.

Memorandum of Agreement between Coastal Commission and State Lands Commission. The MOU formalizes interagency coordination and collaboration between the two agencies. It also supports the ongoing 309 Strategy on public trust between the California Coastal Commission and the State Lands Commission to identify ways the agencies can improve coordination, understanding and management of the impacts to the public trust that could occur, considering sea level rise.

CCC Draft Residential Adaptation Guidance

The Draft Guidance was first released in 2017 and presented to the Commission and revised in 2018. It helped to bring attention to the potential consequences of climate change and sea level rise and to identify general and specific strategies and actions that local governments might consider for LCPs. Briefings in 2019 and 2020 supported opportunities for the Commission and the public to discuss sea level rise adaptation topics in advance of staff releasing a revised Residential Adaptation Guidance document for Commission consideration and adoption.

Related Accomplishments

- As part of our outreach and educational efforts related to sea level rise adaptation, the Commission hosted informational briefings on sea level rise vulnerabilities and adaptation issues raised in the Draft Residential Guidance at a number of Commission hearings (August 2019, September 2019, October 2019, November 2019, February 2020, March 2020).

Enhancement Area: Public Access

Improved Valuation of Impacts to Recreation, Public Access, and Beach Ecology from Shoreline Armoring

The 2015 Administrative Draft of the Report on Improved Valuation of Impacts to Recreation, Public Access, and Beach Ecology from Shoreline Armoring was prepared with financial assistance from NOAA's FY 2012 Project of Special Merit (NA12NOS4190026).[1] Commission staff worked with beach ecologists and economic valuation academics to describe and evaluate beach resources and to explore beach valuation methods that might better account for the impacts of permitted shoreline armoring. The report lays out mitigation strategies for shoreline armoring impacts on beach ecology and recreation and access. While not yet approved as guidance by the Coastal Commission, it has supported ongoing efforts to more fully mitigate

[1] https://documents.coastal.ca.gov/assets/ecology/BeachValuationNOAADeliverableSubmitted_092815.pdf

the adverse impacts of shoreline armoring to beach recreation, access, and ecology where those impacts are not feasibly avoided. This effort informed the 2018 Certification of the City of Solana Beach Local Coastal Program (Amendment No. LCP 6-SOL-16-0020-1 Public Recreation Fee). It also contributed to collaborative work with State Lands Commission in the previous Assessment's 309 Strategy to protect public trust resources

New Public Accessways

Offers to dedicate (OTD) permanently protect for public access purposes and will add to the body of similarly protected lands. Each represents the opportunity for additional new accessways to and along the coast, as well as inland trail segments, once they are built and open for operation. Therefore, each site is a step in increasing the public's ability to get to and use our public lands.

Related Accomplishments

- 80 Public Access OTDs Accepted October 2014 through 2019.
- **Report on Status of Vertical Accessways in Northern California Acquired by California Coastal Commission Actions 1973 to 2015**
  https://documents.coastal.ca.gov/reports/2016/10/w6c-10-2016.pdf In 2016 the Commission completed analysis of vertical accessways statewide, indicating a total of 196 vertical accessways acquired through Commission permit actions. At the time of the report, 61 percent (120 sites) were open to the public.

Guidance to Ensure Implementation of Public Access Requirements

The purpose of the procedural guidance for Best Management Practices (BMP) is to provide detailed instructions to ensure that public access conditions, when imposed by local governments through approved coastal development permits, are implemented. This guidance identifies steps for local government planners to follow on tracking public access conditions, provisions in legal documents, and ensuring that Offers to Dedicate (OTD) Public Access Easements are accepted in a timely manner.

Accomplishments

- Procedural Guidance for Best Management Practices to Ensure Implementation of Public Access Requirements completed May 26, 2017.

Enhancement Area: Cumulative and Secondary Impacts

Updated Compendium of Coastal Development Permit Sample Special Conditions

This Compendium provides sample condition language for consideration in coastal development permit recommendations, updating the 1999 and 2002 versions. It does not cover every topical area that might be presented in a development review, but it does provide generic language for many of the primary issues that a coastal analyst may need to address in their day to day work. This includes sample conditions for final plan requirements, other

agency approvals, and the generic deed restriction. It also covers aspects of public access, coastal hazards management, including shoreline protection structures, and a variety of biological resource protection concerns, among others.

Related Accomplishments

- Compendium of Coastal Development Permit Sample Special Conditions (Compendium), revised Dec. 20, 2016.
- The June 2016 Administrative Guide of Use of Compendium of Coastal Development Permit Sample Special Conditions contains procedures that staff will follow to use the compendium in the regulatory program and to maintain them over time.

Enhancement Area: Special Area Management Planning

LCP Guidance, Training Modules and Digital LCP Library

Significant guidance and assistance were provided in order to enhance the LCP Program and to ensure LCP updates addressed emerging issues and new information. Many of these policy guidance documents are highlighted in achievements under Coastal Hazards; however, many more informational memoranda and guidance documents have been completed since the last assessment using 309 funds.

Accomplishments

- The LCP Update Guide is intended to support LCP update efforts by providing information and guidance for addressing emerging issues in the update of a certified LCP.
  - The LCP Update Guide Part I - Section 1. Public Access released on April 4, 2017
  - LCP Update Guide – Part I - Section 3. Water Quality, 3/29/17
  - LCP Update Guide – Part I - Section 8. Coastal Hazards, 2/14/2017 (Note that coastal hazards guidance is also described under Coastal Hazards)
- Memos to help local governments understand how to carry out their Coastal Act obligations while also implementing state requirements regarding the regulation of accessory dwelling units (“ADUs”) and junior accessory dwelling units (“JADUs”).
- Short-term rental guidance and updated Commission action chart that identifies the general regulatory approach and key regulatory parameters of relevant Local Coastal Program Amendments.
- Cannabis guidance for local governments to inform and assist coastal jurisdictions in developing ordinances to address cannabis cultivation and other cannabis-related development activities.
- Agricultural guidance documents prepare for local governments and posted on the Commissions website including information related to supplemental land uses, managing public access in agricultural areas, agriculture as a means of carbon storage, and a detailed Informational Guide for the Permitting of Agricultural Development (2017).

- Completion of a LCP training framework to provide a work plan for training development and a completion of number of training modules for Commission staff, including the history and importance of the Coastal Management Program, one on Coastal Act requirements, and one for protocols for local governments to record legal document related public access and open space.
- Building out of the Digital LCP Library, including the addition of 4 certified LCPs in fully digital format.

New LCP Certifications and Updates

The products of the 309 enhancement grant activities provide information that supports development of new or updated LCPs. Since the last assessment was completed, several LCP updates have resulted in significant changes to the emphasis placed on climate change and sea level rise policy in California. A few LCP planning actions also relate to issues such as affordable housing, cannabis regulation, and short-term rentals informed by policy guidance.

Since 2015, approximately 13 jurisdictions (through 23 amendments) have initiated or completed significant partial or comprehensive updates to their LCPs. These updated plans revise and incorporate new information and updated policies and implementing measures, many that address the enhancement priority areas. "Comprehensive Update" refers to modifications that constitute an update of the majority of the City/County's land use regulatory policies and programs. Major LCP accomplishments are noted below.

<u>Accomplishments</u>

- During the reporting period, the City of Newport Beach (1/13/17) and City of Pacific Grove (3/11/20) achieved new certified LCPs. More cities and counties have either LUP or IP updates initiated, submitted, or approved (see Assessment Section for Special Area Management Plans).
- Comprehensive update of the Ocean Beach Community Plan (LUP), replacing the previous equivalent LUP in whole including new policies issues such as, but not limited to, lower cost visitor serving accommodations, sea level rise, ESHA determinations, water quality, and shoreline development standards to address coastal hazards issues. (1/14/16)
- City of San Diego IP amendment to address a key coastal hazards issue related to development standards and tracking criteria for nonconforming structures along beaches and bluffs (11/08/16)
- Comprehensive update of the LUP (Mendocino Town Plan) and IP (Town Zoning Code) for the Town of Mendocino Segment of the Mendocino County LCP, including visitor serving facilities, land use designations, permitted and conditionally-permitted use types, water quality provisions, and policy formatting in the LUP (11/8/17).
- Amended the San Francisco LUP to add a coastal hazards planning area, referred to as the Western Shoreline Area Plan, which adds new policies to address erosion, flooding, and sea level rise along the Ocean Beach shoreline (5/10/18).
- Comprehensive update of the City of San Clemente LUP, replacing previous LUP in whole, including new policies on current and emerging issues such as, but not limited to,

the alignment of the California Coastal Trail, pedestrian and bicycle trail connectivity, alternative parking strategies, protection of existing and provision of affordable overnight accommodations, and policies addressing potential impacts due to sea level rise (8/10/18).

- LUP and IP amendment to add a new specific plan, Windward Specific Plan SP-16, to the City of Huntington Beach LCP (12/12/18).
- Comprehensive update of the City of Santa Barbara LUP, replacing previous LUP in whole, notably including policies regarding land use and development, public works and energy facilities, public access, visitor-serving and recreational facilities, biological resources, water quality, cultural resources, and some initial policies related to coastal hazards (8/9/19).

Assessment

Phase I Assessment

Wetlands

Section 309 Enhancement Objective: Protection, restoration, or enhancement of the existing coastal wetlands base, or creation of new coastal wetlands. §309(a)(1)

Note: For the purposes of the Wetlands Assessment, wetlands are "those areas that are inundated or saturated at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." [33 CFR 328.3(b)]. See also pg. 174 of the CZMA Performance Measurement Guidance[2] for a more in-depth discussion of what should be considered a wetland.

PHASE I (HIGH-LEVEL) ASSESSMENT:

Purpose: To quickly determine whether the enhancement area is a high-priority enhancement objective for the CMP that warrants a more in-depth assessment. The more in-depth assessments of Phase II will help the CMP understand key problems and opportunities that exist for program enhancement and determine the effectiveness of existing management efforts to address those problems.

Resource Characterization:

1. Using provided reports from NOAA's Land Cover Atlas,[3] please indicate the extent, status, and trends of wetlands in the state's coastal counties. You can provide additional or alternative information or use graphs or other visuals to help illustrate or replace the table entirely if better data are available.

   Current state of wetlands in 2016 (acres): 242,953 (from 2016 NLCD)[4]

[2] https://coast.noaa.gov/czm/media/czmapmsguide2018.pdf

[3] https://coast.noaa.gov/digitalcoast/tools/lca.html. Note that the 2016 data will not be available for all states until later Summer 2019. NOAA OCM will be providing summary reports compiling each state's coastal county data. The reports will be available after all of the 2016 data is available.

[4] National Land Cover Database (NLCD) land cover data is based on the analysis of Landsat data. Using automated scripts, Landsat scenes were selected for seven target years: 2001, 2003, 2006, 2008, 2011, 2013, and 2016. Other input datasets include 3D Elevation Program (3DEP) digital elevation data; Coastal Change Analysis Program (C-CAP) land cover; Cropland Data Layer (CDL); National Wetlands Inventory (NWI); Soil Survey Geographic (SSURGO) Database; and State Soil Geographic (STATSGO2) Database. SSURGO (with STATSGO2 to fill in gaps) was the basis for a hydric soils data layer used in training data assembly. NLCD 2016 is produced by modeling land cover change over seven intervals between 2001 and 2016, with consistent change trajectories built into the process. Refinement was conducted class-by-class in hierarchical order: (1) Water, (2) Wetlands, (3) Forest and forest transition, (4) Permanent snow, (5) Agricultural lands, and (6) Persistent shrubland and herbaceous. Source: https://www.mrlc.gov/data/nlcd-2016-land-cover-conus.

Because CCAP land cover for wetlands in 2016 was not available, Coastal Commission staff reviewed the National Land Cover Database (NLCD) 2016 Land Cover data and compared it to the 1996 data set to establish trend over a 20-year period. Overall, the 2016 data show 10,065 more total acres of wetlands than represented in the 1996 dataset in the 15 coastal California counties. The California Aquatic Resources Inventory (CARI), a Geographic Information System (GIS) dataset of wetlands, streams, and riparian areas reflects a statewide standardized wetland classification system. This statewide dataset is hosted online through http://www.EcoAtlas.org, a web-service specifically designed to provide wetland information, at variable landscape scales, to environmental scientists, managers and planners.

Some CARI wetlands in the 15 coastal counties align roughly with the NLCD wetlands, but do not quantify the trends in coastal wetland restoration at a refined scale. Note, estuarine and palustrine wetland categories differ from the categories of wetlands presented in the NLCD 2016 data (woody wetlands and emergent herbaceous wetlands). The categories can overlap, as these wetlands can be in estuarine or palustrine environments. Woody wetlands are defined as areas where forest or shrubland vegetation accounts for greater than 20% of vegetative cover and the soil or substrate is periodically saturated with or covered with water. Emergent herbaceous wetlands are defined as areas where perennial herbaceous vegetation accounts for greater than 80% of vegetative cover and the soil or substrate is periodically saturated with or covered with water.

Coastal Wetlands Status and Trends*

Wetland Category	NLCD 2001 acres	NLCD 2011 acres	NLCD 2016 acres
Woody wetlands	90,143	90,014	91,078
Emergent herbaceous wetlands	150,518	149,305	151,875
Total wetlands	240,662	239,319	242,953

*Based on NLCD wetlands in California's 15 outer coast counties

Change in Wetlands	from 2001-2016	from 2011-2016
Percent net change in total wetlands (% gained or lost)	1.0%	1.5%

How Wetlands Are Changing*

Land Cover Type	Area of Wetlands Transformed to Another Type of Land Cover between 2001-2016 in Acres	Area of Wetlands Transformed to Another Type of Land Cover between 2011-2016 in Acres
Development	13,376 (20.9 mi^2)	18,048 (28.2 mi^2)
Agriculture	5,312 (8.3 mi^2)	6,400 (10.0 mi^2)
Barren Land	1,024 (1.6 mi^2)	1,088 (1.7 mi^2)
Water	5,312 (8.3 mi^2)	5,824 (9.1 mi^2)

*Note that wetlands have also been restored or converted from other land cover types as well, so the loss is offset in California over the last five years as seen in the tables above.

Wetlands are changing by transformation to other land cover types such as development, agriculture, barren, and water. However, this does not capture how wetlands are also being restored or transformed within an overall wetland category or from other land use types. One 2019 study of federally funded restoration projects found that from 2006 to 2015, voluntary restoration resulted in 145,443 acres (~227 mi^2) of estuarine wetlands and 154,772 acres (~242 mi^2) of palustrine wetlands in all U.S. coastal counties. [5] The study reported the whole state of California restored 7,180 acres from 2006-2010 and 44,166 acres of estuarine wetland from 2011-2015. Note that only a portion of those reported numbers would correspond to outer coast county jurisdictions because substantial restoration occurred in San Francisco Bay and Delta regions.

2. If available, briefly list and summarize the results of any additional state- or territory-specific data or reports on the status and trends of coastal wetlands since the last assessment to augment the national data sets.

The Coastal Commission collects data on regulatory actions of the Coastal Commission using the agency's in-house Coastal Data Management System (CDMS). As the Coastal Act requires that new development avoid and mitigate impacts to wetlands, the Coastal Commission tracks impacts on wetland acreage. These data reflect permitted, not necessarily completed projects, and the table below reflects tidal wetlands related actions over the last 5 years.

[5] Gittman, R.K., Baillie, C.J., Arkema, K.K., Bennett, R.O., Benoit, J., Blitch, S., Brun, J., Chatwin, A., Colden, A., Dausman, A. and DeAngelis, B., 2019. Voluntary restoration: mitigation's silent partner in the quest to reverse coastal wetland loss in the USA. Frontiers in Marine Science, 6, p.511. https://doi.org/10.3389/fmars.2019.00511

Tidal Wetland Habitat – Acreage Gained or Lost Over Past Five (5) Years (Data source: CDMS)

Performance Measure	FY1415	FY1516	FY1617	FY1718	FY1819	Total past 5 years
	PM# 2	PM# 2	PM# 2	PM# 2	PM# 2	PM# 2
Tidal wetland acres created and restored	2,850.14	25.80	199.31	63.43	280.13	3,418.8
Tidal wetland acres lost	-0.01	-8.30	-1.05	-3.35	-21.36	-34.1
Total Tidal Wetland Habitat - total acres gained or lost	2,850.13	17.50	198.26	60.08	258.77	3,384.7

While local, state, and federal agencies work with partners to restore wetlands, sea level rise and climate change pose additional risks to existing ones. As sea level rises along the Pacific coast in the coming decades, existing rates of marsh accretion at some sites may be insufficient to keep pace with local sea level rise (SLR) in the absence of proactive management. In a 2016 USGS study[6], intensive local sampling at a series of sites along the California coast, done to model local and regional differences in tidal marsh vulnerability to sea level rise, found that mid and high SLR rates threatened the persistence of vegetated marsh at most locations over the coming century. The timing and degree of projected impacts varied among sites. Under medium confidence emission scenarios, all sites lost high marsh habitat by 2100, and most sites became dominated by either low marsh or mudflat habitat. However, all the other 2016 USGS study sites also tended to transition to low marsh habitat over the next 50–100 years. A 2018 Conserving California's Coastal Habitats report[7] confirmed the vulnerability of many California wetlands. The report found 58% of marshes and 55% of tidal flats vulnerable to 5 feet of sea level rise, but also identified where potential future habitat could be established.

[6] Thorne, K.M., MacDonald, G.M., Ambrose, R.F., Buffington, K.J., Freeman, C.M., Janousek, C.N., Brown, L.N., Holmquist, J.R., Gutenspergen, G.R., Powelson, K.W., Barnard, P.L., and Takekawa, J.Y., 2016, Effects of climate change on tidal marshes along a latitudinal gradient in California: U.S. Geological Survey Open-File Report 2016-1125, 75 p., http://dx.doi.org/10.3133/ofr20161125.

[7] Heady, W. N., B. S. Cohen, M. G. Gleason, J. N. Morris, S. G. Newkirk, K. R. Klausmeyer, H. Walecka, E. Gagneron, M. Small. 2018. *Conserving California's Coastal Habitats: A Legacy and a Future with Sea Level Rise*. The Nature Conservancy, San Francisco, CA; California State Coastal Conservancy, Oakland, CA. 143 pages. https://www.conservationgateway.org/ConservationPractices/Marine/crr/library/Documents/TNC_SCC_CoastalAssessment_lo%20sngl.pdf

Coastal Commission staff is engaged in restoration projects throughout the state, as indicated in the table above. Additionally, many of the landscape scale restoration efforts encompass more than one type of wetland or sensitive coastal resource. For example, the University of California, Santa Barbara North Campus Open Space (NCOS) Restoration Project started in 2012 aimed at restoring an area of salt marsh, high marsh, native grassland, coastal sage scrub, sandy dune, southern riparian scrub, seasonal/vernal pond, fresh/brackish wetland, and other environmentally sensitive habitat area (ESHA)[8]. The grading and movement of soil on the site occurred in 2017. Restoration planting followed and was expected to be completed by the year 2020, with most of the components of monitoring to continue through the year 2022. Following completion of the proposed NCOS restoration, the project footprint will support a total of 81.10 acres of new native habitat that will be created by the proposed restoration. The table below provides a breakdown of the acres of existing, impacted, preserved, enhanced, restored and post project native habitat areas.[9]

North Campus Open Space (NCOS) Restoration Project Acreage

NCOS Project Habitats	Existing (acres)	Impacted (acres)	Preserved (acres)	Enhanced (acres)	Restored (acres)	Post project Habitat Area
Aquatic/Subtidal	0	0	0	0	3.98	3.98
Mudflat/Salt Flat	0	0	0	0	5.92	5.92
Salt Marsh	1.35	0.19	1.16	0	13.50	14.66
High Marsh/ Transition (CCC Wetland)	13.74	13.74	0	0	18.51	18.51
Riparian	0	0	0	0	0.99	0.99
Native Grassland	1.96	0.48	1.48	3.40	24.07	28.95
Coastal Sage Scrub	4.64	1.52	3.12	8.84	13.41	25.37
Sandy Dune	2.25	0	2.25	1.86	2.09	6.20
Southern Riparian Scrub	4.22	0.34	3.88	0	1.66	5.4
Seasonal/Vernal Pond	1.40	0.24	1.16	0	3.24	4.40
Plover Nesting	0	0	0	0	3.01	3.01
Upland Clay Annuals	0	0	0	0	0.25	0.2
Fresh/Brackish Wetland (Coastal Freshwater Marsh	9.14	7.56	1.58	0	0.63	2.21

[8] According to the Coastal Act Section 30107.5, ESHA is "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."

[9] Excerpted from Table 3 of the August 3, 2016 UCSB NCOS Coastal Development Permit and Notice of Impending Development Project Description

NCOS Project Habitats	Existing (acres)	Impacted (acres)	Preserved (acres)	Enhanced (acres)	Restored (acres)	Post project Habitat Area
South Parcel NCFH Mitigation Area-ESHA	12.78	0	12.78	0	0	12.78
Total	51.48	24.07	27.41	14.10	91.26	132.58

In addition to the NCOS project, the Coastal Commission has permitted several large wetland restoration and mitigation bank projects that include the San Elijo Lagoon restoration, Elkhorn Slough, and Colorado Lagoon project. These projects are in early stages and will result in restored wetland acreage on the ground in future years.

Management Characterization:

1. Indicate if there have been any significant changes at the state or territory level (positive or negative) that could impact the future protection, restoration, enhancement, or creation of coastal wetlands since the last assessment.

Significant Changes in Wetland Management

Management Category	Significant Changes Since Last Assessment (Y or N)
Statutes, regulations, policies, or case law interpreting these	Y
Wetlands programs (e.g., regulatory, mitigation, restoration, acquisition)	Y

2. For any management categories with significant changes, briefly provide the information below. If this information is provided under another enhancement area or section of the document, please provide a reference to the other section rather than duplicate the information:
    a. Describe the significance of the changes;
    b. Specify if they were 309 or other CZM-driven changes; and
    c. Characterize the outcomes or likely future outcomes of the changes.

<u>Statutes, regulations, policies, or case law</u>

State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State

a) The State and Regional Water Resources Control Boards (Water Boards) developed a new Wetland and Riparian Area Protection Policy in 2014 and adopted a statewide wetland definition and procedures for discharges of dredged or fill material to waters of

the state in April 2019.[10] The new definition and procedures for discharges of dredged or fill material are required in the water quality control plans for inland surface waters and enclosed bays and estuaries and ocean waters of California, for use by the Water Boards. This change was to ensure that waters of the state will continue to be protected under its jurisdiction, even if protections for federal waters continue to be narrowed by administrative actions or the courts. The rules also include procedures for discharges of dredged or fill material to waters of the state. Waters of the State of California, protected under Porter Cologne by the Water Boards, are, by definition, broader than the "waters of the United States" covered by federal regulation.

b) Commission staff provided input on the new rules through the years and supported the Water Board's efforts to protect waters of the state. However, the Coastal Act continues to be more protective of wetlands, and the wetland definition used by Coastal staff is fully vetted. Commission staff has consistently noted that it is important that the Water Boards are clear, in adopting a "statewide" wetland definition, that the new wetland definition does not supersede the wetland definition used by other state agencies, including that used by the Commission in the Coastal Zone.

c) These are not 309 driven changes.

d) The new rules clarify what wetlands are considered waters of the state to provide a framework for monitoring and reporting water quality. The policy supports an outcome of establishing a uniform regulatory approach across all Water Board regions that complements the federal Clean Water Act section 404 program for the discharge of dredged or fill material into all waters of the state, including wetland areas that qualify as waters of the state. Coastal Commission staff will continue to work with the Water Boards in our common mission to protect these coastal resources.

<u>Wetlands programs</u>

Southern California Wetlands Recovery Project

a) The Southern California Wetlands Recovery Project (SCWRP) was established in 1997 as a partnership between 14 federal and state entities. The SCWRP is chaired by the Resources Agency and supported by the State Coastal Conservancy, and partners include public agencies, non-profits, scientists, and local communities. The organization's overall goal is to acquire, restore, and expand rivers, streams, and wetlands in coastal Southern California using a regional approach. The Wetland Managers Group (WMG) consists of staff members from the public agencies that make up the SCWRP and meets on a quarterly basis to make vital decisions that guide programmatic and project goals. The Wetlands Managers Group also provides input and guidance on key scientific questions and initiatives like updating the Regional Strategy. In 2018, the SCWRP produced a Regional Strategy with numeric targets that will help

[10]https://www.waterboards.ca.gov/press_room/press_releases/2019/pr04022019_swrcb_dredge_fill.pdf

quantify progress towards meeting the SCWRP's goals and vision of restoring and protecting wetlands and rivers.[11]

b) Yes, this work is CZM driven as the State Coastal Conservancy and California Coastal Commission are on the SCWRP Board of Governors and Wetland Managers Group.

c) The project will provide continued funding for and accomplishment of wetland acquisition, restoration, and enhancement in Southern California, motivated by a regional, ecosystem-based management approach.

Program for Wetland Mitigation (In-Lieu Fees and Wetland Mitigation Banks)

a) In April 2012, the SCWRP Board of Governors directed the Wetland Managers Group to develop an in-lieu fee program for wetland mitigation in the Southern California bight. This program would allow the aggregation of mitigation funds to implement regionally important projects rather than focusing on small acre-by-acre projects. The Coastal Conservancy, as a representative and fiscal agent for SCWRP, released a draft program prospectus in April 2013 and engaged several state and local agencies, including the Coastal Commission for guidance in developing the in-lieu fee program so that it is sufficiently broad to meet the mitigation needs of multiple agencies. Although this in lieu fee program no longer being pursued, it served as the entry point for the Coastal Commission staff to engage in the development of mitigation banks that are developed consistent with regulations issued by the U.S. Army Corps of Engineers (ACOE) and EPA that govern compensatory mitigation for activities authorized by ACOE permits (published in the Federal Register in April 2008).

   Since 2013, Commission staff has participated in several Interagency Review Teams (IRT) for individual banks in the coastal zone as well as the statewide Project Delivery Team (PDT). Through the various IRTs, Commission staff has worked with federal and state partners to develop mitigation banks to meet the requirements for mitigation under the Coastal Act as well as the ACOE regulations. The Commission's overall goal for participating in the development of mitigation banks in the coastal zone is twofold: (1) to facilitate implementation of regionally significant restoration projects, and (2) streamline the selection and development of appropriate mitigation projects as part of the Commission's regulatory process.

   In 2019, the Commission authorized the Executive Director to become a signatory to the Colorado Lagoon Mitigation in Long Beach, CA. Two additional banks are expected to come before the Commission for approval in the next few years. In addition, Commission staff is also working with Caltrans and other federal and state agencies to develop a statewide advanced mitigation banking program for Caltrans projects. Development of this program is expected to increase the ecological value of mitigation

[11] Southern California Wetlands Recovery Project. 2018. Wetlands on the Edge: The Future of Southern California's Wetlands: Regional Strategy 2018. Prepared by the California State Coastal Conservancy, Oakland, Ca.

implemented by Caltrans and significantly streamline regulatory review of transportation projects.

b) 309 or CZM driven: Yes, in that the State Coastal Conservancy and California Coastal Commission are on the SCWRP Board of Governors. Also, the State Coastal Conservancy would act as the fiscal sponsor for the program.

c) Likely future outcomes: Aggregated mitigation funds to implement regionally important projects rather than small acre-by-acre mitigation projects.

Enhancement Area Prioritization:

1. What level of priority is the enhancement area for the coastal management program?

High _____
Medium __x___
Low _____

2. Briefly explain the reason for this level of priority. Include input from stakeholder engagement, including the types of stakeholders engaged.

Wetland resource concerns for California's coastal zone span a variety of complex and sensitive issues, especially given the magnitude of loss experienced since statehood, and the small areas of wetlands that remain. Stakeholder comments requested additional protection for wetlands and more coordination with local agencies and partners on restoration. Protecting coastal wetlands is a high priority and critical component of the coastal program overall, as it pertains to the regulation of land use and development. Land use and development patterns will have a great impact on remaining wetlands and these transitional habitats will experience early impacts resulting from sea level rise and climate change. As such, the Coastal Hazards and Special Area Management Plan (SAMP) priority enhancement areas will address wetlands where relevant/appropriate.

Coastal Hazards

Section 309 Enhancement Objective: Prevent or significantly reduce threats to life and property by eliminating development and redevelopment in high-hazard areas, managing development in other hazard areas, and anticipating and managing the effects of potential sea level rise and Great Lakes level change. §309(a)(2)

Note: For purposes of the Hazards Assessment, coastal hazards include the following traditional hazards and those identified in the CZMA: flooding; coastal storms (including associated storm surge); geological hazards (e.g., tsunamis, earthquakes); shoreline erosion (including bluff and dune erosion); sea level rise; Great Lake level change; land subsidence; and saltwater intrusion.

PHASE I (HIGH-LEVEL) ASSESSMENT:

Purpose: To quickly determine whether the enhancement area is a high-priority enhancement objective for the CMP that warrants a more in-depth assessment. The more in-depth assessments of Phase II will help the CMP understand key problems and opportunities that exist for program enhancement and determine the effectiveness of existing management efforts to address those problems.

Resource Characterization:

1. In the table below, indicate the general level of risk in the coastal zone for each of the coastal hazards. The following resources may help assess the level of risk for each hazard. Your state may also have other state-specific resources and tools to consult. Additional information and links to these resources can be found in the "Resources" section at the end of the Coastal Hazards Phase I Assessment Template:

    - The state's multi-hazard mitigation plan.
    - Coastal County Snapshots: Flood Exposure
    - Coastal Flood Exposure Mapper
    - Sea Level Rise Viewer/Great Lakes Lake Level Change Viewer
    - National Climate Assessment

General Level of Hazard Risk in the Coastal Zone

Type of Hazard	General Level of Risk[12] (H, M, L)
Flooding (riverine, stormwater)	M
Coastal storms (including storm surge)	H
Geological hazards (e.g., tsunamis, earthquakes)	H
Shoreline erosion	H
Sea level rise	H
Great Lakes level change	N/A
Land subsidence	L (some H places)
Saltwater intrusion	M
Other (please specify)	Fire (+ associated erosion)– H

2. If available, briefly list and summarize the results of any additional data or reports on the level of risk and vulnerability to coastal hazards within your state since the last assessment. The state's multi-hazard mitigation plan or climate change risk assessment or plan may be a good resource to help respond to this question.

Sea Level Rise Resources

- Coastal Commission Sea Level Rise Guidance Science Update. November 2018. https://documents.coastal.ca.gov/assets/slr/guidance/2018/0_Full_2018AdoptedSLRGuidanceUpdate.pdf
  On November 7, 2018, the Coastal Commission unanimously adopted a Science Update to the 2015 Commission Sea Level Rise Policy Guidance. It provides an overview of the best available science on sea level rise for California and recommended methodology for addressing sea level rise in Coastal Commission planning and regulatory actions. The 2018 science-focused changes reflect recent scientific studies and statewide guidance that update our understanding of best available science on sea level rise projections relevant to California. Other sections of the Guidance remain unchanged.

- Coastal Commission Sea Level Rise Vulnerability Synthesis. December 2016. https://www.coastal.ca.gov/climate/slr/vulnerability-adaptation/vulnerability/#/map
  The Statewide Synthesis Report provides many important key findings about California's vulnerabilities to sea level rise throughout the coastal areas of the state. Beaches, coastal access, and coastal recreation areas will be vulnerable to sea level rise in all coastal counties. In more rural areas, the risks are from inundation of beach areas and roads, erosion of upland trails, and the loss of vertical access. In more urban areas, the

[12] Risk is defined as "the estimated impact that a hazard would have on people, services, facilities and structures in a community; the likelihood of a hazard event resulting in an adverse condition that causes injury or damage." *Understanding Your Risks: Identifying Hazards and Estimating Losses. FEMA 386-2. August 2001*

largest threat to these areas arises from efforts to protect inland development from flooding and erosion. These findings, the County Snapshots and the LCP Case Studies will be used to guide and promote future efforts, including in funding decisions on LCP local assistance grants and for pursuing financial support to address identified gaps and needs for additional information on sea level rise vulnerabilities and impacts.

- Coastal Storm Modeling System (CoSMoS)

  CoSMoS is a dynamic modeling approach that has been developed by the United States Geological Survey in order to allow more detailed predictions of coastal flooding due to both future sea-level rise and storms integrated with long-term coastal evolution (i.e., beach changes and cliff/bluff retreat) over large geographic areas. CoSMoS models all the relevant physics of a coastal storm (e.g., tides, waves, and storm surge), which are then scaled down to local flood projections for use in community-level coastal planning and decision-making. Projections of multiple storm scenarios (daily conditions, annual storm, 20-year- and 100-year-return intervals) are provided under a suite of sea-level rise scenarios ranging from 0 to 2 meters (0 to 6.6 feet), along with an extreme 5-meter (16-foot) scenario.

- Ocean Protection Council. 2018. State of California Sea-Level Rise Guidance 2018 Update. http://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A_OPC_SLR_Guidance-rd3.pdf

  This updated Guidance document, provides a science-based methodology for state and local governments to analyze and assess the risks associated with sea-level rise, and to incorporate sea-level rise into their planning, permitting, and investment decisions. It synthesizes the best available science on sea level rise projections and rates for California; gives a step-by-step approach for state agencies and local governments to evaluate those projections and related hazard information in decision making; and describes preferred coastal adaptation approaches.

- 2018 California Sea Level Rise Snapshots prepared for the Ocean Protection Council by the Climate Readiness Institute. Updated May 2018. As part of the AB 2516 Planning for Sea Level Rise Database Project for the Ocean Protection Council (OPC), the Climate Readiness Institute (CRI) at UC Berkeley developed a series of "snapshots" to document and measure progress on sea level rise planning and implementation in six regions of California—San Diego, Los Angeles/Orange, Central Coast, San Francisco Bay Area, Sacramento/San Joaquin Delta, and the North Coast. The six regional areas are making progress on sea level rise planning, but it varies widely depending on resources, public support, local champions, and other local factors. This work contributed to development of a new tool for evaluating adaptive capacity.[13]
  https://vcresearch.berkeley.edu/research-unit/climate-readiness-institute

[13] Hirschfeld, D., Hill, K. E., & Riordan, B. (2020). The regional fingerprint: A new tool to evaluate adaptive capacity. *Environmental Science & Policy*, *112*, 36-46.

- Integrated Climate Adaptation and Resiliency Program (ICARP) Impact Report and 2020 Program Recommendations. April 2020. Impact Report and 2020 Program Recommendations (ca.gov). The report touches on ongoing and emerging opportunities, challenges, gaps, and risks, and explores the work ahead for ICARP to best respond to climate change impacts in California. It describes the Adaptation Clearinghouse as a centralized source of information and resources to assist decision makers at the state, regional, and local levels when planning for and implementing climate adaptation projects that promote resiliency across the state.

- Coastal Plan Alignment Compass. 2019. https://resilientca.org/topics/plan-alignment/compass/. National Oceanic and Atmospheric Administration, U.S. Geological Survey, California Coastal Commission, California Governor's Office of Emergency Services, California Governor's Office of Planning and Research, California Ocean Protection Council, California State Coastal Conservancy, and Federal Emergency Management Agency staff worked together to create a tool for coordinating local plans to support multiple climate mitigation and adaptation goals, reduce duplication, and avoid potential policy conflicts. The Compass provides an overview of the required elements and best practices for each plan, discusses strategies to leverage vulnerability assessments to help make them usable and applicable to all plans, and identifies crosswalk opportunities and tricky spots to avoid.

- Griggs, G., J. Arvai, D. Cayan, R. DeConto, J. Fox, H.A. Fricker, R.E. Kopp, C. Tebaldi, and E.A. Whiteman, 2017. *Rising Seas in California: An Update on Sea-Level Rise Science*. Prepared by the California Ocean Protection Council Science Advisory Team Working Group. April 2017. http://www.opc.ca.gov/webmaster/ftp/pdf/docs/rising-seas-in-california-an-update-on-sea-level-rise-science.pdf

- Heady, W. N., B. S. Cohen, M. G. Gleason, J. N. Morris, S. G. Newkirk, K. R. Klausmeyer, H. Walecka, E. Gagneron, M. Small. 2018. *Conserving California's Coastal Habitats: A Legacy and a Future with Sea Level Rise.* The Nature Conservancy, San Francisco, CA; California State Coastal Conservancy, Oakland, CA. 143 pages. https://www.conservationgateway.org/ConservationPractices/Marine/crr/library/Documents/TNC_SCC_CoastalAssessment_lo%20sngl.pdf

- Pierce, D. W., J. F. Kalansky, and D. R. Cayan, (Scripps Institution of Oceanography). 2018. *Climate, Drought, and Sea Level Rise Scenarios for the Fourth California Climate Assessment.* California's Fourth Climate Change Assessment, California Energy Commission. Publication Number: CNRA-CEC-2018-006. https://www.energy.ca.gov/sites/default/files/2019-07/Projections_CCCA4-CEC-2018-006.pdf
  Probabilistic sea level rise (SLR) projections were generated under RCP 4.5 and RCP 8.5, with estimates of changes in contributors to global and regional SLR and incorporating

new science on potential Antarctic ice loss. Additionally, hourly projections of sea level at selected coastal locations were generated that include tides, regional and local weather influences, and short period Pacific climate fluctuations, atop the aforementioned sea level rise scenarios.

- Befus, K.M., Barnard, P.L., Hoover, D.J., Hart, J.F. and Voss, C.I., 2020. *Increasing threat of coastal groundwater hazards from sea-level rise in California*. Nature Climate Change, pp.1-7.[14]
  As sea levels rise, the shallow groundwater table in coastal communities will also rise and pose a chronic threat. This rise can flood communities from below, damaging buried infrastructure, flooding below grade structures, reducing storm sewer capacity, releasing pollutants, compromising foundations, and emerging above ground as an urban flood hazard.

California's Fourth Climate Change Assessment

California's Fourth Climate Change Assessment (Fourth Assessment) advances actionable science that serves the growing needs of state and local-level decision-makers from a variety of sectors. The Fourth Assessment is part of California's comprehensive strategy to act based on cutting-edge climate research. The Fourth Assessment addresses critical information gaps that decision-makers at the state, regional, and local levels need addressed in order to protect California's people, infrastructure, natural systems, working lands, and waters.
https://www.energy.ca.gov/sites/default/files/2019-08/20180827_Summary_Brochure.pdf

Sievanen, Leila*, Phillips, Jennifer*, Charlie Colgan, Gary Griggs, Juliette Finzi Hart, Eric Hartge, Tessa Hill, Raphael Kudela, Nathan Mantua, Karina Nielsen, Liz Whiteman. 2018. California's Coast and Ocean Summary Report. California's Fourth Climate Change Assessment. Publication number: SUMCCC4A-2018-011.[15]

Fourth Assessment Oceans & Coasts Reports cover a variety of topics related to California's ocean and coast, including natural infrastructure, ocean acidification, communicating risk, and ecosystem carbon.

- **Land Acquisition and Ecosystem Carbon in Coastal California. Ackerly et al.**
  This report analyzes California's ecosystem carbon sequestration and evaluating the potential impact of avoided development. Report #: CCCA4-EXT-2018-003. Published: August 27, 2018

[14] Befus, K. M., P. L. Barnard, D. J. Hoover, J. A. Finzi Hart, C. I. Voss (2020). California Saline Groundwater Wedge Footprint Model Results, HydroShare, https://doi.org/10.4211/hs.1c95059edcf041a0959e0b4a1f05478c
[15] http://www.climateassessment.ca.gov/state/index.html

- **Growing Effort, Growing Challenge: Findings from the 2016 California Coastal Adaptation Needs Assessment. Moser et al.**
  This report advances the understanding of local governments' climate change adaptation finance challenges by examining the nature of those challenges and proposing solutions to address them (EXT-3). Report #: CCCA4-EXT-2018-009. Published: August 27, 2018
- **California Mussels as Bio-Indicators of Ocean Acidification. Gaylord et al.**
  This report explores the utility of employing newly settled California mussels as a bio-indicator of effects of ocean acidification. Report #: CCCA4-CNRA-2018-003. Published: August 27, 2018
- **Assessing and Communicating the Impacts of Climate Change on the Southern California Coast. Erikson et al.**
  This report assesses the coastal impacts of climate change for the California coast, including the combination of sea level rise, storms, and coastal change and translates that information into two simple, user-friendly online web tools. Report #: CCCA4-CNRA-2018-013. Published: August 27, 2018
- **Toward Natural Shoreline Infrastructure to Manage Coastal Change in California. Newkirk et al.**
  This report is intended to facilitate the use of Natural Shoreline Infrastructure along California's coast, improving the resilience of communities and habitats in the face of climate change. Report #: CCCA4-CNRA-2018-011. Published: August 27, 2018
- **CERI-Climate. California Emergency Response Infrastructure Climate Vulnerability Tool.**
  Assessing Vulnerability and Improving Resilience of Critical Emergency Management Infrastructure in California in a Changing Climate Final Results (June 2018). https://public.tableau.com/profile/rand4185#!/vizhome/CJ302-1000_CERI-Climate_20180625/Title

Additional Hazard Resources

- CalOES. September 2018. CALIFORNIA STATE HAZARD MITIGATION PLAN. https://www.caloes.ca.gov/HazardMitigationSite/Documents/002-2018%20SHMP_FINAL_ENTIRE%20PLAN.pdf
  The 2018 California State Hazard Mitigation Plan includes: an updated statewide risk assessment, disaster history, and statistics; recent mitigation progress, success stories, and best practices; updated state hazard mitigation goals, objectives, and strategies; and updated climate mitigation progress and adaptation strategies. Flooding is considered one of the three primary hazards in California (along with earthquake and wildfire). Flood hazards include riverine, stream, and alluvial flooding and coastal flooding, erosion, and sea level rise, all of which are influenced by climate and weather. The plan represents the state's overall commitment to supporting a comprehensive mitigation strategy to reduce or eliminate potential risks and impacts of disasters in order to promote faster recovery after disasters and, overall, a more resilient state.

Fire Resources

- 2018 Strategic Fire Plan for California: Board of Forestry's master plan in terms of providing guidance for statewide fire protection in state responsibility areas, usually updated every decade.
- Executive Order N-05-19: Gov. Newsom signed this executive order on January 9, 2019, which directed the California Department of Forestry and Fire Protection (CAL FIRE), in consultation with other state agencies and departments, to recommend immediate, medium and long-term actions to help prevent destructive wildfires in a 45-day report (see 45-report below).
- CalFire 45-day report: Discusses 35 priority projects as well as medium and long-term actions to be taken, including the Board of Forestry's Vegetation Treatment Program PEIR (a long-term action) that Statewide Planning is collaborating on with the BOF (Final PEIR has now been published).
- Fire Hazard Planning – General Plan Technical Advice Series: Planning guide geared towards helping "provide a robust fire hazard mitigation program" through General Plan updates in California communities.
- Wildfires and Climate Change - California's Energy Future: A Report from Governor Newsom's Strike Force (April 12, 2019) that describes hazard planning approaches, such as prioritizing building in less hazardous areas, home retrofits, and creating defensible spaces.

Management Characterization:

1. In the tables below, indicate if the approach is employed by the state or territory and if significant state- or territory-level changes (positive or negative) have occurred that could impact the CMP's ability to prevent or significantly reduce coastal hazards risk since the last assessment.

Significant Changes in Hazards Statutes, Regulations, Policies, or Case Law

Topic Addressed	**Employed by State or Territory** (Y or N)	**CMP Provides Assistance to Locals that Employ** (Y or N)	**Significant Changes Since Last Assessment** (Y or N)
Elimination of development/redevelopment in high-hazard areas[16]	Y*	Y	N
Management of development/redevelopment in other hazard areas	Y*	Y	Y†

[16] Use state's definition of high-hazard areas.

Climate change impacts, including sea level rise or Great Lakes level change	Y*	Y	Y

*Many of these management topics are addressed on a case-by-case basis through Local Coastal Programs. The Coastal Commission provides technical and planning assistance for the development of these LCPs (and supports each of these topics/policies etc.), and has awarded 6 rounds of a grant program (funding from the Governor/legislature) to support LCP updates (particularly updates that include climate change adaptation).

†Management of development/redevelopment in **all** hazard areas.

Significant Changes in Hazards Planning Programs or Initiatives

Topic Addressed	**Employed by State or Territory** (Y or N)	**CMP Provides Assistance to Locals that Employ** (Y or N)	**Significant Changes Since Last Assessment** (Y or N)
Hazard mitigation	Y	Y	Y
Climate change impacts, including sea level rise or Great Lakes level change	Y	Y	Y

Significant Changes in Hazards Mapping or Modeling Programs or Initiatives

Topic Addressed	**Employed by State or Territory** (Y or N)	**CMP Provides Assistance to Locals that Employ** (Y or N)	**Significant Changes Since Last Assessment** (Y or N)
Sea level rise or Great Lakes level change	N	Y	Y
Other hazards	N	Y	N

2. Briefly state how “high-hazard areas” are defined in your coastal zone.

   “High-hazard areas” aren’t specifically defined for the entire coastal zone, but are rather identified on an individual basis in Local Coastal Programs based on the particular hazards present (e.g. seismic, fire, flood, sea level rise, storms, wave runup, tsunamis etc.)

3. For any management categories with significant changes, briefly provide the information below. If this information is provided under another enhancement area or section of the document, please provide a reference to the other section rather than duplicate the information:
   a. Describe the significance of the changes;

b. Specify if they were 309 or other CZM-driven changes; and
c. Characterize the outcomes or likely future outcomes of the changes.

Hazards Statutes, Regulations, Policies, or Case Law

a) Since the last assessment, significant changes have occurred in statutes, regulations, policies, hazards planning programs, and mapping/modeling programs. The most far reaching changes have occurred in the areas of climate change and sea level rise, although the recent damaging fires have also led to new efforts at fire safety.

At the state level, key reports on climate change and sea level rise were the Ocean Protection Council's 2017 Rising Seas in California: An Update on Sea-Level Rise Science[17], California's 4th Climate Change Assessment (2018), and the 2018 Ocean Protection Council's Sea Level Guidance. These formed the basis for the California Coastal Commission's 2018 Updated Sea Level Rise Policy Guidance, and Draft Residential Adaptation Policy Guidance. These documents all helped to bring attention to the potential consequences of climate change and sea level rise and to identify general and specific strategies and actions that the state will take to address these concerns.

On a case-by-case basis, Local Coastal Program updates (particularly updates that include climate change-related hazards and adaptation), were supported by Coastal Commission technical and planning assistance through 6 rounds of a grant program (funding from the Governor/legislature). Several recent guidance documents have resulted in significant changes to the emphasis placed on climate change and sea level rise policy in California.

b) The California Coastal Commission's Sea Level Rise Policy Guidance and 2018 update, as well as Draft Residential Adaptation Guidance, were the only significant changes that were 309 driven; however, the Coastal Commission, the SF Bay Conservation and Development Commission and the California Coastal Conservancy were contributors and reviewers of the Ocean Protection Council's Sea Level Rise Guidance. Additionally, Local Coastal Program updates and grants to local jurisdictions to complete vulnerability assessments are CZM driven.

c) Expected outcomes from these changes in policies are that existing and future development will be undertaken with greater awareness of potential impacts resulting from tsunamis, climate change and sea level rise and that avoidance of tsunami and sea-level rise related hazards will become more important for the siting or permitting of new development, the innovative design of new structures/ infrastructure, when necessary, in vulnerable areas, and the integration of climate risk considerations into emergency management activities.

[17] http://www.opc.ca.gov/webmaster/ftp/pdf/docs/rising-seas-in-california-an-update-on-sea-level-rise-science.pdf

Hazards Planning Programs or Initiatives

a) Changes to hazard planning programs and initiatives include the 2018 California State Hazard Mitigation Plan (SHMP), the new California Vegetation Treatment Program to fight wildfire, and the interagency team on coastal hazard resilience planning. The 2018 SHMP provides a resource for local planners of risk information that may affect their planning area, including earthquake, flood, fire, and other climate and weather-related hazards. The SHMP describes how California is pursuing climate change adaptation through a wide range of guidance and legislation, such as Safeguarding California Plan: 2018 Update, the California Adaptation Planning Guide, Executive Orders S-13-08 and B-30-15, and Senate Bills 246, 379, 1000, 2800, and others.

The Coastal Commission worked on an interagency team with NOAA, USGS, FEMA, OES, OPR, OPC, and SCC on plan alignment producing the Coastal Plan Alignment Compass to support California's coastal communities as they develop and coordinate local plans (Local Hazard Mitigation Plans, Adaptation Plans, General Plans, and Local Coastal Programs) to better prepare for sea level rise and coastal flooding and leverage FEMA funding opportunities to plan for and implement sea level rise adaptation projects.

New efforts have also been undertaken on tsunami planning and preparedness. At the national level, the newly adopted American Society of Civil Engineers ASCE 7-16 includes design recommendations for high-occupancy development in tsunami run-up areas. These recommendations have been incorporated into the California Building Code from there, will be incorporated into many local building codes. At the state level, California Geological Survey CGS) and California Office of Emergency Services (CalOES) have developed Community Tsunami Response Playbooks and Maritime Tsunami Response Playbooks to assist communities, ports and harbors in responding to tsunami warnings. Commission staff, through participation on the Tsunami Policy Working Group, have provided a review role in the development of these resources. Commission staff, with partial funding from CGS, are also in the process of completing Guidance for Including Tsunamis into Local Coastal Programs and other Planning Documents (expected to be available to the public in mid-2021).

A new program certified in December 2019 by the California Board of Forestry and Fire Protection aims to minimize wildland fire risk across the state. The California Vegetation Treatment Program, or "CalVTP", will direct implementation of vegetation treatments on public and private land across the state as one component of the state's efforts to reduce the risk of loss of lives and property, reduce fire suppression costs, and protect natural resources from wildfire. The Coastal Commission staff have been coordinating with California Board of Forestry and other on how best to carry out this plan in the coastal zone.

b) Under Hazards Planning Programs, only the Coastal Plan Alignment Compass was a CZM-driven change in partnership with NOAA and FEMA, using 309-funds. Commission staff participated and provided input to the update of the 2018 SHMP and the development of

the CalVTP as it pertains to the coastal zone with state funds. Commission staff carried out tsunami work also using state funds.

c) Expected outcomes from these changes in programs are greater awareness and implementation of adaptation for potential impacts resulting from climate change effects on wildfire, sea level rise, coastal flooding, and tsunamis. Results also include integration of climate risk considerations into emergency management activities and hazard preparedness.

Hazards Mapping or Modeling Programs or Initiatives

a) Significant progress in hazards mapping and modeling programs since the last assessment period include the USGS Coastal Storm Modeling System (CoSMoS)[18] updates, California's Fourth Climate Change Assessment tools, and local government vulnerability studies. CoSMoS enables more detailed predictions of coastal flooding due to both future sea-level rise and storms integrated with long-term coastal evolution (i.e., beach changes and cliff/bluff retreat) than previous models. Long-term shoreline change and cliff retreat, as well as the presence of armoring, are accounted for in the flood risk mapping, currently available for the north-central coast (Half Moon Bay to Pt. Arena), San Francisco Bay, southern California, and the central California coast. California's Fourth Climate Change Assessment Cal-Adapt tool[19] also provides flood risk mapping and flood depths given current and sea level rise scenarios. Lastly, local jurisdictions have created risk mapping within local vulnerability assessments using the Coastal Commission's Local Assistance Grant Program that provides funds to support local governments in completing or updating Local Coastal Programs (LCP) consistent with the California Coastal Act, with special emphasis on planning for sea-level rise and climate change. As of December 2019, 32 jurisdictions have generated draft or final sea level rise vulnerability assessments using these grant funds.[20]

b) Local Coastal Program updates and grants to local jurisdictions to complete vulnerability assessments and risk mapping are CZM driven.

c) Expected outcomes from these changes include improved risk mapping at a state and local level.

Enhancement Area Prioritization:

1. What level of priority is the enhancement area for the coastal management program?

High __x___

[18] https://www.usgs.gov/centers/pcmsc/science/coastal-storm-modeling-system-cosmos?qt-science_center_objects=0#qt-science_center_objects
[19] https://cal-adapt.org/tools/slr-calflod-3d/
[20] https://www.coastal.ca.gov/lcp/grants/

Medium _____
Low _____

2. Briefly explain the reason for this level of priority. Include input from stakeholder engagement, including the types of stakeholders engaged.

Addressing hazards management, especially regarding adapting to the impacts of climate change, is a high priority. This is substantiated in the agency's 2021-2025 Strategic Plan and was a frequent theme of stakeholder feedback as many called for urgently addressing climate change through both mitigation and adaptation-related efforts. Goal 4 of that Strategy is to Support Resilient Coastal Communities in the Face of Climate Change and Sea Level Rise. Coastal hazards will intensify as sea level rise and temperatures warm. Hazard responses (such as shoreline armoring and bluff retaining structures) will impact public access, coastal resources, public trust lands and water quality. Consequently, this enhancement area is a high priority to be addressed in the next five-year strategy.

Public Access

Section 309 Enhancement Objective: Attain increased opportunities for public access, taking into account current and future public access needs, to coastal areas of recreational, historical, aesthetic, ecological, or cultural value. §309(a)(3)

PHASE I (HIGH-LEVEL) ASSESSMENT: *(Must be completed by all states.)*
Purpose: To quickly determine whether the enhancement area is a high-priority enhancement objective for the CMP that warrants a more in-depth assessment. The more in-depth assessments of Phase II will help the CMP understand key problems and opportunities that exist for program enhancement and determine the effectiveness of existing management efforts to address those problems.

Resource Characterization:

1. Use the table below to provide data on public access availability within the coastal zone.

Public Access Status and Trends

Type of Access	Current number[21]	Changes or Trends Since Last Assessment[22] (↑, ↓, –, unkwn)	Cite data source
Beach access sites	1429+37= 1466	**+ 37**	In-house CDMS* database and annual CZMA PMS reporting
Shoreline (other than beach) access sites	793+4 = 797	**+4**	In-house CDMS* database and annual CZMA PMS reporting
Recreational boat (power or nonmotorized) access sites	227+5 = 232	**+5**	In-house CDMS* database and annual CZMA PMS reporting
Number of designated scenic vistas or overlook points	589+11 = 600	**+11**	In-house CDMS* database and annual CZMA PMS reporting

[21] Be as specific as possible. For example, if you have data on many access sites but know it is not an exhaustive list, note "more than" before the number. If information is unknown, note that and use the narrative section below to provide a brief qualitative description based on the best information available.
[22] If you know specific numbers, please provide. However, if specific numbers are unknown but you know that the general trend was increasing or decreasing or relatively stable or unchanged since the last assessment, note that with a □□(increased)□□□□(decreased)□□□□(unchanged). If the trend is completely unknown, simply put "unkwn."

Number of fishing access points (i.e. piers, jetties)	555 + 2 = 557	**+2**	In-house CDMS* database and annual CZMA PMS reporting
Coastal trails/ boardwalks *(Please indicate number of trails/boardwalks and mileage)*	No of trails = 824 + 69 = 893 (can't provide current miles)	**+69** Mileage generally increased (Exact mileage numbers not currently tracked)	In-house CDMS* database and annual CZMA PMS reporting
Number of acres parkland/open space	597,528 acres	↑ In 2014 Assessment and Strategy, there were a total of 595,781 acres of parkland/open space. In 2019, the total acreage of parkland/open space is 597,528 acres, which is a gain of 1,747 acres of parkland/open space since 2014. (Consistent with past Assessments, this includes the Farallon and Channel Islands, and offshore rocks of the California Coastal National Monument)	GreenInfo Network - California Protected Areas Database, CPAD 2019
Access sites that are Americans with Disabilities Act (ADA) compliant[23]	794 locations	↑ Number of ADA-compliant sites Increased from reported 767 sites in 2015. (Note, exact numbers of "ADA-compliant" sites not currently tracked)	In-house CDMS* database, annual CZMA PMS reporting, www.yourcoast.org
Other (please specify)			

'*' CDMS = Coastal Data Management System, in house database for tracking Coastal Development Permits, and other Coastal Commission actions.

2. Briefly characterize the demand for coastal public access and the process for periodically assessing demand. Include a statement on the projected population increase for your coastal counties. There are several additional sources of statewide information that may help inform this response, such as the Statewide Comprehensive Outdoor Recreation

[23] For more information on ADA see *www.ada.gov*.

Plan,[24] the National Survey on Fishing, Hunting, and Wildlife Associated Recreation,[25] and your state's tourism office.

There will always a high demand for public access opportunities to and along California's coast. The beauty of this coast is known world-wide and it will always be a draw for locals and visitors alike. At 1,270 miles long, the California coast provides endless opportunities for various types of recreation, both active and passive, and both locals and visitors want to enjoy all that this iconic shoreline has to offer. The state's population is currently at almost 40 million people, and while not currently growing at a high rate (current estimates are at .37%, primarily due to the high cost of living), tourists number about 67 million per year. California Department of State Parks (State Parks) reported in 2017 that approximately 29 million people per year visited state beaches (including camping and day use).[26]

The state periodically assesses demand for coastal access. For example, in 2015, State Parks embarked on a multi-year planning process, called *Parks Forward*.[27] The goal was to evaluate the status of the California State Park system and identify goals for achieving improvement. One of the significant issues identified was the inequity of which populations use the parks in the coastal zone. Citizens located in inland and/or underserved communities are often unable to enjoy the recreational opportunities along the coast. Barriers include lack of affordable and/or available public transit, lack of personal cars and/or ability to pay daily parking fees.

Another assessment that has been conducted during the reporting period is on the demand for public access related to affordable overnight accommodations in the coastal zone. In 2017 UCLA researchers released the *Access for All: A New Generations Challenges on the California Coast* report that estimated that there has been a 70% loss of economy hotel rooms since 1989.[28] The trend of economy hotels being replaced with luxury hotels prevents the majority of the vacationing public from being able to stay overnight along the coast. The study also highlighted differences in overnight visitation by age, income, and race. It found that while 77

[24] Most states routinely develop "Statewide Comprehensive Outdoor Recreation Plans", or SCROPs, that include an assessment of demand for public recreational opportunities. Although not focused on coastal public access, SCORPs could be useful to get some sense of public outdoor recreation preferences and demand. Download state SCROPs at*www.recpro.org/scorp-library*.

[25] The National Survey on Fishing, Hunting, and Wildlife Associated Recreation produces state-specific reports on fishing, hunting, and wildlife associated recreational use for each state. While not focused on coastal areas, the reports do include information on saltwater and Great Lakes fishing, and some coastal wildlife viewing that may be informative and compares 2016 data to 2011, 2006 and 2001 information to understand how usage has changed. See www.wsfrprograms.fws.gov/subpages/nationalsurvey/national_survey.htm

[26]Planning, Recreation and Support Section Marketing and Business Development Office California State Parks *Statistical Report*. 2016/17 Fiscal Year. https://www.parks.ca.gov/pages/795/files/16-17%20Statistical%20Report%20FINAL%20for%20web.pdf

[27] The goal of the Parks Forward Initiative is to develop a new vision and approach to manage, use, and sustain California's state parks. The Parks Forward Commission will address a broad set of issues, including how the Department and the state parks system are organized, structured, managed, funded, and staffed, as well as the mission, number, location, and activities of individual state park unit. http://www.parksforward.com/

[28] UCLA. 2017. "Access for All: A New Generation's Challenges on the California Coast," 25 January 2017.

percent of California voters visit the coast at least once a year, African Americans are less likely to visit the coast, with 33 percent visiting less than once a year.

There may be social factors at play that lead to people of color feeling unwelcome at coastal beaches and recreational areas. In 2017, the California Legislature's recognized this problem and passed Assembly Bill 250 in 2017. This bill directed the State Coastal Conservancy, in coordination with the Coastal Commission and State Parks, to develop and implement a Lower Cost Visitor Serving Program. Creation of this program is a direct response to documented continual loss of affordable overnight accommodations along the coast. In 2019, the State Coastal Conservancy released an assessment of lower-cost coastal accommodations to guide the establishment of the new *Explore the Coast Overnight* program. [29] It found that the majority of those surveyed said that they do not stay overnight at the coast, especially younger people, low-income households, and people of color. The assessment revealed that the only California populations with a majority who stay on the coast overnight are white, aged 55 or more, and/or with a family income greater than $200,000. [30]

In 2018, the people of California demonstrated their support for more public access and recreational opportunities by passing Proposition 68, a $4 billion bond act that will provide funds to create new parks and outdoor access opportunities and enhance existing parks and facilities, many of them located along the coast.

3. If available, briefly list and summarize the results of any additional data or reports on the status or trends for coastal public access since the last assessment.

As discussed above, recent reports document the impact from the loss of affordable overnight accommodations along the coast and the barriers to access that have been created under existing governing/regulating systems and recreational planning efforts. These studies found that there are inequities in the public's ability to access the coast. including:

- Parks Forward – A New Vision for California State Parks, California State Parks, 2015
- Explore the Coast Overnight Assessment, State Coastal Conservancy, 2019

In addition, in October 2016, Commission staff completed a report, *Status Report of Vertical Accessways Acquired by California Coastal Commission Actions from 1973 to 2015 in Northern California – Del Norte, Humboldt, Mendocino, Sonoma, Marin, San Francisco, San Mateo, Santa Cruz and Monterey Counties* on the status of vertical accessways for Northern California. [31] In 2009 the Statewide Coastal Access Program staff prepared the first detailed analysis and report of vertical accessways acquired through Coastal Commission permit actions. The report covered

[29] California Coastal Conservancy. 2019. Explore the Coast Overnight Assessment https://scc.ca.gov/files/2019/10/Explore-the-Coast-Overnight-Assessment-AB4343.pdf
[30] State Coastal Conservancy Statewide Survey, April 2017, Probolsky Research. In *Explore the Coast Overnight: An Assessment of Lower-Cost Coastal Accommodations,* March 2019.
[31] https://documents.coastal.ca.gov/reports/2016/10/w6c-10-2016.pdf

San Diego and Orange Counties and was presented to the Commission in December 2009. In 2011, the report was expanded to add analysis of vertical accessways located in Los Angeles, Ventura, Santa Barbara, and San Luis Obispo Counties and was presented to the Commission in January 2012. The 2016 report completes the analysis statewide. The report concludes that a total of 196 vertical accessways have been acquired through Commission permit actions. Of these, 61% (120 sites) have been opened to the public.

Management Characterization:

1. Indicate if the approach is employed by the state or territory and if there have been any significant state- or territory-level management changes (positive or negative) that could impact the future provision of public access to coastal areas of recreational, historical, aesthetic, ecological, or cultural value.

Significant Changes in Public Access Management

Management Category	**Employed by State or Territory** (Y or N)	**CMP Provides Assistance to Locals that Employ** (Y or N)	**Significant Changes Since Last Assessment** (Y or N)
Statutes, regulations, policies, or case law interpreting these	Y	N	Y
Operation/maintenance of existing facilities	Y	N	N
Acquisition/enhancement programs	Y	Y	Y

2. For any management categories with significant changes, briefly provide the information below. If this information is provided under another enhancement area or section of the document, please provide a reference to the other section rather than duplicate the information:
    a. Describe the significance of the changes;
    b. Specify if they were 309 or other CZM-driven changes; and
    c. Characterize the outcomes or likely future outcomes of the changes.

<u>Statutes, regulations, policies or case law</u>

As noted above, the California Legislature and the people of California passed laws and bond acts to help address the loss/lack of affordable and equitable public access opportunities along California's coast. The new laws and bonds also provide policy guidance and funding to improve public access and recreational opportunities to and along the coast for all Californians.

Assembly Bill 1680 – Hollister Ranch Public Access Program (2019)

a) One area of long-standing concern is in Santa Barbara County, which has one of the least accessible shorelines in California. Over 60 miles of county coast are in private or federal ownership with no land side public access. To address part of this problem, the Coastal Act includes policies to open land based public access into the beaches along Hollister Ranch, which is a gated residential subdivision with 8.5 miles of shoreline. The private gates prevent the public from reaching the shoreline (public tidelands) by land (e.g. driving/ walking/bicycling), so the only public access is by sea (e.g. kayak, motorboat, etc.). The Coastal Act specifically requires the Coastal Commission to develop and adopt a Hollister Ranch Coastal Access Program ("Program') that provides for public use through the ranch road to reach the six beaches. The Program was adopted in 1982 but due to opposition by ranch owners, has never been implemented. To address this decades-long blockage of public access, the California Legislature recently approved Assembly Bill 1680 and it was signed into law by the Governor in 2019. This new law requires the Coastal Commission to update the 1982 Program by 2021 and along with the Coastal Conservancy to implement the first steps by 2022. Any attempt to block implementation is subject to Coastal Commission daily penalty fines.
b) While this planning process is not a CZM driven change, the process is designed to lead to expanded public access to this 8.5 miles of coast, which is currently unavailable to almost all Californians.
c) Outcomes: The planning effort to update the Program is now underway through a collaboration of the Coastal Commission, Coastal Conservancy, the State Lands Commission and the California State Parks. This is the first time that four state agencies have come together to sign a formal Collaboration Agreement to work together and take the necessary steps to open land based public access thru the ranch to the shoreline. The public is encouraged to participate in the planning process, and over 1700 citizens – including ranch owners, elected officials, outdoor enthusiasts, academics, tribal leaders, environmental justice advocates, etc. have written to express their opinions about this situation and how to resolve it. The effort will result in an updated Public Access Program that provides expanded public access to the currently inaccessible (to most) portion of the California coast.

Assembly Bill 250 – Lower Cost Visitor Serving Program (2017)

a) This bill directed the State Coastal Conservancy to develop and implement a Lower Cost Visitor Serving Program in coordination with California State Parks and the Coastal Commission. Also included in AB 250 was a provision to require that the Coastal Commission consider the lower cost coastal accommodations assessment when assessing or directing the use of any reclaimed in-lieu fees for any coastal development project. It authorizes the Commission to reclaim in-lieu fee assessed that has not been expended within seven years if the executive director makes a written determination that the original intent of the in-lieu fee will be better utilized.
b) Not a CZM-drive change

c) Outcomes: As cited above, the State Coastal Conservancy recently prepared a plan (Explore the Coast Overnight) in response to this bill, thus the planning work on identifying the problems and selection of suitable sites to help address this issue have begun. This program will result in new or enhanced forms of lower cost accommodation opportunities for public access such as hostels, campgrounds, lower cost motels, etc.

Parks and Water Bond Act of 2018 (Proposition 68)

a) This $4 billion bond act will provide funding to protect the state's water, parks and natural resources. It authorized $218 million for restoration and preservation of existing state park facilities and provided $30 million for lower cost coastal accommodation grants.
b) Not CZM driven
c) Outcomes: New/expanded and enhanced public access and recreational opportunities.

Administrative Penalty Authority for resolving Coastal Act public access violations

a) On July 1, 2014, the California Coastal Act was amended to add Public Resources Code Section 30821, which provided the California Coastal Commission ("Commission") with the authority to impose penalties administratively for public access violations of the Coastal Act. In the first year after enactment, Commission staff developed and began to implement a program to address public access violations of the Coastal Act using Section 30821. The maximum amount of the penalty under Section 30821 is based on 75% of the civil penalties provided for in civil litigation under Section 30820(b), yielding a maximum of $11,250 per day, for each violation.
b) This authority is CZM driven.
c) Outcomes: The administrative penalty authority has greatly enhanced the ability of the Commission to secure compliance with the Coastal Act and to protect the ability of all Californians to access and recreate along the entire stretch of the California coast. Note: although this change occurred during the previous assessment period (2010 – 2014), it was not included in the last assessment. In addition, this change has resulted in the accelerated resolution of significant public access violations thus enhancing improving public access in the state.

Procedural Guidance for Best Management Practices in meeting public access requirements

a) Commission staff produced a procedural guidance document for local government planners. The procedural guidance offers "best management practices" and other detailed information outlining the steps to take to ensure public access requirements of a coastal development permit have been met and that the public access is secured.
b) This was a CZM-driven change using 309 funds.
c) Outcome: Ensure public access is maximized/maintained. If these steps as described are not taken for locally issued permits, then the mitigation required by the local governments as part of those permits will not result in the intended public accessway.

Acquisition/Enhancements

Public Access OTDs Accepted October 2014 through 2019

Accepted and Managed By	Offer to Dedicate (Lateral)	Offer to Dedicate (Vertical)	Offer to Dedicate (Trail)	Offer to Dedicate (Other)	Other Legal Document (Trail)	Total
State Agency	29	0	30	2	1	62
Local Government	3	3	2	1	0	9
Nonprofit	6	2	1	0	0	9
Total	38	5	33	3	1	80

a) During the period of October 2014 through 2019, a total of 80 public access offers to dedicate (OTD) were accepted.
b) For the 80 new sites that were created since October 2014, these sites are a result of conditions imposed by the Commission through the regulatory program, thus they are CZM-driven changes.
c) Outcomes: Each of these sites is now permanently protected for public access purposes and therefore will add to the body of similarly protected lands. Each represents the opportunity for additional new accessways to and along the coast, as well as inland trail segments, once they are built and open for operation. Therefore, each site is a step in increasing the public's ability to get to and use our public lands

See also, *Status Report of Vertical Accessways Acquired by California Coastal Commission Actions from 1973 to 2015 in Northern California* report of vertical accessways, highlighted above in Resource Characterization no. 3. This report was prepared using Section 309 funds.

In addition, the State Coastal Conservancy (Conservancy), as part of California's networked federally approved coastal management program, administers state bond funding for public access projects including for acquisition of land for and enhancement of public access. The Conservancy completed public access projects in this category from 2015 – 2019; however, this information is not included in the assessment. Highlights of significant projects can be found in the Conservancy's annual reports for the years 2015 – 2019.[32] The Conservancy does not have an approved 309 strategy and does not use 309 funds for these projects.

3. Indicate if your state or territory has a publicly available public access guide. How current is the publication and how frequently it is updated?[33]

[32] https://scc.ca.gov/about/accomplishments/
[33] Note some states may have regional or local guides in addition to state public access guides.

Publicly Available Access Guide

Public Access Guide	Printed	Online	Mobile App
State or territory has? (Y or N)	Y	Y	Y
Web address (if applicable)	N/A	www.yourcoast.org	www.yourcoast.org
Date of last update	2014	2019	2019
Frequency of update	As needed	As needed	As needed

Enhancement Area Prioritization:

1. What level of priority is the enhancement area for the coastal management program?

   High ___X__
   Medium _____
   Low _____

2. Briefly explain the reason for this level of priority. Include input from stakeholder engagement, including the types of stakeholders engaged.

Maximizing public access and recreation to and along the coast is a core principle and fundamental to the implementation of the Coastal Act and California's coastal management program. It is also a high priority and goal of the Commission's updated 2021 – 2025 Strategic Plan. Public access, and the need to protect and maintain it, was one of the primary themes of early public input on the Coastal Commission Strategic Plan update, received through initial public engagement efforts. Stakeholder feedback on the Commission's Strategic Plan requested a priority be placed on protecting public access from effects of climate change and sea level rise, as well as from privatization. Some requested the Commission provide guidelines to local governments to address local beach access and management issues to maintain public accessways without compromising the ecological integrity of the beaches, as well as increasing equitable access for all people as a vital component to addressing social justice for low income residents and communities of color seeking recreational opportunities. Because of this, public access is a high priority for the 309 strategy.

Marine Debris

Section 309 Enhancement Objective: Reducing marine debris entering the nation's coastal and ocean environment by managing uses and activities that contribute to the entry of such debris. §309(a)(4)

PHASE I (HIGH-LEVEL) ASSESSMENT: *(Must be completed by all states.)*
Purpose: To quickly determine whether the enhancement area is a high-priority enhancement objective for the CMP that warrants a more in-depth assessment. The more in-depth assessments of Phase II will help the CMP understand key problems and opportunities that exist for program enhancement and determine the effectiveness of existing management efforts to address those problems.

Resource Characterization:

1. In the table below, characterize the existing status and trends of marine debris in the state's coastal zone based on the best-available data.

Existing Status and Trends of Marine Debris in Coastal Zone

Source of Marine Debris	Significance of Source (H, M, L, unknwn)	Type of Impact[34] (aesthetic, resource damage, user conflicts, other)	Change Since Last Assessment (↑, ↓, –, unkwn)
Beach/shore litter	H	Aesthetic, Resource Damage, User Conflict, Economic Impact, Habitat Impairment	↓
Land-based dumping	H	Aesthetic, Resource Damage, Economic Impact, Habitat Impairment	↑
Storm drains and runoff	H	Aesthetic, Resource Damage, User Conflict, Economic Impact, Habitat Impairment, Food Web Threats (from microplastics and microfibers)	↑
Land-based fishing (e.g., fishing line, gear)	M	Aesthetic, Resource Damage, User Conflict, Economic Impact, Habitat Impairment	–
Ocean/Great Lakes-based fishing (e.g., derelict fishing gear)	M	Aesthetic, Resource Damage, User Conflict, Economic Impact, Habitat Impairment	–

[34] You can select more than one, if applicable.

Derelict vessels	M	Aesthetic, Resource Damage, User Conflict, Economic Impact	Unknown
Vessel-based (e.g., cruise ship, cargo ship, general vessel)	M	Aesthetic, Resource Damage, User Conflict, Economic Impact, Habitat Impairment	Unknown
Hurricane/Storm	L	Aesthetic, Resource Damage, User Conflict, Economic Impact, Habitat Impairment	Unknown but likely ↑ – Correlates with storm drains and runoff
Tsunami	L	Aesthetic, Resource Damage, User Conflict, Economic Impact, Habitat Impairment	↓

2. If available, briefly list and summarize the results of any additional state- or territory-specific data or reports on the status and trends or potential impacts from marine debris in the coastal zone since the last assessment.

   The primary method for obtaining information about the quantity and composition of marine debris in California continues to be the annual California Coastal Cleanup Day, during which volunteers collect data on what they pick up. One promising trend is that the pounds of trash picked up per volunteer has dropped slightly but steadily for each of the past three years, which could be an indication of general improvement. Every year, the most frequently found items remain largely the same across the state, although the order in which the items rank can change from year to year and from region to region, or even city to city, depending on what new policies or regulations have been implemented. For example, the state as a whole has seen a steady drop in the number of single-use plastic bags collected on Coastal Cleanup Day since 2010 as a result of numerous cities, and now finally the state as a whole, enacting laws to ban the distribution of single-use plastic bags at grocery and convenience store checkout. We have reached the point that plastic bags, which previously ranked as high as number four on the top ten list of items collected during the cleanup, has dropped out of the top ten entirely. This is highly unusual for the otherwise stable data set that we typically see during our cleanups, and indicates both the effect of the policies themselves and the validity of using Coastal Cleanup Day data as a method of evaluation for the effectiveness of some policies enacted to curb marine debris.

   Regardless of this and a few other discrete examples, the most common items found during cleanups remain largely unchanged, with cigarette butts always accounting for the largest percentage of any single whole item collected, and single-use disposable plastics – mainly food and beverage packaging – accounting for the largest percentage by category.

An emerging issue that has been of concern since our last report has been our growing understanding of the amount and impact of microplastics (currently defined as plastic particles smaller than 5 mm) and microfibers on our marine and aquatic environments. A recent three-year study conducted by the San Francisco Estuary Institute and the 5 Gyres Institute found that microplastics and microfibers are being discharged into San Francisco Bay from both treated wastewater and stormwater, with the amount coming from stormwater averaging 300 times that coming from treated wastewater. Altogether, over 7 trillion microplastics are entering San Francisco Bay annually, an amount far greater than those found in similar studies in other areas. California has already enacted several laws aimed at assessing and establishing a strategy for addressing microplastics, so additional research and reporting will be available during the next assessment.

The body of literature surrounding marine debris has been growing near exponentially since the last assessment. While much of that research is germane to the Commission's work, such as examining the toxicity of plastic debris in marine environments or in marine species, it is not necessarily specific to California.

Management Characterization:

1. Indicate if the approach is employed by the state or territory and if there has been any significant state- or territory-level management changes (positive or negative) for how marine debris is managed in the coastal zone.

Significant Changes in Marine Debris Management

Management Category	**Employed by State/Territory** (Y or N)	**CMP Provides Assistance to Locals that Employ** (Y or N)	**Significant Changes Since Last Assessment** (Y or N)
Marine debris statutes, regulations, policies, or case law interpreting these	Y	Y	Y
Marine debris removal programs	Y	Y	Y

2. For any management categories with significant changes, briefly provide the information below. If this information is provided under another enhancement area or section of the document, please provide a reference to the other section rather than duplicate the information:
    a. Describe the significance of the changes;
    b. Specify if they were 309 or other CZM-driven changes; and
    c. Characterize the outcomes and likely future outcomes of the changes.

Marine debris statutes, regulations, policies, or case law

Since the last assessment, there has been increasing attention and policy effort around marine debris and plastic pollution specifically:

Numerous new laws have been enacted to address item-specific elements of marine debris. A sampling of a few would be:

State Legislation

- a) A statewide law, enacted in 2014 and upheld by voter initiative in 2016, to ban the distribution of single-use disposable plastic bags from checkout counters at grocery stores, convenience stores, and pharmacies.
  b) This was not a 309 or other CZM-driven change.
  c) The outcome of this change, as described above, is the dramatic decrease in plastic bag litter found during cleanup events.
- a) In 2019, the state passed a "straws-on-request" law that banned sit-down restaurants from distributing plastic straws unless specifically requested by the customer.
  b) This was not a 309 or other CZM-driven change.
  c)The likely outcome of this change will be the decrease in plastic straw litter found during beach cleanup events.
- a) In 2018, the state passed a law requiring the State Water Resources Control Board to both establish a formal definition of "microplastic" (adopted June 3, 2020) and then establish a standard for a level of microplastic in drinking water that would be considered "safe" (expected by June 2021).
  b) This was not a 309 or other CZM-driven change.
  c) The outcome will be to reduce micro plastic in drinking water.
- a) The number of cities that have now implemented bans of polystyrene foam foodware, whether in government-only facilities or also in retail, has now reached 120, up from ~80 at the time of the last assessment.
  b) This was not a 309 or other CZM-driven change.
  c) The likely outcome of this is to find less expanded polystyrene as debris littering California's shorelines.

Storm Water Program – "Trash Amendments" and Implementation Program

a) In 2017, the State, in cooperation with the federal EPA, finalized the trash amendments to the state's stormwater permitting process, requiring all municipalities to submit permit amendments that address trash traveling through their stormwater systems into receiving water bodies. While there are different "tracks" that the municipalities can pursue to achieve their goals, all affected municipalities must strive to achieve zero discharge of trash to receiving water bodies within the time period of the approved permits, generally within the next 10 to 14 years.
b) This was not a 309 or other CZM-driven change.
c) The outcomes of this change are multiple: increased local action around trash, including local bans on problematic debris items; greater publicity around debris issues; increased

local actions, such as street sweeping, in order to prevent trash from entering the stormwater system; ultimately resulting in cleaner shorelines throughout the state.

Ocean Litter Strategy

a) In 2018, the California Ocean Protection Council completed the revisions and updates of its Ocean Litter Strategy, first adopted in 2009. This strategy is not a law or regulation; it does, however, set a framework for laws, regulations, and actions to be taken by both the State and the marine debris community within California over the next 6 years. The Commission will play a role in enhancing educational efforts around plastic pollution, increasing volunteer-led cleanup efforts, and continuing its role in collaborating with other state agencies on the OPC's Plastic Pollution Steering Committee.
b) This was not a CZM-driven action.
c) The result of this change is to provide a statement about the importance of addressing marine debris and to provide a roadmap for future work around marine debris.

Marine Debris Removal Programs

Since the last assessment, there have been expansions of numerous marine debris removal programs in California:

Coastal Cleanup Day and Adopt-A-Beach programs

a) The Coastal Commission's California Coastal Cleanup Day and Adopt-A-Beach programs continue to grow, reaching new areas (especially within inland California), attracting more volunteers, and inspiring more frequent cleanups. The average number of volunteers at the annual Coastal Cleanup Day has surpassed 70,000 – an increase of an average of 10,000 volunteers from the last assessment. Additionally, in 2017, the number of individual cleanups taking place on Coastal Cleanup Day passed the 1,000 mark for the first time and has remained above that since.
b) This is a CZM-driven change, but no 309 funding was used.
c) The outcome of these additional cleanups and volunteers is cleaner beaches on a more frequent basis, and more Californians educated about the sources and impacts of marine debris.

Boating Clean and Green Program

a) Since 2009, the Commission's Boating Clean and Green Program, a partnership with the California Department of Boating and Waterways, has installed a total of 290 on-shore fishing line recycling stations, located at piers, marinas, boat launch ramps, etc. throughout the state. As of October 2019, 1,846 pounds of fishing line have been collected and recycled. Stretched out, this line would stretch from San Francisco to La Pintada, Panama. In addition, commission staff worked with the Greater Farallones National Marine Sanctuaries to install containers on 5 new charter boats in the San Francisco Bay Area. Since 2016, a total of 17 stations have been installed. As of October 2019, 190 pounds of fishing line have been collected and recycled by the On-Board Fishing Line Recycling Program.
b) This is a CZM-driven change, but no 309 funding was used.

c) The outcome of the growth in these programs has been to prevent large amounts of fishing line, which is an incredibly hazardous material for marine animals to encounter, from becoming marine debris.

Enhancement Area Prioritization:

1. What level of priority is the enhancement area for the coastal management program?

High	__X___
Medium	_____
Low	_____

2. Briefly explain the reason for this level of priority. Include input from stakeholder engagement, including the types of stakeholders engaged.

Marine debris continues to grow in importance as a public issue, and information and awareness of the topic has exploded over the past 5 years. Information about the amount of plastic entering the world's oceans each year, the growing awareness of the toxicity of plastic additives and their effect on the food web, and the heightened publicity around the emerging issue of microplastics and microfibers have all contributed to greatly increased public interest in not only the issue of marine debris, but also the call for finding solutions to the problem. In comments on the agency's Strategic Plan, many of the comments received from members of public highlighted the need for the Commission to address problems of ocean pollution and plastics. Given the severity of the issue and public concern, it is a high priority enhancement area for the Commission.

Cumulative and Secondary Impacts

Section 309 Enhancement Objective: Development and adoption of procedures to assess, consider, and control cumulative and secondary impacts of coastal growth and development, including the collective effect on various individual uses or activities on coastal resources, such as coastal wetlands and fishery resources. §309(a)(5)

PHASE I (HIGH-LEVEL) ASSESSMENT:

Purpose: To quickly determine whether the enhancement area is a high-priority enhancement objective for the CMP that warrants a more in-depth assessment. The more in-depth assessments of Phase II will help the CMP understand key problems and opportunities that exist for program enhancement and determine the effectiveness of existing management efforts to address those problems.

Resource Characterization:

1. Using National Ocean Economics Program Data on population and housing,[35] please indicate the change in population and housing units in the state's coastal counties between 2012 and 2017. You may wish to add additional trend comparisons to look at longer time horizons as well (data available back to 1970), but at a minimum, please show change over the most recent five-year period data is available (2012-2017) to approximate current assessment period.

Trends in Coastal Population and Housing Units (includes SF Bay counties)

	2012	2017	Percent Change (2012-2017)
Number of people	28,365,978	29,385,852	3.6%
Number of housing units	10,280,536	10,582,675	2.94%

Of the housing units above, the 15 coastal counties adjacent to the outer coast indicate housing units increased 2.8% to a total of 7,787,551 in the year 2017.

Also see trends demonstrated in the chart below, showing new housing units built annually in California (coastal and non-coastal counties) from 2001-2017. These broad trends show how the cycle of housing unit growth following the Great Recession began around 2009 after the earlier peak in 2004-2005.

[35] www.oceaneconomics.org/Demographics/PHresults.aspx. Enter "Population and Housing" section and select "Data Search" (near the top of the left sidebar). From the drop-down boxes, select your state, and "all counties." Select the year (2012) and the year to compare it to (2017). Then select "coastal zone counties."

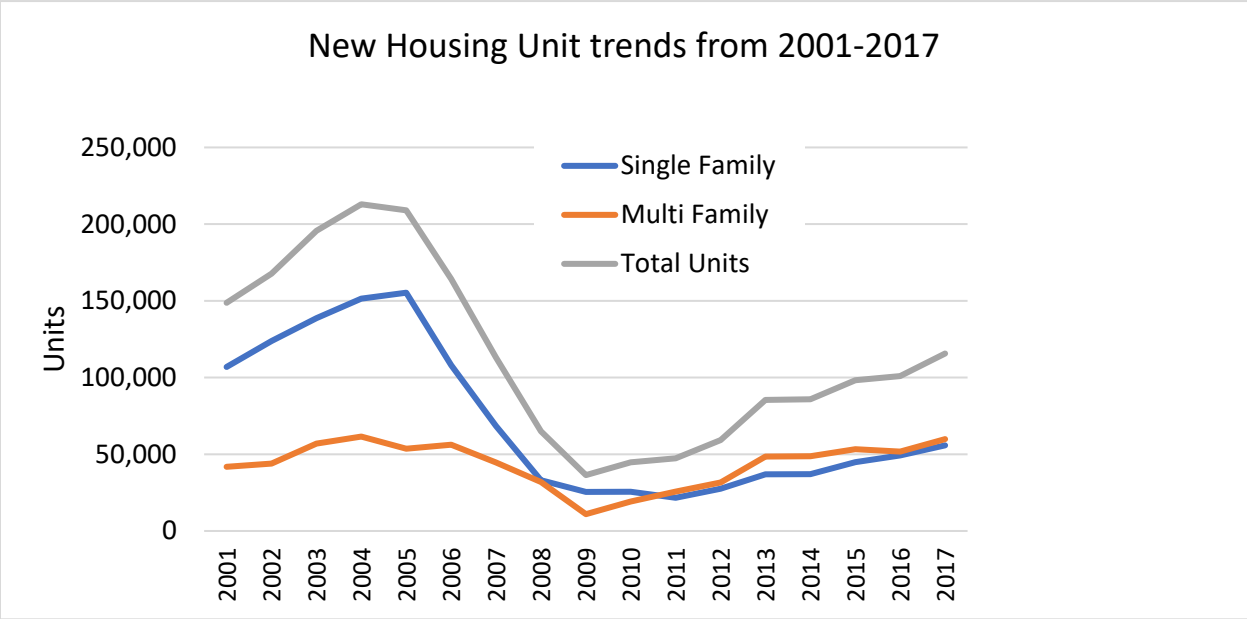


Figure 1. California new housing unit data from 2001-2017. (Source: CIRB (Construction Industry Research Board), a service provided by the California Homebuilding Foundation (CHF), a building permit data source for the State of California)

2. Using provided reports from NOAA's Land Cover Atlas,[36] please indicate the status and trends for various land uses in the state's coastal counties between 1996 and 2016. You may use other information and include graphs and figures, as appropriate, to help illustrate the information. Note that the data available for the islands may be for a different time frame than the time periods reflected below. In that case, please specify the time period that the data represent. Also note that Puerto Rico currently only has data for one time point so will not be able to report trend data. Instead, Puerto Rico should just report current land use cover for developed areas and impervious surfaces.

Because the Land Cover Atlas was not available for the time period 1996-2016 at the time of this assessment, the NLCD datasets from 2001 to 2016 were used to explore trends. These data sets were created using a more consistent method, so they were chosen for comparison. Since 2001, there has been significant forested cover loss in coastal counties, but a gain in scrub/shrub cover and developed land. The timeframe of 2001-2016 encompasses a development growth period that peaked in 2005. If 1996 datasets were analyzed, considerably more area would likely be shown to convert to developed uses, demonstrating the late 90s and early 2000s housing boom that preceded the Great Recession.

[36] www.coast.noaa.gov/digitalcoast/tools/lca.html. Note that the 2016 data will not be available for all states until later Summer 2019. NOAA OCM will be providing summary reports compiling each state's coastal county data. The reports will be available after all of the 2016 data is available.

Distribution of Land Cover Types in Coastal Counties

Land Cover Type	Land Area Coverage in 2016 (Acres)	Gain/Loss Since 2001 (Acres)*
Developed, High Intensity	1,088,034	70,225
Developed, Low Intensity	602,643	8,237
Developed, Open Space	1,018,782	725
Grassland	3,267,930	57,624
Scrub/Shrub	6,923,423	334,630
Barren Land	411,981	-8,003
Open Water	420,064	-10,847
Agriculture	766,883	43,385
Forested	5,712,394	-498,269
Woody Wetland	91,078	935
Emergent Wetland	151,875	1,357

*Note: Data Source was https://www.mrlc.gov/national-land-cover-database-nlcd-2016. National Land Cover Database (NLCD) datasets for 2001 and 2016 were used due to unavailability of Land cover atlas for California at the time of analysis. The coastal counties include outer coast counties and only the SF Bay area counties of San Mateo, San Francisco, Marin, and Sonoma.

3. Using provided reports from NOAA's Land Cover Atlas,[37] please indicate the status and trends for developed areas in the state's coastal counties between 1996 and 2016 in the two tables below. You may use other information and include graphs and figures, as appropriate, to help illustrate the information. Note that the data available for the islands may be for a different time frame than the time periods reflected below. In that case, please specify the time period the data represents.

   According to the National Land Cover Database (NLCD), which was selected to compare the 2016 dataset with one that was constructed using similar methods, the percent of land area developed in coastal counties increased from 12.9% to 13.9% from 2001 to 2016. The percent net change for developed land in the 15-year period from 2001-2016 reflects a low increase (< 1%) in developed area. Developed features are made up of impervious surfaces, but also include the grasses that surround these man-made impervious features. Four categories of NLCD comprise the "developed" type of land use:

   1. Developed, High Intensity - Each pixel comprises 80 to 100 percent concrete, asphalt, or other constructed materials. Vegetation, if present, occupies less than 20 percent

[37] www.*coast.noaa.gov/digitalcoast/tools/lca.html*. Note that the 2016 data will not be available for all states until later Summer 2019. NOAA OCM will be providing summary reports compiling each state's coastal county data. The reports will be available after all of the 2016 data is available.

of the landscape. This class includes heavily built-up urban centers and large constructed surfaces in suburban and rural areas with a variety of land uses.

2. Developed, Medium Intensity - Each pixel comprises a mixture of constructed materials and vegetation or other land cover. Constructed materials account for 50 to 79 percent of total area. This class commonly includes multi- and single-family housing areas, especially in suburban neighborhoods, but may include all types of land use.
3. Developed, Low Intensity - Each pixel comprises a mixture of constructed materials and substantial amounts of vegetation or other land cover. Constructed materials account for 21 to 49 percent of total area. This class commonly includes single-family housing areas, especially in rural neighborhoods, but may include all types of land use.
4. Developed, Open Space - Each pixel comprises a mixture of some constructed materials, but mostly managed grasses or low-lying vegetation planted in developed areas for recreation, erosion control, or aesthetic purposes. Constructed surfaces account for less than 20 percent of total land cover.

The use of these categories could mask how lower density uses are developed and redeveloped into larger footprints or densified, as well as miss the transformation due to lack of resolution. The NLCD dataset is based on 30m pixels (medium resolution) and may not capture small areas accurately.

How Land Use Is Changing in Coastal Counties*

Land Cover Type	**Areas Lost to Development Between 2001-2016** (Acres)
Barren Land	10,542
Emergent Wetland	482
Woody Wetland	248
Agriculture	13,668
Scrub/Shrub	17,277
Grassland	35,499
Forested	936
Open Water	535

* Data source: NLCD 2016 and NLCD 2001. Note that the NLCD dataset (30 m resolution) is not C-CAP high-resolution (1-5 m). The areas lost to development were extracted for the 15 outer coast counties of California.

It is important to note that accurately mapping diverse land cover class changes in a large region using satellite imagery is difficult. In addition, separating changes between land cover condition and land cover conversion over large and diverse landscapes often requires special treatment and strategies beyond the conventional spectral-only change detection. This land use change table only reflects broad trends between 2001 and 2016. It indicates grassland and scrub/shrub uses in coastal counties have been transformed into developed areas the most over the 2001-2016 period.

4. Briefly characterize how the coastal shoreline has changed in the past five years due to development, including potential changes to shoreline structures such as groins, bulkheads and other shoreline stabilization structures, and docks and piers. If available, include quantitative data that may be available from permitting databases or other resources about changes in shoreline structures.

   - Hard armoring structures such as seawalls and revetments have been the typical historical response to coastal erosion. In 1971, the US Army Corps of Engineers estimated that 27.1 miles of armoring protected the California shoreline.[38] By 1998, after the damaging El Nino events of 1977–78, 1982–83, and 1997–98, estimates of armoring grew to 110 miles (Adelman and Adelman, 2013, as reported in 2019 by Griggs and Patsch)[39], though the Coastal Commission's current 2019 estimate for the outer California coast is approximately 123.5 miles (Mapping Unit, California Coastal Commission, Coastal Armoring Database, June 2019).[40]

   - Approximately 4.15% (representing 470 of 11,324 items) of CDPS, Appeals, EPs, and Post-Cert permits from 2015 to June 2019 reviewed by the Commission were for coastal armoring or armoring-related projects. Of just CDPs and Appeals, 6.1% of 2015-2019 items were for coastal armoring or armoring-related projects.

5. Briefly summarize the results of any additional state- or territory-specific data or reports on the cumulative and secondary impacts of coastal growth and development, such as water quality, shoreline hardening, and habitat fragmentation, since the last assessment.

   Cumulative and secondary impacts of coastal growth and development can have adverse impacts on water quality, public access, and sensitive habitats (e.g. ESHA, wetlands and beaches). Polluted ocean waters pose a significant health risk to millions of ocean users in California. Storm drain runoff is typically the greatest source of pollution to local beaches, potentially contaminated with motor oil, animal waste, pesticides, yard waste and trash. After a rain, indicator bacteria densities often far ex[41] assessed the average water quality grade for 500 California beaches and found only 54% of beaches got an A or B grade during wet weather. This is an eight percent decrease from the state's five-year average. However, the summer monitoring indicated 94% of the assessed California beaches had grades of A or B.

[38] USACE (U.S. Army Corps of Engineers) and Dames & Moore, 1971. National Shoreline Study: California Regional Inventory. San Francisco, California: Department of Defense, USACE, South Pacific Division, 106p.
[39] Adelman, K. and Adelman, G., 2013. California Coastal Records Project. https://www.californiacoastline.org Griggs, G. and Patsch, K., 2019. The protection/hardening of California's coast: Times are changing. *Journal of Coastal Research*, 35(5), 1051–1061. Coconut Creek (Florida), ISSN 0749-0208.
[40] Mapping Unit, California Coastal Commission, Coastal Armoring Database, June 2019
[41] https://healthebay.org/wp-content/uploads/2019/06/BRC_2019_FINAL.pdf, Assessed 2/4/2020.

Hard armoring, such as seawalls and revetments, reflect wave energy and constrain natural landward migration of the shoreline, generally leading to the loss of recreational beach area, impacts on adjacent shore, and negative effects on ecological resources. In a literature review Dugan et al. (2018) found a secondary effect of hard armoring is that when sea level rises, nearly all beaches will shrink.[42] A 2017 USGS study found that Southern California could lose up to two-thirds of its beaches by 2100, if sea level rises 3 to 6 feet.[43]

Since the last assessment, Coastal Commission staff' initiated work on developing a California Coastal Armoring Database (CCAD), a comprehensive statewide geospatial inventory of shore parallel armoring structures designed to help answer key management questions related to the impacts of armoring on the shoreline. The CCAD will assist research and planning at the local, regional and state level by providing data for hazard risk assessments, sea level rise planning, tracking armoring projects, and public access assessments. The database will allow enhanced tracking of armoring activity by including permit history, allowing staff to better monitor and anticipate changes to public access and coastal resources. While no 309 funds were used for the database, it is CZM program driven. The outcome of this work will ensure more efficient and effective use of data on evaluating the cumulative impact of armoring for land use policy analysis and development of sea level rise adaptation strategies that can address beach loss.

In addition to loss of beach due to hard armoring, cumulative effects of development can have adverse effects on vulnerable coastal ecosystems (such as wetlands, riparian areas, coastal sage scrub, chaparral, grasslands, and woodlands) and ecosystem functions (such as carbon sequestration, water purification, habitat provision, and pollination). A 2018 study found that natural lands in California will experience more exposure to sea level rise than agricultural or developed areas.[44] These vulnerable habitats need space for coastal processes such as erosion, accretion, transgression, and transition to maintain their health and ability to provide ecosystem functions. Improving sediment delivery and coastal processes that nourish shorelines and wetlands, for example, could improve resilience to sea level rise and maintain area over time.

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[42] Dugan, J.E., Emery, K.A., Alber, M. *et al.* Generalizing Ecological Effects of Shoreline Armoring Across Soft Sediment Environments. *Estuaries and Coasts* **41,** 180–196 (2018). https://doi.org/10.1007/s12237-017-0254-x

[43] Vitousek, S., Barnard, P. L., Limber, P., Erikson, L., & Cole, B. (2017). A model integrating longshore and cross-shore processes for predicting long-term shoreline response to climate change. Journal of Geophysical Research: Earth Surface, 122(4), 782-806.

[44] Heady, W. N., B. S. Cohen, M. G. Gleason, J. N. Morris, S. G. Newkirk, K. R. Klausmeyer, H. Walecka, E. Gagneron, M. Small. 2018. *Conserving California's Coastal Habitats: A Legacy and a Future with Sea Level Rise*. The Nature Conservancy, San Francisco, CA; California State Coastal Conservancy, Oakland, CA. 143 pages. https://www.conservationgateway.org/ConservationPractices/Marine/crr/library/Documents/TNC_SCC_CoastalAssessment_lo%20sngl.pdf

Additional research, data collection, monitoring, and focal investigations are needed to better inform these types of adaptation strategies.

Management Characterization:

1. Indicate if the approach is employed by the state or territory and if there have been any significant state-level changes (positive or negative) in the development and adoption of procedures to assess, consider, and control cumulative and secondary impacts of coastal growth and development, including the collective effect on various individual uses or activities on coastal resources, such as coastal wetlands and fishery resources, since the last assessment.

Significant Changes in Management of Cumulative and Secondary Impacts of Development

Management Category	**Employed by State or Territory** (Y or N)	**CMP Provides Assistance to Locals that Employ** (Y or N)	**Significant Changes Since Last Assessment** (Y or N)
Statutes, regulations, policies, or case law interpreting these	Y	N	Y
Guidance documents	Y	Y	Y
Management plans (including SAMPs)	Y	Y	Y

2. For any management categories with significant changes, briefly provide the information below. If this information is provided under another enhancement area or section of the document, please provide a reference to the other section rather than duplicate the information:
    a. Describe the significance of the changes;
    b. Specify if they were 309 or other CZM-driven changes; and
    c. Characterize the outcomes or likely future outcomes of the changes.

<u>Statutes, regulations, policies, or case law</u>

New Accessory Dwelling Unit Legislation[45]

a) New state requirements regarding local government regulation of "accessory dwelling units" (ADUs) became effective on January 1, 2017. The creation of new ADUs in existing residential areas is a strategy for increasing the supply of lower-cost housing in the coastal zone in a way that avoids significant adverse impacts on coastal resources.
b) These were not CZM driven changes.

[45] https://www.hcd.ca.gov/policy-research/AccessoryDwellingUnits.shtml
https://documents.coastal.ca.gov/assets/rflg/CCC_guidance_memo_re_ADUs.pdf

c) An expected future outcome is an increased supply of lower cost housing throughout California, including in the coastal zone.

New Lower Cost Coastal Accommodation Program

a) AB 250 passed in 2017 requires the State Coastal Conservancy to develop and implement a Lower Cost Coastal Accommodations Program. The Program's purpose is to improve the availability of lower-cost accommodations within one and one-half miles of the coast in response to the cumulative impact of loss of low to moderate cost accommodations in coastal areas. The new law also authorizes the Coastal Commission to reclaim any in-lieu fee paid by developers not expended within seven years of its deposit and reassign the fee for use for low-cost coastal accommodation and visitor-serving facilities.
b) This was a CZM driven change.
c) Expected outcomes include increased lower cost accommodation availability.

Environmental Justice Amendments to Coastal Act and Environmental Justice Policy

a) In 2016, AB 2616 was enacted to amend the state's Coastal Act, giving the Commission authority to specifically consider environmental justice when making coastal permit decisions. The bill also required "one of the members of the commission appointed by the Governor to reside in, and work directly with, communities in the state that are disproportionately burdened by, and vulnerable to, high levels of pollution and issues of environmental justice." To implement this new authority and to provide clarity to Commissioners, staff, members of the public and affected communities its application, Commission staff developed an Environmental Justice (EJ) Policy. The EJ Policy was adopted by the Commission on March 8, 2019. The policy contains a policy statement, a statement of EJ principles and a suite of committed actions to ensure implementation of the policy. Priorities include addressing environmental justice in climate change, coastal access, housing, tribal concerns, working with local government, and with accountability, transparency, and public participation.

   In terms of cumulative and secondary effects, with respect to coastal hazards from of climate change/sea level rise, environmental justice communities will likely face disproportionate impacts that may exacerbate existing environmental injustices. Some of these impacts include disproportionate burdens such as increased inland temperatures causing public health imperatives for access to cooler coastal temperatures; heat exacerbating poor air quality; sea level rise, coastal erosion, and some adaptation measures, such as sea walls reducing access to the coast and ocean and coastal recreation areas for all residents; lower-income residents and renters more likely to be displaced by coastal impacts such as flooding; and low-income communities more vulnerable to water quality and supply issues that can result from climate impacts like seawater intrusion, contamination from extreme storm events, and drought. There are also cumulative effects of development with respect to public access in terms of barriers to public access and other social-economic factors limiting public use and recreation along the coast.
b) These were CZM driven changes.

c) The outcome of this change is that Commission will be required to analyze how its decisions will affect all communities and to ensure the equitable distribution of benefits of Commission decisions to all members of the public. The effect of this policy change will span all coastal resources and enhancement areas.

Senate Bill 1, the Road Repair and Accountability Act of 2017 (SB 1)

a) Senate Bill 1, the Road Repair and Accountability Act of 2017, was signed into law on April 28, 2017. This legislative package invests $54 billion over the next decade to fix roads, freeways and bridges in communities across California and puts more dollars toward transit and safety. Funds are split equally between state and local investments. Some Caltrans SB1 Grants will be used to advance adaptation planning for coastal zone projects that strengthen the resilience of transportation assets, natural and urbanized areas, and vulnerable community members.
b) These were not CZM driven changes, but CZM agencies and local government partners will be using funds on adaptation projects.
c) An expected future outcome is an increased number of projects funded to strengthen the climate change resilience of transportation assets in the coastal zone.

<u>Guidance Documents</u>

a) Local Coastal Programs are a key mechanism to control cumulative and secondary impacts of coastal growth and development. Significant guidance and assistance were provided in order to enhance the LCP Program and to ensure LCP updates addressed emerging issues and new information. Many of these policy guidance documents are highlighted in Phase I Assessments for SAMP and Coastal Hazards. Guidance documents below were all designed to share best practices and to provide local coastal governments suggested policy and implementation provisions to incorporate into Local Coastal Programs.

- LCP Update Guide: The guidance addresses new and emerging climate information on implementing key policy issues under the Coastal Act, with 2017 updates to address coastal hazards, water quality, and public access.
    i. – Part I - Section 8. Coastal Hazards, 2/14/2017.[46] Note that coastal hazards guidance is also described in the Coastal Hazards Assessment Section
    ii. LCP Update Guide – Part I - Section 3. Water Quality, 3/29/17[47]
    iii. LCP Update Guide – Part I - Section 1. Public Access, 4/4/17[48]
- The Model LCP Water Quality Guidance[49] provides model Local Coastal Program (LCP) policies and standards that are appropriate for updating the water quality elements of an LCP's Land Use Plan (LUP) and Implementation Plan (IP) to address development that

[46] https://www.coastal.ca.gov/rflg/lcp-planning.html
[47] https://documents.coastal.ca.gov/assets/lcp/LUPUpdate/LUP_Update_Guide_Ch_3_Water_Quality_UPDATED_3.29.17_Final.pdf
[48] https://documents.coastal.ca.gov/assets/lcp/LUPUpdate/LUP_Guide_Update_1_Public_Access_updated_4.4.17_FINAL.pdf
[49] https://www.coastal.ca.gov/water-quality/local-gov/

requires a Coastal Development Permit and has the potential for adverse water quality or hydrology impacts to coastal waters.

- The California Coastal Commission Sea Level Rise Policy Guidance was adopted in 2015 and updated in 2018, providing guidance for local governments in developing LCPs and in reviewing coastal development permits.
- Memos to help local governments understand how to carry out their Coastal Act obligations while also implementing state requirements regarding the regulation of accessory dwelling units ("ADUs") and junior accessory dwelling units ("JADUs").
- The Model LCP Water Quality Guidance provides model Local Coastal Program (LCP) policies and standards that are appropriate for updating the water quality elements of an LCP's Land Use Plan (LUP) and Implementation Plan (IP) to address development that requires a Coastal Development Permit and has the potential for adverse water quality or hydrology impacts to coastal waters.
- Short-term rental guidance and updated Commission action chart that identifies the general regulatory approach and key regulatory parameters of relevant Local Coastal Program Amendments.
- Training modules that detail the history and importance of the Coastal Management Program and that describe the Coastal Act requirements and protocols for local governments to record legal document related public access and open space.
- Cannabis guidance for local governments to inform and assist coastal jurisdictions in developing ordinances to address cannabis cultivation and other cannabis-related development activities.
- Agricultural guidance documents prepare for local governments and posted on the Commissions website including information related to supplemental land uses, managing public access in agricultural areas, agriculture as a means of carbon storage, and a detailed Informational Guide for the Permitting of Agricultural Development (2017).
- Procedural guidance for meeting public access requirements (see Phase I Public Access).
- Development and adoption of the Commission's Environmental Justice Policy integrates the principles of environmental justice, equality, and social equity into all aspects of the Commission's program. The policy can be used as a guide for local governments understanding of environmental justice issues to be included in future LCPs but more detailed guidance for local governments will be developed as described in the Implementation Section of the environmental justice policy.
- Procedural guidelines for maintaining a digital library of certified LCPs.

b) All of these were CZM driven changes. Section 309 funds were used for all guidance documents except for water quality and environmental justice

c) The outcomes from guidance contained in documents above support updated LCP policies and implementing regulations through LCP Amendment certified by the Commission.

Caltrans and Coastal Commission Plan for Improved Agency Partnering

a) Caltrans and the Coastal Commission developed a framework to guide each agency in fostering the integration of our respective planning procedures, addressing pressing coastal management issues such as climate change and ensuring positive communication and quick resolution of conflicts as they might arise. In 2015, management from Caltrans and the Commission designated an Integrated Planning Team (IPT) to continue refinements to the working partnership. The IPT identified ways to improve communication and coordination during the earlier phases of planning processes, with the expectations that subsequent transportation projects will reflect LCP and Coastal Act policies in ways that will streamline their regulatory reviews and advance shared goals from both agencies Strategic Plans. In December 2016, the IPT released the Plan for Improved Agency Partnering that contained recommendations to increase and improve coordination and communication between Caltrans and the Coastal Commission. [50]
b) These were CZM driven changes. No Section 309 were used.
c) The Agreement does not change or supersede official policy, guidance, or regulations, but may signal a need to update policies and/or guidance to better reflect partnering commitments and desired outcomes. The Commission will continue to support adaptation planning projects and collaborate with Caltrans to support efforts aimed at increasing sustainability and contending with climate change issues, particularly in relation to sea level rise, as well as to meet multimodal access goals, focusing on the completion of the California Coastal Trail. This Plan is timely, as Caltrans prepares to spend billions of new dollars on transportation-related activities that will be provided by new legislation (SB 1).

Administrative Guide for Use of Compendium of Coastal Development Permit (CDP) Sample Special Conditions, and updated Compendium of CDP Sample Conditions

a) The updated compendium and the administrative guide for use provides Commission analysts a clear and consistent source of information for the application of special conditions that can be used for preparing recommendations to the Commission for action on permit applications that raise similar issues. The document updates conditions frequently used in regulatory permit review; however, it is not regulation.
b) This was a CZM driven change using Section 309 funding.
c) Benefits include more consistent state-wide application of permit conditions, simplified language and improved applicant compliance with permit conditions.

Management Plans

See discussion in SAMP section for details on new or updated LCPs and in Ocean Resources for regional sediment management plans.

[50] https://documents.coastal.ca.gov/assets/caltrans/Approved-Plan-for-Improved-Agency-Partnering-First-Edition.pdf

Enhancement Area Prioritization:

1. What level of priority is the enhancement area for the coastal management program?

High	_____
Medium	__x___
Low	_____

2. Briefly explain the reason for this level of priority. Include input from stakeholder engagement, including the types of stakeholders engaged.

Cumulative impacts of development affect coastal resources, including public access. Most notably for the assessment period are the cumulative impacts of shoreline development and for hard armoring that is used to protect structures from flooding and erosion. Members of public and other stakeholders raised concerns about the impact shoreline development during early engagement on the Commission's 2021-2025 Strategic Plan, though with a wide range of proposed policy solutions. The Cumulative and Secondary Impacts enhancement area has considerable overlap with the Special Area Management Plan and Coastal Hazards sections, which are considered high priority. Thus, many of the emerging issues related to cumulative and secondary impacts of development will be covered in these higher priority enhancement sections.

Special Area Management Planning

Section 309 Enhancement Objective: Preparing and implementing special area management plans for important coastal areas. §309(a)(6)

The Coastal Zone Management Act defines a Special Area Management Plan (SAMP) as "a comprehensive plan providing for natural resource protection and reasonable coastal-dependent economic growth containing a detailed and comprehensive statement of policies; standards and criteria to guide public and private uses of lands and waters; and mechanisms for timely implementation in specific geographic areas within the coastal zone. In addition, SAMPs provide for increased specificity in protecting natural resources, reasonable coastal-dependent economic growth, improved protection of life and property in hazardous areas, including those areas likely to be affected by land subsidence, sea level rise, or fluctuating water levels of the Great Lakes, and improved predictability in governmental decision making."

PHASE I (HIGH-LEVEL) ASSESSMENT: *(Must be completed by all states and territories.)*
Purpose: To quickly determine whether the enhancement area is a high priority enhancement objective for the CMP that warrants a more in-depth assessment. The more in-depth assessments of Phase II will help the CMP understand key problems and opportunities that exist for program enhancement and determine the effectiveness of existing management efforts to address those problems.

Resource Characterization:

1. In the table below, identify geographic areas in the coastal zone subject to use conflicts that may be able to be addressed through a special area management plan (SAMP). This can include areas that are already covered by a SAMP but where new issues or conflicts have emerged that are not addressed through the current SAMP.

Geographic Area	Opportunities for New or Updated Special Area Management Plans
	Major conflicts/issues
Coastal zone	33 LCPS remain to be certified in the coastal zone. Approximately 50 Areas of Deferred Certification remain to be incorporated into a certified LCP. Of the 93 certified LCP segments, 34 have not been updated in any part; 42 have been updated only in part and may need future comprehensive updates to address new information and changed conditions.

Within California's Coastal Management Plan (CCMP), Local Coastal Programs (LCPs) are considered the equivalent of the CZMA Section 309(a)(6) definition of *Special Area Management Plans (SAMPs)* for important coastal areas. Under the California Coastal Act, local

governments are required to complete LCPs which, as defined by the Coastal Act, should include: (a) land use plans, (b) zoning ordinances, (c) zoning district maps, and (d) within sensitive coastal resources areas, other implementing actions that are sufficiently detailed to indicate the kinds, location, and intensity of land uses, the applicable resource protection and development policies and, where necessary, a listing of implementing actions. Once certified by the Coastal Commission, LCPs allow primary coastal permitting authority to shift from the Coastal Commission to the local government. In addition, the Commission continues to review and maintain special area plans for the four industrial ports, public works planning for special districts, including important State Park units, long range development plans for university properties, plans for the siting of energy facilities, and review of management plans for federal properties.

An Area of Deferred Certification (ADC) refers to a geographic area that is eligible for inclusion within a local government's Local Coastal Program (LCP) but was not certified as part of the original certification review or through any subsequent amendments of the LCP. This could occur if the planning and management problems for that geographic area were especially difficult to resolve. Deferring certification may allow more time to resolve such problems while certifying and delegating most permit authority over most of the jurisdiction under a certified LCP. But until an LCP is certified for an ADC, the Commission retains permit authority in that area.

LCPs that have been certified or updated in whole or in part have incorporated newer policies and development standards to reflect new state laws, land use planning trends, newer scientific information (many have incorporated policies regarding sea level rise for example), changed conditions, and new and emerging issues. As a result, they are better equipped to guide review of development proposals in a manner consistent with the California Coastal Act going forward for the next decade.

2. If available, briefly list and summarize the results of any additional state- or territory-specific data or reports on the status and trends of SAMPs since the last assessment.

Commission staff annually prepare the LCP Status Report.[51] The report describes status of LCPs overall and summarizes significant LCP actions throughout the fiscal year. The Commission also has an ongoing responsibility to monitor LCP implementation through its post-certification monitoring activities. These efforts include reviewing notices of pending local hearings and pending non-hearing actions; reviewing notices of final local action; and providing notice of appealable development to the Commission. Commission staff review of local coastal development permit items provide an opportunity to verify if the local jurisdiction is carrying out coastal permitting consistent with the certified LCP. Significant inconsistencies or high number of permit appeals would trigger consideration of whether an update to an LCP is needed.

[51] https://documents.coastal.ca.gov/assets/rflg/LCPStatusSummaryChart_October%202020.pdf

More specific to status and trends in LCPs, the Commission held joint public workshops in 2015 and 2019 with the members of the League of Cities and California State Association of Counties to allow local government officials to discuss coastal city and county issues and concerns. In 2019, topics focused on LCP planning related to short-term rentals, sea level rise, and the LCP development process. Local governments provided input regarding the complexity of developing LCPs (and LCP amendments) that balance and manage local priorities while protecting coastal resources consistent with the Coastal Act.[52] Input from local government representatives requested that the Commission prioritize partnerships and collaborations between the Commission and local governments, engagement in the public process, additional guidance and guidelines to deal with complex coastal planning issues, maintaining digital LCPs and providing model language.

Following the July 2019 Local Government Workshop, a Local Government Working Group consisting of representatives from the California State Association of Counties, the League of California Cities, and a Coastal Commission subcommittee (Commissioners Groom and Wilson) was formed to support advancing coastal zone sea level rise planning efforts. This group developed a joint statement to serve as a foundation for collective efforts on sea level rise adaptation planning going forward. [53] The Joint Statement focuses specifically on what the three entities which make up the working group can do to address sea level rise related to LCP policy development, adaptation planning, and project decision making.

Status and trends discussed in the Cumulative and Secondary Impacts Phase I Assessment are also applicable to SAMP/LCPs.

Management Characterization:

1. Indicate if the approach is employed by the state or territory and if there has been any significant state- or territory-level management changes (positive or negative) that could help prepare and implement SAMPs in the coastal zone.

Management Category	**Employed by State or Territory** (Y or N)	**CMP Provides Assistance to Locals that Employ** (Y or N)	**Significant Changes Since Last Assessment** (Y or N)
SAMP policies, or case law interpreting these	Y	Y	Y
SAMP plans	Y	Y	Y

[52] Background Report for the July 12, 2019 Local Government Workshop on Short Term Rentals and Sea Level Rise Planning and Adaptation (F2-7-2019-report.pdf (ca.gov)) and City/County Platform Paper (F2-7-2019-citycountyplatformpaper.pdf (ca.gov))

[53] Briefing and consideration of adopting the Local Government Working Group "Joint Statement on Adaptation Planning", CCC Staff Report (w6d-11-2020-report.pdf (ca.gov))

2. For any management categories with significant changes, briefly provide the information below. If this information is provided under another enhancement area or section of the document, please provide a reference to the other section rather than duplicate the information:
    a. Describe the significance of the changes;
    b. Specify if they were 309 or other CZM-driven changes; and
    c. Characterize the outcomes or likely future outcomes of the changes.

SAMP Policies or Case Law

SAMP Policies

See Cumulative and Secondary Impacts Phase I Assessment for a list of policy guidance documents released since 2015 that provide policy recommendations for address emerging issues and procedural guidelines in developing new or updating LCPs. The policy guidance and procedural guidelines are considered policy changes for Commission staff and local governments with information that contributes to effective implementation of the Coastal Act through LCPs.

Case Law

a) Describe the significance of the changes;
There were several legal cases which had implications for the LCP planning program.

Greenfield v. Mandalay Shores Community Assn., 21 Cal. App. 5th 896 (2019). The significance is that the case supports the right and duty of the Coastal Commission to regulate restrictions on short-term vacation rentals through LCPs.

San Diego Unified Port Dist. v. California Coastal Commission, 27 Cal. App. 5th 1111 (2018). The significance is that the case upholds the Coastal Commission's ability to require lower-cost overnight accommodations as part of local plans (here, a Port Master Plan).

Beach & Bluff Conservancy v. City of Solana Beach, 28 Cal. App. 5th 244 (2018). The significance is that the case held that LCP policies that prohibit future shoreline armoring do not constitute a facial, unconstitutional taking.

b) These were not 309 or other CZM-driven changes; and
c) The outcome of these changes overall clarified and strengthened the LCP program.

SAMP Plans

a) Describe the significance of the changes
New certified LCPs became effective for the City of Newport Beach and City of Pacific Grove over the assessment period. More cities and counties have either LUP or IP updates initiated, submitted, or approved. Since 2015, the Commission acted on approximately 23 LCP

Amendments (from 15 jurisdictions) that updated Local Coastal Program Land Use Plans (LUPs) or Implementation Plans (IPs) (i.e. zoning ordinances that implement the LUP policies) in whole or in part to reflect new information and changed conditions. The table below lists these amendments, focusing on ones that were designed to reduce future damage from hazards and to develop or update sustainable development ordinances, policies and plans.

In addition, the comprehensive and partial updates often addressed visitor serving accommodations, public access and transit-oriented planning, general land use changes to concentrate density in existing developed areas that are located outside of hazardous areas, review processes and procedures, and changes needed to addressed new state laws such as related to accessory dwelling units, affordable housing, density bonuses, and reasonable accommodation. Many additional LCP Amendments were acted on, but these were primarily project-driven, minor, or limited, topic amendments that did not represent updates in whole or in significant part.

Comprehensive or Partial LCP Updates and Other Significant Amendments (including Master Plans & Hazards Updates) 2015-2019

Jurisdiction	LCPA Number/ Name	Effective Certification Date
Mendocino County	LCP-1-MEN-14-0840-1 (Mendocino Town Plan Update)	11/8/2017
Marin County	LCP-2-MAR-19-0003-1 (Marin IP Partial Update)	2/6/2019
San Francisco City / County	LCP-2-SNF-18-0028-1 (Western Shoreline Area Plan)	5/10/2018
City of Pacific Grove	LCP-3-PGR18-0093-1 (Comprehensive LUP Update)	3/11/2020
City of Santa Cruz (Partial Update)	LCP-3-STC-17-0016-1-Part C (Zoning Clean up)	6/7/2017
City of Santa Cruz	LCP-3-STC-17-0073-2-Part A (Downtown Plan)	3/8/2018
Santa Barbara County	LCP-4-STB-14-0836-2-Part A (Summerland Community Plan Update)	6/16/2016
Santa Barbara County	LCP-4-STB-17-0048-1 (Eastern Goleta Valley Community Plan)	12/19/2017
Santa Barbara County	LCP-4-STB-18-0039-1-Part B (Gaviota Coast Plan)	11/7/2018
City of Santa Barbara	LCP-4-SBC-18-0062-1 (Comprehensive LUP Update)	8/9/2019
Ventura County	LCP-4-VNT-16-0033-1 (Phase II A Update)	5/31/2017
Ventura County	LCP-4-VNT-16-0069-2 (Phase II B Update)	6/26/2017

Jurisdiction	LCPA Number/ Name	Effective Certification Date
City of Newport Beach	LCP-5-NPB-15-0039-1 (Major)	1/13/2017
City of Huntington Beach	LCP-5-HNB-18-0046-1 (Windward Specific Plan)	12/12/2018
City of San Clemente	LCP-5-SCL-16-0012-1 (Comprehensive LUP Update)	8/10/2018
City of Oceanside	LCP-6-OCN-18-0069-2 Zoning Ordinance Update - Base Zoning Districts	11/14/2019
City of Carlsbad	LCP-6-CAR-15-0034-2 General Plan Update/LCP Map Revisions	8/11/2016
City of Carlsbad	LCP-6-CVR-18-0070-1 Carlsbad Village & Barrio Master Plan	10/16/2019
San Diego County	LCP-6-SDC-17-0015-1 (Major)	12/13/2018
City of San Diego	LCP-6-OCB-15-0006-1 Ocean Beach Community Plan Update	1/14/2016
City of San Diego	LCP-6-SAN-16-0043-3 9th Update	11/8/2016
City of San Diego	LCP-6-TJN-17-0029-1 San Ysidro Community Plan Update	12/13/2017
City of San Diego	LCP-6-CCP-18-0094-4 Midway-Pacific Highway Community Plan Update	3/7/2019

Since 2015 when the last 309 Assessment was compiled, the Commission has acted on seven special area management plans through the federal consistency review process, either as a "consistency determination (CD)" or "negative determination (ND)" with respect to the proposed plan being consistent with policies of the coastal management program. These management plans addressed the protection of coastal resources and public access on federal and state parklands and federal military reservations. They are:

- Department of Veterans Affairs (VA) Long Range Development Plan for the Veterans Affairs Center in the Richmond District of San Francisco, Fort Miley Campus (CD-0003-15)
- BLM Trinidad Head Management Plan, Trinidad, Humboldt County (CD-0007-16
- Comprehensive Conservation Plan for the Guadalupe-Nipomo Dunes National Wildlife Refuge, San Luis Obispo County (ND-0020-16)
- Redwood NP/Santa Monica Mountains NRA Invasive Plant Management Plan (ND-0029-17)
- Bolsa Chica Lowlands Sediment Management Plan (ND-0030-17)
- Beach Management Plan for Vandenberg Air Force Base (CD-0004-18)
- Trail Management Plan at Cabrillo National Monument, San Diego County (ND-0014-19)

Also, not reported in the previous assessment, the Commission concurred with the consistency certification for and certified the North Coast Corridor Public Works Plan (PWP) and

Transportation and Resource Enhancement Program (NCC PWP/TREP) in August 2014. This PWP action for the Interstate 5 corridor in northern San Diego County serves as a master federal consistency certification to ensure the entire suite of rail, highway, transit, bicycle, pedestrian and other community and resource improvements described therein will be appropriately linked, phased, and implemented in a manner consistent with applicable Coastal Act policies. In 2019, the Commission approved Phase 1/Stage 4 as the latest installment in the comprehensive program of the NCC PWP/TREP for transportation, community, and natural resource enhancements.

Refer also to discussion under Cumulative and Secondary Impacts/Management Plans.

b) These were CZM-driven changes.

c) Outcomes: Updated land use designations, policies and ordinances in the LCPs will result in better permit decisions to protect coastal resources, especially considering projected impacts of climate change.

Enhancement Area Prioritization:

1. What level of priority is the enhancement area for the coastal management program?

High	__X__
Medium	_____
Low	_____

2. Briefly explain the reason for this level of priority. Include input from stakeholder engagement, including the types of stakeholders engaged.

   SAMP or LCP planning is one of the primary ways that the California coastal management program is carried out. LCPs need to be kept current to new and emerging issues and reflect current conditions to best manage and protect coastal resources consistent with the Coastal Act. Stakeholder and public input obtained through the local government workshops held in 2015 and 2019 as well as the input from local governments received during the development of the Commission 2021 – 2025 Strategic Plan indicated a high interest and need for the Commission to prioritize partnership and collaboration between the Commission and local governments, Commission engagement in the local public planning process, and for the Commission to provide additional guidance and guidelines to deal with complex coastal planning issues, digital LCPs and model policy language.

Ocean and Great Lakes Resources

Section 309 Enhancement Objective: Planning for the use of ocean [and Great Lakes] resources. §309(a)(7)

PHASE I (HIGH-LEVEL) ASSESSMENT:

Purpose: To quickly determine whether the enhancement area is a high-priority enhancement objective for the CMP that warrants a more in-depth assessment. The more in-depth assessments of Phase II will help the CMP understand key problems and opportunities that exist for program enhancement and determine the effectiveness of existing management efforts to address those problems.

Resource Characterization:

1. Understanding the ocean and Great Lakes economy can help improve management of the resources it depends on. Using Economics: National Ocean Watch (ENOW),[1] indicate the status of the ocean and Great Lakes economy as of 2015 (the most recent data) in the tables below. Include graphs and figures, as appropriate, to help illustrate the information. Note ENOW data are not available for the territories. The territories can provide alternative data, if available, or a general narrative, to capture the value of their ocean economy.

Status of Ocean and Great Lakes Economy for Coastal Counties (2015)

	All Ocean Sectors	Living Resources	Marine Construction	Ship & Boat Building	Marine Transportation	Offshore Mineral Extraction	Tourism & Recreation
Employment (# of Jobs)	*557,505*	*6,421*	*6,905*	*8,846*	*101,680*	*12,064*	*421,587*
Establishments (# of Establishments)	*22,890*	*499*	*292*	*119*	*1,701*	*448*	*19,831*
Wages (Millions of Dollars)	*21,600*	*136.3*	*511*	*554.5*	*8,500*	*1,000*	*10,900*
GDP (Millions of Dollars)	*44,800*	*363.6*	*1,000*	*1,000*	*16,500*	*3,300*	*22,600*

Change in Ocean and Great Lakes Economy for Coastal Counties (2005-2015)[2]

	All Ocean Sectors	Living Resources	Marine Construction	Ship & Boat Building	Marine Transportation	Offshore Mineral Extraction	Tourism & Recreation
Employment (# of Jobs)	13%	-18%	-30%	-11%	-13%	-3%	25%
Establishments (# of Establishments)	12%	-16%	-8%	-17%	-1%	3%	15%
Wages (Millions of Dollars)	29%	-13%	-4%	29%	4%	19%	63%
GDP (Millions of Dollars)	21%	-5%	-17%	25%	11%	-41%	58%

2. Understanding existing uses within ocean and Great Lakes waters can help reduce use conflicts and minimize threats when planning for ocean and Great Lakes resources. Using Ocean Reports[3], indicate the number of uses within ocean or Great Lakes waters off your state. For energy uses (including pipelines and cables, see the "Energy and Government Facility Siting" template following). Add additional lines, as needed, to include additional uses that are important to highlight for your state.

Uses within Ocean or Great Lakes Waters

Type of Use	Number of Sites
Federal sand and gravel leases *(Completed)*	0
Federal sand and gravel leases *(Active)*	0
Federal sand and gravel leases *(Expired)*	0
Federal sand and gravel leases *(Proposed)*	0
Beach Nourishment Projects	52
Ocean Disposal Sites	51
Principle Ports *(Number and Total Tonnage)*	8 ports; 190,807,100 total tonnage
Coastal Maintained Channels	58
Designated Anchorage Areas	110
Danger Zones and Restricted Areas	8
Other (please specify)	

3. In the table below, characterize how the threats to and use conflicts over ocean and Great Lakes resources in the state's or territory's coastal zone have changed since the last assessment.

Significant Changes to Ocean and Great Lakes Resources and Uses

Resource/Use	**Change in the Threat to the Resource or Use Conflict Since Last Assessment** (↑, ↓, –, unkwn)
Benthic habitat (including coral reefs)	↑
Living marine resources (fish, shellfish, marine mammals, birds, etc.)	↑
Sand/gravel	↑
Cultural/historic	–
Other – Natural Shorelines	↑
Other – Water Quality	↑
Transportation/navigation	↑
Offshore development[4]	↑
Energy production	↓
Fishing (commercial and recreational)	↑
Recreation/tourism	–
Sand/gravel extraction	↑
Dredge disposal	↑
Aquaculture	↑
Other -Desalination	↑

4. For the ocean and Great Lakes resources and uses in the table above that had an increase in threat to the resource or increased use conflict in the state's or territory's coastal zone since the last assessment, characterize the major contributors to that increase. Place an "X" in the column if the use or phenomenon is a major contributor to the increase.

Major Contributors to an Increase in Threat or Use Conflict to Ocean and Great Lakes Resources

	Land-based development	Offshore development	Polluted runoff	Invasive species	Fishing (Comm and Rec)	Aquaculture	Recreation	Marine Transportation	Dredging	Sand/Mineral Extraction	Ocean Acidification	Energy Production	Living Resource Impacts	Shoreline Armoring
Benthic habitat (including coral reefs)		X		X	X	X			X					
Living marine resources (fish, shellfish, marine mammals, birds, etc.)	X	X	X	X	X	X	X	X	X	X	X	X		X
Sand/gravel										X				X
Other – Natural Shorelines	X		X						X	X				X
Other – Water Quality	X	X	X			X		X				X	X	
Transportation/navigation		X				X							X	
Offshore development		X			X	X		X					X	
Fishing (commercial and recreational)	X	X		X		X					X		X	
Sand/gravel extraction						X							X	X
Dredge disposal							X						X	
Aquaculture					X			X			X		X	
Desalination	X						X				X		X	

Sources: The information summarized in the table is based on the published resources and data listed in Question 4 (below), on workshops, presentations, reports and individual regulatory findings brought before the Coastal Commission since 2015, and on the expert opinion of Coastal Commission staff members.

5. If available, briefly list and summarize the results of any additional state- or territory-specific data or reports on the status and trends of ocean and Great Lakes resources or threats to those resources since the last assessment to augment the national data sets.

Living Marine Resources

Increased threats to living marine resources, including fisheries and benthic habitats:
The living marine resources of the California coast continue to be threatened by an array of factors, including point and non-point source pollution, habitat degradation and loss in coastal areas and watersheds, overfishing and by-catch, anthropogenic noise, ship strikes, invasive species, the potential for oil spills, ocean acidification and beach nourishment activities. To the extent that the impacts from these factors are cumulative or increasing, the overall threat to living marine resources is estimated to have increased since the last assessment.

A recent, overarching assessment of the status and trends of living marine resources in the California Current Large Marine Ecosystem is provided by NOAA's 2013 *California Current* Integrated Ecosystem Assessment report, Status Update for 2019:
https://www.nwfsc.noaa.gov//assets/25/9707_11192019_113138_TechMemo149.pdf

Since the last assessment there have been several positive developments in specific areas that have the potential to alleviate threats to living resources and reduce use conflicts. Several of these are summarized below:

Baseline and long-term monitoring of State Marine Protected Areas (MPAs):
Since the last assessment, a new series of regional reports summarizing the results of baseline monitoring in each region of California's coast has been issued by the California Ocean Science Trust (COST), CA Department of Fish and Wildlife (CDFW), and CA Ocean Protection Council. These reports provide data from the first five years of monitoring the state marine protected area network along the north coast, north central coast, central coast and southern coast of California. In addition to establishing a baseline against which future trends in the marine biological resources of these areas may be assessed, the report also indicates that some species are already demonstrating increased abundance in the MPA areas and that commercial and recreational fishing continues to be an integral part of the local ocean economy across the central coast at the same time a shift towards non-extractive pursuits such as whale-watching tours appears to be occurring.
MPA Baseline Monitoring Reports**:**
https://wildlife.ca.gov/Conservation/Marine/MPAs/Management/Monitoring#537132130-baseline-monitoring-reports-by-region

In 2018, COST and CDFW developed the MPA Monitoring Action Plan. The Action Plan is designed to identify key measures and metrics, habitats, species, ocean use conflicts and management questions that will drive long-term monitoring in the MPAs.
MPA Monitoring Action Plan:
https://wildlife.ca.gov/Conservation/Marine/MPAs/Management/monitoring/action-plan

Reduced threat of entrainment at coastal power plant cooling water intakes:
As discussed in more detail below, the State Water Resources Control Board has adopted a policy to phase out most once-through cooling systems at coastal power plants. As this policy is implemented, there will be reductions in the amount of seawater withdrawn from the ocean

and coastal lagoons, which is expected to reduce the entrainment of marine organisms and improve nearshore ocean productivity in the areas near existing power plants (see below).

Energy Production

Reduced Use Conflicts from Coastal Power Plants:

The state's 2010 adoption of a policy to phase out most of California's once-through cooled power plants has continued to reduce the threat to coastal marine biological resources (see below for a link to the policy and associated documents). Prior to adoption of the policy, the state's 19 coastal power plants were able to pull in up to nearly 16 billion gallons of seawater or bay water per day to cool their generating units. The combined effects of these power plant water withdrawals resulted in significant loss of marine life and biological productivity that extended along hundreds of miles of shoreline and through thousands of acres of the state's nearshore waters. Since adoption of the policy, all or some of the generating units at 14 of the 19 plants have either been retired by their owners or have modified their cooling system to no longer require seawater for cooling. The policy has so far resulted in a reduction of up to 12 billion gallons per day in allowable seawater withdrawals by these plants, which provides for a substantial improvement in nearshore ocean productivity. Several more plants are scheduled to be retired or modified in the next two years, with the remaining plants scheduled to do so during a fifteen-year compliance period.

Once-Through Cooling Policy:
http://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/

Potential for increased use conflicts or threats to resources from onshore and offshore wind and wave energy: Several offshore wind or wave energy facilities have been proposed along the California shoreline, although only one has received regulatory approval. The Strauss Wind Energy Project was approved by Santa Barbara County in 2019. Although the wind turbines are located outside of the coastal zone, there is a potential for spillover effects in the coastal zone and increased use conflicts over coastal resources. Also, since the last assessment, there has been a significant increase in planning for offshore wind in California. The Coastal Commission participates on the Intergovernmental Renewable Energy Task Force, a group of state and federal agencies and tribal groups working together to examine opportunities for offshore renewable energy development in California and assess the potential for impacts to coastal resources. Planning for offshore wind is likely to continue through the next five-year assessment period with a potential for consideration of proposed offshore wind facilities.

Potential for decreased use conflicts from offshore oil and gas production:

Based on data available through 2018, offshore oil and gas production in California state waters has significantly decreased since 2014. Data available from the California Department of Conservation Division of Oil and Gas Resources (DOGGR) indicates that annual offshore oil production in state waters decreased from 14.2 million barrels in 2014 to 7.7 million barrels in 2018. This decrease is due to several factors including the Refugio Oil Spill that resulted in the closure of a critical onshore pipeline that required several offshore platforms to stop production for an indefinite period. In addition, several other platforms have stopped production and begun decommissioning activities. Oil and gas production on the federal outer

continental shelf (OCS) offshore of California has continued its long-term decline. Oil production in federal waters declined from approximately 20 million barrels in 2014 to 5 million barrels in 2018, the most recent year for which complete data are available. This decrease is due to several factors including the Refugio Oil Spill that resulted in the closure of a critical onshore pipeline and required several offshore platforms to stop production for an indefinite period. In addition, several other platforms have stopped production and begun decommissioning activities. No new platforms or leases in state or federal waters have been approved that would enable significant expansion of production in the near-term.

Oil Spills

Since 2014, a number of significant oil spills have impacted California's Coastal Zone. The most significant oil spill occurred in 2015 when a 24-inch underground pipeline (line 901) ruptured near Refugio State Beach in Santa Barbara County, causing the release of crude oil onto area beaches and into the Pacific Ocean. It is estimated that over 100,000 gallons of crude oil spilled, of which an estimated 21,000 gallons reached the ocean. In 2016, an oil spill occurred at the Port of Los Angeles when heavy fuel oil leaked from the 577-foot car carrier Istra Ace. Estimates are that some 265 barrels of oil were spilled from the vessel into San Pedro Bay, however, the quantity could be much larger. The spill covered more than 70 acres and took 23 days to clean up. In 2019, an oil spill occurred at the 421 Pier at Haskell's Beach in Goleta. The incident had occurred while crews were working to plug a historic well, releasing an estimated 80 to 125 gallons of crude oil. In addition, smaller spills in recreational harbors and marinas along the coast have also been regularly reported and cleaned up by appropriate local, state, and federal responders.

Well Stimulation & Hydraulic Fracturing

Since the last assessment, oil and gas production in California has continued to generate controversy and receive heightened scrutiny due to the public realization that the use of well stimulation techniques, in particular hydraulic fracturing ("fracking") has become increasingly common in California oil fields (including offshore), with little regulation from the state or federal government, and no clear understanding of the potential environmental effects. In response to these concerns, in 2013 California enacted new legislation (Senate Bill 4, September 20, 2013) authorizing DOGGR to develop new regulations and a permitting system for well stimulation activities and collect information on the chemicals being used in these treatments. SB 4 also mandated that the state commission an independent science study of well stimulation practices and impacts in California. The new law and regulations apply to offshore well stimulation activities within state waters, which, to date, have been limited to fracking in the Long Beach Unit. The California Council on Science and Technology published its independent science study in July 2015. Relevant to oil and gas production in the Coastal Zone, the report concluded that: (1) hydraulic fracturing was only used in a small number of offshore wells, (2) record keeping for these practices in federal waters is not consistent with state standards, (3) direct impacts from hydraulic fracturing have not been thoroughly investigated, (4) the majority of impacts associated with hydraulic fracturing are indirect impacts of oil and gas development enabled by the hydraulic fracturing, and (5) produced water from hydraulic fracturing is potentially hazardous.

Investigations conducted by the Coastal Commission staff and several non-profit and news organizations over the past two years have also revealed that well stimulation activities have occurred in wells at several offshore platforms in federal waters, though the practice is not yet widespread. In November 2019, Governor Newsom imposed a moratorium on new permits for hydraulic fracturing until further scientific review is completed. He also ordered a moratorium on steam-based oil extraction and a review of how fracking permits are issued in California.

Senate Bill 4**:** http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB4
SB 4 Interim Well Stimulation Treatment Regulations:
http://www.conservation.ca.gov/index/Documents/FInal%20Text%20of%20Readopted%20SB%204%20Interim%20WST%20Regulations%20with%20Revised%20IWSTN%20Form.pdf
SB 4 Proposed Well Stimulation Treatment Regulations, 2nd Revision:
http://www.conservation.ca.gov/index/Documents/Oct.%209,%202014%20final%202nd%20revised%20SB%204%20WST%20regulations.pdf
CCST: An Independent Assessment of Well Stimulation in California:
https://ccst.us/reports/well-stimulation-in-california/

Sand & Gravel; Natural Shorelines

Sand, gravel and sediment resources that would otherwise be added to coastal littoral cells and sustain California beaches and shorelines continue to be retained behind inland dams and debris basins in coastal watersheds, with the cumulative amount of retained sand continuing to grow. Large amounts of sand and gravel are also extracted by mining activities for use in the construction industry. California Geological Survey reports indicate that sand, gravel and crushed rock production in California has increased since 2014, and that hundreds of sand and gravel mining operations continue throughout coastal watersheds, with the largest in the San Gabriel River and Santa Ana River drainages of Southern California. Sand mining also continues at the CEMEX sand plant along southern Monterey Bay, although this sand mining operation is scheduled to end by December 2020. The estimated 200,000 cubic yards of sand that are extracted annually at this site contribute to locally high rates of beach and dune erosion. Shoreline protective devices such as breakwaters, revetments and seawalls also continue to interrupt alongshore sediment movement and retain sand that would otherwise enter the littoral cells. Data gathered by Coastal Commission staff indicate that the number of shoreline protective devices and the length of armored shoreline along the California coast have increased since the last assessment. See the Cumulative and Secondary Impacts Assessment for detail on armoring data for California.

California Geological Survey ***Reports:***
California's Non-fuel Mineral Production in 2017:
https://www.conservation.ca.gov/cgs/Documents/california-non-fuel-mineral-production-2017.pdf
Aggregate Sustainability in California 2018:
https://www.conservation.ca.gov/cgs/Documents/MS_052_California_Aggregates_Report_201807.pdf

Other -- Desalination:

Seawater desalination continues to receive significant attention in some coastal areas of California. Since 2015, the developments below have modified the threat to coastal resources or use conflicts as follows:

- **State desalination policy:** California is now implementing the Ocean Plan Amendment approved in 2014 by the State Water Resources Control Board establishes requirements for the design and siting of desalination intakes and discharges. The policy seeks to reduce adverse effects to marine life by requiring subsurface intakes where feasible, to minimize the area of ocean waters in which a high salinity discharge could adversely affect marine organisms, and to require measures to fully mitigate the adverse marine life effects that result from approved facilities. The policy also requires coordination among the various permitting agencies, including the Coastal Commission.
- **Proposed desalination facilities:** Since 2015, several water purveyors and water districts have investigated the feasibility of different desalination facility designs and locations. With the emphasis on reducing marine life mortality as expressed in both the above-referenced once-through cooling policy and the desalination policy, most of these investigations have focused on identifying ways of constructing and operating subsurface intakes, conducting studies on the effectiveness and biological results of using different screening methods, and other similar studies. There are currently two proposed new and three existing desalination facilities being reviewed for conformity to the policy, and about six possible proposals in the planning stage.

Desalination Policy:
http://www.swrcb.ca.gov/water_issues/programs/ocean/desalination/
Expert Panel on Intake Impacts and Mitigation, Final Reports:
(Oct 2013)
http://www.swrcb.ca.gov/water_issues/programs/ocean/desalination/docs/erp_final.pdf
(Mar2012)
http://www.swrcb.ca.gov/water_issues/programs/ocean/desalination/docs/erp_intake052512.pdf
Expert Panel on Impacts and Effects of Brine Discharges, Final Report:
http://www.swrcb.ca.gov/water_issues/programs/ocean/desalination/docs/dpr.pdf
Salinity Toxicity Study:
http://www.swrcb.ca.gov/water_issues/programs/ocean/desalination/docs/saltoxfr08012.pdf

Other -- Water Quality:

Inland and nearshore coastal waters are still affected by nonpoint source water pollution. Water quality, reduced flow volumes related to climate (e.g., on-going drought), water diversions and control structures (i.e., dams and reservoirs) and invasive species continue to cause declines in threatened and endangered fish species. New policies that have been adopted or proposed by the State Water Resources Control Board since 2014 may eventually improve water quality conditions in relation to specific discharge or pollutant types (e.g., bacteria, trash, etc.) (see "Single Sector Management Plans", below). Decreased federal funding for the Coastal Nonpoint Source Pollution Implementation Grants program has made it

more difficult for the Commission to address these issues and provide local assistance to minimize nonpoint source pollution through planning in Local Coastal Programs and regulatory decisions (i.e., coastal development permits).
California Ocean Plan 2019 Update:
https://www.waterboards.ca.gov/water_issues/programs/ocean/docs/oceanplan2019.pdf
State Water Board bacterial objectives:
https://www.waterboards.ca.gov/bacterialobjectives/
Statewide Water Quality Control Plans for Trash:
https://www.waterboards.ca.gov/water_issues/programs/trash_control/documentation.html

Management Characterization:

1. Indicate if the approach is employed by the state or territory and if any significant state- or territory-level changes (positive or negative) in the management of ocean and Great Lakes resources have occurred since the last assessment?

Significant Changes to Management of Ocean and Great Lakes Resources

Management Category	Employed by State or Territory (Y or N)	CMP Provides Assistance to Locals that Employ (Y or N)	Significant Changes Since Last Assessment (Y or N)
Statutes, regulations, policies, or case law interpreting these	Y	Y	Y
Regional comprehensive ocean/Great Lakes management plans	Y	Y	Y
State comprehensive ocean/Great Lakes management plans	N	N	N
Single-sector management plans	Y	Y	Y

2. For any management categories with significant changes, briefly provide the information below. If this information is provided under another enhancement area or section of the document, please provide a reference to the other section rather than duplicate the information:
   a. Describe the significance of the changes;
   b. Specify if they were 309 or other CZM-driven changes; and
   c. Characterize the outcomes or likely future outcomes of the changes.

Statutes, Regulations, Policies, Case Law

Marine Life Protection Act Implementation; Marine Protected Areas

Initiated in 2007 and completed in December of 2012, California's state marine protected areas planning process (carried out under the 1999 Marine Life Protection Act) has resulted in enhanced protection for approximately 16% of coastal state waters (roughly 852 square miles) as Marine Protected Areas (MPAs). The Commission's Coastal Management Program does not directly implement these programs but participates through intergovernmental coordination.

a) Significant changes since last assessment: Since the last assessment, the California Fish and Game Commission adopted the Master Plan for MPAs in August 2016, a document designed to guide the implementation of the Marine Life Protection Act. Also, in 2018, the California Department of Fish and Wildlife adopted the MPA Monitoring Action Plan. This Plan prioritizes key measures and metrics, habitats, sites, species, human uses, and management questions to target for long-term monitoring and aid in the evaluation of the Network in meeting the goals of the MLPA
b) 309 or other CZM-driven changes: These changes were not driven by Section 309 or other CZMA provisions.
c) Outcomes & Effectiveness: The designation of state MPAs establishes a higher level of protection for the marine species and habitats contained in these areas and the establishment of the MPA network is expected to help ensure that this protection extends to the settlement and recruitment of future generations of these species. Early monitoring data from the Central Coast suggests that populations of marine species are increasing within the MPAs relative to outside areas and this trend is expected to continue.

California Ocean Protection Act Implementation

The California Ocean Protection Act of 2004 created the Ocean Protection Council (OPC), and charged it with broad duties related to the protection of ocean and coastal resources, including: (a) the coordination of state ocean resource agency activities; (b) the facilitation of scientific data collection and sharing of pertinent results; (c) the identification of changes in state and federal law and policy that would improve ocean/coastal resource protection; and (d) recommendations to the Legislature on ocean/coastal resource policy. As a partner agency of the OPC, the Commission participates in new OPC programs through interagency coordination.

a) Significant changes since last assessment:
March 2018, OPC approved an update to State's *Sea-Level Rise Guidance Policy*. This update incorporated advances in ice loss science and projections of sea-level rise and included guidance to address the needs of both state agencies and local governments.
In 2018, OPC adopted the *State of California Ocean Acidification Action Plan* that articulates a 10-year vision for addressing ocean acidification and includes a series of pragmatic actions to work towards that vision. The Commission provided input and comments on this plan during its development. In 2018, the California Natural Resources Agency updated the state's Climate Change Adaptation Strategy called the Safeguarding California Plan. This Plan serves as the State's roadmap for everything state agencies are doing and will do to protect communities, infrastructure, services, and the natural environment from climate change impacts. One of the principal components of the Plan is focused on California's coastal and ocean resources.

b) 309 or other CZM-driven changes? These changes were not driven by Section 309 or other CZMA provisions.
c) Outcomes & Effectiveness: Unknown.

Regional Comprehensive Ocean Management Plans

West Coast Ocean Alliance (WCOA), (formerly West Coast Governors Alliance on Ocean Health and West Coast Governors Alliance

In September 2006, the Governors of California, Oregon, and Washington announced the West Coast Governors Agreement on Ocean Health.[54] The agreement launched an updated regional collaboration to protect and manage the ocean and coastal resources along the entire West Coast, as called for in the recommendations of the U.S. Commission on Ocean Policy and the Pew Oceans Commission.

a) Significant changes since last assessment:
In early 2015, the WCGA supported the convening of the first West Coast Ocean Summit, held in Portland, Oregon wherein state, federal, and tribal representatives from all three West Coast states attended to discuss marine planning priorities and organization. Several key items came out of the summit that set priorities for future efforts including:
- Continuing coordination between the state, federal, and tribal marine planning entities;
- Establishing a West Coast Regional Planning Body (RPB) per Executive Order 13547, which created a National Ocean Policy. This group was to focus on coordination amongst marine planning entities and continue to support the West Coast Ocean Data Portal (WCODP), an entity previously funded by the WCGA.
- Establishing a West Coast Ocean Partnership (WCOP) to focus on ocean health, reinforcing previous WCGA efforts, and work in concert with the newly established RPB. The primary goals within the WCOP Strategic Framework included coastal resiliency, changing ocean conditions, and data coordination.

However, due to limited funding and shifting national policies, both the WCOP and RBP reorganized. As of 2020, the WCOP is inactive, and the RPB is known as the West Coast Ocean Alliance (WCOA), though its primary members and goals have not changed.

WCOA members consist of 11 federally recognized Tribes, 6 state agencies, 8 federal agencies, and the Pacific Fisheries Management Council. The goals of the WCOA include the following: 1. compatible and sustainable ocean uses, 2. effective and transparent decision-making, 3. comprehensive ocean and coastal data, and 4. increased understanding of and respect for tribal rights, resources, and knowledge. A primary focus of the WCOA continues in 2018 – 2020 is to work in concert with the WCODP, gathering coastal and ocean data to support regional management efforts and decision-making. This effort has been supported by federal appropriations provide in FY 2019 and FY 2020 through the IOOS Network to support regional data management efforts. In addition, the WCOA recently

[54] http://www.cmsp.noaa.gov/activities/wcga.html

developed a Tribal Engagement Guidance document. Future deliverables and work plans that support the WCOA's vision statement are still being developed.

b) 309 or other CZM-driven changes: These changes were not CZM. The Commission does not directly implement this program but participates through intergovernmental coordination and relevant topic area working groups as staff capacity allows.
c) Outcomes & Effectiveness: Unknown.

San Diego Marine Spatial Planning

In 2016 the California State Lands Commission partnered with the Port of San Diego to embark on a regional ocean planning effort. This effort began with the development of a preliminary assessment report (https://www.sdoceanplanning.org/preliminary-assessment-report) based on the results of engagement and discussions with stakeholders about how they use the ocean space, their challenges with those uses, their previous experiences and concerns with ocean planning and similar planning processes, and suggestions on how to best manage this type of process. Following the release of the assessment report in December 2018, the planning partnership also completed and released an interactive web mapping application: https://www.sdoceanplanning.org/web-mapping-application

a) Significant changes since last assessment: This is a new effort since the last assessment.
b) 309 or other CZM-driven changes? These changes were not driven by Section 309 or other CZMA provisions.
c) Outcomes & Effectiveness: Unknown.

Single-Sector Management Plans

California State-wide Sediment Management Plan

Though not part of the Commission's Coastal Management Program, Commission staff has served as part of the Coastal Sediment Management Working Group (CSMW) since its inception and has participated in and overseen the development of several reports and tools related to the California Coastal Sediment Management Master Plan. This Sediment Master Plan is currently being implemented through a series of regional sediment management plans (see below).

a) Significant changes since last assessment: CSMW is developing a coastal Sediment Master Plan (SMP) to help guide sediment management efforts anticipated when implementing regional sediment management. The focus is to identify and prioritize sediment management needs and opportunities along the California coast, provide this information to resource managers and the general public, and develop strategies to facilitate sediment management activities. The SMP includes three types of Support Tools developed by CSMW: Informational reports, digital tools, and Coastal RSM Plans (CRSMPs). Public and agency outreach provide the fourth and overarching SMP focus. CSMW hosted several SMP Implementation Workshops in regions with a completed CRSMP to gain insight from stakeholders on implementation strategies across coastal California. These insights are being incorporated into the SMP

Implementation Report, currently under development. As of June 2019, several activities are ongoing or reaching conclusion, including:

- The state-wide final Sediment Master Plan Implementation Report
- An offshore sand prospect study
- A pilot beach nourishment study in San Mateo county
- A Programmatic Environmental Report in Humboldt County
- A Strategic Planning effort is envisioned to help CSMW identify the Workgroup's future focus.

b) 309 or other CZM-driven changes? These changes were not driven by Section 309 or the CZM program. Funding for the California Coastal Sediment Management program was originally initiated with funding from NOAA and has received subsequent funding the Bureau of Ocean and Energy Management (BOEM). During the assessment period, funding was provided by the U.S. Army Corps of Engineers and the California Natural Resources Agency. Commission staff participation in the CSMW is s mostly supported with state funding.

c) Outcomes & Effectiveness: The statewide effects of these sediment management activities will likely take several years to decades to become apparent, but the primary goal of sediment management activities is to reduce shoreline erosion and coastal storm damages and to protect beaches and coastal habitats through regional approaches to addressing/managing sediment imbalances.

Regional Sediment Management Plans

The Commission's Coastal Management Program does not directly implement Coastal Regional Sediment Management Plans (CRSMP) but participates through the Coastal Sediment Management Workgroup (CSMW) as described above. The CSMW is spearheading and coordinating the development and implementation of these plans, and through other intergovernmental coordination (See also Coastal Hazards Section).

a) Significant changes since last assessment: Since the last assessment, several CRSMPs have been completed, while others have initiated or continued the planning and development process (e.g., data collection, stakeholder input, governance policy development, preparation of environmental documents and draft CRSMP, public review):

- Santa Cruz Littoral Cell - The US Army Corps of Engineers (USACE) completed a Coastal RSM Plan for the stretch of coast from Half Moon Bay to Moss Landing in 2015. Monterey Bay National Marine Sanctuary partnered in preparing the Plan and hosts a descriptive webpage with access to the Santa Cruz Littoral Cell CRSMP
- San Francisco Open Coast Littoral Cell – A Coordination Network of jurisdictions was formed to address implementation for this cell, which extends from the Golden Gate Bridge to Pacifica. The report was finalized in 2016; CSMW is working to incorporate public comments on this Plan.
- San Luis Obispo County – The San Luis Obispo Council of Governments (SLOCOG) completed their Coastal RSM Plan for San Luis Obispo County in 2016.

- Los Angeles County - CSMW worked with a consultant to develop the report and to attempt to assemble an effective governance structure for the coastal area within LA County. A draft Coastal RSM Plan, completed in 2012, was considered as final in 2017.
- Eureka Littoral Cell - The Humboldt Bay Harbor Recreation and Conservation District completed their Plan in 2017. The Plan covered the area from Trinidad Head south to False Cape, including the interior of Humboldt Bay.
- San Francisco Central Bay - The Bay Conservation and Development Commission (BCDC) developed a Coastal RSM Plan for the central SF Bay to the Golden Gate. The Report was completed by 2017.
- Marin and Sonoma County - The Greater Farallones National Marine Sanctuary completed CSMWs last Coastal RSM Plan in 2018. The report covered the outer coasts of Marin and Sonoma counties, from Bolinas Bay to Jenner.

b) 309 or other CZM-driven changes: Commission staff participation is mostly supported by state funding; overall funding for these programs comes from other non-CZM funding sources.

c) Outcomes & Effectiveness: Similar to the state-level efforts, the regional plans are meant to support evaluation and development of regional sediment management plans at the local level to prepare the coast for the next 50 years to reduce shoreline erosion and coastal storm damages and to protect beaches and coastal habitats through regional approaches to addressing/managing sediment imbalances. Coastal Commission staff are not directly involved in monitoring the effectiveness of the plans, but longer-term effectiveness will be evaluated by the degree to which Commission receives permit applications or land use plan amendments to address shoreline change.

California Ocean Plan Amendments (Water Quality)

The State Water Quality Control Board (SWRCB) has developed and periodically updates the California Ocean Plan ("Water Quality Control Plan for California Ocean Waters") and California Inland Waters, Enclosed Bays and Estuaries Plan, which contain policies designed to control waste discharges and protect water quality along the California coast for the benefit of marine and estuarine species and public health. Authority for Ocean Plan policies comes from both the California Water Code and federal Clean Water Act. The Commission's Coastal Management Program is not directly responsible for implementing the Ocean Plan, but Commission staff have been integrally involved in the development of several of recent or proposed plan amendments, in particular the Once-Through Cooling Policy and Desalination Policy (see below).

a) Significant changes since last assessment: Since the last assessment, the SWQCB has adopted a revised Ocean Plan containing several important amendments, and is currently in the process of developing several new policies for inclusion in future revisions:
   - Amendment of Ocean Plan addressing new bacteria water quality objectives and implementation provisions to protect recreational users from the effects of pathogens in ocean waters of California, adopted August 2019.

- Amendment of Ocean Plan and Enclosed Bays and Estuaries Plan that includes new policies governing desalination facilities and brine discharge ("Desalination Policy"), adopted April 2016. Development of this policy included significant input from Commission staff and other state agencies.

b) 309 or other CZM-driven changes? Commission staff participation was funded in part with 306 grant monies, but funding for these programs comes from other non-CZM funding.

c) Outcomes & Effectiveness: The newly adopted and proposed policies are expected to reduce pollutant discharges to and improve water quality in the coastal ocean, and in the case of the Desalination Policy, greatly reduce existing and potential impacts to living marine resources associated with entrainment in desalination plant intake systems.

Oil Spill Prevention and Response

The Coastal Commission is one of several state agencies charged with developing programs to prevent and respond to oil spills in the marine environment. The Commission also reviews federal actions related to oil spills through its federal consistency authority under the CZMA. Significant activities and policy changes related to oil spills since the last assessment are summarized below:

a) Significant changes since last assessment:
   - The Region IX Regional Contingency Plan was updated to include the Dispersant Use Plan for California (2018). The Coastal Commission agreed that the proposed updates would improve oil spill response procedures and capabilities and would not adversely affect coastal resources, and therefore concurred with the Coast Guard's Negative Determination (ND 0047-18).
   - The Commission's Oil Spill Program continues to review Oil Spill Response Plan (OSRP) updates for consistency with the Commission's prior federal consistency actions over the installation and operation of some OCS platforms.
   - The Commission's Oil Spill Program has been coordinating permits with NOAA's Office of Response and Restoration to carry-out scientific research on the use of Unmanned Aircraft Systems (UAS) for detecting oil spills, including a concurrence on a Negative Determination for a demonstration project in the Santa Barbara Channel (ND-0026-17). The Commission will continue to facilitate use of UAS's for oil spill detection and response planning in California.
   - The Commission's Oil Spill Program staff continues to participate in regional Area Committees with local, state, and federal partners and has been involved in updates to regional oil spill response plans, including formulation of new/alternative sensitive site response strategies.
   - The Commission's Oil Spill Program continues to fulfill its legislative mandate as a member of four Harbor Safety Committees (HSC's) and aids in the development of BMP's for improving navigation and safety along California's coastline.
   - The Commission's Oil Spill Program staff, along with local, state, and federal partners, was selected by the OSPR Technical Advisory Committee (TAC) as the State Agency Representative to the Vessel of Opportunity (VOO)Task Force. The VOO Task

Force was established by SB 414 and is required to evaluate and make recommendations to the TAC regarding the feasibility of using VOO's for oil spill response in marine waters.

- AB 2864 (Limon) Natural Resource Damage Assessment (NRDA) Participation – This bill was recently passed and requires the OSPR Administrator to invite the CCC and BCDC to participate in the NRDA process for coastal and Bay oil spills. The Commission staff is currently working with other trustee agencies on the review of the Refugio Beach Oil Spill Draft Damage Assessment and Restoration Plan/Environmental Assessment.
- The Commission's Oil Spill Program has begun working with the USCG, OSPR, and the Governor's Office of Emergency Services to conduct communication and other related oil spill prevention and response workshops (e.g., First Responder Awareness Training, Response Communication Workshop) with the boating industry and other stakeholders.

b) 309 or other CZM-driven changes? The activities of the Coastal Commission Oil Spill Program are not funded under Section 309, but CZM-driven.

c) Outcomes & Effectiveness: The risk of spills along the California coastal remains, and on-going coordination with industry and other responsible agencies is necessary to prevent future oil spills and effectively respond to them if they occur.

3. Indicate if your state or territory has a comprehensive ocean or Great Lakes management plan.

Comprehensive Ocean/Great Lakes Management Plan	**State Plan**	**Regional Plan**
Completed plan (Y/N) (If yes, specify year completed)	N	y
Under development (Y/N)	N	Y
Web address (if available)	N/A	http://www.westcoastoceans.org/media/wcop-strategic-framework_final.pdf https://www.sdoceanplanning.org/web-mapping-application
Area covered by plan	N/A	West Coast Oceans: CA, OR, WA SD Planning: Southern California, including San Diego Bay

Enhancement Area Prioritization:

1. What level of priority is the enhancement area for the coastal management program?

High _____
Medium __X___
Low _____

2. Briefly explain the reason for this level of priority. Include input from stakeholder engagement, including the types of stakeholders engaged.

The Coastal Commission plays a critical role in the management of the state's ocean resources through implementation of the Coastal Act and its coastal management program. The Commission is engaged in many statewide policy issues like Marine Protected Areas, marine planning, desalination, aquaculture, beach nourishment and renewable energy. Many of the early public comments on the Commission's new Strategic Plan noted opposition to offshore drilling and a preference for looking at alternative energy such as offshore wind. While this work is a high priority for the agency overall, there are other funding sources that can be used to support Commission efforts in this area; as such, it is a medium priority for 309 work. Currently, Commission does not see a need to pursue any program change in the Ocean Resources enhancement. However, efforts on other higher priority enhancement areas, like marine debris and addressing coastal hazards will benefit ocean resources and the implementation of Coastal Act marine resources policies.

Energy and Government Facility Siting

Section 309 Enhancement Objective: Adoption of procedures and enforceable policies to help facilitate the siting of energy facilities and Government facilities and energy-related activities and Government activities which may be of greater than local significance. §309(a)(8)5

PHASE I (HIGH-LEVEL) ASSESSMENT:

Purpose: To quickly determine whether the enhancement area is a high-priority enhancement objective for the CMP that warrants a more in-depth assessment. The more in-depth assessments of Phase II will help the CMP understand key problems and opportunities that exist for program enhancement and determine the effectiveness of existing management efforts to address those problems.

Resource Characterization:

1. In the table below, characterize the status and trends of different types of energy facilities and activities in the state's or territory's coastal zone based on best-available data. If available, identify the approximate number of facilities by type. For ocean-facing states and territories (not Great Lakes states), Ocean Reports[6] includes existing data for many of these energy facilities and activities.

Status and Trends in Energy Facilities and Activities in the Coastal Zone

Type of Energy Facility/ Activity	Exists in Coastal Zone (# or Y/N)	Change in Existing Facilities/Activities Since Last Assessment (-,¯,-,unkwn)	Proposed in Coastal Zone (# or Y/N)	Change in Proposed Facilities/Activities Since Last Assessment (-,¯,-,unkwn)
Pipelines	Y	¯Line 901 in Santa Barbara County out of service due to Refugio Oil Spill	Y	-Pipeline 901/903 replacement project proposed in Santa Barbara County
Electrical grid (transmission cables)	Y	No change	Y	-New transmission associated with future offshore wind or wave energy projects
Ports	Y	unknown	N	-No new ports proposed or increases in tanker/barge traffic expected
Liquid natural gas (LNG)	N	- No LNG facilities in CA	N	- No new LNG facilities proposed
Other: Thermal (Natural Gas) Power Plants	19	¯Generating units at 16 of 19 plants have retired or switched away from using seawater for once-through	Y	¯Several more plants are scheduled to retire in the next five years.

Type of Energy Facility/ Activity	Exists in Coastal Zone (# or Y/N)	Change in Existing Facilities/Activities Since Last Assessment (-,¯,-,unkwn)	Proposed in Coastal Zone (# or Y/N)	Change in Proposed Facilities/Activities Since Last Assessment (-,¯,-,unkwn)
		cooling. Some sites will likely be available soon for other purposes.		
Oil and gas	Y	¯Several offshore platforms have commenced decommissioning activities	Y	-Proposed new production at new facility in Los Angeles County
Coal	N	-No change	N	-No change
Nuclear	Y	¯In 2013, one of CA's 2 remaining nuclear plants shut down	N	-No new nuclear facilities proposed, and the last remaining nuclear units (at Diablo Canyon) are scheduled to shut down in 2023 and 2025.
Wind	Y	-Only small-scale wind projects have been built	Y	-One onshore wind facility is proposed in Santa Barbara County. - Offshore wind is in the planning stages but specific facilities are not likely to be proposed within the next 5 years.
Wave	N	-No change	Y	-Two preliminary permits pending with FERC
Tidal	N	-No change	N	-None proposed
Current (ocean, lake, river)	N	-No change	Y	-One permit pending with FERC
Hydropower	N	-No change	N	- FERC issued two preliminary permits for pumped storage/hydropower projects at Vandenberg AFB and Marine Corps Base Camp Pendleton.
Ocean thermal energy conversion	N	-No change	N	-None proposed
Solar	Y	-No change	Y	-Continuing interest in residential, small-scale projects
Biomass	N	-No change	N	-No change

2. If available, briefly list and summarize the results of any additional state- or territory-specific information, data, or reports on the status and trends for energy facilities and activities of greater than local significance in the coastal zone since the last assessment.

Oil & Gas Facilities

As reported for the last assessment, in 2014, the U.S. Department of the Interior (DOI) issued a Request for Information on the 2017-2022 OCS Oil and Gas Leasing Program requesting that interested parties submit comments about the potential for new leases and to identify environmental concerns and issues related to offshore leasing. In July 2014, the Coastal Commission and the Governor of California sent letters urging the DOI to not include any new oil and gas OCS lease sales in California in the new proposed 2017-2022 OCS Oil and Gas Leasing Program. The final 2017-2022 OCS Oil and Gas Leasing Program, issued in November 2016, did not schedule any new leases in the Pacific Region.

On January 4, 2018, DOI issued the Draft Oil and Gas Leasing Program for 2019-2024, proposing new leases in federal waters offshore of Northern, Central and Southern California. The Coastal Commission, the Governor of California and several other state government agencies sent letters again urging DOI not to include new leases in California. We are awaiting DOI's final 2019-2024 Oil and Gas Leasing Program, due out in 2020.

In general, there has been a decline in oil and gas production in the Coastal Zone over the last five years. Veneco, Inc. filed for bankruptcy in 2017, quitclaiming its interests in the South Ellwood Field leases, including Platform Holly and the Ellwood Beach pier leases in Santa Barbara County. The State Lands Commission is in the process of completing decommissioning activities on both leases. There has also been increased interest in decommissioning offshore platforms in federal waters. Several informational reports have been generated by the Interagency Decommissioning Working Group and its partner agencies regarding the ongoing process of decommissioning oil and gas platforms in the coastal zone and California's OCS. In addition to the Veneco platform, seven others on the OCS are currently undergoing decommissioning.

Although there has been a general decreasing trend for oil and gas production in California's coastal zone and OCS over the past five-year period, there is the potential for new oil and gas production over the next five-year period. In 2018, the Coastal Commission approved an expanded onshore oil and gas facility in Long Beach in Los Angeles County. The new facility will expand production and consolidate the surface area of an existing operation. It is also possible that oil and gas operators could seek to increase the production of oil and gas both onshore and offshore California using well stimulation treatments including hydraulic fracturing and acid well stimulation. As documented in other regions of the country, new well stimulation treatments have significantly increased production of oil and gas from existing and new wells, leading to construction of additional production and processing facilities and new transportation pathways. At this time, it is uncertain whether these new techniques could

result in an expansion of oil and gas production within the coastal zone or federal waters in California, although there is some evidence to suggest that the fractured formations in California are not conducive to the type of extensive and highly productive hydraulic fracturing practiced in the Midwest. As required by Senate Bill 4, discussed in more detail below, the State of California conducted a scientific study on well stimulation treatments to understand the advantages and disadvantages of employing these treatments in California and to inform the development of new rules and regulations governing these practices. The study found that hydraulic fracturing was not widely used in California, but the impacts are still largely unknown. Until additional research is conducted and new regulations adopted, the potential impact of increased well stimulation treatments on oil and gas production in California is unknown.

It is also likely that the next five years will see additional oil and gas pipelines in California's coastal zone. In May of 2015 oil transport pipeline Line 901 ruptured near Refugio State Beach and spilled roughly 3,000 barrels of heavy crude into the Pacific Ocean. Preliminary planning and environmental review are currently underway In Santa Barbara County to replace Line 901 with a new pipeline and to authorize oil transport by truck in the interim. A Draft Supplemental Environmental Impact Report has been prepared for the interim trucking project that includes a variety of information regarding the status and trends of energy facilities in central California's coastal zone.

Coastal Power Plants

In 2010, the state of California adopted a policy to phase out most of California's once-through cooled power plants. Prior to adoption of the policy, the state's 19 coastal power plants were able to pull in up to nearly 16 billion gallons of seawater or bay water per day to cool their generating units. The combined effects of these power plant water withdrawals resulted in significant loss of marine life and biological productivity that extended along hundreds of miles of shoreline and through thousands of acres of the state's nearshore waters. Since adoption of the policy, generating units at 14 of the 19 plants have either been retired by their owners or have modified their cooling system to no longer require seawater for cooling. The policy has so far resulted in about a 12 billion gallon per day reduction in allowable seawater withdrawals, which provides for a substantial improvement in nearshore ocean productivity. Several more plants are scheduled to be retired or modified in the next five years, with the remaining plants scheduled to do so during a fifteen-year compliance period. Some of the sites where plants have retired may soon be available for other coastal uses.

Nuclear Power Plants

As of the last assessment, California's coastal zone contained two nuclear power plants – Southern California Edison's San Onofre Nuclear Generating Station (SONGS) and Pacific Gas & Electric Company's Diablo Canyon Power Plant. In July 2013, after struggling to repair leaks from both reactors at the facility, Southern California Edison announced that SONGS would be permanently shut down and decommissioned. Both reactors ceased to generate power as of

October 2013, although the plant still takes in about 50 million gallons per day of ocean water to cool the spent fuel pools. The owner of the Diablo Canyon facility, Pacific Gas & Electric Company, recently announced that they would not seek to operate the facility after its current licenses expire in 2023 and 2025. Elimination of the SONGS and Diablo Canyon discharges and significant decrease in the volume and eventual elimination of the plant's intakes are expected to result in improvements to the quality and productivity of offshore marine resources. To replace the power produced by SONGS in both the short and long term, the California Independent Service Operator, California Energy Commission, and California Public Utilities Commission are conducting ongoing integrated resource planning, developing grid support and electrical transmission scenarios, and identifying where and how much new power generation will be needed, some of which may be proposed in the coastal zone.

During its review of the proposed decommissioning of the San Onofre Nuclear Generating Station in 2019, the Commission continued to identify the need for a national solution for storage of spent nuclear fuel from nuclear power plants. The three coastal nuclear power plants in California—Humboldt Bay Nuclear Power Plant, Diablo Canyon Nuclear Power Plant in San Luis Obispo County, and San Onofre—all have temporary, on-site storage facilities, as there are no off-site sites available. All three of these nuclear facilities are located directly on the ocean, and their on-site storage of spent nuclear fuel is a public safety and coastal resource concern because of long-term implications of sea level rise and other coastal hazards. The continued presence of spent nuclear fuel is presently highly controversial particularly at San Onofre, but the need for a national, long-term solution for safely storing spent nuclear fuel is common to all three facilities.

Offshore Wind

Since the last assessment, there has been new interest in developing offshore wind resources in California. In May 2016, Governor Jerry Brown sent a letter to DOI Secretary Sally Jewell requesting formation of an Intergovernmental Renewable Energy Task Force to examine opportunities for offshore renewable energy development in California. The Coastal Commission is an active participant on the Taskforce, in addition to several other state and federal agencies and tribal groups. In October 2018, in response to interest from developers, BOEM issued a Call for Information and Nominations requesting information and expressions of interest for three offshore Call Areas located off of California's north and central coast. Since the Call closed at the end of January 2019, BOEM has been preparing a NEPA document in preparation for a lease sale. Prior to the lease sale and possibly as early as summer of 2020, BOEM will submit a federal consistency determination to the Coastal Commission on potential lease areas. Although it is early in the planning process for offshore wind, the Coastal Commission is working with our state and federal agency partners to ensure that offshore wind facilities are sited, designed, constructed and operated in a manner that avoids and minimizes impacts to coastal resources.

3. Briefly characterize the existing status and trends for federal government facilities and activities of greater than local significance[7] in the state's coastal zone since the last assessment.

Since the last assessment, the state has continued to see increases in the extent and pace of Department of Defense military activities, in the form of physical development and training and testing activities, both onshore and offshore, in San Diego County (onshore) and Southern California Training Offshore waters. Several factors have converged to create these intensifications: increased military focus on littoral warfare, joint international training with ally nations, a desire to reduce travel time by military personnel (and allow them more "family time"), increasing efficiencies gained through combining the resources multitude of military bases in proximity to San Diego, an overall shift from Atlantic-focused training to Pacific-focused training, and, given the realities and perceptions of increased threats worldwide to the nation's security, an overall increase in Navy and Marine Corps personnel and tempo of their training. These increases could, if not carefully planned and implemented, pose pressures on scarce and sensitive coastal zone resources.

Management Characterization:

1. Indicate if the approach is employed by the state or territory and if significant state- or territory-level changes (positive or negative) that could facilitate or impede energy and government facility siting and activities have occurred since the last assessment.

Significant Changes in Energy and Government Facility Management

Management Category	**Employed by State or Territory** (Y or N)	**CMP Provides Assistance to Locals that Employ** (Y or N)	**Significant Changes Since Last Assessment** (Y or N)
Statutes, regulations, policies, or case law interpreting these	Y	Y	Y
State comprehensive siting plans or procedures	Y	Y	N

2. For any management categories with significant changes, briefly provide the information below. If this information is provided under another enhancement area or section of the document, please provide a reference to the other section rather than duplicate the information:
   a. Describe the significance of the changes;
   b. Specify if they were 309 or other CZM-driven changes; and
   c. Characterize the outcomes or likely future outcomes of the changes.

Statutes, regulations, policies and case law:

Assembly Bill 1775 and Assembly Bill 342

a) Since the last assessment, the State of California adopted new laws prohibiting oil development and pipelines on state lands. These laws, AB 1775 and AB342 would also indirectly restrict oil development on adjacent federal lands, including the outer continental shelf.
b) This change was not 309 or CZM-driven.
c) The likely future outcomes of these changes would be to prohibit new oil and gas development on state lands and in the OCS.

Senate Bill 350 and Executive Order (B-30-15)

a) In 2015, the Clean Energy and Pollution Reduction Act (Senate Bill 350) established clean energy, clean air, and greenhouse gas (GHG) reduction goals, including reducing GHG to 40 percent below 1990 levels by 2030 and to 80 percent below 1990 levels by 2050. The Governor also issued an executive order to this effect, which also set interim targets on reducing GHG emissions by 40% below 1990 levels. California Energy Commission is working with other state agencies on implementation.
b) This change was not 309 or CZM-driven.
c) Expected outcomes of the bill are increased use of Renewables Portfolio Standard eligible resources, including solar, wind, biomass, geothermal and others.

Senate Bill 32

a) In 2018, updated the state clean energy and GHG reduction goals and target dates. The legislation mandates increases to renewable energy use, putting more electric cars and the road and improving energy efficiency and curbing emissions from key industries.
b) This change was not 309 or CZM-driven.
c) Expected outcomes of the bill are increased use of Renewables Portfolio Standard eligible resources, including solar, wind, biomass, geothermal and others.

State Policy: Executive Order B-55-18 Commitment to Carbon Neutrality

a) In 2018, Governor Brown issued Executive order calling for statewide carbon neutrality by 2045.
b) This change was not 309 or CZM-driven.
c) Expected outcomes are to continue to push the state to achieve GHG reductions.

State Policy: Ocean Protection Council Strategic Plan

a) The California Ocean Protection Council Strategic Plan sets a target of development of a commercial scale offshore wind project in California that minimizes impacts on marine biodiversity or habitat, currents and upwelling, fishing, cultural resources, navigation, aesthetic/visual, and military operations by 2026.
b) This is not a 309 of CZM-driven change

c) Encourages state agency coordination and supports state efforts on research, data and analysis to identify viable options for commercial scale offshore energy by 2026.

Enhancement Area Prioritization:

1. What level of priority is the enhancement area for the coastal management program?

   High _____
   Medium __X___
   Low _____

2. Briefly explain the reason for this level of priority. Include input from stakeholder engagement, including the types of stakeholders engaged.

Energy and Government Facility Siting enhancement are is a medium priority for the Coastal Commission, similar to the reason describe for Ocean Resources. Public comments on the Commission's 2021 - 2025 Strategic Plan support a moratorium on any new oil and gas drilling and specifically addressed issues like the decommissioning of Diablo Canyon Nuclear Plant and permitting desalination plants. Overall, many commenters suggest Commission's work in the area of energy and government facility siting should reflect the state's high priority on reducing energy use and transitioning to renewable energy. For any newly proposed or existing energy facilities that are at risk to flooding or erosion, now or with future sea level rise, this will be addressed through the efforts under the Coastal Hazards and Special Area Management Plan enhancement areas.

Aquaculture

Section 309 Enhancement Objective: Adoption of procedures and policies to evaluate and facilitate the siting of public and private aquaculture facilities in the coastal zone, which will enable states to formulate, administer, and implement strategic plans for marine aquaculture. §309(a)(9)

PHASE I (HIGH-LEVEL) ASSESSMENT: *(Must be completed by all states and territories.)*
Purpose: To quickly determine whether the enhancement area is a high-priority enhancement objective for the CMP that warrants a more in-depth assessment. The more in-depth assessments of Phase II will help the CMP understand key problems and opportunities that exist for program enhancement and determine the effectiveness of existing management efforts to address those problems.

Resource Characterization:

1. In the table below, characterize the existing status and trends of aquaculture facilities in the state's coastal zone based on the best-available data. Your state Sea Grant Program may have information to help with this assessment.[55]

Status and Trends of Aquaculture Facilities and Activities[56]

Type of Facility/Activity	Number of Facilities[57] in 2018	Approximate Economic Value (2018)	Change Since Last Assessment (2013) (↑, ↓, –, unkwn)
All Shellfish[58]	21	More than $33.7 M	↑
Total Mollusk	20	$33.7 M	↑
Abalone	3	(not disclosed)	unkwn
Clams	3	$14,000	unkwn
Mussels	7	(not disclosed)	unkwn
Oyster[59]	17	$28.7 M	↑
Kelp/Marine Algae[60]	3	(not disclosed)	↑

[55] While focused on statewide aquaculture data rather than just within the coastal zone, the *Census of Aquaculture* (*www.agcensus.usda.gov/Publications/Census_of_Aquaculture/*) may help in developing your aquaculture assessment. The census is conducted every 10 years and the last report was released in 2013. The report provides a variety of state-specific aquaculture data to understand current status and recent trends.
[56] Based on 2018 Census of Aquaculture, https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/Aquaculture/index.php
[57] Be as specific as possible. For example, if you have specific information of the number of each type of facility or activity, note that. If you only have approximate figures, note "more than" or "approximately" before the number. If information is unknown, note that and use the narrative section below to provide a brief qualitative description based on the best information available.
[58] Includes crustaceans and mollusks. Only mollusk sales reported for California
[59] Includes commercial nursery/seed production facilities and grow-out farms.
[60] Includes research and experimental facilities. Only 1 algae and 1 microalgae facility reported for California in 2018 Census of Aquaculture.

2. If available, briefly list and summarize the results of any additional state- or territory-specific data or reports on the status and trends or potential impacts from aquaculture activities in the coastal zone since the last assessment.

   The Coastal Commission is nearing the completion of the permit compliance effort initiated during the last 309 assessment. This effort involved review of existing coastal development permits for aquaculture operations and a collaborative, multi-agency to ensure all state permitting requirements were being met. The effort resulted in the issuance of new or amended permits for the majority of shellfish aquaculture operations within California's coastal zone to resolve permit non-compliance issues and bring unpermitted aquaculture activities into compliance with the Coastal Act. Additionally, many of the new authorizations allow for the expansion of existing shellfish aquaculture facilities by adding acreage and/or cultivation methods that are expected to yield higher production volumes and economic value in coming years.

   In addition, Commission staff are currently involved in early consultation, agency coordination, and preliminary environmental review activities with five pending shellfish aquaculture projects. Four of these projects are proposed to be located in the open coastal waters offshore of California rather than protected estuaries and embayments.

   Commission staff have also seen a growing interest in aquaculture focused on marine algae species. Three research- or pilot-scale facilities have been approved and installed within California's coastal zone since the last assessment and there are currently two proposals for commercial scale kelp cultivation operations in the initial stages of project development.

   The primary potential impacts from aquaculture activities in the coastal zone that have arisen since the last assessment concern marine debris and naturalization of non-native species. Shellfish aquaculture relies heavily on the use of plastic cultivation structures and materials that can become dislodged and lost into the marine environment. Due to the volume and quantity of this material, even the loss of a low percentage of total gear can result in the annual loss of many tons of plastic into the ocean. As aquaculture operations expand in California's coastal zone and the use of new gear types increases, the Commission, through the imposition of special conditions (i.e., mitigation measures), is focused on the prevention of gear loss and promotion of gear recovery and clean-up efforts.

   The Commission is similarly concerned with preventing and responding to the naturalization of non-native aquaculture species. Although not native to California, one of the most commercially valued species, the Pacific oyster, is now understood to have escaped from cultivation and is establishing self-sustaining wild populations throughout southern California. As climate change related shifts in oceanic conditions occur, this naturalization trend has the potential to increase and expand into other parts of the state. In response, the Commission is actively tracking the presence of wild Pacific oysters and is requiring the use of sterile triploid oyster varieties in cultivation.

Management Characterization:

1. Indicate if the approach is employed by the state or territory and if there have been any state- or territory-level changes (positive or negative) that could facilitate or impede the siting of public or private aquaculture facilities in the coastal zone.

Significant Changes in Aquaculture Management

Management Category	**Employed by State or Territory** (Y or N)	**CMP Provides Assistance to Locals that Employ** (Y or N)	**Significant Changes Since Last Assessment** (Y or N)
Aquaculture comprehensive siting plans or procedures	Y	N	N
Other aquaculture statutes, regulations, policies, or case law interpreting these	Y	N	Y

2. For any management categories with significant changes, briefly provide the information below. If this information is provided under another enhancement area or section of the document, please provide a reference to the other section rather than duplicate the information:
    a. Describe the significance of the changes;
    b. Specify if they were 309 or other CZM-driven changes; and
    c. Characterize the outcomes or likely future outcomes of the changes.

<u>Statutes, regulations, policies or case law</u>

Senate Bill 262

a) On October 2, 2019, California's governor signed Senate Bill No. 262. This legislation requires the Coastal Commission to develop guidance, in consultation with the California Department of Fish and Wildlife and other stakeholders, for applicants seeking coastal development permits for shellfish and seaweed aquaculture production and restoration projects. The guidance document was completed in December 2020 and can be accessed on the Commission's website. [61]

b) This legislation was not a 309 or CZM-driven change but the CZM program will carry out the purpose/ intent of the legislation.

[61] https://documents.coastal.ca.gov/assets/cdp/CDP%20Application%20Guidance_12.08.20.pdf

c) Outcome/Impact: The intended purpose of this guidance is to increase agency coordination, reduce regulatory duplication, reduce costs to applicants, and provide examples of growing techniques that have been approved by the Commission in past actions.

Enhancement Area Prioritization:

1. What level of priority is the enhancement area for the coastal management program?

High	_____
Medium	__X__
Low	_____

2. Briefly explain the reason for this level of priority. Include input from stakeholder engagement, including the types of stakeholders engaged.

   The aquaculture enhancement area is a medium priority for California's coastal management program. Although the increasing trend seen over the previous assessment continues, aquaculture remains a modest industry in California. The Commission's efforts over the past five years (including its regulatory compliance review and resulting permitting efforts) have established a consistent, efficient process for reviewing, evaluating, and facilitating the siting of aquaculture facilities in the coastal zone. In addition, there were a number of comments from stakeholders and members of the public supporting aquaculture during the development of the Coastal Commission's Strategic Plan. As additional facilities are proposed and pursued – and with the development of the guidance document described above – the Commission will be able to continue to refine and improve this process. With this capability and in light of the more significant challenges posed by sea level rise and other issues confronting the Commission, the aquaculture enhancement area is medium priority for California's coastal management program.

Phase II Assessment

Coastal Hazards

In-Depth Resource Characterization:
Purpose: To determine key problems and opportunities to improve the CMP's ability to prevent or significantly reduce coastal hazard risks by eliminating development and redevelopment in high-hazard areas and managing the effects of potential sea level rise and Great Lakes level change.

1. Based on the characterization of coastal hazard risk, what are the three most significant coastal hazards[62] within your coastal zone? Also indicate the geographic scope of the hazard, i.e., is it prevalent throughout the coastal zone, or are there specific areas most at risk?

	Type of Hazard	**Geographic Scope** (throughout coastal zone or specific areas most threatened)
Hazard 1	Erosion	Statewide; particularly as it relates to the severity along different shoreline types (beaches, cliffs/bluffs, wetlands etc.)
Hazard 2	Flooding/ Storms/Waves/ Tsunamis	Statewide; particular as related to beaches, wetlands, area protected by dikes/other infrastructure, and urban areas adjacent development (residential, docks/piers, infrastructure, etc.)
Hazard 3	Fire	Statewide; particularly in coastal areas with high fire hazard severity zones or where consequences of fire, such a mudslides and debris flows reach the coast.

2. Briefly explain why these are currently the most significant coastal hazards within the coastal zone. Cite stakeholder input and/or existing reports or studies to support this assessment.

   All three of the above hazards are significant because they have been and continue to be important factors that are analyzed in many of the Commission's decision-making processes (e.g. Coastal Development Permits, Local Coastal Program updates/certifications etc.). Moreover, each of these hazards will be exacerbated by sea level rise/climate change and the resulting changes may not be well understood. Many of the stakeholders who provided comments on the Commission's 2021-2025 Strategic Plan mentioned sea level rise in general, especially as they relate to protection of beaches, coastal habitats, and development.

[62] See list of coastal hazards on pg. 24 of the assessment template.

3. Are there emerging issues of concern, but which lack sufficient information to evaluate the level of the potential threat? If so, please list. Include additional lines if needed.

Emerging Issue	Information Needed
Sea level rise driven changes in coastal hazards	Additional information related to sea level rise impacts in general is necessary, including a better understanding of changes in erosion rates as it relates to differences in shoreline types; the cumulative flooding impacts in areas where rivers/estuaries combine with open ocean shoreline flooding; impacts with localized issues of subsidence, and modelling methodologies for both.
Sea level rise adaptation responses	Better understanding of implementation techniques (plus related legal information) for a variety of both common and innovative adaptation responses including but not limited to living shorelines, regional sediment management, and shoreline protective device removal. Additional information about where/under what conditions different techniques are most useful is also necessary, as is better understanding of the methodologies for monitoring sea level rise, local vertical land motion, and the effectiveness of adaptation strategies.
Saltwater intrusion & groundwater changes	Aquifer water quality information where saltwater intrusion occurs is needed. Information is also needed on risk of emergence/groundwater related flooding from saltwater intrusion elevating shallow water tables
Fire	Information on drought and heat wave effects on changing fire patterns and intensities
Dam Safety	Many of the dams in coastal watersheds are aging and threatening communities downstream. They are holding a significant amount of upstream sediment that would otherwise have reached the coast. Plans have been developed to remove several obsolete dams, but none have been implemented. Information and environmentally sound examples of ways to clean sediments trapped behind dams is needed.

In-Depth Management Characterization:

Purpose: To determine the effectiveness of management efforts to address identified problems related to the coastal hazards enhancement objective.

1. For each coastal hazard management category below, indicate if the approach is employed by the state or territory and if there has been a significant change since the last assessment.

Significant Changes in Coastal Hazards Statutes, Regulations, and Policies

Management Category	**Employed by State/Territory** (Y or N)	**CMP Provides Assistance to Locals that Employ** (Y or N)	**Significant Change Since the Last Assessment** (Y or N)
Shorefront setbacks/no build areas	Y	Y	N
Rolling easements	N	N	N
Repair/rebuilding restrictions	Y	Y	Y
Hard shoreline protection structure restrictions	Y	Y	Y
Promotion of alternative shoreline stabilization methodologies (i.e., living shorelines/green infrastructure)	Y	Y	Y
Repair/replacement of shore protection structure restrictions	Y	Y	Y
Inlet management	Y	Y	Y
Protection of important natural resources for hazard mitigation benefits (e.g., dunes, wetlands, barrier islands, coral reefs) (other than setbacks/no build areas)	Y	Y	N
Repetitive flood loss policies (e.g., relocation, buyouts)	Y (by FEMA/OES, not the CMP)	N	N
Freeboard requirements	Y	Y	N
Real estate sales disclosure requirements	Y	Y	N
Restrictions on publicly funded infrastructure	N	N	N
Infrastructure protection (e.g., considering hazards in siting and design)	Y	Y	N
Other (please specify)			

Significant Changes to Coastal Hazard Management Planning Programs or Initiatives

Management Category	Employed by State/Territory (Y or N)	CMP Provides Assistance to Locals that Employ (Y or N)	Significant Change Since the Last Assessment (Y or N)
Hazard mitigation plans	Y (by OES, CGS, not the CMP)	N	Y
Sea level rise/Great Lake level change or climate change adaptation plans	Y	Y	Y
Statewide requirement for local post-disaster recovery planning	N	N	N
Sediment management plans	Y	Y	Y
Beach nourishment plans	Y	Y	Y
Special Area Management Plans (that address hazards issues)	Y	Y	Y
Managed retreat plans	Y	Y	Y
Other (Fire hazard planning)	Y	Y	Y

Significant Changes to Coastal Hazard Research, Mapping, and Education Programs or Initiatives

Management Category	Employed by State/Territory (Y or N)	CMP Provides Assistance to Locals that Employ (Y or N)	Significant Change Since the Last Assessment (Y or N)
General hazards mapping or modeling	Y	Y	Y
Sea level rise mapping or modeling	Y	Y	Y
Hazards monitoring (e.g., erosion rate, shoreline change, high-water marks)	Y	Y	Y
Hazards education and outreach	Y	Y	Y
Other (please specify)			

2. Identify and describe the conclusions of any studies that have been done that illustrate the effectiveness of the state's management efforts in addressing coastal hazards since the last

assessment. If none, is there any information that you are lacking to assess the effectiveness of the state's management efforts?

A number of resources highlighted in Phase I Coastal Hazards Assessment that provide information regarding the status of coastal hazards also make some conclusions regarding the effectiveness of current state management efforts to date. At a macro-scale, studies conclude that risk of coastal hazards caused by climate change and sea level rise are extremely significant in terms of potential economic losses, property damage and risk to life and human health and that more focused attention and coordination is needed across sector, government agencies to address it.

Noteworthy conclusions from the Climate Readiness Institute's 2018 California Sea Level Rise Snapshots and Coastal Commission's Statewide Vulnerability Synthesis Report are provided here.

- **2018 California Sea Level Rise Regional Snapshots.** Climate Readiness Institute. [63] Current barriers identified from this process are the following: 1) there are too many different directives from state and federal agencies, 2) sufficient resources are not available for local and regional sea level rise planning, 3) some local governments do not prioritize sea level rise planning because it is not required, 4) changing science and guidance is not understood by elected official and the public, and 5) socially vulnerable communities and populations are often not engaged in the planning and decision making process.

- The Commission's Statewide Vulnerability Synthesis Report makes 10 key findings/conclusions that pertain to the effectiveness of current management and where attention or additional information is needed. These include:

  Risks to Populations: The largest coastal zone populations vulnerable to flooding from a 100-year storm plus 55 inches sea level rise are in Los Angeles, Orange, and San Diego counties.

  Environmental Justice and Social Vulnerability: Many vulnerability assessments did not account for the full range of social impacts linked to sea level rise. Vulnerability to hazards from sea level rise will have a disproportionate impact on communities with the least capacity to adapt; as such, a comprehensive approach to assessing social vulnerabilities should be used going forward to identify communities that may have higher vulnerabilities due to socio-economic factors and other risks that may be present in that community. Furthermore, as sea levels rise and public access points and recreational opportunities are lost, public access opportunities will become fewer and more limited for those who cannot afford to live at the coast.

  Development and Shoreline Protective Devices: Despite many miles of existing armoring,

[63] https://vcresearch.berkeley.edu/research-unit/climate-readiness-institute

erosion will continue to threaten existing developed areas in vulnerable communities, and this threat will increase with rising sea level.

Public Access and Recreation: Public access and recreational assets are threatened by sea level rise in every county. However, with planning, funding, and collaboration, local governments can lay the groundwork for resilient public access ways and preservation of beach areas, even as sea levels rise.

Beaches, Vulnerable Habitat and Open Space: Many communities have not yet addressed the vulnerability of their sandy beaches to rising sea levels. Of those assessments that did evaluate sediment management and beach replenishment to maintain beach area as sea levels rise, few examined the ecological consequences or the long-term economic feasibility of these responses.

Wetlands and Other Vulnerable Habitat: As sea levels rise, wetland habitat will be lost unless it can migrate inland or accrete upward. Thus, planning for wetland migration buffers and/or other adaptation strategies for sustaining wetlands will be vital to conserving the remaining wetland habitat area on the California coast.

Agricultural Resources: Sea level rise poses significant threats to agricultural resources where it can cause an increase in flooding and inundation of low-lying agricultural land, saltwater intrusion into agricultural water supplies, and/or a decrease in the amount of freshwater available for agricultural uses. Protecting agricultural resources in these cases will necessitate collaboration and long-term planning with all stakeholders, including local governments, utilities, landowners, state and federal agencies.

Energy and Other Infrastructure: Because of the interconnected nature of critical infrastructure, the high cost of networks and central facilities, and the long-term expectations for years of use, planning for sea level rise in infrastructure investments will be increasingly important. This planning will require proactive approaches, interagency collaboration, and funding to maintain community services in the most cost-effective way.

Interagency Coordination: This statewide synthesis of sea level rise vulnerability assessments highlights the importance of interagency coordination for addressing sea level rise threats that cross boundaries of individual parcels, jurisdictions, and state and federal lands.

Lessons Learned from Local Coastal Program Planning Case Studies: LCP policies to address new development, known vulnerabilities, general hazard response, and future specific adaptation methods provide the mechanism to develop resilience to sea level rise. Communities should begin planning so that actions now do not preclude future adaptation options.

Identification of Priorities:

1. Considering changes in coastal hazard risk and coastal hazard management since the last assessment and stakeholder input, identify and briefly describe the top one to three management priorities where there is the greatest opportunity for the CMP to improve its ability to more effectively address the most significant hazard risks. *(Approximately 1-3 sentences per management priority.)*

   Management Priority 1: Strengthen policy recommendations as they related to hazard avoidance and phased adaptation

   Description: Provide information and policy recommendations to incorporate both common and new, innovative approaches for avoiding and mitigating coastal hazards into CDPs and LCPs. In LCPs, providing recommendations for policies and planning that allows for phasing actions for long term adaptation can help communities sequence the projects necessary to address hazards as conditions change.

   Management Priority 2: Encourage and support implementation of nature-based strategies to address sea level rise

   Description: Past coastal hazard responses of hard armoring or beach nourishment will have different efficacy and life trajectories in the context of rising seas. Hard armoring, which is only allowable under the Coastal Act under specific circumstances, and sediment management practices are more traditional approaches that are relied upon in many areas; additional studies, feasibility analysis, pilot efforts, and potential regulatory changes are needed to develop or enhance policy recommendation and improve permitting processes to preserve and restore the protective functions of natural shorelines through nature-based sea level rise adaptation strategies.

   Management Priority 3: Consider the environmental justice impacts that sea level rise adaptation projects may cause or exacerbate in permit and planning decisions

   Description: Due to discriminatory land use policies and systematic racism, environmental justice communities often experience a disproportionate burden related to hazard management, barriers to coastal access, and pollution impacts. Adaptation planning must include outreach and engagement with environmental justice communities that are directly and/or indirectly impacted by sea level rise impacts. Outcomes of adaptation projects need to address the vulnerabilities of impacted environmental justice communities.

2. Identify and briefly explain priority needs and information gaps the CMP has for addressing the management priorities identified above. The needs and gaps identified here should not be limited to those items that will be addressed through a Section 309 strategy but should include any items that will be part of a strategy.

Priority Needs	Need? (Y or N)	Brief Explanation of Need/Gap
Research	Y	Research is needed to help better understand vertical land motion, dynamic changes to coastal/riverine systems from rising sea level, the effectiveness of adaptation strategies for various coastal types, and to support most policy changes. Management efforts directed toward coastal hazards will require research into many aspects of the coast to minimize risks from hazards, better understand where certain hazards may be of greater or lesser concern, determining whether there are underlying causes for the hazardous condition that can be managed. For example, beach nourishment may not be effective in locations where beach erosion is due primarily to land subsidence. If research determines that ground water withdrawals are a major cause for land subsidence and sea level rise in certain areas, policies directed at changes in water withdrawals may be important in a beach management effort. Work is also needed to better understand and project future changes to bluff retreat with rising sea level. Several models have been developed, but there has been little validation of the best models for different bluff situations. Also, additional research is needed into the differences in response times between changes in sea level and changes in the retreat rates of different bluff types.
Mapping/GIS/modeling	Y	Mapping, GIS and modeling are planning tools and they have been used in LCPs for many years. In addition, mapping, GIS and modeling are major components of most local government's sea level rise vulnerability assessment and LCP updates. Local-scale geology is an important control on the bluff retreat response to rising sea level, but is difficult to incorporate into generalized models. More accurate and useful projections of future bluff retreat in California will likely require the development of location-specific models; such efforts should be directed toward areas of known vulnerability, where significant resources are at stake. Significant improvements to existing bluff retreat modeling tools could result from the collection of more widespread and more accurate historical retreat rate estimates.
Data and information	Y	A large number of hazard maps, studies, tools and data

management		sets have been developed over the years. Data and information management is important now to help planners and local communities best use existing data and information. Many new maps and tools are being developed in response to various sea level rise issues and planners and local government staff will need help in determining which of these will be useful, and under what conditions.
Training/Capacity building	Y	Staff and local planners need to be trained on the available hazard and sea level rise products so that they can make the best use of these new and emerging tools.
Decision-support tools	Y	Decision-support tools bridge research and policy.
Communication and outreach	Y	Outreach is important to sea level rise vulnerability assessments and LCP updates and is fundamental to the Coastal Act.
Other (specify)		

Enhancement Area Strategy Development:

1. Will the CMP develop one or more strategies for this enhancement area?

   Yes ___x___
   No _____

2. Briefly explain why a strategy will or will not be developed for this enhancement area.

   Hazards and hazard responses are an important CCMP program concern due to extreme weather and sea level rise and other climate related impacts, and due to the corresponding impacts to public access, coastal resources, public trust lands and water quality from both hazards themselves and hazard responses. A significant number of public comments offered on the Commission's 2021-2025 Strategic Plan note that addressing climate change should be a high priority. To bolster the 2021 – 2025 Strategic Plan objective of supporting resilient coastal communities in the face of climate change and sea level rise, the Commission will develop a strategy to support more resilient, sustainable, and equitable coastal communities which includes long-term protection of coastal resources through policy guidance and potential regulatory changes that address the management priorities and needs identified herein.

Public Access

In-Depth Resource Characterization:
Purpose: To determine key problems and opportunities to improve the CMP's ability to increase and enhance public access opportunities to coastal areas.

1. What are the three most significant existing or emerging threats or stressors to creating or maintaining public access within your coastal zone? Indicate the geographic scope of the stressor, i.e., is it prevalent throughout the coastal zone or are specific areas most threatened? Stressors can be private development (including conversion of public facilities to private); non-water-dependent commercial or industrial uses of the waterfront; increased demand; erosion; sea level rise or Great Lakes level change; natural disasters; national security; encroachment on public land; or other (please specify). When selecting significant stressors, also consider how climate change may exacerbate each stressor.

	Stressor/Threat	**Geographic Scope** (throughout coastal zone or specific areas most threatened)
Stressor 1	Barriers to equitable access	All coastal California; southern California highest priority to start
Stressor 2	Sea level rise; loss of beaches, coastal trail segments, access and facilities	All coastal California
Stressor 3	Lack/ loss of affordable public access	All coastal California; southern CA highest priority to start

2. Briefly explain why these are currently the most significant stressors or threats to public access within the coastal zone. Cite stakeholder input and/or existing reports or studies to support this assessment.
    a. Barriers to equitable access: The demand for public access to California's coast continues to increase every year. Given the high cost of living along the coast, many lower income people live inland, at some distance from the coast. For these inland residents, it is expensive to drive to and park at the coast. The cost of a car, the cost of gasoline, and the cost of day use parking fees are all significant factors that inhibit interior residents from enjoying a day at the coast. In contrast, those who live within a short distance of the coast, they are able to easily and more cheaply reach and enjoy a day at the beach.[64] In addition, as discussed in the Phase I Public Access assessment, recent studies show that social barriers exist, as a result of historic exclusionary practices or other factors that limit public use and enjoyment of the coast.

[64] UCLA 2017 "Access for All: A New Generation's Challenges on the California Coast," 25 January 2017.

b. Sea Level Rise: As our oceans continue to rise, many of California's beaches will face early and significant flooding and erosion impacts.[65] As beaches are drowned and available sand areas shrink, so are important recreational assets that bring in large amounts of essential tourist dollars to local communities. Rising seas will also negatively impact our recreational infrastructure, such as coastal trail segments, beach access stairways, picnic tables, restrooms, lifeguard towers, etc. The State is working on adaptation strategies to ensure that as seas rise, these amenities are replaced on inland and upland locations.[66]

c. Lack or loss of affordable overnight accommodations: As previously highlighted in Phase I, according to recent studies, 60% of California residents enjoy just the day at the beach, they do not stay overnight due to high costs of motels.[67] The Coastal Commission found in 2016 that only 5% of coastal accommodations are economy rooms, as 70% of all rooms that have been lost since 1989 have been economy rooms. (whereas less than 10% of the rooms lost have been in the upscale and luxury categories).[68] By this action, lower income people are effectively prevented from staying overnight at the coast. This creates an injustice, especially for lower income people who live further away from the coast.

3. Are there emerging issues of concern, but which lack sufficient information to evaluate the level of the potential threat? If so, please list. Include additional lines if needed.

Emerging Issue	Information Needed
Need to fund, construct, open and operate lower cost overnight facilities to ensure that all Californians can enjoy an overnight trip along the coast	Need more detailed information on the cost to implement the necessary steps including: acquisition of property, construction and related infrastructure costs, costs and funding opportunities to operate and maintain.

[65] USGS 2017 study predicts that 31 to 67 percent of Southern California beaches could become completely eroded by 2100 in the event the ocean rises about 3 to 6.5 feet.
Vitousek, Sean & Barnard, Patrick & Limber, Patrick. (2017). Can beaches survive climate change? Journal of Geophysical Research: Earth Surface. 10.1002/2017JF004308.
[66] Ocean Protection Council. 2018. OPC Sea Level Rise Science 2018 Update.
Noble Consultants-G.E.C., Inc. 2016. Los Angeles County Public Beach Facilities Sea-Level Rise Vulnerability Assessment prepared for LA County Department of Beach and Harbors.
[67] California Coastal Conservancy. 2019. Explore the Coast Overnight Assessment
https://scc.ca.gov/files/2019/10/Explore-the-Coast-Overnight-Assessment-AB4343.pdf
[68] According to a Coastal Commission Lower Cost Visitor Serving Accommodations Public Workshop held in October 2016, since 1989, more than twice as many economy rate hotel rooms (24,720) have been lost along the coast compared to all other hotel rooms at all other price points combined (11,247). Such trends have made it that much more difficult for the lower cost consumer to access the coast.
https://www.ioes.ucla.edu/wp-content/uploads/th6-11-2016.pdf

Need to ensure that LCPs include policies to maintain public access and also encourage and require provision of lower cost visitor serving facilities.	LCP amendments and updates- need to encourage local governments to conduct studies and to adopt policies that support maintaining public access where it may be lost to sea level rise and for prioritizing low cost visitor serving amenities.
Defining and creating more equitable public access	Information about where, how, and why individuals and families from communities of color, low-income communities, and other underserved communities can or can't access coast.
Beach and beach access sustainability	Information about where beaches and access ways will be lost and where they are able to be maintained/sustained given geography/physical conditions as seas rise due to climate change; information on adjacent development/ability of beaches to migrate inland and maintain sand supply

In-Depth Management Characterization:
Purpose: To determine the effectiveness of management efforts to address identified problems related to the public access enhancement objective.

1. For each additional public access management category below that was not already discussed as part of the Phase I assessment, indicate if the approach is employed by the state or territory and if significant changes (positive or negative) have occurred at the state or territory level since the last assessment.

Significant Changes to Public Access Management

Management Category	Employed by State/Territory (Y or N)	CMP Provides Assistance to Locals that Employ (Y or N)	Significant Changes Since Last Assessment (Y or N)
Comprehensive access management planning	Y	Y	Y
GIS mapping/database of access sites	Y	Y	Y
Public access technical assistance, education, and outreach (including access point and interpretive signage, etc.)	Y	Y	Y
Other (please specify): Laws/policies	Y		Y; EJ provisions added to the Coastal Act and EJ Policy adopted

2. For management categories with significant changes since the last assessment, briefly provide the information below. If this information is provided under another enhancement area or section of the document, please provide a reference to the other section rather than duplicate the information.
    a. Describe significant changes since the last assessment;
    b. Specify if they were 309 or other CZM-driven changes; and
    c. Characterize the outcomes or likely future outcomes of the changes.

Comprehensive access management planning

Memorandum of Understanding (Coastal Commission and State Lands Commission)

a) Significant changes since the last assessment:

The Memorandum of Understanding (MOU) was entered into by the California Coastal Commission (CCC) and the California State Lands Commission (CSLC) in September 2019 to improve coordination and collaboration between agencies. The purpose of the MOU is to encourage and facilitate the coordination and exchange of information between and among staffs of the CCC and CSLC for project proposals requiring an approval by the CCC which may also implicate the CSLC's leasing jurisdiction, granted lands oversight responsibilities, or trustee interests under the Public Trust Doctrine. As global climate changes and sea levels rise, it is critical for the agencies to coordinate early and often, share expertise, and combine efforts to maintain public trust resources and promote public access.

b) 309 or other CZM-driven changes:

The MOU is a product of a federal Coastal Zone Management Act (CZMA) grant award Section 309 strategy entitled "Managing Options to Protect Public Trust Lands and Resources."

c) Outcomes or likely future outcomes of the changes:

An expected outcome is better protection of public access for public trust resources in light of sea level rise.

GIS mapping/database of access sites

Mapping of Coastal Trail

a) Significant changes since the last assessment: Commission, with assistance from Caltrans and the Coastal Conservancy, completed California Coastal Trail status GIS mapping in June 2019. This effort is a work in progress and is designed to be updated as conditions change.

b) 309 or other CZM-driven changes: This effort was CZM-driven, but not 309 funded.

c) Outcomes or likely future outcomes of the changes: This trail information will be used to further the goal of maximizing public access by providing information showing the gaps in the Coastal Trail as well as areas of Coastal Trail needing improvement. This information will be used in LCP updates and regulatory actions to complete the Coastal Trail system.

Public access technical assistance, education, and outreach

YourCoast Web App

a) Significant changes: Since the last assessment, the Coastal Commission has released a web and iOS app (https://coastal.ca.gov/YourCoast/#/map) to provide locations of public access points for California's outer coast. This app was released in 2018 for visitors to the California

coast to easily find information about public beaches and amenities at each location. The app provides directions, photos and information about restrooms, parking, disabled access, dog rules, surfing, campgrounds and other pertinent information included in the CCC Coastal Access Guides.

b) 309 or other CZM-driven changes: The app was CZM-driven, funded by a settlement agreement to resolve permit violations in 2013.

c) Outcomes or likely future outcomes of the changes: The app provides information that was previously only available through printed guidebooks. The app format allows the agency to quickly update the information as it changes over time. This promotes the agency's mission of maximizing public access to provide recreational opportunities for all the people.

State Coastal Conservancy Explore the Coast and Explore the Coast Overnight Grant Programs

a) Significant changes since the last assessment:

To address the scarcity of overnight accommodations for low and middle income individuals and families on the coast, in 2017 the California State Legislature enacted AB 250 (Gonzalez-Fletcher), codified as Chapter 10 of Division 21 of the Public Resources Code Sections 31411-31414. AB 250 calls on the Conservancy to work with the Coastal Commission and State Parks to develop and implement the Explore the Coast Overnight program to facilitate the improvement of existing and the development of new lower-cost coastal accommodations. The goals of the Explore the Coast Overnight Program includes: Helping improve existing, and develop new lower-cost coastal accommodations; Ensuring that new or renovated coastal accommodation projects are available to all Californians, in particular low and middle-income Californians and organizations that serve under-resourced communities; Supporting innovative pilot projects; Creating and preserving a variety of lower-cost coastal accommodations; and

Maintaining and increasing the stock of lower-cost coastal accommodations along the California coast.

b) 309 or other CZM-driven changes: The efforts are CZM-driven, managed by the Coastal Conservancy.

c) Outcomes or likely future outcomes of the changes:

Explore the Coast grants and the Explore the Coast Overnight Program will expand more opportunities for all Californians to experience and learn about the coast and stay overnight at the coast, particularly individuals and youth from low and middle-income households, communities of color, at-risk or underserved populations, and others that face barriers to accessing the coast.

Other laws/policies

Environmental Justice Amendments to the Coastal Act

See Cumulative Impacts Phase I for description of this significant change.

Regarding c), outcomes as they pertain to public access, the Environmental Justice (EJ) policy states:

"The Commission will use its legal authority to ensure equitable access to clean, healthy, and accessible coastal environments for communities that have been disproportionately overburdened by pollution or with natural resources that have been subjected to permanent damage for the benefit of wealthier communities."

In addition, the EJ Policy includes a dedicated principle to Coastal Access and a number of implementation steps related to reducing barriers to and better understanding public access needs of environmental justice communities. This includes a commitment that Commission will strive for a no-net-loss of lower-cost facilities in the coastal zone, while implementing a longer-term strategy to increase the number and variety of new lower-cost opportunities. And, where a local government fails to consider environmental justice when evaluating a proposed development that has the potential to adversely or disproportionately affect a historically disadvantaged group's ability to reach and enjoy the coast, that failure may be the basis for an appeal of that local permit to the Coastal Commission.

3. Identify and describe the conclusions of any studies that have been done that illustrate the effectiveness of the state's management efforts in providing public access since the last assessment. If none, is there any information that you are lacking to assess the effectiveness of the state's management efforts?

   The public access program highlights below illustrate many of the last 5 years of accomplishments in terms of planning and completing new accessways and coastal trail segments, access barrier removal, and educational improvements.

Year	Public Access Program highlights
2015	New access at Noyo Headlands Park, new Arana Gulch multi-use pathway, New facilities and stairway access at Dan Blocker County Beach, new beach pathway to Carbon Beach in Malibu.
2016	Peter Douglas Coastal Trail in Mendocino County, the last link in the 67-mile-long Backbone Trail, new public stairway to the Malibu Road East beach, bluff face stairway at Geoffrey's Restaurant in Malibu, new city of Malibu parking area available for public use near Malibu Pier.
2017	New coastal trail segment in Arcata, new access point on northern Mendocino coast, new parking area and trail to viewing platform in Mendocino County, new access trail in City of Morro Bay, enhanced Carlsbad access with new educational kiosk, access impediments removed in Malibu, new accessway at La Conchita in Ventura County with dedication to Pater Douglas. In July, the Commission approved the first new State Parks beach campground in 30 years—the Fort Ord Dunes State Campground in Monterey County which will open up public access along 4 miles of shoreline.
2017	Completion of the report, "Status of Vertical Accessways for Northern California," October 2016 (See Phase I Public Access description).

2018	New access created at City of Eureka CA Coastal Trail segment, new Pelican Bluffs Trail in Point Arena, City of Ft Bragg Noyo Headlands coastal trail completed, and a new Santa Cruz County CCT segment.
2019	Two new beach accessways in City of Pismo Beach, Mountains Recreation and Conservation Authority (MRCA) opened two Coastal View Overlooks in the Big Rock area of Malibu, encroachments removed at Malibu's Las Flores Beach, and City of Santa Cruz upgraded a critical link in the CCT with a new Trestle Bridge. In March 2019, four state agency Directors signed a Collaboration Agreement stating their collective intent to develop and implement an updated Public Access Program for Hollister Ranch beaches.

As discussed in the Phase I Public Access section, the Coastal Commission and the Conservancy prepared reports in 2017 and 2019 that documented the status of lower cost visitor serving accommodations along the coast and found that 70% of lower cost hotels have been lost to construction of new luxury hotels. One result of that land use change is that 60% of the visitors to the coast come only for the day, overnight stays are too expensive. While the state has placed a high priority on constructing additional lower cost accommodations, there has been very little progress toward meeting this goal because of financial and management challenges such as identifying specific ways to fund, construct, operate and maintain these facilities. Case studies, both within and outside California, could help to bring information and expertise to the issue which could assist with program implementation.

In addition to proactive efforts to create new or enhance existing public access opportunities, there also have been significant improvements for public access through the resolution of Coastal Act public access violations through the use of the Commission's administrative penalty authority. Resolution for public access violations typically involve removal of physical barriers, acquisition of land or property to provide new public access. One report that describes the effectiveness of this new tool as it relates to public access is in the 2019 report to the Legislature on the implementation of Coastal Commission Administrative Penalty Authority from 2015 – 2018[69].

Identification of Priorities:

1. Considering changes in public access and public access management since the last assessment and stakeholder input, identify and briefly describe the top one to three management priorities where there is the greatest opportunity for the CMP to improve the effectiveness of its management effort to better respond to the most significant public access stressors. *(Approximately 1-3 sentences per management priority.)*

[69] https://documents.coastal.ca.gov/reports/2018/Report-to-CA-legislature/Coastal-Commission-Report-of-Administrative-Penalty-Authority-1.15.19.pdf

Management Priority 1: Environmental Justice and equity in public access

While there has been initial research that points to inequitable coastal access and identifies general barriers, there is a lack of information on where, how, and why individuals and families from underserved communities access the coast. A needs assessment of coastal access for environmental justice communities and an evaluation of this information disaggregated by race, income and other socioeconomic and demographic variables would help the Commission understand the locations, types of coastal recreation and access preferred by underserved communities in coastal and inland areas and existing inequities. This information would help the Commission develop better permit conditions, prioritize enforcement actions, and would be a resource for other state partners for funding coastal access projects. Additionally, the information could be used to inform review of LCP policies on coastal access. In the absence of a comprehensive "needs assessment", implementing the goal of providing enhanced public access in a manner that promotes environmental justice will rely on targeted approaches and case studies to provide new strategies.

Management Priority 2: Evaluate and develop management strategies to address sea level rise risks to public access/recreational opportunities due to sea level rise and the loss of beaches

Description: Public beaches are under threat from sea level rise. If Californians do not act, two-thirds of beaches in southern California could be lost to sea level rise by the end of this century. Strategies are needed to adapt access ways, parking areas, and recreational shoreline space at risk and determine where beaches and accessways can be maintained over time. Addressing coastal hazards is an important management priority as sea level rise will intensify hazards and responses such as shoreline armoring and bluff retaining structures can impact public access, coastal resources, public trust lands and water quality. See the Coastal Hazards section for more details on sea level rise adaptation and armoring impacts.

Management Priority 3: Increase opportunities for affordable access and overnight lodging along the coast

Description:
It is well documented that there has been a considerable loss of affordable overnight accommodations along the coast since 1989. The Commission needs to evaluate and find new ways to support creation of new lower cost accommodations through its regulatory and planning functions.

2. Identify and briefly explain priority needs and information gaps the CMP has to help it address the management priorities identified above. The needs and gaps identified here do not need to be limited to those items that will be addressed through a Section 309 strategy but should include any items that will be part of a strategy.

Priority Needs	Need? (Y or N)	Brief Explanation of Need/Gap
Research	Y	Needs assessment on equitable public access; where/how to sustain beaches with SLR/development patterns
Mapping/GIS	Y	Provide staff and stakeholders with the most current California Coastal Trail mapping and coastal armoring dataset information– provide desk top GIS to all CCC employees. Also, mapping of where public access sites and accessways are vulnerable to sea level rise.
Data and information management	Y	Maintain data to analyze impacts of armoring on public access and public trust lands
Training/Capacity building	Y	Work with local governments and staff to update LCPs to plan for the impacts of sea level rise and adaptation on access; also guidance to remove barriers and address low cost visitor serving amenities in LCPs
Decision-support tools	Y	See above.
Communication and outreach	Y	Hold workshops and develop online communication tools such as story maps to engage the public, environmental justice communities, local governments, and stakeholders
Other (specify)		

Enhancement Area Strategy Development:

1. Will the CMP develop one or more strategies for this enhancement area?
   Yes ___X___
   No _____

2. Briefly explain why a strategy will or will not be developed for this enhancement area.

   The Coastal Act places a high priority on maximizing public access to and along the coast. The Commission's Strategic Plan reinforces public access for all as a high priority goal. A strategy is needed to examine place-based disparities in public coastal access and increase equitable coastal access. Furthermore, loss of public access to sea level rise is a considerable concern, as well as addressing how responses to sea level rise (such as shoreline armoring) will affect coastal resources and public access.

Marine Debris

In-Depth Resource Characterization:
Purpose: To determine key problems and opportunities to improve the CMP's ability to effectively management marine debris in the coastal zone.

1. What are the three most significant existing or emerging challenges related to marine debris within your coastal zone? Indicate the geographic scope of the challenge, i.e., is it prevalent throughout the coastal zone, or are specific areas most threatened? Challenges can be land- or ocean-based marine debris reduction (e.g., behavior change to reduce waste, increase recycling, or litter less); catastrophic event-related debris; marine debris identification and removal; research and monitoring; education and outreach; or other (please specify). When selecting significant challenges, also consider how climate change may exacerbate each challenge.

	Challenges	**Geographic Scope** (throughout coastal zone or specific areas most threatened)
Challenge 1	**Marine debris reduction** including: behavior change and knowledge, and practices of individuals, businesses and other institutions to reduce the creation of plastic pollution and other marine debris	Throughout the coastal zone
Challenge 2	**Other:** Policy Implementation and compliance to meet requirements of the trash amendment within MS4 Stormwater permits	Urban/incorporated areas within the coastal zone
Challenge 3	**Marine debris identification and removal** including: source identification/fate and transport of plastic pollution and other marine debris within the coastal zone	Throughout the coastal zone

2. Briefly explain why these are currently the most significant challenges related to marine debris in the coastal zone. Cite stakeholder input and/or existing reports or studies to support this assessment.

   Challenge 1: Marine debris reduction. There is growing recognition of the extent of the plastic pollution problem, and an increasing knowledge base about the impacts to marine

wildlife, the economy, and human health. For example, according to the Convention on Biological Diversity, over 800 species have been adversely impacted by marine debris.[70] A report by Kier Associates on behalf of the Natural Resources Defense Council found that California pays at least $428 million per year to stop litter from becoming pollution that is harmful to the environment.[71] Further, the extent and impact of this global problem is documented by numerous scientific studies.

Within California, the public is increasingly concerned about plastic in the ocean. A 2019 survey of Californians by the Public Policy Institute of California found that "Overwhelming majorities view plastic and marine debris as a big problem (72%) or somewhat of a problem (18%).[72] Across age, education, income, and racial/ethnic groups, solid majorities say this is a big problem." In addition, as discussed in Phase I Assessment for Marine Debris, stakeholder input on the need to address this issue was very strong. During the early scoping phase for public input on the Commission's 2021 – 2025 Strategic Plan, there were many comments expressing concern about marine debris, plastic pollution and trash in the coastal and marine areas. In addition, there have been increasing calls for behavior change and changes in practices to prevent marine debris on the part of individual consumers, businesses, and other institutions. As a result, it is clear that there is policy consensus in California that a change in practices and new measures to reduce marine debris at the source are required to better control the flow of pollution to the ocean.

Challenge 2: Policy implementation/compliance. Local governments are at the forefront of efforts to implement changes to better control marine debris. The trash amendments[73] that were added to the statewide MS4 Stormwater permits at the beginning of 2015 by the State Water Resources Control Board require municipalities to develop plans to reach zero discharge of trash to receiving water bodies within 10 years. This requirement will be extremely difficult to achieve and could potentially require cities to budget millions of dollars for implementation of trash control measures that they may not currently have to reach their targeted reductions. Cities will be looking to innovative solutions to achieve these targets and will be looking towards all willing partners to assist them.

Challenge 3: Identification and removal. There is an ongoing need to better identify the true source and pathways of plastic pollution and other trash found within the coastal zone. Management of trash requires the identification of the most effective means of preventing it from escaping and reaching the coast. There is a general understanding that an estimated 80% of debris within the coastal zone begins on land; however, a more granular examination of the amounts coming from inland vs. the coast itself, and the pathways that trash might take to reach the coast, is needed in order to increase effective prevention.

[70] https://www.cbd.int/doc/publications/cbd-ts-83-en.pdf
[71] https://www.nrdc.org/sites/default/files/oce_13082701a.pdf
[72] https://www.ppic.org/blog/a-california-dream-less-plastic-in-the-ocean/
[73] https://www.waterboards.ca.gov/water_issues/programs/trash_control/

3. Are there emerging issues of concern, but which lack sufficient information to evaluate the level of the potential threat? If so, please list. Include additional lines if needed.

Emerging Issue	Information Needed
Microplastic/microfiber plastic pollution	Effective mitigation measures that can be employed on a broad scale
Food web impacts of plastic pollution	Additional/ongoing research to determine impacts

In-Depth Management Characterization:
Purpose: To determine the effectiveness of management efforts to address identified problems related to the marine debris enhancement objective.

1. For each additional marine debris management category below that was not already discussed as part of the Phase I assessment, indicate if the approach is employed by the state or territory, and indicate if significant state- or territory-level changes (positive or negative) have occurred since the last assessment.

Significant Changes to Management of Marine Debris

Management Category	Employed by State or Territory (Y or N)	CMP Provides Assistance to Locals that Employ (Y or N)	Significant Changes Since Last Assessment (Y or N)
Marine debris research, assessment, monitoring	Y	Y	N
Marine debris GIS mapping/database	Y	Y	N
Marine debris technical assistance, education, and outreach	Y	Y	N
Marine debris reduction programs (litter control, recycling, etc.)	Y	Y	Y
Other (please specify)			

2. For management categories with significant changes since the last assessment, briefly provide the information below. If this information is provided under another enhancement area or section of the document, please provide a reference to the other section rather than duplicate the information.

    a) Describe significant changes since the last assessment;
    b) Specify if they were 309 or other CZM-driven changes; and

c) Characterize the outcomes or likely future outcomes of the changes.

See Phase I description of significant changes pertaining to marine debris reduction programs.

3. Identify and describe the conclusions of any studies that have been done that illustrate the effectiveness of the state's or territory's management efforts to reduce marine debris since the last assessment. If none, is there any information that you are lacking to assess the effectiveness of the state's or territory's management efforts?

In general, there is a lack of standardized data on coastal debris in California. The most consistent measurements come from the annual California Coastal Cleanup Day, during which volunteers track data on the items they are removing from beaches and inland waterways. This community science effort has shown itself to be an effective method for tracking broad trends in debris over time and indicate that some management efforts have been effective at reducing marine debris. For example, plastic grocery bags, which had consistently been among the top 5 items removed from California shorelines since 1988, started to drop in abundance around 2010, when the first local plastic bag bans began to take effect. By 2017, plastic grocery bags had dropped completely out of the top ten, accounting for less than 1.3% of all items removed, as opposed to close to 9% before the ban movement began. Similarly, Coastal Cleanup data has shown the effectiveness of banning smoking on beaches in reducing tobacco litter. Between 2008 – 2012, cigarette butt litter on beaches in Santa Monica (which banned smoking in 2009) dropped by 59%.

Currently, the State Water Resources Control Board is undertaking an effort to standardize data collection methods across the state, while also working with existing data sets to establish baseline information for use in measuring progress. Commission staff is working as part of that team to help better understand the state of trash data in California. It is anticipated that the outcome of this effort will greatly assist local municipalities as they provide progress updates on their efforts to achieve new water quality standards for trash

Identification of Priorities:

1. Considering changes in marine debris and marine debris management since the last assessment, as well as stakeholder input, identify and briefly describe the top one to three management priorities where there is the greatest opportunity for the CMP to improve the effectiveness of its management effort to better respond to the most significant marine debris challenges. *(Approximately 1-3 sentences per management priority.)*

Management Priority 1: <u>Incorporation of plastic pollution and other marine debris reduction measures in the Commission's permits, LCPs, and enforcement actions.</u>

Description: The Commission needs guidance for Commission staff and local governments that can require applicants and local governments to address marine debris reduction

measures in plans and permits, including but not limited to: a) Best management practices for plastic pollution and other marine debris reductions for use in all permitting and enforcement measures; b) Sample permit condition language and findings to support Coastal Act basis for plastic pollution reduction options; and c) Local Coastal Program policy guidance for addressing plastic pollution and other marine debris reductions.

Management Priority 2: Education and capacity of staff to address marine debris in permits and LCPs

Description: Commission and local government staff need education and training on the plastic pollution, reduction measures and how best management practices can be incorporated into permits, plans, and enforcement actions.

Management Priority 3: Broader public awareness and education

Description: Education and outreach is needed to build support for marine debris reductions and coastal management. This can include conducting public education on current marine debris research and mitigation measures using media articles, social media posts, and website information. More specific information should be developed for specific audiences such as permit applicants and local governments to support management priorities 1 and 2.

2. Identify and briefly explain priority needs and information gaps the CMP has to help it address the management priorities identified above. The needs and gaps identified here do not need to be limited to those items that will be addressed through a Section 309 strategy but should include any items that will be part of a strategy.

Priority Needs	**Need?** (Y or N)	**Brief Explanation of Need/Gap**
Research	Y	Research is needed into the limits or lack thereof of authority under the Coastal Act to undertake marine debris reduction measures within the permitting, LCP, and enforcement processes. Research needed into available marine debris mitigation measures, their effectiveness, and appropriate use of measures in Coastal Commission regulatory actions.
Mapping/GIS	N	
Data and information management	Y	1) Need to standardize data collection 2) Identification, including needing a more granular examination of the amounts of marine debris coming from inland vs. the coast itself, and the pathways that trash might take to reach the coast. Note: These are not needs that can be addressed directly by the CCMP/Commission's marine debris program.

Priority Needs	Need? (Y or N)	Brief Explanation of Need/Gap
Training/Capacity building	Y	Currently, plastic pollution and other marine debris mitigation efforts are addressed on an ad hoc basis within the Commission's permitting and enforcement work. There is a lack of consistency in how the issue is handled across regulatory actions, and a lack of knowledge as to how best to incorporate these measures. Because the field of marine debris mitigation techniques is rapidly evolving, it is unreasonable and inefficient to expect each analyst to independently develop the detailed knowledge needed to design mitigation measures. Given that addressing marine debris was identified as a priority issue in the Commission's latest strategic plan and 309A Assessment, there is a critical need to formalize the methods in which plastic pollution will be addressed by analysts and to provide detailed guidance, training, and ongoing adaptation as new mitigation measures become available.
Decision-support tools	Y	Decision support tools are needed to implement guidance for planners and analysts, enabling them to identify opportunities for intervention at various stages of the process and in various regulatory contexts, to achieve marine debris reductions.
Communication and outreach	Y	Public education and publicity are needed to provide support for regulatory actions and to raise awareness of the importance of marine debris reduction measures and practices. Guidance for different audiences such as permit applicants and local governments is needed.
Other (specify)		

Enhancement Area Strategy Development:

1. Will the CMP develop one or more strategies for this enhancement area?
   Yes _X_
   No _____

2. Briefly explain why a strategy will or will not be developed for this enhancement area.

   As understanding of the scope of plastic pollution along the California coast and in the Pacific Ocean grows, the need to enact pollution reduction measures grows alongside. Marine debris can adversely impact coastal resources, including Environmentally Sensitive

Habitat Areas, Marine Protected Areas, and species both endangered and healthy, and diminish the value of coastal economies.

A strategy is needed to help to identify ways to more fully protect the state's lands and resources as well and the public's safe and healthy access to those lands. Guidance around best management practices, training, and public education would provide greater consistency in how this issue is handled across regulatory actions for permits with the Commission's jurisdiction, and support local governments in reducing trash by incorporating zero-trash discharge measures to into their LCPs.

Special Area Management Planning

In-Depth Resource Characterization:
Purpose: To determine key problems and opportunities regarding the preparation and implementation of special area management plans for important coastal areas.

1. What are the one to three most significant geographic areas facing existing or emerging challenges that would benefit from a new or revised special area management plan (SAMP) or better implementation of an existing SAMP? For example, are there areas where existing management approaches are not working and could be improved by better coordination across multiple levels of government? What challenges are these areas facing? Challenges can be a need for enhanced natural resource protection; use conflicts; coordinating regulatory processes or review; additional data or information needs; education and outreach regarding SAMP policies; or other (please specify). When selecting significant challenges, also consider how climate change may exacerbate each challenge.

	Geographic Scope (within an existing SAMP area (specify SAMP) or within new geographic area (describe new area))	**Challenges**
Geographic Area 1	Estuarine areas (e.g., Humboldt Bay, Southern California wetlands and lagoons)	Lack of Information/guidance on developing sea level rise adaptation options for nature-based strategies; preserving agricultural land; addressing vulnerability of transportation/Hwy 1 in low-lying areas in light of sea level rise
Geographic Area 2	Outer coast beaches and bluffs (especially higher density developed areas)	Lack Information/guidance on how on smart growth, affordable housing, beach loss, and addressing hard armoring impacts on coastal resources can be best addressed in LCPs
Geographic Area 3	Statewide coastal zone	Addressing barriers to public access through policies in local land use plans (current lack of policies)

2. Briefly explain why these are currently the most significant challenges that may require developing a new SAMP or revising or improving implementation of an existing SAMP. Cite stakeholder input and/or existing reports or studies to support this assessment.

Local Coastal Programs (LCPs)[74] are important planning tools for protecting coastal resources and development. Of the 176 California coastal zone jurisdictions, 33 LCPS remain to be certified in the coastal zone, most of which are in Southern California. Of the 93 certified LCP segments, 34 have not been updated in any part; 42 have been updated only in part and may need future comprehensive updates to address new information and changed conditions. As discussed in the Phase I Assessments, changing shoreline conditions due to coastal hazards and sea level rise is growing risk to shoreline development and coastal resources. Many LCPs do not contain policies that directly address sea level rise and adaptation responses. Below are some of the key Coastal Act policy areas to be addressed for LCP development or update:

- **Public Access:** One of the highest priorities in the Coastal Act is the mandate to protect and maximize public access to the coast. In many areas, sea level rise will lead to a loss of public access and recreational opportunities due to permanent inundation, episodic flooding or erosion of beaches, recreational areas, and trails. Further, currently there are barriers to public access in terms of transportation to/from, affordability and other issues. With planning, funding, and collaboration, local governments can lay the groundwork for phased adaptation and future actions to preserve accessways and beach area as sea levels rise. With better understanding and coordinated efforts with relevant stakeholders/entities, land use policies can be developed to make it easier for the public to access the coast and ocean.

- **Coastal Development and Hazards:** There is a need throughout developed regions of California for shoreline management planning to address all types of development (residential, commercial, and public infrastructure) vulnerable to sea level rise. Many jurisdictions have relied on hard armoring, sand replenishment and seasonal berms as storm defenses. Understanding the viability of future reliance on seasonal berms, sand replenishment, or hard armoring in the face of sea level rise will be pivotal for many jurisdictions. Other important developed assets that need long-term sea level rise planning are energy plants, wastewater facilities, railroads, and roads. This planning will require continued multi-agency coordination and collaboration with stakeholders like the State Lands Commission, Caltrans, utilities, and the railroad authority.

- **Coastal Habitats, ESHA, and Wetlands:** Sea level rise threatens wetland and lagoon habitats because of saltwater intrusion, drowning of marsh habitat, and

[74] LCPs are equivalent to the CZMA Section 309(a)(6) definition of Special Area Management Plans (SAMPs) for important coastal areas. Under the California Coastal Act, local governments are required to complete LCPs which, as defined by the Coastal Act, should include: (a) land use plans, (b) zoning ordinances, (c) zoning district maps, and (d) within sensitive coastal resources areas, other implementing actions that are sufficiently detailed to indicate the kinds, location, and intensity of land uses, the applicable resource protection and development policies and, where necessary, a listing of implementing actions. In addition, the Commission continues to review and maintain special area plans for the four industrial ports, public works planning for special districts, including important State Park units, long range development plans for university properties, plans for the siting of energy facilities, and review of management plans for federal properties.

vegetation/habitat conversion. Additional study is needed to better understand options for preserving or restoring coastal habitats in light of sea level rise, limited upslope areas for migration, and managed water flows (i.e. tide gates).

- **Coastal Agriculture:** Sea level rise could lead to a significant increase in flooding and inundation of low-lying agricultural land, saltwater intrusion into agricultural water supplies, and a decrease in the amount of freshwater available for agricultural uses, especially around Humboldt Bay. In addition, adaptation planning for vulnerable levees raises potential Coastal Act policy conflicts between preserving agricultural lands, currently located behind levees, and restoring these areas to tidal wetlands as an adaptation approach for managing higher sea levels.

Adaptation strategies in LCPs can address hazardous areas with policies and ordinances to implement protection, accommodation, retreat, or a combination of strategies that can include nature-based approaches. Deciding which strategies to pursue in an LCP challenges decision-makers in most jurisdictions, as the balancing between priorities such as coastal resource protection and planning development is a complex process. The complexity of this challenge for decision-makers is well documented in reports pertaining to the 2015 and 2019 Coastal Commission – Local Government Workshop (see SAMP Phase I) and comment letters from local governments on the development of the Commission's 2021 – 2025 Strategic Plan.

In addition, the Commission's Statewide Sea Level Rise Vulnerability Synthesis report[75] funded by the Coastal Impact Assistance Program lays out descriptions of the coastal hazard and sea level rise threats and management priorities in each coastal county. These snapshots of priority issues by county detail the findings of extensive report review and interviews with Commission district staff in 2016.

Along with the impacts of sea level rise, the state is also facing widespread affordable housing shortages. In 2017, the State Legislature acknowledged that California is facing a severe housing crisis, and that current and future housing demands are exceeding the availability of housing units.[76] Since 2017, demands have only increased, and numerous additional laws have been enacted to address the crisis. The increasing need to house the growing population combined with shrinking shoreline areas that are safe from coastal hazards require urgent attention yet careful planning. Much of the Southern California coastline exemplifies high-density communities and heavily developed shorelines that are facing pressure to continue to redevelop in hazardous areas and to armor the shoreline to protect against flooding and erosion. Developing new or updating LCPs will be a way to promote smart growth, meet affordable housing requirements, and increase housing density in safe areas while also reducing greenhouse gas emissions in the coastal zone.

[75] https://www.coastal.ca.gov/climate/slr/vulnerability-adaptation/vulnerability/#/map

[76] California Legislative Information. Government Code Section 65852.150 pursuant to Senate Bill 1069 (Wieckowski) and Assembly Bill 2299 (Bloom), effective January 1, 2019. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV§ionNum=65852.150

3. Are there emerging issues of concern, but which lack sufficient information to evaluate the level of the potential threat? If so, please list. Include additional lines if needed.

Emerging Issue	Information Needed
Environmental justice	Climate change and sea level rise hazards will have disproportionate impacts on communities with the least capacity to adapt and may exacerbate existing environmental injustices and cumulative impacts from other environmental hazards. More information is needed on understanding these impacts on public access, subsistence fishing, recreational opportunities, jobs, housing balance, and other economic benefits of the coastal economy.
Integrating climate change sustainability concepts into land use planning, greenhouse gas mitigation, and smart growth	Information on actions to implement smart growth and other sustainable development strategies to reduce greenhouse gas emissions to slow climate change over the long term. Land use plan options for facilitating integration of climate change mitigation and adaptation strategies to assist local governments in LCP development.
Climate change adaptation and sea level rise; impacts to public access, beaches, and other coastal resources from groundwater rise, shoreline armoring, and erosion.	Information on potential impacts and development of policy and ordinance alternatives to assist local governments in adaptation through LCP development. Enhanced procedures for condition compliance.

See also challenges presented in response to question 1.

In-Depth Management Characterization:
Purpose: To determine the effectiveness of management efforts to address identified problems related to the special area management planning enhancement objective.

1. For each additional SAMP management category below that was not already discussed as part of the Phase I assessment, indicate if the approach is employed by the state or territory and if significant state- or territory-level changes (positive or negative) have occurred since the last assessment.

Significant Changes Related to Special Area Management Planning

Management Category	Employed by State or Territory (Y or N)	CMP Provides Assistance to Locals that Employ (Y or N)	Significant Changes Since Last Assessment (Y or N)
SAMP research, assessment, monitoring	Y	Y	Y

SAMP GIS mapping/database	Y	Y	Y
SAMP technical assistance, education, and outreach	Y	Y	Y
Other (please specify) SAMP Financial Assistance	Y	Y	Y

2. For management categories with significant changes since the last assessment, briefly provide the information below. If this information is provided under another enhancement area or section of the document, please provide a reference to the other section rather than duplicate the information.
    a. Describe significant changes since the last assessment;
    b. Specify if they were 309 or other CZM-driven changes; and
    c. Characterize the outcomes or likely future outcomes of the changes.

SAMP research, assessment, monitoring

a) As noted in the Phase 1 SAMP Assessment, since 2015, two new Implementation Plans have been certified, one new Land Use Plan was certified, and 20 other LCP Amendments significantly updated LCPs (for a total of 23 actions), including the addition or update of local Community Plans, Area Plans, Specific Plans, and Master Plans as well as the addition of new policies and provisions in LCPs to address sea level rise. Although more than 85 percent of the coastal zone is now governed by cities and counties (total 76 local governments: 15 counties, 61 cities) with certified LCPs, this means the Commission now works with 60 plus local governments on LCP implementation, including local appeals, monitoring hundreds of local development actions, and processing approximately over 100 LCP amendments a year. In addition, the Commission has awarded 40 local governments with LCP funding and these grants have been vehicles to promote research and assessment of local priorities.

b) While the grant awards were funded through other state funds, 309 guidance documents (discussed in Phase I and below) and communication initiatives contributed to these efforts.

c) New or revised polices and implementing ordinances will guide future development, including recognition of sea level rise projections and associated hazards in new or updated LCPs. Amended and/or updated LCPs will also incorporate policies and standards that address sustainable development, public access, multi-modal transportation, and cumulative impacts.

SAMP GIS mapping/database

See Phase I Cumulative and Secondary Impacts Resource Characterization #5.

SAMP technical assistance, education, and outreach

a) Significant technical assistances in the form of policy guidance was provided in order to enhance the LCP Program and to ensure LCP updates addressed emerging issues and new information. Many of these policy guidance documents have already been highlighted in Phase I Assessments for Cumulative and Secondary Impacts, SAMP, and Coastal Hazards. In addition,

under the Commission's 2011 – 2015 309 Strategy, Commission staff built out a digital LCP library and procedural guidelines to populate and maintain the most current certified versions of LCPs to support more effective implementation of the LCP program. This digital library of LCP continues to be built upon as new LCP and LCP amendments are certified.

In addition, there have also been significant changes regarding outreach and education during the assessment period, and there has been communication and collaboration with the local government partners and improved mechanisms supporting efficiency and effectiveness of the LCP development and amendment process. These included:

- Continued working with a Local Government Working Group of city and county officials to assist in implementing improvements to the LCP certification and amendment process and participating in meetings of the Coastal Working Groups within the League of California Cities (LOC) and the California State Association of Counties (CSAC).
- Collaborated on Short-Term Vacation Rentals issues with local governments and provided information and guidance on ways to accommodate vacation rentals in a way that respects local context. Provided an opportunity for public input and discussion of Commission Staff's preliminary recommendations for strengthening the Commission's program on lower cost overnight accommodations in November 2016.
- In 2015 and 2019, joint workshops between Coastal Commission and Local Government (elected leaders), led by local government representatives from the League of Cities and California State Association of Counties Coastal Issues Working Groups to discuss city and county issues and concerns related to interactions with the Commission on Short-Term Rentals, Sea Level Rise, and the Local Coastal Program process, as described in SAMP Phase I.
- Provided sea level rise related informational briefings in 2019 and 2020 with outside experts at multiple Commission hearings to educate and highlight sea level rise planning considerations.
- Held a forum in Northern California on Adapting to Sea Level Rise on Humboldt Bay's Agricultural Lands.
- Conducted a webinar for local governments briefing them on the available coastal agriculture guidance documents.
- Presented to community-based organizations/groups on sea level rise planning issues including for the Sunset Community Plan.
- Compiled resources to aid communication and dissemination of LCP policy guidance with Coastal City and County Planning Directors.

b) Most of these efforts were funded through the 309 enhancement program; these are all CZM-driven changes.

c) Expected outcomes are new or revised policies and implementing ordinances that will guide future development consistent with the Coastal Act, including recognition of sea level rise projections in new or updated LCPs.

SAMP Financial Assistance

a) The Commission has awarded $8.3 million dollars in 6 rounds of grant funding to 40 local governments to develop or update LCPs with a focus on planning for climate change and sea level rise since 2014. Changes since last Assessment: local assistance grants are being funded by state-funding from the Greenhouse Gas Reduction Fund (GGRF) and is now part of the Commission's baseline budget. Funds will be made available as long as there are sufficient revenues from the state's carbon market sales.
b) No 309 funds for financially assistance were used; this is a CZM program effort/driven change.
c) Expected outcomes are new or revised polices and implementing ordinances that will guide future development consistent with the Coastal Act, including recognition of sea level rise projections in new or updated LCPs.

3. Identify and describe the conclusions of any studies that have been done that illustrate the effectiveness of the state's or territory's special area management planning efforts since the last assessment. If none, is there any information that you are lacking to assess the effectiveness of the state's or territory's management efforts?

The Commission tracks agency and local government planning and permit activity using the Commission's Coastal Data Management System (CDMS). The Commission has been generally successful implementing the LCP requirement of the Coastal Act, as 63 counties and cities are now issuing permits under a Commission-approved, certified LCP (out of 76 coastal zone local governments). The coastal jurisdictions that are not issuing any coastal permits include 1 county and 12 cities, 11 of which are in southern California. In addition, some local governments with certified LCPs have not yet achieved certification in all segments or chose to submit them in phases, and therefore, the Commission is still issuing CDPs in portions of their jurisdictions. As such, one marker of the success of the program is to have certified LCPs for all segments of the coastal zone. As described in SAMP Phase I, this data is provided annually to the Commission in the LCP Status report. In addition, the Commission's Executive Director reports annually to the Commission with a summary of Commission efforts and significant LCP decisions.

LCPs are effective local blueprints for Coastal Act policies, implementing statewide planning policy in a locally specific context when kept current with changing conditions and local needs. Incomplete or out-of-date LCPs lead to conflict and delays in development approvals, and ultimately, less effective resource protection and less resilient communities. One marker of the effectiveness is the number of appeals or local issued permits that raise significant issues with respect to the permit being issued consistent with the certified LCP. The number of appeals will vary by jurisdiction, and this information is used when working with local governments to encourage submittal of LCP updates to improve effective implementation. The Coastal Commission's semi-annual federal progress reports provide a summary of permit appeals every six months.

Most importantly many LCPs are significantly out-of-date and lack critical policies to address sea level rise. Thus, one of the Commission's highest priorities over the past five years has been to update LCPs and certify new LCPs to address hazards posed by sea level rise and climate change. The Coastal Act creates strong incentives for local governments to develop LCPs and obtain certification, but weaker incentives for local governments to revise their LCPs when necessary to address relevant issues of statewide concern, such as sea level rise. The Coastal Act imposes no penalty for inaction on LCP updates, and local governments may have other priorities or may lack the resources to prioritize an LCP update.[77]

To help local governments do this work, the Commission has awarded 40 local governments with grants since 2013, totaling more than $8 million. As a result, 32 communities have completed coastal hazard vulnerability assessments, and many have begun drafting new policies and ordinances for both SLR updates, as well as comprehensive LCP updates and certifications. During the last five years, progress has been made with the City of Newport Beach and City of Pacific Grove have new certified LCPs and the City/County of San Francisco and City of Santa Barbara have completed certified LCP updates. Still more cities and counties have either LUP or IP updates initiated, submitted, or approved.[78] Through the administration of the LCP grant program since 2014, the Commission has learned that more time is needed than initially anticipated for translating the results of vulnerability studies and adaptation plans into policy and ordinance adoption. To support this process, the Commission has been working on model policies for policy guidance for both residential and infrastructure development types as well as encouraging the evaluation phased adaptation approaches in LCPs .

Identification of Priorities:

1. Considering changes with coastal resource protection or coastal use conflicts within defined geographic areas, special area management planning activities since the last assessment, and stakeholder input, identify and briefly describe the top one to three management priorities where there is the greatest opportunity for the CMP to improve their ability to prepare and implement special area management plans to effectively manage important coastal areas. *(Approximately 1-3 sentences per management priority.)*

   Management Priority 1: Support LCP planning through technical assistance and development of LCP policies and ordinances to protect beaches, wetlands and other coastal resources, including public access as seas rise that can be included in new or updated LCPs, especially for jurisdictions with LCP grants (See also 2021-2025 Strategic Plan Objective 4.4)

   Description: The local jurisdictions awarded LCP planning grants are high priority for program enhancements that will assist local governments preparing and implementing updated LCP policies and ordinances to better manage coastal resources and public access

[77] Jacobs, J. (2016). A Bug in the Programs: The Need to Create Greater Incentives for Local Coastal Program Updates. Stan. Envtl. LJ, 36, 3.
[78] Coastal Commission LCP Grant Status Table: https://coastal.ca.gov/lcp/grants/

and support nature-based adaptation solutions in the area of addressing hazards due to sea level rise and other climate change adaptation needs.

Management Priority 2: Support LCP planning through technical assistance that provides guidance on integrating climate change mitigation, smart growth, affordable housing and maximizing public access.

Description: Promote actions in LCPs and coastal development permits to implement smart growth and other sustainable development strategies to provide housing and reduce greenhouse gas emissions to slow climate change over the long term. Additionally, support land use plan options for integration of climate change mitigation (e.g., carbon sequestration; reducing vehicle miles traveled and energy consumption) and adaptation strategies to assist local governments in developing in areas safe from high geologic, flood, and fire hazards.

Management Priority 3: Support LCP planning through technical assistance that addresses disproportionate burdens to and ensure equal benefits to environmental justice communities in LCPs, including as it intersects with planning for sea level rise; incorporate meaningful engagement practices and equitable public participation processes throughout the entire LCP planning process.

Description: Provide policy guidance that supports local governments to amend their LCPs or certify new LCPs that address environmental justice issues. Through the Commission's role in LCP planning, support more meaningful engagement, equitable process, effective communication, and that the benefits of coastal protection are distributed equally/accessible to everyone.

2. Identify and briefly explain priority needs and information gaps the CMP has to help it address the management priorities identified above. The needs and gaps identified here do not need to be limited to those items that will be addressed through a Section 309 strategy but should include any items that will be part of a strategy.

Priority Needs	**Need?** (Y or N)	**Brief Explanation of Need/Gap**
Research	Y	Need for information on beach users to support development of equitable sea level rise adaptation strategies for protecting beaches that address disproportionate burdens and benefits to environmental justice communities. Continued need to address potential coastal hazard impacts using phased adaptation strategies, and include information on groundwater intrusion risk, beach migration potential, and habitat resilience. Financial risk and legal analysis that support sea level rise planning and implementation of adaptation strategies.

Priority Needs	Need? (Y or N)	Brief Explanation of Need/Gap
Mapping/GIS	Y	Update and distribute GIS data layers such as the California Coastal Armoring Dataset to assist in planning and permitting. Support completion of statewide Coastal Trail mapping, attribution, and support planner review/utilizing this information in LCPs.
Data and information management	Y	Continued need to build out electronic versions of all current certified LCPs and keep them up to date in the digital LCP library. Expanded quantitative evaluation of policy implementation in all enhancement areas.
Training/Capacity building	Y	Expanded training for both Commission and local staff in the LCP program and in other enhancement areas.
Decision-support tools	Y	Funding needed for decision-support tools for planners, especially to support adaptation planning pathway evaluation.
Communication and outreach	Y	Communicating with the public about sea level rise and other coastal management issues. Enhanced mechanisms to share best practices and policies and incorporate meaningful engagement practices and equitable public participation processes to support LCP planning. Development of ways to implement better regional coordination and implementation of regional/cross jurisdictional strategies.
Other (specify)	Y	Staff and financial resources for local governments to update LCPs.

Enhancement Area Strategy Development:

1. Will the CMP develop one or more strategies for this enhancement area?
   Yes __x____
   No _____

2. Briefly explain why a strategy will or will not be developed for this enhancement area.

LCP are an integral element to implementing the Coastal Act. Updating and developing new LCPs to address key enhancement area issues like coastal hazards and public access is a high priority for the Commission; this is also reflected in the agency's recently adopted 2021-2025 Strategic Plan.

As discussed above, in SAMP Phase I and II assessments, LCPs need to be kept up to date to adequately manage coastal resources, especially as climate change and sea level rise will present greater challenges to managing coastal hazards and public access for coastal

jurisdictions with outdated plans. In addition, it is a state priority to support planning for development that meets new housing requirements for areas that are safe from current and future hazards, including fire hazards, sea level rise and flooding hazards, can protect community investments and help avoid an inequitable burden on low income and environmental justice communities. A strategy is needed to support local governments in updating LCPs or developing new LCPs for uncertified areas, that will enable progress in addressing the many issues described in the Coastal Hazards, Public Access, and SAMP assessments.

Strategy

Strategy 1. Building Resilient and Sustainable Communities through Planning and Permitting

I. Issue Area(s)

The proposed strategy or implementation activities will support the following high-priority enhancement areas *(check all that apply)*:

- ☐ Aquaculture
- ☐ Energy and Government Facility Siting
- ☒ Coastal Hazards
- ☐ Ocean/Great Lakes Resources
- ☒ Special Area Management Planning
- ☐ Cumulative and Secondary Impacts
- ☒ Wetlands
- ☐ Marine Debris
- ☐ Public Access

II. Strategy Description

A. The proposed strategy will lead to, or implement, the following types of program changes *(check all that apply):*

☐A change to coastal zone boundaries;

☒ New or revised authorities, including statutes, regulations, enforceable policies, administrative decisions, executive orders, and memoranda of agreement/understanding;

☒ New or revised local coastal programs and implementing ordinances;

☐ New or revised coastal land acquisition, management, and restoration programs;

☐ New or revised special area management plans (SAMP) or plans for areas of particular concern (APC) including enforceable policies and other necessary implementation mechanisms or criteria and procedures for designating and managing APCs; and,

☒ New or revised guidelines, procedures, and policy documents which are formally adopted by a state or territory and provide specific interpretations of enforceable CZM program policies to applicants, local government, and other agencies that will result in meaningful improvements in coastal resource management.

B. Strategy Goal

The goal of this strategy is to build more resilient coastal communities and coastal resources in light of coastal hazards associated with climate change and sea level rise by evaluating Coastal Commission regulations and developing new policy guidance documents. The review of regulations and development of policy documents will support planning for and permitting of climate adaptation and climate change mitigation/impact reduction efforts that result in more resilient communities and coastal resources.

C. *Describe the proposed strategy and how the strategy will lead to and/or implement the program changes selected above.*

Strategy 1 focuses on updating the Coastal Commission's portion of the California coastal management program to build more resilient coastal communities. Broadly, resilience refers to the ability to anticipate, reduce, accommodate, or recover from a disturbance. Building climate resilience requires not just integrating ways to address potential climate change impacts into plans, but also adjusting how communities plan to be flexible in the face of future uncertain impacts. Communities that facilitate planning and permitting of nature-based adaptation, promote equity in process and outcomes, and implement climate mitigation efforts in local land use plans consistent with the Coastal Act will build resilience. Thus, Strategy 1 will help communities anticipate risks, reduce future impacts, accommodate changes to come, and recover from disasters such as wildfire or flooding. This strategy is directly aligned with Goal 4 of the Coastal Commission's recently adopted 2021 - 2025 Strategic Plan, *Support Resilient Coastal Communities in the Face of Climate Change and Sea Level Rise*, and will support the Commission in carrying out several actions across multiple goals in the plan.

More specifically, this strategy will result in two program changes and be carried out in two parts. Ultimately, these program changes will result in a third program change of updated local coastal plans (also known as "Local Coastal Programs" under the Coastal Act, or LCPs); however, the Commission does not expect to achieve updates to LCPs during the first five years of completing the strategy.

Under the first part of the strategy, staff will evaluate Coastal Commission regulations to determine if updates are needed to better facilitate or accelerate sea level rise planning and implementation of sea level rise adaptation projects that are consistent with the Coastal Act. This part of the strategy will focus on exploring how nature-based adaptation approaches can enhance and protect natural resources whether any regulatory changes are needed to implement them For example, these approaches could provide potential pathways to sustain the significant ecosystem services of estuarine wetlands as well as recreation on sandy beaches. Commission staff will also revaluate policies and regulations related to reducing risks of hazards to development.

The strategy could include one or more rulemaking efforts that are required to change any Coastal Commission regulation based on whether the Commission determines that additional regulatory updates are needed. This effort will help the Commission make progress on achieving Action 6.3.4 of its Strategic Plan, to update regulations to advance sea level rise management strategies. The evaluation will also inform development of policy guidance documents described below. To the extent it is determined that regulation changes are not needed, interpretive policy guidance can also assist in advancing sea level rise adaptation planning.

The second part of the strategy will consist of developing a series of policy guidance documents that are formally adopted by the Commission on a number of climate-related topics to advance

and support sea level rise adaptation, including addressing equity and environmental justice in sea level rise adaptation planning, adaptation to other climate impacts such as wildfire and drought that pose coastal hazards to communities and coastal resources, and to advance climate mitigation in land use planning and permitting such that hazards associated with climate change and sea level rise are reduced. Commission staff will engage with state and local agency partners, stakeholders and the public in the development of these policy guidance documents.

Regarding addressing equity and environmental justice in sea level rise adaptation planning, Commission staff have started some of this work in a 309 task in its FY 2020 grant under the 2016 – 2020 Strategy 2, Strengthening Technical Assistance through Local Coastal Program Planning and Implementation to begin the engagement work with community-based organizations and conduct research and literature review to inform the basis of policy guidance. The FY 2020 grant task will result in an outline for the policy guidance; the work proposed in this strategy will build upon the Commission's FY 2020 grant task outcome. In addition, the other policy guidance documents proposed for development will include environmental justice and equity elements, and/or reference the recommendations contained in equity and environmental justice in sea level rise adaptation planning where relevant.

Finally, this strategy will also include program change implementation in the form of outreach, education, and training on the adopted policy guidance documents, including development of associated informational resources and/or presentations to assist staff and key partners with implementation of the program changes. The intended audience for policy guidance includes local governments, state agencies, and Coastal Commission staff. The information contained in the guidance can also be used to educate members of the public.

The specific policy guidance documents that the Commission plans to develop under this strategy include:

1) Policy guidance on addressing equity and environmental justice in sea level rise planning (*Strategic Plan Action 5.1.3*).
2) Policy guidance on resiliency planning for wildfire risk through vegetation management and other land use approaches consistent with the Coastal Act (*Strategic Plan Action 4.3.4*)
3) Policy guidance on protecting beaches and evaluating shoreline management options for implementing nature-based and phased adaptation approaches to hazards posed by sea level rise. This guidance will also include policy and procedural recommendations for improving permitting of restoration projects that meet multi-benefit objectives for habitat/wetlands enhancement, public access, and flood-risk reduction (*Strategic Plan Actions 4.3.5, 4.4.5*).
4) Policy guidance for local governments to reduce greenhouse gas emissions, sustainable development standards and smart growth land use planning strategies (*Strategic Plan Actions 4.5.2, 4.5.3*)

III. Needs and Gaps Addressed

Identify what priority needs and gaps the strategy addresses and explain why the proposed program change or implementation activities are the most appropriate means to address the priority needs and gaps. This discussion should reference the key findings of the assessment and explain how the strategy addresses those findings.

Addressing the top three hazards of erosion, flooding, and fire, especially with regard to adapting to the impacts of these hazards intensified by climate change, is a high priority. Accelerating changes in the extensiveness and intensity of these hazards due to a warming climate heighten the need to provide information and policy recommendations to incorporate both common and new, innovative approaches for avoiding and mitigating coastal hazards into permits and LCPs. The Commission considers many nature-based approaches for sea level rise adaptation to be innovative, especially when they provide multi-benefits for recreation, habitat, and flood protection. The work done under the proposed strategy will build and strengthen the policy tools available to support implementation of these approaches at both the planning and permitting phases, thus protecting resources while also preparing communities for wildfire, flooding, and coastal erosion. Commission staff will look to case studies and the application of Coastal Act policies in current projects underway to inform development of the policy guidance.

Building more resilient communities means avoiding hazards where possible, responding to the hazards as they occur, and developing in sustainable ways. In the case of wildfire, guidance is needed on reducing wildfire risk in coastal areas with high fire hazard severity zones or where fire-inspired mudslides and debris flows reach the coast. Proactive vegetation management consistent with the Coastal Act can better prepare coastal communities to manage wildfire. Reducing greenhouse gas emissions, sustainable development standards and smart growth land use planning strategies are also needed tools for building more resilient communities that avoid hazards and mitigate for impacts of development.

The Special Area Management Planning, Coastal Hazards, and Public Access Assessments identified the need to plan to protect coastal resources like sandy beaches, estuarine ecosystems, and wetlands from sea level rise. Guidance on planning for sea level rise and associated flooding and erosion with phased adaptation approaches will address this important need. Hard armoring, which is only allowable under the Coastal Act under specific circumstances, and sediment management practices are more traditional hazard management approaches that are widely understood to be short or medium-term solutions. Additional studies, feasibility analyses, pilot efforts, and potential regulatory changes are necessary to develop or enhance policy recommendations and improve permitting processes to preserve and restore the protective functions of natural shorelines, both on the outer coast and in estuarine areas, through nature-based sea level rise adaptation strategies.

Another theme that is consistent in the Special Area Management Plan, Coastal Hazards, and Public Access Assessments is a need to incorporate environmental justice throughout the LCP process, by targeting engagement to include all stakeholders, considering impacts on environmental justice communities, and planning for equitable outcomes from adaptation. This

strategy's guidance for addressing equity and environmental justice in sea level rise planning will provide information to better prepare planners and analysts.

IV. Benefits to Coastal Management

Discuss the anticipated effect of the strategy, including the scope and value of the strategy, in advancing improvements in the CMP and coastal management, in general.

This strategy addresses a significant challenge of the California Coastal Management Program in planning for climate change: reducing hazard risk with phased adaptation planning that embraces multi-benefit projects where habitat, public access, and flood risk reduction can coexist. Facilitating new nature-based adaptation projects with policy guidance will benefit the state and nation by providing a larger set of examples from which to learn and improve upon. As the guidance on nature-based projects, wildfire risk reduction, smart growth, and equity in adaptation informs LCP updates, adaptation implementation will advance and pave the way for consideration by additional coastal communities. Thus, planning for resilient coastal communities by using innovative management and construction techniques, considering costs and benefits beyond the parcel scale, and using a participatory approach that includes socially disadvantaged populations will improve coastal management for the state.

V. Likelihood of Success

This strategy has a high likelihood of success because it is directly aligned with the agency's recently adopted Strategic Plan and will support the Commission's abilities to carry-out a number of high priority Governor's initiatives and Executive Orders. These Executive Orders direct state agencies to prioritize climate mitigation and adaptation efforts and to protect the state's biodiversity and coastal waters through finding efficiencies in permitting and accelerated efforts to conduct restoration projects. In addition, the Coastal Commission and local governments recently adopted a set of Joint Sea Level Rise principles in support of progress on sea level rise adaptation planning in LCPs. The Commission will be able to leverage this work and framework established with the League of Cities and California Association of County Supervisors (CSAC) to address policy areas of mutual interest, work through challenging climate policy issues to support achievement of policy guidance outcomes.

VI. Strategy Work Plan

Using the template below, provide a general work plan that includes the major steps that will lead toward or achieve a program change or implement a previously achieved program change.

Strategy Goal: Build resilient, sustainable communities through updated regulation and policy guidance that supports nature-based adaptation solutions, restoration and smart growth/sustainable development that reduces climate impacts.
Total Years: 5 years
Total Budget: $950,000 - $972,000

Year(s): Year 1
Description of activities: Activities during year one will include environmental justice and equity in sea level rise planning, regulatory analysis in support of advancing sea level rise planning and shoreline restoration, and background research on wildfire and sustainability topics. Activities will consist of the following:

1) Building on the FY 2020 grant task, develop draft policy guidance to address environmental justice and equity in sea level rise planning with robust community engagement.
2) Conduct an analysis of Commission regulations that guide implementation of Coastal Act policies related to protection of land and marine resources as well as policies on hazard reduction and restoration to determine if any updates are needed. The focus of this evaluation will be on regulations that pertain to implementation of nature-based adaptation strategies and reducing risks from coastal hazards.
3) Evaluate strategies for increasing wildfire resilience in coastal communities through LCP planning and permitting that employs multiple fire prevention and planning approaches, including vegetation management, building materials, siting, and setbacks. This effort will be informed by and will support the ongoing coordination work started as part of the state's Vegetation Management Treatment program initiative that began 2019 with the California Board of Forestry, CalFire, the California Natural Resources Agency and others. This initiative is highlighted in the Coastal Hazards Assessment (Phase I).
4) Begin work on developing a set of principles related to sustainability and reduction of greenhouse gas emissions (GHGs) in land use planning through research, permit history and LCP review and current state laws and policy requirements. Based on the research, develop a work plan for phased completion of sustainability topics.

Major Milestone(s): Draft policy guidance addressing equity and environmental justice in sea level rise planning; summary report analysis with staff recommendations for updates to the Commission's regulations to advance sea level rise planning and implementation of projects, especially as it relates to accelerating permitting for restoration projects; ; summary of strategies for wildfire resilience; draft set of principles and work plan for sustainability topics.

Budget: $175,000 - $200,000

Year(s): Year 2 -3
Description of activities: Activities during years two and three will focus on developing policy guidance for shoreline management, nature-based strategies, reducing wildfire risk in the coastal zone and principles for sustainability. Activities will consist of the following:

1) Using regulation analysis, formalize recommendations into policy guidance that seeks to accelerate permitting of shoreline restoration and nature-based adaptation projects or pursue regulation changes through the formal state rule-making process.
2) Finalize policy guidance addressing environmental justice and equity in sea level rise planning for Commission adoption; conduct outreach and training on adopted guidance for Coastal Commission staff, local governments, other state agencies and interested

stakeholders. Related products may also be developed to provide information to the public.

3) Conduct an analysis of beaches, locations and shoreline conditions to support identification locations where beaches are most at risk and nature-based strategies that may be viable interim or long-term solutions to mitigate hazards posed by sea level rise. This work will leverage existing information and reports about coastal habitat vulnerability to sea level rise and other datasets, such as the Coastal Commission Coastal Armoring Database Project. Use this information to develop draft policy guidance on protecting beaches and evaluating shoreline management options for implementing nature-based and phased adaptation approaches to hazards posed by sea level rise.
4) Advance work on wildfire risk reduction and vegetation management by developing draft policy recommendations for LCPs in Year 2 and finalizing the draft guidance for Commission review and adoption in Year 3.
5) Use the research, work plan and recommendations from Year 1 to prepare and finalize for Commission review and approval a set of sustainability policy principles to support development of topical guidance documents to implement the principles to encourage smart growth and GHG-reductions in line with Coastal Act and other relevant state requirements in permitting and LCPs. Begin work on developing 1 - 2 topical guidance modules for use by Commission staff and local governments.
6) Conduct outreach and engagement with stakeholders and interested parties (i.e. non-governmental organizations, realtors, and others), and through the Coastal Commission, League of Cities and CSAC framework to develop the guidance documents described above.

Major Milestone(s): Policy guidance or rule-making submittal for changes needed to advance permitting of shoreline restoration, nature-based adaptation; summary of analysis of beaches, hot spots for beach loss and shoreline management options recommendations; draft policy guidance on shoreline management options. Draft wildfire policy guidance. Final sustainability policy principles to inform subsequent guidance on sustainable development and GHG reduction and development of 1 - 2 sustainability topical guidance documents.

Budget: $400,000 - $420,000

Year(s): 4
Description of activities: The main focus of year 4 will be finalizing policy guidance on shoreline management options, through public and stakeholder engagement, coordination with partner agencies and local government working groups, and propose to the Coastal Commission for adoption. In addition, based on the sustainability topics work plan, staff will continue to develop sustainability guidance for Year 4.

Major Milestone(s): Finalize and propose for Commission adoption policy guidance on shoreline management options, with focus on nature-based solutions and phased adaptation Complete 1 –2 sustainability guidance documents on encouraging smart growth and GHG -

reductions in land use planning and permits consistent with the work plan and sustainability principles.

Budget: $170,00 – $190,000

Year(s): 5
Description of activities: The focus of year 5 will be implementation of the adopted guidance developed in years 3 - 4, including development of training and outreach materials, and conducting outreach, training, and education. Workshops on the guidance documents will be widely publicized and noticed, and include supporting materials targeted for the general public as well as for local governments. In addition, staff will complete the final set of sustainability guidance documents based on the work plan and sustainability principles.

Major Milestone(s): Training materials and outreach related to adopted guidance document (s), conduct training and outreach on adopted guidance. Final sustainability topical guidance documents.

Budget: $160,000 – $172,000

VII. Fiscal and Technical Needs

A. Fiscal Needs: *If 309 funding is not sufficient to carry out the proposed strategy, identify additional funding needs. Provide a brief description of what efforts the CMP has made, if any, to secure additional state from other sources to support this strategy.*

At this time, Commission staff believe that the 309 funding as budgeted will support carrying out this strategy. If additional funds are needed, Commission will consider available funding resources at the state-level, such as funding from the Greenhouse Gas Reduction fund or other state funding sources dedicated to analyzing and addressing climate impacts.

B. Technical Needs: *If the state does not possess the technical knowledge, skills, or equipment to carry out all or part of the proposed strategy, identify these needs.*

At this time, the Commission believes it has the necessary technical capacity to carry out this proposed strategy. The Commission will also seek technical knowledge and assistance in working with key agency partners and through existing state-level working groups in place to advance state efforts on implementation of the executive orders described above.

VIII. Projects of Special Merit (Optional)

If desired, briefly state what projects of special merit the CMP may wish to pursue to augment this strategy. (Any activities that are necessary to achieve the program change or that the state intends to support with baseline funding should be included in the strategy above.) The information in this section will not be used to evaluate or rank projects of special merit and is simply meant to give CMPs the option to provide additional information

if they choose. Project descriptions should be kept very brief (e.g., undertake benthic mapping to provide additional data for ocean management planning). Do not provide detailed project descriptions that would be needed for the funding competition.

The Commission leaves open the possibility to pursue a project of special merit under this strategy, but a specific project has not been identified at this time.

Strategy 2. Public Access for All with Sea Level Rise

I. Issue Area(s)

The proposed strategy or implementation activities will support the following high-priority enhancement areas *(check all that apply)*:

- ☐ Aquaculture
- ☐ Energy and Government Facility Siting
- ☒ Coastal Hazards
- ☐ Ocean/Great Lakes Resources
- ☒ Special Area Management Planning
- ☐ Cumulative and Secondary Impacts
- ☐ Wetlands
- ☐ Marine Debris
- ☒ Public Access

II. Strategy Description

A. The proposed strategy will lead to, or implement, the following types of program changes *(check all that apply):*

☐ A change to coastal zone boundaries;

☐ New or revised authorities, including statutes, regulations, enforceable policies, administrative decisions, executive orders, and memoranda of agreement/understanding;

☒ New or revised local coastal programs and implementing ordinances;

☐ New or revised coastal land acquisition, management, and restoration programs;

☐ New or revised special area management plans (SAMP) or plans for areas of particular concern (APC) including enforceable policies and other necessary implementation mechanisms or criteria and procedures for designating and managing APCs; and,

☒ New or revised guidelines, procedures, and policy documents which are formally adopted by a state or territory and provide specific interpretations of enforceable CZM program policies to applicants, local government, and other agencies that will result in meaningful improvements in coastal resource management.

B. *Strategy Goal*

The goal of this strategy is to develop guidance and informational resources for planners at the Commission and in local government to ensure public continued access in light of sea level rise and to reduce barriers to public access in support of the Commission's goal to maximize coastal access for all in the agency's 2021 – 2025 Strategic Plan. This objective consists of the following actions:

2.6.1 Identify locations where public access ways, the CCT or roadways that facilitate access to these areas may be limited or eliminated in the future due to sea level rise and increased storm events. Begin planning for other options to maintain maximum public access such as through new vertical access ways, trail relocations, rerouting of transportation corridors, bluff top facility enhancements or other alternatives.

2.6.2 Work with California State Parks, local governments and others to plan for the impacts of sea level rise and coastal erosion on state, regional and local parks, public access and recreational facilities.

2.6.3 Ensure that LCPs and coastal development permits include policies to maintain public access given the potential loss of public access and CCT segments from sea level rise and coastal erosion.

In addition, this strategy will support Commission's Strategic Plan efforts to reduce barriers to public access, under Objective 2.3.

I.3.2 Develop guidance to use in LCP planning that supports local governments to identify and reduce barriers to coastal access in their local jurisdictions and to consider the unique coastal access needs of environmental justice communities.

C. *Describe the proposed strategy and how the strategy will lead to and/or implement the program changes selected above. If the strategy will only involve implementation activities, briefly describe the program change that has already been adopted, and how the proposed activities will further that program change. (Note that implementation strategies are not to exceed two years.)*

This strategy will result in policy guidance, new information and a framework for maintaining public access in light of sea level rise, with an additional focus on addressing disproportionate impact of public access losses to socially vulnerable or environmental justice communities and removal of barriers to access.

The strategy will consist of the following elements and steps: 1) analyze public access with a focus on the California Coastal Trail, vulnerable in the present day and in a future with sea level rise; 2) assess the needs for public access for environmental justice or socially vulnerable communities, informed by sea level rise vulnerabilities; 3) leverage work underway to address current, real-time vulnerable public access ways for lessons learned and transferable solutions; 4) coordinate with key partner agencies such as Caltrans, State Coastal Conservancy (Conservancy), and California Department of State Parks and Recreation (State Parks); 5) develop guidance for coastal development permits and/or updates to Access and /or Hazard components of LCPs; and 6) implement guidance with training and outreach.

The strategy will result in one or more guidance documents to inform Commission actions on coastal permitting within the Commission's jurisdiction and support addressing these challenges in LCPs. As a result, subsequent program changes to be achieved under this strategy will be new/updated LCPs to support resilient communities in planning for climate change and sea level rise. A unifying theme throughout will be an emphasis on considering environmental justice in engagement and adaptation outcomes to protect public access for all.

II. Needs and Gaps Addressed

There are several needs addressed by this strategy. First, as sea level rises, sandy beaches as well as rocky shores will be more frequently inundated, flooded, or eroded and thus no longer available for public recreational use. In addition, temporary damages to public access infrastructure (roads, parking, trails, etc.) from storm flooding or erosion as well as permanent submergence due to rising seas will pose growing challenges to California's beach recreation areas. While a frequent response to coastal hazards like flooding and erosion, hard shoreline protection is often not a long-term strategy that preserves beaches and public access to shoreline recreation that is now under threat from climate change and sea level rise.

Under this strategy, staff will carry-out a specific effort to identify areas of the coast where public access is vulnerable to sea level rise, with a particular focus on the California Coastal Trail. Second, climate change and sea level rise hazards will have disproportionate impacts on communities with the least capacity to adapt and may exacerbate existing environmental injustices and cumulative impacts from other environmental hazards. More information is needed on understanding these impacts on public access and recreational opportunities. As such, with an emphasis in addressing place-based disparities in public coastal access, the strategy will seek to develop a baseline of information for customizing adaptation approaches that benefit all Californians and do not increase access barriers among any particular group or demographic.

The Phase II Assessments for Special Area Management Plans, Coastal Hazards, and Public Access identified the need to plan to protect coastal resources like sandy beaches and maintain or improve access to them with sea level rise. Another theme that is consistent in these Assessments is a need to incorporate environmental justice throughout the LCP process, by engaging stakeholders, considering impacts on environmental justice communities, and planning for equitable outcomes from adaptation and in coastal permitting. This strategy seeks to address these needs through permitting and planning guidance on how to support equitable distribution of benefits from protecting public access and beach recreation as sea level rises.

III. Benefits to Coastal Management

This strategy addresses a central challenge of the California Coastal Management Program going forward in a time of rising seas: protect coastal resources, particularly beaches, and maximize public access for all. The Coastal Commission is in a unique role to conduct the analysis and engage with stakeholders and key agency partners to develop policy guidance on planning for equitable coastal access as coastal hazards are projected to intensify with climate change and rising seas. Many of the overarching principles that are carried forward in the strategy, evaluation of adaptation options for various types of hazard contexts and analysis of environmental justice issues will be informative and useful for the 76 local governments developing new policy in the California coastal zone and other coastal states with similar environments.

IV. Likelihood of Success

Discuss the likelihood of attaining the strategy goal and program change (if not part of the strategy goal) during the five-year assessment cycle or at a later date.

There is a high likelihood of success for this strategy based on the demonstrated need, request for assistance on these issues from local governments, the recently adopted EJ policy by the Coastal Commission, and the number of current planning and permitting projects the Commission is currently reviewing that would benefit from the analysis and policy guidance. In addition, the strategy will leverage the work underway to complete a geospatial mapping of the California Coastal Trail, completed in coordination with Caltrans and the Coastal Conservancy, which will facilitate analysis of sea level rise vulnerabilities of the Coastal Trail. Commission staff will continue this coordination and collaboration with these agency partners (and others) under this strategy, which will also contribute to the likelihood of success. Most important, the strategy will support achievement of several Strategic Plan action items and overall Strategic Plan goals.

V. Strategy Work Plan

Using the template below, provide a general work plan that includes the major steps that will lead toward or achieve a program change or implement a previously achieved program change.

Strategy Goal: Guidance and informational tools for analysts and planners to maximize coastal access for all in addressing impacts sea level rise and removal of barriers.

Total Years: 5
Total Budget: $560,000 - $580,000

Year(s): 1 (2021) Assessment of needs and vulnerabilities
Description of activities: Assess public access needs, barriers and identify locations where public accessways, the CA Coastal Trail (CCT), or roadways that facilitate access may be limited or eliminated in the future due to sea level rise and increased storm events. Utilize recently completed geospatial mapping of CCT to analyze vulnerabilities with various sea level rise projections. Begin gathering information to understand the impacts of future losses or lack of public access, including identifying impacts on residents of underserved or environmental justice communities in accessing the coast, through engagement with environmental justice stakeholders. Public transportation opportunities to enhance public access will be evaluated in this context. Conduct coordination with key partner agencies, like the State Coastal Conservancy, State Parks, Caltrans and regional transportation agencies, to leverage information on vulnerabilities and conduct the analysis.

Major Milestone(s): Report on access barriers and sea level rise vulnerabilities for public access locations. Outreach and engagement with environmental justice communities. Refined work plan.

Budget: $ 110,000

Year(s): 2 – 3 (2022-2023) Case studies, evaluation and partner coordination, stakeholder engagement

Description of activities: Analyze existing circumstances where public access is being lost or undermined by coastal hazards related to erosion and flooding – review efforts underway for planning and evaluating alternatives/hazard response solutions. Use information and vulnerabilities assessed in Year 1 to inform a staff memo, informational products on recommendations for planning for public access, including potential hot spots for sea level rise impacts and options for planning to maximize public access. The staff memo will also include information on analyzing sea level rise impacts on public access and the existence of potential environmental justice impacts associated with proposed adaptation actions. This could include best practices for local governments to evaluate barriers to coastal access experienced by underserved communities and ways to reduce these barriers and any disparate impacts on vulnerable communities resulting from adaptation programs or projects affecting public access. It will also recommend policy approaches for ensuring equitable distribution of benefits of any new or replacement public accessways and amenities.

In addition, Years 2- 3 will continue the coordination and collaboration between the Coastal Commission and partner agencies such as State Coastal Conservancy, Caltrans, and California State Parks on opportunities, approaches and resources available for maintaining beaches, public accessways, the California Coastal Trail and amenities (e.g. parking, facilities) in light of sea level rise.

Major Milestone(s): Report on case studies, adaptation options, and staff memo
Budget: $ 200,000 – $220,000

Year(s): 4 – (2024) Draft Policy Guidance development; partner coordination and stakeholder engagement ongoing
Description of activities: Relying on the results of the other tasks, develop draft policy guidance for Commission staff and local governments in support of updating LCPs to address sea level rise impacts on public access and addressing public access in coastal development permit review with equity and environmental justice. Include robust community engagement to include environmental justice and equity needs.

Major Milestone(s): Draft planning and regulatory policy guidance
Budget: $125,000

Year 5 – (2025) Final Guidance adoption by Coastal Commission and Implementation
Description of activities: Building off the draft guidance developed in year 4, finalize and present final guidance for Coastal Commission adoption. Post adoption, staff will begin to implement policy guidance by providing training, outreach, and education to Commission staff and local governments in support of updating LCPs to address sea level rise impacts on public access with recognition of unique coastal access needs of environmental justice communities.

Major Milestone(s): Final Guidance adoption, training materials, outreach and education
Budget: $125,000

VII. Fiscal and Technical Needs

A. Fiscal Needs: If 309 funding is not sufficient to carry out the proposed strategy, identify additional funding needs. Provide a brief description of what efforts the CMP has made, if any, to secure additional state funds from the legislature and/or from other sources to support this strategy.

At this time, the 309 funding will support carrying out this strategy. If additional funds are needed, Commission will consider available funding resources such as funding from the Greenhouse Gas Reduction fund or other state funding sources dedicated to analyzing and addressing sea level rise impacts.

B. Technical Needs: *If the state does not possess the technical knowledge, skills, or equipment to carry out all or part of the proposed strategy, identify these needs. Provide a brief description of what efforts the CMP has made, if any, to obtain the trained personnel or equipment needed (for example, through agreements with other state agencies).*

At this time, the Commission believes it has the necessary technical capacity to carry out this proposed strategy, in partnership with key agency partners and environmental justice and equity groups that have additional knowledge and expertise in the area of coastal public access and the California Coastal Trail.

VIII. Projects of Special Merit (Optional)

If desired, briefly state what projects of special merit the CMP may wish to pursue to augment this strategy. (Any activities that are necessary to achieve the program change or that the state intends to support with baseline funding should be included in the strategy above.) The information in this section will not be used to evaluate or rank projects of special merit and is simply meant to give CMPs the option to provide additional information if they choose. Project descriptions should be kept very brief (e.g., undertake benthic mapping to provide additional data for ocean management planning). Do not provide detailed project descriptions that would be needed for the funding competition.

Commission staff may pursue project of special merit funding to conduct a comprehensive needs assessment of public access needs of environmental justice communities. Initial ideas for such a project may include seeking a third-party entity with academic, research or survey capability to assist the Commission with carrying-out this work.

Strategy 3. Marine Debris Reduction Measures Program

I. Issue Area(s)

The proposed strategy or implementation activities will support the following high-priority enhancement areas *(check all that apply)*:

- ☐ Aquaculture
- ☐ Energy and Government Facility Siting
- ☐ Coastal Hazards
- ☒ Ocean/Great Lakes Resources
- ☐ Special Area Management Planning
- ☐ Cumulative and Secondary Impacts
- ☐ Wetlands
- ☒ Marine Debris
- ☐ Public Access

II. Strategy Description

A. The proposed strategy will lead to, or implement, the following types of program changes *(check all that apply):*

☐ A change to coastal zone boundaries;

☐ New or revised authorities, including statutes, regulations, enforceable policies, administrative decisions, executive orders, and memoranda of agreement/understanding;

☒ New or revised local coastal programs and implementing ordinances;

☐ New or revised coastal land acquisition, management, and restoration programs;

New or revised special area management plans (SAMP) or plans for areas of particular concern (APC) including enforceable policies and other necessary implementation mechanisms or criteria and procedures for designating and managing APCs; and,

☒ New or revised guidelines, procedures, and policy documents which are formally adopted by a state or territory and provide specific interpretations of enforceable CZM program policies to applicants, local government, and other agencies that will result in meaningful improvements in coastal resource management.

B. ***Strategy Goal:*** The goal of this program will be to develop guidance and public outreach around the inclusion of plastic pollution and other marine debris reduction measures in coastal development permits, LCPs, and other relevant regulatory processes and documents, pursuant to Strategic Plan Objective 3.5.

Strategic Plan Action 3.5.2 states: Provide guidance for coastal development permits, LCPs, and other relevant documents to incorporate marine debris reduction measures into permits and plans.

This strategy will also support various components of the California Ocean Protection Council's Ocean Litter Strategy (OLS), which the Commission was heavily involved in developing. There are multiple objectives and actions within the OLS that Commission actions to reduce plastic pollution would support, including *Objective 1.1 Prohibit or discourage common ocean litter*

items in public institutions, retail, and food service establishments through government policies or mandates; Objective 3.1 Support the State Water Resources Control Board's Trash Amendments; and Objective 5.2 Educate consumers about the sources of ocean litter to drive behavior change in purchasing. The Commission is specifically identified as a lead in *Action 3.2.1. Establish and improve management of trash, recycling, and compost receptacles in high-use areas.* The Commission is also identified as the lead in *Action 6.2.3. Include aquaculture BMP Plan implementation requirements in coastal development permits, where appropriate.* The proposed program would directly support progress on these actions.

C. *Describe the proposed strategy and how the strategy will lead to and/or implement the program changes selected above. If the strategy will only involve implementation activities, briefly describe the program change that has already been adopted, and how the proposed activities will further that program change. (Note that implementation strategies are not to exceed two years.)*

As understanding of the scope of plastic pollution along the California coast and in the Pacific Ocean grows, the need to enact pollution reduction measures grows alongside. Marine debris can adversely impact coastal resources, including Environmentally Sensitive Habitat Areas as defined by the Coastal Act, Marine Protected Areas, and species both endangered and healthy, and diminish the value of coastal economies. To carry-out this strategy, Commission staff will create an internal team of staff assembled as a Plastic Pollution Task Force, made up of staff with expertise in permitting, planning, enforcement and water quality, to investigate, develop, and implement the proposed guidance for planners and permit analysts, including recommendations for ways to encourage source reduction of plastic pollution at the planning or project level. The strategy to develop guidance, associated training, and public information will help institutionalize plastic pollution reduction measures within the Coastal Commission's planning and regulatory processes.

The initial investigatory phase will consist of the following tasks: 1) review areas where the Commission is already implementing measures in regulating development to control plastic pollution, 2) research activities and sectors within the Commission's jurisdiction that potentially create plastic pollution, and 3) analyze the strengths and limitations of the Coastal Act in addressing plastic pollution within coastal development permits, LCPs, other relevant documents, and enforcement actions.

The development phase of the project will consist of the following tasks: 1) using a data driven approach , develop methods and criteria for evaluating the potential for plastic pollution impacts from proposed development or other coastal-dependent uses; 2) identify appropriate interventions within the coastal development permit and planning processes in which plastic pollution reductions can be realized; 3) develop best management guidance for plastic pollution reductions to be used in evaluating coastal development permits, LCPs, and enforcement actions; and 4) Coastal Commission review and adoption of the guidance.

The guidance will be rolled out in an implementation phase, consisting of: 1) staff training on the new guidance including how to incorporate it into regulatory analyses and processes; 2) the guidance and associated materials will serve as ongoing resources for staff in reviewing projects and plans; and 3) staff will provide public information and resources around the programmatic change and measures to address plastic pollution.

Concurrent with this work, Commission staff will continue to collaborate with other state agencies, including the Ocean Protection Council, CalRecycle, the State Water Resources Control Board, and others to support continued work across all areas of the plastic pollution challenge through the OPC's Plastic Pollution Steering Committee. This collaboration will provide a forum by which the Commission can share progress and solicit feedback and expertise from other state agencies about the development of the policy guidance under Strategy 3.

III. Needs and Gaps Addressed

Identify what priority needs and gaps the strategy addresses and explain why the proposed program change or implementation activities are the most appropriate means to address the priority needs and gaps. This discussion should reference the key findings of the assessment and explain how the strategy addresses those findings.

Currently, plastic pollution and other marine debris mitigation efforts are addressed on an ad hoc basis within the Commission's permitting and enforcement work. There is a lack of consistency in how the issue is handled across regulatory actions, and a lack of knowledge as to how best to incorporate these measures. Because the field of marine debris mitigation techniques is rapidly evolving, it is unreasonable to expect each analyst to have the detailed knowledge needed to design mitigation measures. Given that addressing marine debris was identified as a priority issue in the Commission's latest strategic plan and 309A Assessment, there is a critical need to formalize the methods in which plastic pollution will be addressed by permit and enforcement analysts and to provide detailed guidance, training, and ongoing adaptation as new mitigation measures become available.

IV. Benefits to Coastal Management

Discuss the anticipated effect of the strategy, including the scope and value of the strategy, in advancing improvements in the CMP and coastal management, in general.

This strategy will help to identify ways to more fully protect the state's lands and coastal resources as well and the public's safe and healthy access to those lands by reducing trash and debris in the marine environment. The guidance and training will result in greater consistency in how this issue is handled across regulatory actions and improve marine debris reduction outcomes overall. It will also provide guidance and leadership for local governments to follow as they implement LCPs and aim to minimize plastic pollution to better adhere to trash amendments in MS4 storm water permits mandating zero trash discharge to receiving water bodies as discussed in the Marine Debris Phase I, II Assessments.

V. Likelihood of Success

Discuss the likelihood of attaining the strategy goal and program change (if not part of the strategy goal) during the five-year assessment cycle or at a later date. Address the nature and degree of support for pursuing the strategy and the proposed program change, as well as the specific actions the state or territory will undertake to maintain or build future support for achieving and implementing the program change, including education and outreach activities.

There is a high likelihood of success for completing this strategy and the program change because of the Commission staff expertise, agency commitment and state-level requirements for trash reductions. To expertise, this strategy will be carried out under the leadership of staff in the Commission's Public Education (PE) Program, which has expertise in plastic pollution reduction measures from leading the development of both the state and multi-state marine debris reduction strategy efforts over the past 15 years, with the support of the Commission's Water Quality Unit and regulatory staff. The Commission's PE staff also has expertise in this area through leading California's Coastal Cleanup Day efforts for 36 years. In addition to staff expertise, there is strong institutional support for prioritizing marine debris reduction actions within the Commission's executive leadership and the Commission decision-making body.

Further, the recently adopted requirements placed on local governments by the State Water Quality Control Board's Trash Amendments mandate zero discharge of trash into receiving water bodies within the next decade. These requirements involve significant new measures and investment by local government to achieve the target reductions. With the completion of the new guidance and staff training under this strategy, the Coastal Commission staff can better support local governments and the state as a whole in reaching the trash amendment requirements and OLS goals. In sum, given the support for these pollution reduction measures at both the state and local level, the strategy is highly likely to be successful.

The Commission will maintain and build support for this program change through ongoing education and outreach activities including public education on current marine debris research and mitigation measures, media articles, social media posts, and website information.

VI. Strategy Work Plan

Using the template below, provide a general work plan that includes the major steps that will lead toward or achieve a program change or implement a previously achieved program change somewhat over the course of the five-year strategy due to unforeseen circumstances. *The same holds true for the annual budget estimates. Further detailing and adjustment of annual activities, milestones, and budgets will be determined through the annual cooperative agreement negotiation process.*

Strategy Goal: Develop guidance and public outreach around the inclusion of plastic pollution and other marine debris reduction measures in coastal development permits, LCPs, and other relevant regulatory processes and documents
Total Years: 5 years

Total Budget: $375,000 - $400,000

Year(s): Year 1
Description of activities: Strategy leads (Commission Public Education staff) will assemble the Plastic Pollution Task Force within the Commission's existing staff with interest and expertise in water quality, plastic pollution reduction measures, and the regulatory, planning and enforcement aspects of the Coastal Act as described above. The task force will examine the coastal permitting process, as well as the sectors and activities that could generate plastic pollution, to better understand intervention points at which pollution prevention measures can be included. The task force will review the areas where the Commission has included plastic pollution reduction measures in past regulatory actions and research the variety of measures that can be taken to reduce plastic pollution. In addition, the task force will identify any gaps or needs within the Coastal Act authority that may need to be addressed in order to better incorporate plastic pollution reduction measures into the permitting process.

Major Milestone(s): Research and foundation for development of guidance documents for use in reducing marine debris through regulatory actions; methods and criteria for evaluating plastic pollution impacts from proposed development or other coastal-dependent uses.

Year(s): Year 2
Description of activities: The task force will work with the Commission's Water Quality Unit as well at the State Water Resources Control Board to incorporate the new trash amendments in MS4 storm water permits into planning, permitting, and enforcement efforts. Building on the work of year one, continue development of the guidance including a series of best management practices to be used by all permit, planning, and enforcement analysts and including ways to address source reduction of plastic pollution within the planning process or project implementation. Staff will also continue to assess whether there is the need for new legislation related to the Commission's ability to implement marine debris reduction measures through regulatory actions.

Major Milestone(s): Summary of appropriate interventions within the coastal development permit and planning processes in which plastic pollution reductions can be realized; Elements of the draft guidance and/or guidance documents that will include best management practices for reduction of plastic pollution and other marine debris within commission regulatory actions.

Year(s): Year 3
Description of activities: The task force will continue to develop guidance documents in collaboration with the Commission's Water Quality Unit. By the end of Year 3, the Commission will hold a public hearing and formally adopt the guidance.

Major Milestone(s): Outcomes: 1) Guidance document including but not limited to: a) Best Management Practices for plastic pollution and other marine debris reductions for use in permitting and enforcement processes; b) Sample permit condition language and findings to support Coastal Act basis for plastic pollution reduction options; and c) Local Coastal Program

policy guidance for addressing plastic pollution and other marine debris reductions. 2) Commission adoption of guidance

Years 1 – 3 Budget: $225,000 - $250,000

Year(s): 4-5
Description of activities: After completion of the guidance, staff will consider issues or gaps within the Coastal Act or coastal management program that have been identified that may need to be addressed by legislation and subsequent updates to the Commission's enforceable policies. Staff will develop a training protocol for use with all regulatory and enforcement staff on the plastic pollution reduction guidance and will begin training staff on the best management practices to be incorporated into permits, plans, and enforcement actions. Staff will develop public outreach documents and materials to publicize the guidance and new actions in which the guidance has been used.

Major Milestone(s): (1) Legislative action as needed; (2) Staff training developed; (3) Staff trained in the use of new plastic pollution reduction measures in their work; and (4) Public documents and other outreach materials made available describing the new measures and Commission actions that have included them.

Budget: $100,000 - $150,000

VII. Fiscal and Technical Needs

A. Fiscal Needs: *If 309 funding is not sufficient to carry out the proposed strategy, identify additional funding needs. Provide a brief description of what efforts the CMP has made, if any, to secure additional state funds from the legislature and/or from other sources to support this strategy.*

The Commission will rely on 309 enhancement program funding as the primary source for this strategy but will contribute additional staff and management time from the agency's state budget.

B. Technical Needs: *If the state does not possess the technical knowledge, skills, or equipment to carry out all or part of the proposed strategy, identify these needs. Provide a brief description of what efforts the CMP has made, if any, to obtain the trained personnel or equipment needed (for example, through agreements with other state agencies).*

Depending on the state of agency staffing in both the Public Education and Water Quality Units, the strategy may require additional technical staff or resources. If needed, the Commission may pursue those resources through other state agency partners, like the Ocean Protection Council and State Water Board. The Commission has interagency agreement with the State Water Board that would facilitate coordination and potential assistance with technical knowledge or skills that may be needed.

VIII. Projects of Special Merit (Optional)

If desired, briefly state what projects of special merit the CMP may wish to pursue to augment this strategy. (Any activities that are necessary to achieve the program change or that the state intends to support with baseline funding should be included in the strategy above.) The information in this section will not be used to evaluate or rank projects of special merit and is simply meant to give CMPs the option to provide additional information if they choose. Project descriptions should be kept very brief (e.g., undertake benthic mapping to provide additional data for ocean management planning). Do not provide detailed project descriptions that would be needed for the funding competition.

At this time, the Commission does not anticipate submitting projects of special merit for the Marine Debris Reduction Measures strategy.

5-Year Budget Summary by Strategy

The following budget table summarizes the anticipated Section 309 expenses by strategy for each year.

Table 1. Five-Year Budget Estimate by Strategy

Strategy Title	Year 1	Year 2	Year 3	Year 4	Year 5	Total Funding
Resilience for communities and coastal resources	$200,000	$200,000	$200,000	$186,000	$186,000	$972,000
Public access for all with sea level rise	$110,000	$110,000	$110,000	$125,000	$125,000	$580,000
Marine Debris Reduction Measures	$76,000	$76,000	$76,000	$75,000	$75,000	$378,000
Total Projected Funding	$386,000	$386,000	$386,000	$386,000	$386,000	$1,930,000

Summary of Stakeholder and Public Comment

Stakeholder Input

Public review is a key piece of developing the Assessment and Strategy and allows the public to see the results of the Commission's program enhancement efforts. As noted above, Commission staff used the public input received during the update to the Commission's Strategic Plan, including initial input on the development phase and formal written comments on the public review draft of the plan, to inform development of the Assessment and Strategy.

The Commission received 68 written comment letters or emails on the Strategic Plan from state and federal agencies (4), local governments and or elected officials (15), non-governmental organizations (9) and other stakeholder groups, such as community and neighborhood groups, property owners, and members of the public (40). The comments provided input to Commission staff on high priority topics and issues. A summary of these comments by enhancement area includes:

- Public Access (aligns with Public Access Enhancement area). Comments included the need to better address coastal access for overburdened and historically disadvantaged communities and to assess the disproportionate burden on disadvantaged communities with regard to public access. There were also comments expressing concern over the impacts of high visitation and impacts to "special communities," community character and coastal resources, expressed primarily from coastal communities.

- Coastal Resources (encompasses Wetlands, Cumulative and Secondary Impacts, Aquaculture, Marine Debris). Comments supported efforts to address plastic pollution and marine debris; similar to above, comments expressed concern over damage to coastal resources with high visitation in unique coastal communities.

- Climate Change and Sea Level Rise (aligns with Coastal Hazards Enhancement area) Regarding the goal of supporting resilient coastal communities, commenters expressed support for addressing sea level rise, some requested emphasizing the urgency of addressing sea level rise and other climate impacts. Commenters also wanted additional recognition of flexibility needed to address local circumstances/constraints.

- Planning and Permitting (aligns with Special Area Management Planning Enhancement area). Comments focused on additional improvements for timely and more efficient processing of LCPs and CDPs. Comments also requested actions be more explicit around Commission hearing process and making information gathering/analysis more transparent. Comments also requested additional specificity around how environmental justice issues would be considered in regulatory review and requested additional actions to improve opportunities for community engagement. Affordable housing concerns were brought up as well.

Public Comment on Draft 309 Assessment and Strategy

The Commission staff provided a 30-day public comment period on the Draft Section 309 Assessment and Strategy for 2021 - 2025 concurrent with review by NOAA starting in December 21, 2020. Staff also presented the Draft 309 Assessment and Strategy to the Commission at the January 13, 2021, public hearing. The Commission received nine comment letters by January

20, 2021, and two oral comments from the public at the January 13th public hearing. Appendix A contains the comment letters and responses below address the issues raised.

Response to Public Comments Received

The Commission appreciates all members of the public and interested parties that reviewed and provided feedback on the Commission's Draft 309 Assessment and Strategy. Generally, most comments were supportive of the Commission's Draft Section 309 Assessment and Strategy for 2021 – 2025. Issues that were raised repeatedly included the importance of fostering public engagement, protecting coastal resources, managing public access, and reducing marine debris.

A number of revisions were made to the Strategy portion of the document based of feedback from the public and in response to comments from NOAA's Office for Coastal Management to provide clarity and additional specificity or information. Another more significant change was the removal of the anticipated regulatory change in process as a "program change" because this work is not related to a prior strategy in Strategy 1. Instead, the first Strategy 1 component now states that staff will evaluate other Coastal Commission regulations to determine if updates are needed to better facilitate or accelerate sea level rise planning and implementation of sea level rise adaptation projects and reduce hazards. Staff also added descriptions of stakeholder feedback to the Enhancement Area Prioritization explanations in the Phase I Assessments and further specified the partners and resources consulted to develop management priorities.

Table 2 below provides the responses of Commission staff to the nine comment letters received during the public comment period. The table notes where public comments resulted in changes that are reflected in the final document. Note that the oral comments received at the public hearing on January 13, 2021 were also detailed in Comment Letter #7 so these comments are not specified twice.

Table 2. Responses to comments on Draft 309 Assessment and Strategy for 2021-2025

#	Commenter	General Issue	Response
1	April Moulton	Supports OHV use	The 309 Assessment and Strategy is not intended to address all of the Commission's coastal management priorities. Comments on matters outside the scope of the 309 Assessment and Strategy will be shared with the relevant District or program staff.
2	Eric Ryder/ Theresa Foland	Supports accessory dwelling units (ADUs) changes to local LCP	Changes to the ADU regulations in individual jurisdictions are not the focus of the 309 Assessment and Strategy. However, a management priority in the Special Area Management Planning enhancement area is to support LCP planning through technical assistance that provides guidance on integrating climate change mitigation, smart growth, and affordable housing and are broadly addressed in Strategy 1.
3	Ingrid Mueller	Prevent cumulative negative community effects/preserve character and history of Venice	The 309 Assessment and Strategy prioritizes community engagement in Strategy development. Strategy 1 will develop draft policy guidance to address environmental justice and equity in sea level rise planning with robust community engagement. A unifying theme throughout Strategy 2 will be an emphasis on considering environmental justice in engagement and adaptation outcomes to protect public access for all. The Commission welcomes continued participation in informing these efforts.
4	John T. Heyl	Need to better manage public access at Point Lobos State Park and Big Sur	Maximizing public access and recreation to and along the coast is a core principle and fundamental to the implementation of the Coastal Act and California's coastal management program. Likewise, protection of coastal resources is a core mandate for the Coastal Commission. Strategies 1 and 2 of this 309 Assessment and Strategy are mostly focused on planning for coastal hazards that include sea level rise. Staff welcomes participation of stakeholders as a part of community engagement in Strategy 1 and 2 aimed at developing guidance and informational resources for planners at the Commission and in local government to support innovative ways to protect coastal resources and maximize public access.

#	Commenter	General Issue	Response
5	Betha Everett	Requests support for short term rentals at Niguel Beach Terrace	Short term rentals (STRs) are a potential part of providing public access and affordable accommodations for visitors to the coast. To the extent that STRs can serve to provide additional affordable accommodations, they might broadly be addressed in Strategy 2, which focuses on sea level rise adaptation to protect vulnerable public access. Addressing Niguel Beach Terrace specifically is outside the scope of the Strategy, but local governments could use the technical assistance that results from this work to support amendments to their Local Coastal Programs.
6	Fred Ross	Requests for designation of the Strands and adjacent Niguel Beach Terrace developments in Dana Point to protect public access	Please see comment above. Also, staff welcomes participation of stakeholders as a part of community engagement in Strategy 2 aimed at developing guidance and informational resources for planners at the Commission and in local government to ensure the public continued access in light of sea level rise and to reduce barriers to public access in support of the Commission's goal to maximize coastal access for all in the agency's 2021 – 2025 Strategic Plan.
7	Stefanie Sekich-Quinn, Jennifer Savage, Emily Parker, Miho Ligare (Heal the Bay & Surfrider Foundation)	<u>Sea Level Rise Adaptation:</u> *Disallow hard armoring in emergency permits and rely on softer solutions such as geotextile bags, nature-based solutions *Assess number of lapsed emergency permits and their impacts *Require more strict conditions in permits such as removing armoring projects by a date certain *Require short term and long term planning that utilizes adaptation	<u>Sea Level Rise Adaptation:</u> Commission staff agree with commenters that nature-based adaptation approaches should be promoted for addressing coastal hazards and sea level rise. The intent of Strategy 1 is to promote nature-based adaptation approaches such that more advance planning will be done to reduce the need for emergency permits, especially where sea level rise impacts can be anticipated. The first part of Strategy 1 is to review regulations for advancing sea level rise adaptation which could include review of issuance of emergency permits. Addressing condition compliance and enforcement is beyond the scope of what can be done in Strategy 1 with the resources that are available for this 5-year strategy effort. Also note that the proposed guidance on phased planning will address ways that can integrate short- and long-term adaptation projects that rely on nature-based approaches and consideration of relocation or realignment to protect coastal resources. Also note, an analysis of the extent and impacts of hard shoreline armoring is provided in the Phase I Cumulative Impacts Assessment (pages 52 – 53).

#	Commenter	General Issue	Response
		measures such as natural erosion control measures and managed retreat <u>Marine Debris:</u> *Support convening a Plastic Pollution Task Force to identify the best ways to incorporate plastic pollution reduction measures into permitting and identify enforcement opportunities *Recommend that the Task Force also identify source reduction solutions, such as quantitative source reduction targets and extended producer responsibility schemes as meaningful interventions that the Coastal Commission can implement	<u>Marine Debris:</u> Commission staff agree that a focus on the life cycle of marine debris is important. Staff clarified in Strategy 3 that the policy guidance developed will integrate source reduction at a planning or project/permit-review level where relevant. Staff also noted that the Commission will continue to collaborate with other state agencies, including the Ocean Protection Council, CalRecycle, the State Water Resources Control Board, and others in development of the policy guidance. Efforts related to Extended Producer can best be addressed the state's Plastic Pollution Steering Committee. This work covers many areas of addressing plastic pollution that are not necessarily within the Commission's authority, such as the development and implementation of Extended Producer Responsibility for plastic packaging, regulation of toxic chemicals used in the production of plastic, and the development of standards for microplastics in drinking water.
8	Carla Farley (Smart Coast California)	Requests an increase in funding of Strategy 1 to support more public engagement with guidance	Commission staff agrees sea level rise is a complex issue that requires an in-depth understanding of climate change and potential impacts on coastal communities. The Strategy 1 workplan proposes outreach and engagement with interested parties and through the Coastal Commission, League of Cities and CSAC framework to develop the guidance described in the strategy. Finalizing policy guidance on management options will entail public and stakeholder engagement and coordination with partner agencies and local government

#	Commenter	General Issue	Response
			working groups. Staff appreciates the suggestion for shared materials prior to engagement events such as workshops and made changes reflecting this in the Strategy 1 workplan. Planned funding distribution for the three Strategies reflects projected needs at this time. The Commission also plans to work with other partners to conduct broader outreach on sea level rise and other relevant adaptation topics outside the direct scope of Strategy 1.
9	David Kossack (San Andreas Land Conservancy)	Assessment--ESHA/wetland trends are misleading Strategies--Suggests public access policy of zero access to protect wetlands and other ESHA; Requests an audit of cumulative impacts from actions such as emergency permits and definition of when development of the coast is complete	Commission staff agree that remote sensing trends are not reported on a scale that is able to discern the gains or losses to ESHA and wetland habitats resulting from smaller projects. The Wetlands Phase I Assessment notes this issue and reports on Coastal Commission permit tracking of wetland acreages which are more accurate at a project level. These changes are not extensive enough to detail a statewide tracking of wetland acreage change, hence the use of remote sensing for broad trends. Coastal Commission staff are focused on local and regional scale projects in the coastal zone, and can report on significant gains or losses where Commission permitting is involved in project implementation (See CDMS table in Wetlands Phase I Assessment). Also, the Wetlands Phase I Assessment points out some larger projects that are in progress and expected to result in significant wetland acreage gain at a local scale. Addressing threats to coastal resources due to climate change, habitat fragmentation, and cumulative impacts of development is an important element of the Coastal Hazards, SAMP, and Public Access enhancement area management priorities that culminated in Strategy 1. Strategy 1 has a focus on protecting or enhancing habitat areas to support resilience to growing coastal hazards. Maximizing public access and recreation to and along the coast is fundamental to California's coastal management program, so balancing coastal resource protection with public access will need to be approached on a case by case basis based on local context and consistent with the Coastal Act. Please see response to Comment #7 for more on emergency permits and the scope of the 309 Strategies.

Appendix A – Public Comment Letters

Comment for: Coastal Commission's Draft Section 309 Assessment and Strategy

AM

April Moulton [redacted]
Thu 12/24/2020 8:59 PM
To: 309Comments2021@Coastal

Good afternoon and Merry Christmas,

I am a resident of Oceano and want to protect the State Park and it's OHV and Camping Use. I used to camp at this state beach 20 years ago. We loved vacationing here so much that we bought a home in the neighborhood closest to the southern entrance to the Dunes. We did this for the sole purpose to make it easier to recreate in our vehicles with family and friends in the sand.

I understand California wants to eliminate off road vehicles, gas powered vehicles and designate a large amount of open land to be protected in years to come.

This state park has already given so much of the park to be closed off to other uses (mostly protecting wildlife and plantlife). This is an OHV State Park. That was it's intended use since the 1980's. We have already given more than 50% of the park to be closed off to vehicles and camping. PLEASE help us protect what we still have.

California has over 800 miles of coastline. We are asking to keep just a few miles of that.

Lastly, if the park is closed off to vehicles, the majority of the park would never be seen by people. Anything past the beachfront, hard packed sand is a difficult terrain that doesn't lend to bicycle riding, running or hiking. That means it will simply become a vast desolate section of the park that we used to enjoy.

Thank you for your time!

Stay safe, stay healthy and stay in touch.

Sincerely,

April Moulton ***(formerly Smith; YES! I got married during COVID)***
Risk Management Broker Lic #01736191
Call/Text: 805-391-0222
Search for homes or read reviews: **www.AprilC21Home.com**
Mission Statement: **To provide our clients the best possible Real Estate experience by providing them with the best trained agents in the industry.**

Letter #2

Re: Reminder - Public Notice of Coastal Commission's Draft Section 309 Assessment and Strategy

eryder [redacted]

Fri 1/15/2021 10:38 PM

To: 309Comments2021@Coastal <309Comments2021@coastal.ca.gov>

3 attachments (714 KB)

PRESENTATION.pdf; 20201110_r_CZ ADU Update CCC Transmittal (4).pdf; 20201110_o_CZ ADU PLN 2020-00144 (3).pdf;

Hello -

Residents of Half Moon Bay living in the San Mateo County Unincorporated area / LCP Zone have been waiting for over a year for the changes to the ADU regulations that the Governor handed down in 2019 to trickle down to us. The San Mateo County Supervisors / Planning Department finally passed along their Recommendations for the Coastal Commission / LCP to certify these changes two months ago. Attached are the meeting minutes, along with supporting material.

We have been waiting to build out an Attached ADU for my in-laws to move into, to help care for them. My Mother In-Law, in particular, has one lung and is now on oxygen and in a nursing home. The fear of COVID is extremely high and causing us all a lot of stress. She is 85. We need to bring her home, but we have no space for both of them, or even just her. To say getting these recommendations certified ASAP is a matter of life and death is probably not too far from reality here.

Please put this on the next meetings calendar and/or let us know if this has already been signed off, as I believe there may not need to be a meeting for this. From the looks of it, the next CC meeting for our area isn't until April. It will be extremely stressful to wait yet another 3 months before we can even START the permitting process.

Thank you for your time and consideration!!

Eric Ryder / Theresa Foland
HMB

Letter #3

Primary and Cumulative Negative Environmental Justice Impacts

Ingrid Mueller [redacted]

Fri 1/15/2021 10:54 PM

To: 309Comments2021@Coastal <309Comments2021@coastal.ca.gov>
Cc: Save Venice <savevenice.me@gmail.com>

Dear Commissioners,
Your eyes and ears are wide open, no doubt, as we all want to help preserve our uber-beloved California Coast.

As a 32-year tenant at the now Landmarked Lincoln Place Mid-Century Apartments in East Venice, you can imagine our grassroots 20-year fight to Preserve it as a State Historic Resource..and it's standing still.

Our Oakwood area, however, has been uber-gentrified over a couple of decades, as the Mello Act was tossed between our City and CCC, thus never applied.
Thousands of renting neighbors were displaced, are homeless, cannot re-unite, are disabled, got lost in addictions =
Primary after effects of overdevelopment, poker games for the rich, that greed addiction.

Our Venice Neighborhood Council has strategically knitted into its Board and some Committees those very designing, building, and uber-developing persons and Investment LLCs that are evaluating Venice for very wrong reasons, indeed.

Generations of black and brown and activist residents are insisting on being heard.
The black community built and fully owned their beloved 110-year old First Baptist Church - alas, it was sold behind their backs by a new 'Charlatan' pastor by fraudulent means.
Instead, Pastor E.L.Holmes beautifully served the Oakwood Congregation since 1945 and helped uplift Black History for today's strong, remaining population.

To preserve and respect history, good and bad, strengthens us all.
May you be able to help Venice keep its unique culture, character, and history.

No more cumulative negative community effects!

Yours Sincerely, indeed.
Ingrid Mueller
1050 Doreen Place#3
Venice, CA 90291

cc: savevenice.me

Letter #4

Niguel Beach Terrace, Dana Point CA92629

Betha Everett [redacted]

Sun 1/17/2021 1:01 AM

To: 309Comments2021@Coastal <309Comments2021@coastal.ca.gov>

Attention : Coastal Commission Members , "Headlands in Coastal Zone"

There are 368 condos located in the complex called "Niguel Beach Terrace" located in the Headlands Coastal Zone in Dana Point CA 92629.

These condos are 70 to 75% rentals, located in Headlands Coastal Zone, located on the ocean side of Pacific Coast Highway on Selva Road, Dana Point.

This complex, Niguel Beach Terrace, is only a few steps to beach access, directly across street and down steps to Salt Creek Beach / Strand Beach
located in Headlands Coastal Zone.

For 16 years from "2000 to 2016" 100 owners were allowed to do weekly or short term rentals in this complex but it is not allowed now. Since we are in the coastal zone, it seems we should have that privilege again.

If only one member of the Coastal Commission would come and investigate this, that would answer many questions that so many owners have concerning this issue.

We wonder what is the advantage is for being in the "Headlands Coastal Zone" without allowing this privilege?

When we did it, so many guests traveled here to enjoy our beaches constantly? We hope someone can check our
Headlands Coastal Zone and our condo location and help us bring back this privilege.

We want to only do what the city and the Coastal commission approve for this opportunity because we are special being in "Headlands Coastal Zone"

We are only steps away from these two beautiful beaches.
It is just so perfect for this privilege for families especially with children to enjoy our beaches.

At this time we are allowed 30 day rentals, but it is very hard for young families with children (sports and school) to get away for 30 days at one time.

Our guests are also wonderful but all mostly retired now that required for a stay of 30 days.

Thank you for listening and for opportunity to discuss this issue.

Sincerely,
Betha Everett
Sent from my iPhone
Betha Everett

949.310.3703
Danacondo@aol.com

Vrbo.com/6794. Harbour House
Vrbo.com/6796. Cleopatra
Vrbo.com/16037. Ivory Coast
Vrbo.com/892680. Ritz Point-
Retreat

Letter #5

Public Access Thoughts

John T. Heyl [redacted]

Sun 1/17/2021 8:19 PM

To: 309Comments2021@Coastal <309Comments2021@coastal.ca.gov>

I live near Point Lobos State Park and Big Sur. Both areas are impacted by ever-growing throngs of visiting tourists, mostly arriving by automobile.

I'm wondering if the commissioners are considering some form of lottery system for managing the numbers of visitors?

I envision something that discourages the idle drive-by selfie-scoring visitors while encouraging and enhancing pre-planned visits of limited numbers to enhance the visitor experience at the limited access points.

If a daily, weekly, or monthly pass was available and monitored by the Coastal Commission for various sections of the California Coast, as is currently under review in the Big Sur area, could this contribute to better visitor experiences and preservation of quality access to the coastal areas?

Yrs,

John Heyl
Carmel Valley, CA

Letter #6

Commission's Section 309 Draft Assessment and Strategy Document for 2021 – 2025 for Public Review and Comment.

Fred Ross [redacted]

Tue 1/19/2021 9:10 PM

To: 309Comments2021@Coastal <309Comments2021@coastal.ca.gov>; Betha Everett <danacondo@aol.com>; soonertraci@gmail.com <soonertraci@gmail.com>

To whom it may concern

We are writing to ask that you designate the Strands and adjacent Niguel Beach Terrace developments in Dana Point to protect public access.

These developments are within the Coastal Zone.

The city of Dana Point, as well as various HOA organizations, are currently limiting access and prevent affordable short term rentals to enhance access to our wonderful California coasts.

The current regulations forbidding short term rentals is making this a "rich persons" playground and limiting access to regular folks.

Designating these areas as protected areas under the Code will help in local efforts to get the city and HOA's to relax current restrictions.

I am copying key portions of **309 Draft Assessment and Strategy Document for 2021 – 2025**

Quote: " ***recent reports document the impact from the loss of affordable overnight accommodations along the coast and the barriers to access that have been created under existing governing/regulating systems and recreational planning efforts. These studies found that there are inequities in the public's ability to access the coast.*** **"**

the California Legislature and the people of California passed laws and bond acts to help address the loss/lack of affordable and equitable public access opportunities along California's coast. The new laws and bonds also provide policy guidance and funding to improve public access and recreational opportunities to and along the coast for all Californians.

Maximizing public access and recreation to and along the coast is a core principle and fundamental to the implementation of the Coastal Act and California's coastal management program. It is also a high priority and goal of the Commission's updated 2021 – 2025 Strategic Plan. Public access, and the need to protect and maintain it, was one of the primary themes of early public input on the Coastal Commission Strategic Plan update, received through initial public engagement efforts. Stakeholder feedback on the Commission's Strategic Plan requested a priority be placed on protecting public access from effects of climate change and sea level rise, as well as from privatization. Some requested the Commission provide guidelines to local governments to address local beach access and management issues to maintain public accessways without compromising the ecological integrity of the beaches, as well as increasing equitable access for all people as a vital component to addressing social justice for low income residents and communities of color seeking recreational opportunities. Because of this, public access is a high priority for the 309 strategy.

Thank you for your consideration.

on behalf of
Betha Everett
34102 Selva, #362, Dana Point, CA

Heal the Bay

SURFRIDER FOUNDATION

January 20, 2021

To: John Ainsworth, Executive Director, California Coastal Commission
CC: Alison Dettmer, Chief Deputy Director, California Coastal Commission
Michelle Jesperson, Federal Programs Manager, California Coastal Commission
Mary Matella, Environmental Scientist, California Coastal Commission

RE: Draft 309 Assessment and Strategy, Coastal Zone Management Act

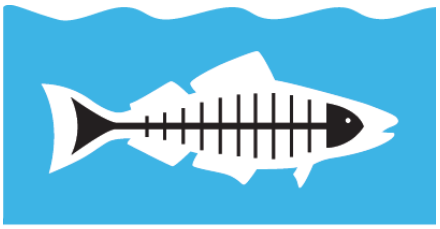
Dear Executive Director Ainsworth,

We, the undersigned organizations, respectfully offer the following comments on the Coastal Commission's draft 309 Assessment and Strategy. The draft Assessment and Strategy highlights important accomplishments on coastal hazards, marine debris and public access. This work includes landmark progress on sea level rise adaptation planning and policy guidance, measurable progress on improving coastal access, as well as the Commission's successful and impactful annual Coastal Cleanup Day events. These advancements, thanks in part to the Coastal Zone Management Act (CZMA) funding, make California not only a national but also an international leader in coastal management.

Surfrider produces an annual report, called the State of the Beach, in which we grade all U.S. coastal states on how they manage coastlines and plan for sea level rise. We use the CZMA 309 form as a basis for our rubric to assign points to each state (see appendix of report to view how we utilize the 309 form). California is the only state that has received an "A" for it's progress in sea level rise planning and policy guidance and coastal development standards. The Coastal Commission has pushed for increasing setbacks to keep infrastructure safe from future coastal erosion and is recommending local communities look at complicated issues like managed retreat, including examining moving vulnerable train tracks.

While the Assessment and Strategy offers a sound proposal to build on recent accomplishments, we offer the following comments to strengthen the 2021-2025 strategy.

Sea Level Rise Adaptation



Heal the Bay



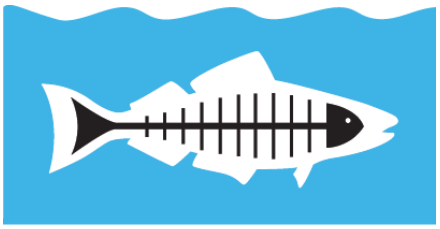
While California and the Coastal Commission are relatively advanced compared to other U.S. states in sea level rise adaptation policy guidance, it remains to be seen whether this strong guidance will translate to better regulatory policies and more coastal protections at the local and state level. For the 2021-2025 309 Strategy, we strongly recommend that the Coastal Commission staff focus on ensuring that the draft Residential Sea Level Rise Guidance be approved unaltered, and remain strong and protective of public resources. The Commission's collective planning guidance must translate to strict policy and permitting outcomes if we are to avoid the worst impacts from sea level rise.

In 2020, Governor Newsom signed two executive orders to help the state mitigate and adapt to the climate crisis with an emphasis on using nature-based solutions to combat climate change impacts. Governor Newsom also issued a pledge to conserve 30 percent of the state's land and waters by 2030. Coastal Commission staff must ensure that applicants cosatal development permits and local government's local coastal programs implement and enforce policies that comply with these mandates as well as their own solid sea level rise guidance.

We noted that the 309 Assessment and Strategy did not include a review of actual coastal armoring statistics for the state. It would be beneficial to know if there has been an increase or decrease in seawalls, including armoring allowed through emergency permits, and in alternative shoreline protection such as living shorelines to track the state's progress. This is particularly relevant for addressing the grossly misused emergency permit system in place which has led to an unjustifiable amount of unpermitted coastal armoring on our coast. Emergency permits are readily issued with minimal analysis and public notice, and are given without question as to what qualifies as an unforeseen emergency.

Applicants, often with little regard for the Coastal Act, will armor shorelines under an emergency permit; unfortunately that armoring is rarely – if ever – removed and a proper coastal development permit allowing for staff evaluation and public input is not sought. In other instances, applicants might take years in drawn out "negotiation" with Coastal Commission staff to seek a follow-up permit. This gaping loophole undermines California's example to the rest of the country.

The ease with which an applicant is issued an emergency armoring permit in California undermines the state's otherwise stringent criteria. We strongly



Heal the Bay



recommend that Coastal Commission staff look into methods to discourage emergency shoreline armoring permits, especially given that we can no longer claim erosion and sea level rise as unforeseen events on our coast. Staff should consider and require alternative temporary measures and disallow hard armoring under emergency permitting. This Commission must find a way to correct the haphazard approach to emergency permits and updating the 309 form provides at least one opportunity to earnestly start the process.

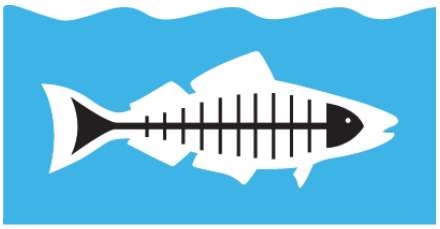
Per Surfrider's policy on armoring and recommendations we urge you to:

- Disallow hard armoring in emergency permits and rely on softer solutions such as geotextile bags (preferably from a natural, non-plastic material), nature-based solutions
- Conduct more a thorough analysis of impacts associated with emergency permitting.
- Assess amount and number of lapsed emergency permits that have resulted in unpermitted armoring.
- Require more strict conditions in the permits such as removing armoring projects by a date certain.
- Require short term and long term planning that utilizes adaptation measures such as using natural erosion control measures (i.e. living shorelines) **and** managed retreat.

Marine Debris

We agree that marine debris, more specifically plastic pollution, should be a high priority for Coastal Commission staff. We are also in agreement that the Coastal Commission should closely track and be involved with addressing the emerging issue of microplastics as described in the draft 309 Assessment and Strategy.

Overall, we are in support of institutionalizing marine debris reduction measures in policies and practices such as adding special conditions in coastal development permits and Local Coastal Programs. However, we would like to see more emphasis be put on plastic pollution source reduction measures and full lifecycle solutions. Plastic is a fossil fuel product, and the entire lifecycle of plastics, from extraction to production to disposable, is harmful to our communities and environment and disproportionately impacts low-income communities and communities of color most often.



Heal the Bay



We are in support of convening a Plastic Pollution Task Force to identify the best ways to incorporate plastic pollution reduction measures into the permitting process and identify enforcement opportunities. We recommend that the Task Force also identify source reduction solutions, such as quantitative source reduction targets and extended producer responsibility schemes as meaningful interventions that the Coastal Commission can implement. The guidance document developed based on the Task Force's work will be a helpful resource for staff and given the opportunity, we would be happy to review and provide feedback.

We appreciate Coastal Commission staff for their leadership on these important issues and for the opportunity to comments. We look forward to continued work with staff to implement the Strategy.

Sincerely,

Stefanie Sekich-Quinn
Coastal Preservation Manager
Surfrider Foundation

Jennifer Savage
California Policy Manager
Surfrider Foundation

Emily Parker
Coastal and Marine Scientist
Heal the Bay

Miho Ligare
Plastic Pollution Policy Coordinator
Surfrider Foundation

Smart Coast California

Letter #8

January 20, 2021

California Coastal Commission
John Ainsworth, Executive Director
455 Market Street, Suite 300
San Francisco, Ca 94105

RE: Comments to The Draft 309 Enhancement Grants Assessment and Strategy

Dear Mr. Ainsworth,

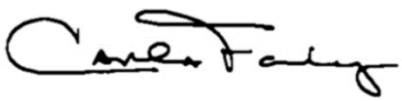
Please accept this letter as our formal response to your Draft 309 Assessment and Strategy for the 2021-2025 Enhancement Cycle. The Section 309 Enhancement Grants Program provides roughly $385,000 per annual grant award issued by NOAA to the Commission, to support staff efforts to make program improvements to the Commission's coastal management program.

The CCC Executive Director's report dated December 18, 2020 to the California Coastal Commission regarding the Draft 2021-2025 309 Assessment and Strategy addresses three major Strategies, the first being "Resilience for Communities and Coastal Resources". We would like to formally request that a more significant portion of the annual funding provided by NOAA be allocated to Strategy #1, Resilience for Communities and Coastal Resources", more specifically to public review efforts. As part of your outreach and educational efforts related to sea level rise adaptation, the Commission has hosted informational briefings on sea level rise vulnerabilities and adaptation issues at monthly Commission hearings, which has been helpful. However, combining public hearings for numerous agenda items does not provide the public with adequate opportunities to understand the issues and provide valuable input, especially for the public review of the Residential Adaptation Policy Guidance (RAPG).

We are formally requesting that public presentations and hearings on the issue of Sea Level Rise should be organized as stand-alone meetings, be widely publicized and noticed, and the materials should be presented in terms that are comprehensible to the general public. We note that often the power point presentations made to the Commission are not made available to the general public before the hearings, which is disadvantageous. The subject of Sea Level Rise is a complex issue that requires an in-depth understanding of Climate Change and the potentially devastating effects to the communities on our California Coast, and we appreciate the efforts made to date by the CCC to provide information to the public.

Thank you for your time and consideration regarding this matter, and please do not hesitate to contact us directly should you require any additional information or materials.

Sincerely,



Carla Farley
2021 President

Letter #9

David S. Kossack, Ph. D.
San Andreas Land Conservancy
P. O. Box 268
Davenport, CA 95017
[redacted]

California Coastal Commission
Executive Division
455 Market Street, Suite 300
San Francisco, CA 94105

Re: California Coastal Commission, Coastal Management Program, Draft 309 Assessment and Strategy, 2021 to 2025 Enhancement Cycle.

Chair Padilla and Commissioners:

Thank you for this opportunity to comment on the California Coastal Commission's Coastal Management Program, Draft 309 Assessment and Strategy, 2021 to 2025 Enhancement Cycle. We have some concerns.

Assessments

ESHA are talked about in terms of "determinations" rather than providing for necessary protection and restoration. ESHA's are ripsawed by Public Access, Sea Level Rise and Coastal Development. ESHA's are only getting smaller while pressure from Public Access, Sea Level Rise and Coastal Development only increases, if not encouraged by the CCC. We feel that after almost 50 years the CCC should have a pretty good grasp on its ESHAs and staff's 'determinations' amount to project fragmentation.

CCC's assessment of **Coastal Wetlands Status and Trends*** Is a little miss leading: The 'gain' in wetlands as presented in Draft 309 is likely within in the standard of error for any of these remote sensing assessments. We think that it is safe to say that in an on the ground assessment of any given coastal wetland will reveal that neither quantity or quality of wetlands has increased, certainly not based upon any functional ecology, in fact their condition(s) are abysmal. Most wetlands, including riparian wetlands, have a contemporary extent that is a shadow of their historic extent. CCC staff wants us to believe that wetlands are increasing, this is not the case.

Public Access is worked as a numbers game with no assessment of the impacts to coastal resources (e.g., ESHA: wetlands, rocky and sandy beach ecologies...), Public Access is overbearing: on MLK day, Jan. 18, 2021,, there were more cars parked on Highway 1 then I have ever seen. Public Access is treated as a sacred cow but these impacts are unmitigable. This is unfortunate but with a finite coastline and an ever increasing user group it will reach a point where you will not like it, if it hasn't reached that point already. These are cumulative impacts.

It is interesting that Wetlands, Cumulative Impacts and Ocean Resources, core Prop 20 priorities only get a "Medium" ranking, while Public Access and Special Area Management Planning get a "High" ranking. Too much of the CCC's and 309's logic is based upon continuing the same activities that have driven impacts to coastal resources including sea level rise, the loss of ESHA and cumulative impacts… to the point of diminishing return.

Strategies:

We find the Strategies presented by Draft 309 are boiler plate, things that are thrown out for just about any plan but provide no benefit to the issues at hand. There are several “Strategies” that would provide a great deal more insight into protection of the Coast.

Zero (0) is a real number. Zero access is a valid Public Access policy. A zero access policy is what is needed to protect wetlands, coastal habitats and other ESHAs. The Prop. 20 that I voted for said: ‘if there is access the public has access’. Prop. 20 said nothing about dissamating coastal resources that don’t have access, public or private, in the name of Public Access. If a No Access Policy were part of CCC’s tool kit it would provide for an equitable Access Policy, no access no matter what the user group, public or private, and it would provide the enforcable protection that the Coast demands.

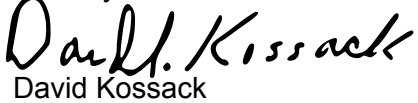
ESHA’s clearly need an *a priori* determination of the protections and restorations that need to be implemented under 30240: ‘(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.’ This includes the need for a bright line to protect against encroachment by development and Public Access.

Every month the Commission’s Executive/Deputy Director's Reports submit dozens of permit waivers, emergency permits, immaterial amendments & extensions that do not get a public hearing. These are Cumulative Impacts. There needs to be an audit of these reports that is preferably done by a third party to account for their growth inducing and cumulative impacts.

CCC needs to recognize that ongoing development is driving climate change. Moving the door mat up a step addresses neither climate change nor sea level rise… The easy coastal protection have past. The Commission, either through Draft 309 or on their own, needs to define the final out-come, (i.e., when is development of the coast completed).

Strategy 1. Building Resilient and Sustainable Communities through planning and permitting: the planner’s full employment strategy.

Thank you

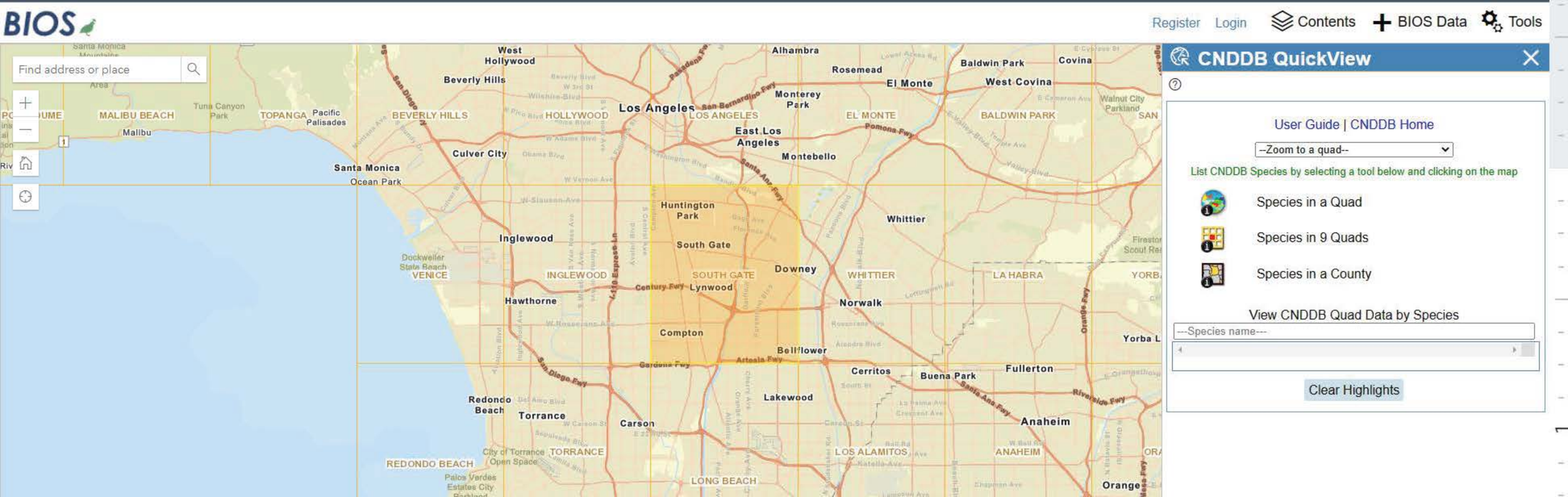


David Kossack
On behalf of
San Andreas Land Conservancy

9001-9019 LONG BEACH BOULEVARD HABITAT FOR HUMANITY PROJECT

Appendix H
Statutory Checklist Reference Documents

CDFW CNNDB Map and List


BIOS
Register
Login
Contents
BIOS Data
Tools
Find address or place
CNDDB QuickView
User Guide | CNDDB Home
--Zoom to a quad--
List CNDDB Species by selecting a tool below and clicking on the map
Species in a Quad
Species in 9 Quads
Species in a County
View CNDDB Quad Data by Species
---Species name---
Clear Highlights
Los Angeles
Santa Monica
Beverly Hills
West Hollywood
Culver City
Inglewood
Hawthorne
Torrance
Redondo Beach
Compton
Lynwood
South Gate
Huntington Park
Whittier
Downey
Norwalk
Bellflower
Lakewood
Long Beach
Carson
Cerritos
Buena Park
Fullerton
Anaheim
Orange
Alhambra
Rosemead
El Monte
Baldwin Park
West Covina
Covina
Monterey Park
East Los Angeles
Montebello
Pomona Fwy
Santa Ana Fwy
San Diego Fwy
Century Fwy
Gardena Fwy
Artesia Fwy
Riverside Fwy
Orange Fwy
MALIBU BEACH
BEVERLY HILLS
HOLLYWOOD
LOS ANGELES
EL MONTE
BALDWIN PARK
TOPANGA
Pacific Palisades
Malibu
Tuna Canyon Park
Ocean Park
Dockweiler State Beach
VENICE
INGLEWOOD
SOUTH GATE
WHITTIER
LA HABRA
YORBA
TORRANCE
City of Torrance Open Space
REDONDO BEACH
Palos Verdes Estates City
LOS ALAMITOS
ANAHEIM
Walnut City Parkland
Santa Monica Mountains Area

Element_T	Scientific_N	Common_N	Element_C	Federal_St	State_Statu	CDFW_Stat	CA_Rare_P	Quad_Cod
Animals - A	Spea hamn	western sp	AAABF020	None	None	SSC	-	3311882
Animals - B	Aquila chry	golden eag	ABNKC220	None	None	FP | WL	-	3311882
Animals - B	Coccyzus a	western ye	ABNRB020	Threatened	Endangere	-	-	3311882
Animals - B	Falco pereg	American p	ABNKD060	Delisted	Delisted	FP	-	3311882
Animals - B	Setophaga	yellow war	ABPBX030	None	None	SSC	-	3311882
Animals - B	Spizella bre	Brewers sp	ABPBX940	None	None	-	-	3311882
Animals - B	Polioptila c	coastal Cali	ABPBJ0808	Threatened	None	SSC	-	3311882
Animals - B	Athene cur	burrowing	ABNSB100	None	None	SSC	-	3311882
Animals - B	Empidonax	southweste	ABPAE330	Endangere	Endangere	-	-	3311882
Animals - B	Vireo bellii	least Bells	ABPBW011	Endangere	Endangere	-	-	3311882
Animals - In	Rhaphiomi	El Segundo	IIDIP05022	None	None	-	-	3311882
Animals - M	Taxidea tax	American b	AMAJF040	None	None	SSC	-	3311882
Animals - M	Myotis veli	cave myoti	AMACC01C	None	None	SSC	-	3311882
Animals - M	Glyptoston	San Gabrie	IMGASB10	None	None	-	-	3311882
Animals - M	Gonidea ar	western ric	IMBIV1901	None	None	-	-	3311882
Animals - R	Anniella ste	Southern C	ARACC010	None	None	SSC	-	3311882
Animals - R	Phrynosom	coast horn	ARACF121C	None	None	SSC	-	3311882
Plants - Va	Centromad	southern ta	PDAST4R0F	None	None	-	1B.1	3311882
Plants - Va	Phacelia st	Brands star	PDHYD0C5	None	None	-	1B.1	3311882
Plants - Va	Orcuttia ca	California C	PMPOA4G0	Endangere	Endangere	-	1B.1	3311882
Plants - Va	Navarretia	prostrate v	PDPLM0C0	None	None	-	1B.2	3311882

Quad_Nam	Data_Statu	Taxonomic_Sort-esriFieldTypeString
SOUTH GA	Mapped	Animals - Amphibians - Scaphiopodidae - Spea hammondii
SOUTH GA	Unprocesse	Animals - Birds - Accipitridae - Aquila chrysaetos
SOUTH GA	Mapped	Animals - Birds - Cuculidae - Coccyzus americanus occidentalis
SOUTH GA	Unprocesse	Animals - Birds - Falconidae - Falco peregrinus anatum
SOUTH GA	Unprocesse	Animals - Birds - Parulidae - Setophaga petechia
SOUTH GA	Unprocesse	Animals - Birds - Passerellidae - Spizella breweri
SOUTH GA	Unprocesse	Animals - Birds - Polioptilidae - Polioptila californica californica
SOUTH GA	Mapped	Animals - Birds - Strigidae - Athene cunicularia
SOUTH GA	Mapped	Animals - Birds - Tyrannidae - Empidonax traillii extimus
SOUTH GA	Mapped	Animals - Birds - Vireonidae - Vireo bellii pusillus
SOUTH GA	Unprocesse	Animals - Insects - Mydidae - Rhaphiomidas terminatus terminatus
SOUTH GA	Mapped	Animals - Mammals - Mustelidae - Taxidea taxus
SOUTH GA	Unprocesse	Animals - Mammals - Vespertilionidae - Myotis velifer
SOUTH GA	Mapped	Animals - Mollusks - Megomphicidae - Glyptostoma gabrielense
SOUTH GA	Mapped	Animals - Mollusks - Unionidae - Gonidea angulata
SOUTH GA	Mapped	Animals - Reptiles - Anniellidae - Anniella stebbinsi
SOUTH GA	Mapped ar	Animals - Reptiles - Phrynosomatidae - Phrynosoma blainvillii
SOUTH GA	Mapped	Plants - Vascular - Asteraceae - Centromadia parryi ssp. australis
SOUTH GA	Mapped	Plants - Vascular - Hydrophyllaceae - Phacelia stellaris
SOUTH GA	Mapped	Plants - Vascular - Poaceae - Orcuttia californica
SOUTH GA	Mapped	Plants - Vascular - Polemoniaceae - Navarretia prostrata

9001-9019 LONG BEACH BOULEVARD HABITAT FOR HUMANITY PROJECT

Appendix H
Statutory Checklist Reference Documents

SCAG Data/Map Report for City of South Gate

SCAG
INNOVATING FOR A BETTER TOMORROW

Connect SoCal

The 2024–2050 Regional Transportation Plan/Sustainable Communities Strategy

LOCAL DATA EXCHANGE (LDX) PROCESS

DATA/MAP BOOK

for the City of

SOUTH GATE

DRAFT PLAN RELEASE | NOVEMBER 2023

CONTENTS

INTRODUCTION 1
- What is Connect SoCal 2024? 1
- What is the Local Data Exchange Process? 1
- What is the Regional Data Platform? 2
- What is the Local Information Services Team? 2

PROVIDING INPUT TO SCAG 3
- Timeline 4

LAND USE 5
- General Plan Land Use 10
- Specific Plan Land Use 10
- Zoning 10
- Existing Land Use 10
- Key Entitlements 11

PRIORITY DEVELOPMENT 11
- Neighborhood Mobility Areas 11
- Livable Corridors 12
- Job Centers 12
- Housing Trajectory 13

TRANSPORTATION 15
- High Quality Transit Corridors 15
- Transit Priority Areas and Major Transit Stops 15
- Regional Bikeways 16
- Regional Truck Routes 16

GREEN REGION RESOURCE AREAS (SB 375) 17
- Resilience 17
- Open Space/Habitat 19
- Administrative/Working Lands 23

GEOGRAPHICAL BOUNDARIES 24
- City Boundary and Sphere of Influence 24
- Census Tract Boundary 24
- Transportation Analysis Zone (TAZ) Boundary 24

DRAFT GROWTH FORECAST (SED) 25

APPENDIX 1: SUSTAINABLE COMMUNITIES PROJECT (SCP) CRITERIA

APPENDIX 2: SOCIOECONOMIC ESTIMATES AND PROJECTION BY TAZ

MAPS

INTRODUCTION

Founded in 1965, the Southern California Association of Governments (SCAG) holds a federal designation as a Metropolitan Planning Organization (MPO) and is a state-recognized Regional Transportation Planning Agency and Council of Governments. SCAG's primary role is developing long-range plans for a region encompassing six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura) and 191 cities, an area covering more than 38,000 square miles.

Beginning in February 2022, SCAG started an extensive data exchange process with local jurisdictions. The purpose of this process was twofold: to inform SCAG's 2024 Regional Transportation Plan/Sustainable Communities Strategy ("Connect SoCal 2024") and to provide data, tools, and platforms to assist in local plan development. This process was developed in conjunction with SCAG's Regional Data Platform. The data and maps in this book can also be accessed in digital and editable form through the RDP (https://scag.ca.gov/RDP) alongside several additional planning tools.

This bottom-up approach ensures that local jurisdictions are actively involved in the development of SCAG's regional plans and that the data is accurate. By providing tools and data back to local jurisdictions for their own plan updates, the objective of the Local Data Exchange is to help make local and regional plans mutually reinforcing.



What is Connect SoCal 2024?

The Regional Transportation Plan is an important planning document for all major US regions which allows transportation projects to qualify for federal funding and/or federal approval. A principal requirement of the RTP is that the US EPA's Transportation Conformity Regulations are complied with at the regional level. The California Sustainable Communities and Climate Protection Act of 2008, better known as Senate Bill 375, mandates the integration of transportation, land use, and housing planning with the objective of smarter growth. Under SB 375, the California Air Resources Board issues a travel-based greenhouse gas (GHG) emissions reduction target for the region and requires MPOs to develop a Sustainable Communities Strategy that demonstrates target achievement in alignment with the RTP and the Regional Housing Needs Assessment (RHNA).[1] These federal and state standards both require the development of a coordinated regional strategy for transportation and land use in order to ensure that the region's goals are achieved.

What is the Local Data Exchange Process?

In order develop a plan that can meet these requirements, SCAG first prepares a set of GIS maps for local jurisdictions. Several maps are produced by third parties and are curated and provided by SCAG for informational purposes as a consideration in developing local plans. Other maps are draft, prior, or public versions of local data which SCAG is requesting local review for possible inclusion in Connect SoCal 2024. Over the course of 2022, SCAG reached out to all 197 local jurisdictions, provided available resources, and met one-on-one with local jurisdictions to discuss these data and maps in their local context, provide background on the development of Connect SoCal 2024, and provide training in tools available to local jurisdictions. Preliminary data and maps were shared with local jurisdictions through the May 2022 released data/map book and through the Regional Data Platform.

This version of the Data/Map Book reflects the conclusion of the Local Data Exchange process with revisions made by local jurisdictions that provided them to SCAG or were granted an extension by the December 2, 2022 deadline.

1 The RHNA is on an eight-year cycle and no RHNA will be developed alongside Connect SoCal 2024.

INTRODUCTION

What is the Regional Data Platform?

The Regional Data Platform (RDP) (https://scag.ca.gov/RDP) is a collaborative data sharing and planning system designed to facilitate better planning for cities and counties of all levels across the region. The RDP is intended to:

- Provide modern planning tools and best practices oriented around the data and analysis requirements of General Plan updates
- Streamline the process of collecting and integrating data from local jurisdictions to SCAG to enhance regional planning
- Facilitate transparency and collaboration, locally and regionally, to drive more democratic and sustainable planning

The RDP has been designed with three major components—*Accessible Data and Information, Planning and Engagement Tools, and Data Sharing Tools and Workflows*. Tools and resources have been produced in each of these categories with the assistance of ten pilot jurisdictions.

Under *Accessible Data and Information*, the RDP's Regional Hub is a one-stop location for data, tools, reports, and collaboration. SoCal Atlas is a web-based application providing the ability to explore commonly-used data, statistics, and maps across topics (e.g., demographics, employment, housing) and geographies (e.g., county, city, census tracts).

Planning and Engagement Tools include the Housing Element Parcel Tool (HELPR) and Parcel Locator applications for public use. Additionally, local jurisdictions have access to several pieces of off-the-shelf Esri software (e.g., ArcGIS Pro, Urban, Business Analyst) and a local General Plan update site template to easily create a website to facilitate and engage residents during a General Plan update.

The *Data Sharing Tools and Workflows* component has been centered around the Local Data Exchange (LDX) Process, which provides opportunities to local jurisdictions and stakeholders to explore, review, update, and comment on data shared by and with SCAG. Local jurisdiction users with login credentials will have the ability to track submission status and receive direct technical assistance from SCAG.

What is the Local Information Services Team?

Responding to jurisdictions' requests for further technical assistance on the RDP and LDX processes, SCAG launched the Local Information Services Team (LIST) comprised of technical staff able to provide customized one-on-one technical and information services and tool demos. LIST aims to:

1. Link SCAG's available information products (e.g., data, applications, model policies and best practices, topical white papers) to help address local needs,
2. Provide local jurisdiction staff an opportunity to offer feedback on how SCAG can improve its products to facilitate better collaboration, and to
3. Coordinate one-on-one meetings with local jurisdictions during the LDX process.

Requests can be submitted through https://scag.ca.gov/RDP or list@scag.ca.gov.

PROVIDING INPUT TO SCAG

This Data/Map Book and its dynamic online equivalent through the Regional Data Platform is specific to your local jurisdiction and is designed to help local planners better understand the sources, methodologies, and contexts of datasets which will be integrated into SCAG's regional plans.

The layers below are being shared with local jurisdictions in preparation for Connect SoCal 2024. During the LDX process, SCAG sought update and corrections on several layers as indicated below. Additional layers represent regional datasets which local update and corrections were optional. The remaining layers are third-party data which relate to regional objectives and are included for reference while developing Connect SoCal 2024's forecasted regional development pattern. Additional detail is found in the description of each layer that follows. **The current datasets reflect the inputs received during the LDX process.**

CATEGORY	LAYER NAME	REVIEW TYPE
Land Use	General Plan	Update/Corrections
	Zoning	Update/Corrections
	Existing Land Use	Update/Corrections
	Specific Plan Land Use	Update/Corrections
	Key Entitlements	Update/Corrections
Priority Development	Neighborhood Mobility Areas	Optional
	Livable Corridors	Optional
	Job Centers	Optional
	Housing Trajectory	Update/Corrections and site inventory upload
Transportation	High Quality Transit Corridors	Reference Only
	Transit Priority Areas and Major Transit Stops	Reference Only
	Regional Bikeways	Optional
	Regional Truck Routes	Optional
Green Region Resource Areas (SB 375)	Resilience *(Flood areas, coastal inundation, wildfire risk)*	Reference Only
	Open Space/Habitat *(Open space and parks, endangered species and plants, sensitive habitat areas, natural community and habitat conservation plans)*	Reference Only
	Administrative/Working Lands *(Tribal nations, military installations, farmlands)*	Reference Only
Geographical Boundaries	City Boundary and Sphere of Influence	Reference Only
	Census Tract	Reference Only
	TAZ	Reference Only
Growth	Jurisdiction-level projections of households and employment (2019-2050)	Update/Corrections
	TAZ-level projections of households and employment (2019-2050)	Update/Corrections



PROVIDING INPUT TO SCAG

Due to delays in the 2020 Census and a desire to better integrate the evolving COVID-19 pandemic and local jurisdictions' 6th cycle housing element updates in SCAG's forecasting process, preliminary growth forecast data were available later than other layers in May 2022. SCAG staff collected, reviewed, and incorporated the inputs received from email and RDP-LDX portal which provides several options for input:

- Direct editing (no GIS knowledge required)
- Complete file upload
- Complete plan upload
- Comments & feedback

Unique jurisdictional login information was provided under separate cover. LIST members were available throughout the LDX process to provide technical assistance and can be contacted at list@scag.ca.gov.

Timeline

The Local Data Exchange Process involves the following milestones.

EVENT	DATE
Local Data Exchange Soft Launch. Data layers (except growth) available for local review through Data/Map Books and Regional Data Platform (RDP).	February 2022
Subregional outreach and trainings on LDX and RDP. LIST team available for questions and consultation.	Feb – Apr 2022
Local Data Exchange Complete Launch. Data/Map Book and RDP updated to include preliminary growth data.	May 2022
One-on-one meetings with local jurisdictions to review the data package and feedback opportunity.	Beginning May 2022
Deadline for local jurisdictions to provide feedback for possible inclusion in Connect SoCal 2024.	Dec 2, 2022
Regional collaboration on plan development. Continued development of Connect SoCal 2024 strategies with stakeholders, working groups, and the general public.	Early 2023
Draft Connect SoCal 2024 release	Nov 2023
Final Connect SoCal 2024 adoption	Anticipated April 2024

LAND USE

After the adoption of Connect SoCal 2020, SCAG began the 2019 regional land use dataset development process to update parcel-based land use information in preparation for Connect SoCal 2024. From late 2019 to early 2020, SCAG staff obtained the 2019 parcel boundary GIS file and tax roll property information from county assessor's offices and/or county's GIS portals. After a year of data collection, standardization, and clean-up, SCAG staff prepared a set of land use data and maps at the parcel level as follows:

- Adopted General Plan land use with local jurisdiction's general plan designations and with SCAG Land Use Codes
- Adopted Specific Plan land use with SCAG Land Use Codes
- Adopted Zoning codes with local jurisdiction's zoning codes and with SCAG Land Use Codes
- 2019 Existing land use with SCAG Land Use Codes

The Anderson Land Use Classification was used as the standardized SCAG Land Use Code system. For more detailed information on the land use code system, please refer to Table 1: SCAG Land Use Codes Table. Land use datasets were further reviewed by local jurisdictions during the LDX process. In May 2023, SCAG staff completed the data updates based on the data updates and comments received during the LDX process.

Please note that the data shown in some areas may be generalized, because the parcel-level land use dataset does not support multiple uses of designations on a single parcel. Due to this limitation, if site specific data is necessary, users should always reference a local agency's adopted documents or field surveys to determine actual land use designations.



LAND USE

TABLE 1: SCAG Land Use Codes Legend

LEGEND		LAND USE DESCRIPTION
	Single Family Residential	1110 Single Family Residential 1111 High Density Single Family Residential (9 or more DUs/ac) 1112 Medium Density Single Family Residential (3-8 DUs/ac) 1113 Low Density Single Family Residential (2 or less DUs/ac)
	Multi-Family Residential	1120 Multi-Family Residential 1121 Mixed Multi-Family Residential 1122 Duplexes, Triplexes and 2- or 3-Unit Condominiums and Townhouses 1123 Low-Rise Apartments, Condominiums, and Townhouses 1124 Medium-Rise Apartments and Condominiums 1125 High-Rise Apartments and Condominiums
	Mobile Homes and Trailer Parks	1130 Mobile Homes and Trailer Parks 1131 Trailer Parks and Mobile Home Courts, High-Density 1132 Mobile Home Courts and Subdivisions, Low-Density
	Mixed Residential	1140 Mixed Residential 1100 Residential
	Rural Residential	1150 Rural Residential
	General Office	1210 General Office Use 1211 Low- and Medium-Rise Major Office Use 1212 High-Rise Major Office Use 1213 Skyscrapers
	Commercial and Services	1200 Commercial and Services 1220 Retail Stores and Commercial Services 1221 Regional Shopping Center 1222 Retail Centers (Non-Strip With Contiguous Interconnected Off-Street Parking) 1223 Retail Strip Development 1230 Other Commercial 1231 Commercial Storage 1232 Commercial Recreation 1233 Hotels and Motels
	Facilities	1240 Public Facilities 1241 Government Offices 1242 Police and Sheriff Stations 1243 Fire Stations 1244 Major Medical Health Care Facilities 1245 Religious Facilities 1246 Other Public Facilities 1247 Public Parking Facilities 1250 Special Use Facilities 1251 Correctional Facilities 1252 Special Care Facilities 1253 Other Special Use Facilities

TABLE 1: SCAG Land Use Codes Legend (continued)

LEGEND		LAND USE DESCRIPTION
	Education	1260 Educational Institutions 1261 Pre-Schools/Day Care Centers 1262 Elementary Schools 1263 Junior or Intermediate High Schools 1264 Senior High Schools 1265 Colleges and Universities 1266 Trade Schools and Professional Training Facilities
	Military Installations	1270 Military Installations 1271 Base (Built-up Area) 1272 Vacant Area 1273 Air Field 1274 Former Base (Built-up Area) 1275 Former Base Vacant Area 1276 Former Base Air Field
	Industrial	1300 Industrial 1310 Light Industrial 1311 Manufacturing, Assembly, and Industrial Services 1312 Motion Picture and Television Studio Lots 1313 Packing Houses and Grain Elevators 1314 Research and Development 1320 Heavy Industrial 1321 Manufacturing 1322 Petroleum Refining and Processing 1323 Open Storage 1324 Major Metal Processing 1325 Chemical Processing 1330 Extraction 1331 Mineral Extraction - Other Than Oil and Gas 1332 Mineral Extraction - Oil and Gas 1340 Wholesaling and Warehousing

TABLE 1: SCAG Land Use Codes Legend (continued)

LEGEND		LAND USE DESCRIPTION
	Transportation, Communications, and Utilities	1400 Transportation, Communications, and Utilities 1410 Transportation 1411 Airports 1412 Railroads 1413 Freeways and Major Roads 1414 Park-and-Ride Lots 1415 Bus Terminals and Yards 1416 Truck Terminals 1417 Harbor Facilities 1418 Navigation Aids 1420 Communication Facilities 1430 Utility Facilities 1431 Electrical Power Facilities 1432 Solid Waste Disposal Facilities 1433 Liquid Waste Disposal Facilities 1434 Water Storage Facilities 1435 Natural Gas and Petroleum Facilities 1436 Water Transfer Facilities 1437 Improved Flood Waterways and Structures 1438 Mixed Utilities 1440 Maintenance Yards 1441 Bus Yards 1442 Rail Yards 1450 Mixed Transportation 1460 Mixed Transportation and Utility
	Mixed Commercial and Industrial	1500 Mixed Commercial and Industrial
	Mixed Residential and Commercial	1600 Mixed Residential and Commercial 1610 Residential-Oriented Residential/Commercial Mixed Use 1620 Commercial-Oriented Residential/Commercial Mixed Use
	Open Space and Recreation	1800 Open Space and Recreation 1810 Golf Courses 1820 Local Parks and Recreation 1830 Regional Parks and Recreation 1840 Cemeteries 1850 Wildlife Preserves and Sanctuaries 1860 Specimen Gardens and Arboreta 1870 Beach Parks 1880 Other Open Space and Recreation 1890 Off-Street Trails

TABLE 1: SCAG Land Use Codes Legend (continued)

LEGEND		LAND USE DESCRIPTION
	Agriculture	2000 Agriculture 2100 Cropland and Improved Pasture Land 2110 Irrigated Cropland and Improved Pasture Land 2120 Non-Irrigated Cropland and Improved Pasture Land 2200 Orchards and Vineyards 2300 Nurseries 2400 Dairy, Intensive Livestock, and Associated Facilities 2500 Poultry Operations 2600 Other Agriculture 2700 Horse Ranches
	Vacant	3000 Vacant 3100 Vacant Undifferentiated 3200 Abandoned Orchards and Vineyards 3300 Vacant With Limited Improvements 3400 Beaches (Vacant) 1900 Urban Vacant
	Water	4000 Water 4100 Water, Undifferentiated 4200 Harbor Water Facilities 4300 Marina Water Facilities 4400 Water Within a Military Installation 4500 Area of Inundation (High Water)
	Specific Plan	7777 Specific Plan
	Under Construction	1700 Under Construction
	Undevelopable or Protected Land	8888 Undevelopable or Protected Land
	Unknown	9999 Unknown

General Plan Land Use

Beginning in February 2021, SCAG conducted the 2019 general plan land use data update process. In preparation for the update process, SCAG staff conducted an inventory of local general plan land use to review the status of local jurisdiction's general plan land use element updates and to collect recently updated local general plan land use information, based on information available on city/county websites. Throughout the process of collecting local general plan land use information, SCAG staff made every effort to incorporate any local general plan land use maps and designations updated after the development of 2016 regional land use dataset that was used for Connect SoCal 2020. As a part of the update process, SCAG staff migrated 2016 general plan land use information to 2019 parcel polygons and made updates to GIS parcel attributes, symbology layers and general plan correspondence tables. The general plan land use information was coded into GIS format at the parcel level, which includes local land use designations, SCAG land use codes, residential density (dwelling units per acre) and non-residential intensity (floor area ratio). In this Data/Map Book, two different types of general plan land use maps are prepared at the jurisdictional level—one with local designations, consistent with those used in each local jurisdiction and the other with the SCAG's standardized land use codes. **Data reflect revisions made by local jurisdictions during the LDX process in 2022.**

Specific Plan Land Use

Beginning in June 2021, SCAG conducted the 2019 specific plan land use data update process. In preparation for the update process, SCAG staff conducted an inventory of local specific plan land use to collect recently adopted or updated local specific plan land use information, based on information available on city/county websites. Throughout the process of collecting local specific plan documents, SCAG staff made every effort to incorporate any local specific plan land use maps and designations that are newly adopted or updated after the development of 2016 regional land use dataset. As a part of the update process, SCAG staff migrated 2016 specific plan land use information to 2019 parcel polygons and made updates to GIS parcel attributes and specific plan correspondence tables. The specific plan land use information was coded into GIS format at the parcel level, which includes local land use designations, residential density (dwelling units per acre) and non-residential intensity (floor area ratio). In this Data/ Map Book, specific plan land use map is prepared at the jurisdictional level with SCAG's standardized land use codes along with specific plan area boundaries. **Data reflect revisions made by local jurisdictions during the LDX process in 2022.**

Zoning

During the Connect SoCal 2020 Local Input and Envisioning Process, SCAG developed parcel-based zoning dataset, including zoning code—both in local code and SCAG land use code, symbology layers, and zoning standard correspondence tables. The 2016 zoning dataset was then updated based on feedback submitted by local jurisdictions during that process. As a part of the 2019 zoning data update process, SCAG staff migrated 2016 zoning code information to 2019 parcel polygons and prepared two different types of zoning maps at the jurisdictional level—one with local designations, consistent with those used in each local jurisdiction and the other with the SCAG's standardized land use codes. **Data reflect revisions made by local jurisdictions during the LDX process in 2022.**

Existing Land Use

The base year of Connect SoCal 2024 is 2019. To develop the base year 2019 existing land use data, SCAG staff migrated the 2016 existing land use information to 2019 parcel polygons and incorporated any recent land use changes since the year 2016. As a part of the update process, SCAG staff made every effort to identify newly developed parcels that were

previously undeveloped in the 2016 existing land use data by analyzing county assessor's tax roll information, such as use codes and assessed valuations, as well as building footprint information. Additionally, SCAG staff conducted geoprocessing to more accurately reflect the land information from various reference layers, including but not limited to California Protected Areas Database (CPAD), California School Campus Database (CSCD), Farmland Mapping and Monitoring Program (FMMP)'s Important Farmland, U.S. Department of Defense's Military Installations, Ranges, and Training Areas (MIRTA). In this Data/Map Book, the 2019 existing land use map is prepared at the jurisdictional level with SCAG's standardized land use codes. **Data reflect revisions made by local jurisdictions during the LDX process in 2022.**

Key Entitlements

The objective of this data is to improve SCAG's forecast of households and population by ensuring we capture large and/or regionally significant projects. As the land use authorities, local jurisdictions are being asked to review this draft dataset alongside several other land use datasets.

This dataset is not intended to reflect, in and of itself, specific projects which should or should not be included in Connect SoCal 2024. Since Connect SoCal 2024's forecast is not a build-out scenario and entitled projects are often phased over time, not all projects may be reflected and others may be partially reflected. Rather, locally-reviewed Tier2 TAZ growth totals reflect anticipated future growth in Connect SoCal 2024 and this dataset is one of several inputs in assisting to develop these growth totals.

Data reflect revisions made by local jurisdictions during the LDX process in 2022.



PRIORITY DEVELOPMENT

Neighborhood Mobility Areas

Neighborhood Mobility Areas (NMAs) are areas that focus on creating, improving, restoring and enhancing safe and convenient connections to schools, hospitals, shopping, services, places of worship, parks, greenways and other destinations. SCAG uses four empirical measures in its initial identification of NMAs: 1) Intersection density, 2) Low-speed streets, 3) Land use entropy (mixing), and 4) Accessibility to amenities within 1-mile using street network distances. In order to weight these four measures equally, each was converted to a z-score at the TAZ-level. A z-score of zero indicates that a TAZ is at the regional average for that measure – positive scores reflect above-average TAZs and negative scores reflect below average TAZs. A composite score was developed for each TAZ by summarizing the z-scores for all four measures. Based on the results of this process, SCAG took the top 25 percent performing TAZs and identified them as NMAs, to reflect the "top one-fourth" of the region for neighborhood mobility. These preliminary NMAs were then provided to local jurisdictions for review and refinement. We invited local jurisdictions to review the NMA layer by modifying and identifying the TAZs that best reflect (a) the measures and areas important in your community and (b) to link to any local mobility policies/strategies your jurisdiction has. Jurisdictions were asked to describe proposed changes, while keeping the share of each jurisdiction's TAZs identified as NMAs roughly equal (i.e. no more than +/- 10%) so that the regional NMA layer continues to reflect the "top one-fourth" of the region for mobility.

PRIORITY DEVELOPMENT

Livable Corridors

Livable Corridors are areas where local jurisdictions may plan and zone for increased density at nodes along key corridors, and to "redevelop" single-story under-performing retail with well-designed, higher density housing and employment centers. Growth at strategic nodes along key corridors, many of which are within High Quality Transit Corridors (HQTCs), will make transit a more convenient and viable option. The Livable Corridors network is developed utilizing select variables from past regional plans like HQTCs and input from local jurisdictions during LDX. Additionally, this strategy is comprised of two components that will encourage context sensitive density, improve retail performance, combat disinvestment, and improve fiscal outcomes for local communities:

- **Transit Improvements:** Some corridors have been identified as candidates for on-street, dedicated lanes or other enhancements (e.g., Transit Signal Priority). Other corridors have the potential to support features that improve the user experience and bus performance, including enhanced bus shelters, real-time travel information, off-bus ticketing, all-door boarding, and longer distances between stops to increase speeds.
- **Active Transportation Improvements:** Increased investments in Complete Streets within Livable Corridors and intersecting arterials are essential to support safe bicycling, walking, and rolling. Investments may include protected lanes to encourage safe bicycling and lower speed mobility, improved pedestrian access, and bicycle and micromobility parking.

Livable corridors provided for local review were those identified in Connect SoCal 2020.

Based on the criteria above, jurisdictions were asked to describe proposed changes or additions using the line drawing tool.

Job Centers

The Job Centers layer in the Data/Map book was used during Connect SoCal 2020 and identifies areas in the region with significantly higher employment density than surrounding areas. Rather than a traditional downtown core surrounded by a periphery, Southern California has long been known to have a polycentric urban form characterized by multiple centers of activity. 72 job centers were identified in the SCAG region and are places with a greater concentration of employment than areas around them.[2] [3]

This layer was derived from point-level business establishment data from InfoUSA in 2016. Data have been post-processed by SCAG staff or accuracy and job centers are delineated using Tier2 TAZ boundaries. While job data form the basis these centers, places of work also represent the location of activity which may be a destination for other non-work trips (e.g. school, shopping, recreation).

This methodology aims to identify regional peaks of employment density for further plan development and is not intended to capture each local jurisdiction's main commercial areas. Additionally, the use of TAZ boundaries may limit the accuracy of specifc job center boundaries. SCAG requested local insights into the location of regionally-signifcant peaks of existing employment or activities in order to refine Connect SoCal 2024 strategies.

2 For an early methodology delineating job centers in the region, see Giuliano, Genevieve, and K. A. Small. 1991. Subcenters in the Los Angeles region. Regional Science and Urban Economics 21, p. 163-182.

3 These job centers are identified using the methodology described in Kane, K., Hipp, J. R., & Kim, J. H. 2018. Los Angeles employment centers in the twenty-first century. Urban Studies 55:4, p. 844-869

Housing Trajectory

The 6th cycle RHNA process required that each local jurisdiction develop a plan to accommodate its designated housing need across four income categories. Updated housing elements were due to the California Department of Housing and Community Development (HCD) on October 15, 2021 and required the inclusion of a site inventory detailing the location and characteristics of sites which satisfy the RHNA housing need. In some cases, current zoning and general plan designations may not yet be consistent with the housing element's site inventory; however, local jurisdictions have between 1 and 3 years to ensure consistency.

SCAG's 6th cycle RHNA methodology (see https://scag.ca.gov/rhna) allocated the majority of the region's housing need to jurisdictions on the basis of job accessibility and transit accessibility as defined in Connect SoCal 2020. As such, ensuring that local plans to accommodate this need are reflected in Connect SoCal 2024's forecasted regional development pattern is one tool in achieving the region's GHG and conformity targets.

In addition to verifying land use data as described above, SCAG developed an approach to standardize key site inventory criteria in order to help ensure that local jurisdictions' housing element updates are properly reflected. SCAG staff have generated the summary table below based on a review of each local jurisdiction's most recently submitted housing element conducted between December 27, 2021 – January 7, 2022. In addition to reviewing this table for accuracy, local jurisdictions were asked to provide the Excel-based sites inventory table which accompanied the housing element submittal to HCD (see file upload link through https://scag.ca.gov/RDP).

Table 2: Summary Statistics from 6th Cycle Housing Element Updates

NAME	VALUE	DESCRIPTION
Total RHNA Allocation	8282	Total 6th cycle RHNA allocation issued to local jurisdiction in September 2020.
Pipeline/Approved Units	711	Units which are currently in the process of being developed. While the precise description and likely timing differs between housing elements, most include a similar category to indicate housing units which are likely to materialize in the near-term and do not require any, or any significant deviation from existing plans to accommodate.
Nonvacant/infill sites	0	Units included in the housing element which meet HCD's criteria for providing additional evidence of development likelihood owing to an existing or previous use on the site.
Vacant sites	0	Units identified by the housing element which can be developed on currently vacant parcels, indicating fewer barriers to development. This may differ from pipeline/ approved projects (above), and/or may reflect units on sites other than those listed as nonvacant/infill.
Units requiring rezoning	0	Number of units proposed to be achieved through rezoning, per HCD's sites inventory guidelines.
Accessory Dwelling Units	480	
Site Inventory Date/ Version	Sept draft	

Source: Preliminary data from SCAG staff review of most recently available 6th cycle housing element update conducted between 12/27/21 and 1/7/22.

TRANSPORTATION

High Quality Transit Corridors

For Connect SoCal 2024, SCAG developed High Quality Transit Corridors (HQTCs) in the SCAG Region for plan year 2050, based on the following SB 375 language:

- High-Quality Transit Corridor (HQTC): A corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours (CA Public Resource Code Section 21155(b)).

HQTCs included in this Data/Map Book are based on the 2050 plan year transit network of Connect SoCal 2024 and are considered draft until the completion of Connect SoCal 2024. Further explanation of the methodology for identifying HQTCs is included in the Connect SoCal 2024 Transit Technical Report Appendix. Please note that SCAG updates its inventory of planned transit network with the adoption of a new RTP/SCS, once every four years. However, transit planning studies may be completed by transit agencies on a more frequent basis than the RTP/SCS is updated by SCAG. This data is intended for planning purposes only, and SCAG shall incur no responsibility or liability as to the completeness, currentness, or accuracy of this information. SCAG assumes no responsibility arising from use of this information by individuals, businesses, or other public entities. Users should consult with the appropriate transit provider(s) to obtain the latest information on transit routes, stop locations, and service intervals before making determinations regarding CEQA exemption or streamlining.



Transit Priority Areas and Major Transit Stops

For Connect SoCal 2024, SCAG developed Transit Priority Areas (TPAs) and major transit stops in the SCAG Region for plan year 2050. TPAs are Priority Development Areas that are within one half mile of existing or planned major transit stops in the region. A major transit stop is defined as a site containing an existing or planned rail or bus rapid transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. TPAs are where TOD can be realized – where people can live, work and play in higher density, compact communities with ready access to a multitude of safe and convenient transportation alternatives. Focusing regional growth in areas with planned or existing transit stops is key to achieving equity, economic, and environmental goals. Infill within TPAs can reinforce the assets of existing communities, efficiently leveraging existing infrastructure and potentially lessening impacts on natural and working lands. Growth within TPAs supports Connect SoCal's strategies for preserving natural lands and farmlands and alleviates development pressure in sensitive resource areas by promoting compact, focused infill development in established communities with access to high-quality transportation.

Major transit stops and the TPAs included in this Data/Map Book are based on the 2050 plan year transit network of Connect SoCal 2024. Please note that SCAG updates its inventory of planned transit network with the adoption of a new RTP/SCS, once every four years. However, transit planning studies may be completed by transit agencies on a more frequent basis than the RTP/SCS is updated by SCAG. This data is intended for planning purposes only, and SCAG shall incur no responsibility or liability as to the completeness, currentness, or accuracy of this information. SCAG assumes no responsibility arising from use of this information by individuals, businesses, or other public entities. Users should consult with the appropriate transit provider(s) to obtain the latest information on transit routes, stop locations, and service intervals before making determinations regarding CEQA exemption or streamlining.

Regional Bikeways

The Southern California Regional Bikeway Shapefile (RBS) builds on what has been compiled in coordination with each of the six County Transportation Commissions (Imperial, Orange, Los Angeles, Riverside, San Bernardino, and Ventura) for the 2020 RTP/SCS. SCAG developed standard data fields using existing fields from each county and others identified by stakeholders and consultants. Since the adoption of the 2020 RTP/SCS, SCAG further refined the data fields necessary to streamline and standardize digitization of the RBS and its associated attributes. For inclusion in the 2024 RTP/SCS, or Connect SoCal 2024, SCAG has added two data fields, lane count and lane direction, to simplify the RBS digitization to street centerlines.

The RBS includes both existing and proposed facilities and was compiled from shapefiles provided by each county transportation commission during the 2016 RTP/SCS and 2020 RTP/SCS. The Connect SoCal 2024 RBS includes updates provided by local jurisdictions following the adoption of the 2020 RTP/SCS. Commissions and local jurisdictions may use different strategies for compiling their files so some areas may be more up to date and contain different amounts of data than others.

Existing routes are facilities that currently are installed upon city streets or paths. Proposed facilities are those contained in city or county level plans that have not yet been constructed. Each route is classified based on definitions for bicycle routes as outlined below. Class I-IV are defined by the California Highway Design Manual. Class V is a SCAG defined route type.

Class Definitions:

- Class I Bikeway (Bike Path): Provides a completely separated facility for the exclusive use of bicycles and pedestrians with crossflow by vehicles minimized.
- Class II Bikeway (Bike Lane): Provides a striped lane for one-way bike travel on a street or highway.
- Class III Bikeway (Bike Route): Provides for shared use with pedestrian or motor vehicle traffic.
- Class IV Bikeway (Separated Bikeway): Provides for the exclusive use of bicycles and includes a separation (e.g., grade separation, flexible posts, inflexible physical barrier, or on-street parking) required between the separated bikeway and the through vehicular traffic.
- Class V Bikeway (Bicycle Friendly Boulevard): Bicycle Friendly Boulevard are facilities parallel to major corridors and that provide a calmer, safer alternative for bicyclists of all ages and skill levels. Bicycle Friendly Streets include traffic calming elements beyond traditional signage, such as roundabouts, diverters, curb extensions, etc.

Regional Truck Routes

The Southern California Regional Truck Route Shapefile (RTRS) has been compiled using the general plans and municipal codes of the jurisdictions in areas of each of the six County Transportation Commissions (Imperial, Orange, Los Angeles, Riverside, San Bernardino, and Ventura). SCAG has developed standard data fields based on information found in local general plans and municipal codes to identify roadways and roadway segments that are designated as truck routes by the cities. The RTRS includes truck routes on existing local facilities. Jurisdictions may use various operational criteria to define truck routes including number of axles, time of the day, weight-related restrictions, like minimum and maximum weights, gross and net weight limits, are the most commonly used criterion. Existing truck routes are those that are specifically identified as facilities where trucks are generally permitted or restricted during all times, or the majority, of a day. It should be recognized that most jurisdictions permit truck to travel on any roadway segment with clear limitations to their movement (e.g., direct delivery to locations

not on a designated route). Each route is at the discretion of its jurisdiction. Confirmation and updates to the RTRS will allow SCAG member cities to understand and develop policy regarding intracity and intercity truck route connections and gaps, and access to relevant land uses within jurisdictional boundaries.

GREEN REGION RESOURCE AREAS (SB 375)

As the region faces unprecedented challenges, it is important to coordinate regional land use and transportation strategies and address Southern California's growth and sustainability challenges in order to protect the SCAG region's natural assets and reduce future risks from climate change. The Green Region Resource Areas (GRRAs), derived from SB 375 statute and Connect SoCal 2020 strategies, highlights where future growth is not encouraged due to sensitivity to natural hazards, conservation value, federal and tribal land management, and a changing climate.

The Green Region Resources Areas consist of ten (10) topic areas broken into three categories: Resilience, Open Space/Habitat, and Administrative/Working Lands. GRRA layers have been selected based off guidance from SB 375 defined "resource areas." As a note, some GRRA layers may be comprised of multiple pieces of underlying source data.

Additionally, Multi-Benefit Asset Maps have been developed for each of the three categories, as well as a consolidated map. Areas in the region that have more instances of overlapping data layers for these themes are shown with relatively higher value on the map. For example, the Resilience map identifies areas with fire, flood, and coastal inundation risks, which may have higher needs for resilience strategies. This approach builds upon the 2020 Connect SoCal Growth Vision's approach by prioritizing areas with a confluence of assets. Note that some GRRA layers are not included in the Multi-Benefit Asset Maps (Endangered Species and Plants; Natural Community and Habitat Conservation Plans) or the growth forecast, and are presented for reference to inform local feedback on non-GRRA data elements.



Resilience

The Resilience category highlights areas within the region at risk due to climate change, such as flooding, coastal inundation (sea level rise), and wildfire risk. Information on the underlying datasets comprising the Resilience Multi-Benefit Asset Map can be found in the table below.

LAYER NAME	UNDERLYING DATASET(S)
Flood Areas	FEMA Effective: 100-Year Floodplains, 2017, FEMA
Coastal Inundation (Sea Level Rise)	Coastal Storm Modeling System (CoSMoS) for Southern California, v3.0, Phase 2, 2018, USGS
Wildfire Risk	Fire Hazard Severity Zones Local Responsibility Areas Maps, 2008, CAL FIRE
	Fire Hazard Severity Zones State Responsibility Areas Maps, 2007, CAL FIRE
	Wildland Urban Interface, 2020, CAL FIRE

- Flood Areas - The Flood Area data was obtained from the Digital Flood Insurance Rate Map (DFIRM), obtained from Federal Emergency Management Agency (FEMA) in August 2017. The DFIRM Database is a digital version of the FEMA Flood Insurance Rate Maps (FIRM)[4] that is designed for use with digital mapping and analysis software. The FIRM is created by FEMA for the purpose of floodplain management, mitigation, and insurance activities for the National Flood Insurance Program (NFIP).

4 The FIRM is the official map of a community on which FEMA has delineated both the special hazard areas and the risk premium zones applicable to the community. Since 1970s, the FEMA has created and updated the flood hazard maps for National Flood Insurance Program (NFIP). NFIP was created by the US Congress in 1968 to reduce future damage and to provide protection for property owners from potential loss through an insurance mechanism.

GREEN REGION RESOURCE AREAS

FEMA prepares the flood maps to show the extent of flood hazard in a flood prone community by conducting engineering studies called 'Flood Insurance Studies (FISs).' From the study, FEMA delineate Special Flood Hazard Areas (SFHAs), which are subject to inundation by a flood that has a 1 percent or greater chance of being equaled or exceeded during any given year. This type of flood is commonly referred to as the 100-year flood or base flood. The 100-year flood has a 26 percent chance of occurring during a 30 year period, the length of many mortgages. The 100-year flood is a regulatory standard used by Federal and most State agencies to administer floodplain management programs. The FIRM includes data on the 100-year (1% annual chance of occurring) and 500-year (0.2% annual chance of occurring) floodplains. The flood maps developed by FEMA are primary tools for state and local governments to mitigate the effects of flooding in their communities. The data are available to the public at FEMA's Map Service Center (https://msc.fema.gov/portal/). You may also request the related documents or other maps, such as FIS result report, or a Flood Boundary and Floodway Map (FBFM). For more information on the FIRM, refer to their website at https://www.fema.gov/flood-insurance-rate-map-firm. Please note the information included in this book includes only 100-year flood data.

- Coastal Inundation (Sea Level Rise) - The Coastal Inundation data was obtained from the Coastal Storm Modeling System (CoSMoS) for Southern California (v3.0, Phase 2). CoSMoS is an online mapping viewer that makes detailed predictions over large geographic scales of storm-induced coastal flooding and erosion for both current sea level rise (SLR) scenarios. The data included in this book depicts the potential inundation of coastal areas resulting from a projected 3 feet rise in sea level above current Mean Higher High Water (MHHW) conditions. CoSMoS v3.0 for Southern California shows projections for future climate scenarios (sea- level rise and storms) to provide emergency responders and coastal planners with critical storm-hazards information that can be used to increase public safety, mitigate physical damages, and more effectively manage and allocate resources within complex coastal settings. Phase 2 data for Southern California include storm-hazard information for the coast from the Mexican Border to Pt. Conception. For more information on CoSMoS v3.0 Phase 2, refer to the Summary of Methods at https://www.sciencebase.gov/catalog/file/get/57f1d4f3e4b0bc0bebfee139?name=CoSMoS_SoCalv3_Phase2_summary_of_methods.pdf
- Wildfire Risk - The Wildfire Risk layer depicts areas at risk of wildfires resulting in disastrous property loss. Wildfire Risk consists of the following datasets:

  CAL FIRE Fire and Resource Assessment Program (FRAP) Wildland-Urban Interface (WUI) and Wildland-Urban Intermix

  Wildfires resulting in disastrous property loss are referred to as "Wildland-Urban Interface" fires, or "interface fires." These fires may start as small vegetation fires or be part of large brush and forest fires. The Wildland-Urban Interface is distinct from areas of "Wildland-Urban Intermix" zones in which areas of human habitation are mixed with areas of flammable wildland vegetation. Intermix areas may extend from the edge of developed private land into Federal, private, and State jurisdictions. These data describe relative risk to areas of significant population density from wildfire by intersecting residential housing unit density with proximate fire threat to give a relative measure of potential loss of structures and threats to public safety from wildfire. The data was developed for the 2015 Assessment of Forest and Rangelands. It is derived from several data sources, including housing density, Fire Hazard Severity Zones, Unimproved Parcels, and Vegetation Cover. For more information, refer to the CAL FIRE website at: https://osfm.fire.ca.gov/divisions/code- development-and-analysis/wildfire-protection/

CAL FIRE Fire Hazard Severity Zones: Local and State Responsibility Areas Maps

State law requires CAL FIRE to designate areas, or make recommendations for local agency designation of areas, that are at risk from significant fire hazards based on fuels, terrain, weather, and other relevant factors. These areas at risk of interface fire losses are referred to by law as "Fire Hazard Severity Zones" (FHSZ). The Fire Hazard Severity Zone maps are developed using a science-based and field-tested model that assigns a hazard score based on the factors that influence fire likelihood and fire behavior. Many factors are considered such as fire history, existing and potential fuel (natural vegetation), predicted flame length, blowing embers, terrain, and typical fire weather for the area. There are three levels of hazard in the Local and State Responsibility Areas: moderate, high and very high. The data in this book includes only high and very high levels of hazards. For more information, refer to the CAL FIRE website at https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness- and-mitigation/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/

Open Space/Habitat

The Open Space/Habitat category highlights topic areas related to open space and parks, conservation plan boundaries, and habitat areas sensitive to development, such as areas with endangered species and plants. Information on the underlying datasets comprising the Habitat Multi-Benefit Asset Map are provided in the following table; note that Endangered Species and Plants, as well as Natural Community and Habitat Conservation Plans, are included as individual maps for reference, and are not factored into the Multi-Benefit Asset Maps or Consolidated Map.

LAYER NAME	UNDERLYING DATASET(S)
Open Space and Parks	Save Our Agricultural Resources (SOAR), 2017, County of Ventura
	California Conservation Easement Database (CCED), 2021, Multiple sources
	California Protected Areas Database (CPAD), 2021, Multiple sources
Endangered Species and Plants*	California Natural Diversity Database, 2017, CA Department of Fish and Wildlife
Sensitive Habitat Areas	National Wetlands Inventory, 2020, US Fish and Wildlife Services
	2015 Areas of Conservation Emphasis (ACEIIv2), 2015, CA Department of Fish and Wildlife
	California Essential Habitat Connectivity Project, 2010, CA Department of Fish and Wildlife
Natural Community and Habitat Conservation Plans*	Conservation Plan Boundaries, Habitat Conservation Plans (HCPs) and Natural Community Conservation Plans (NCCPs), 2021, CA Department of Fish and Wildlife

Note: Layers marked with an asterisk (*) are included as individual maps for reference and are not factored into the Multi-Benefit Asset Maps or Consolidated Map.

- Open Space and Parks - As prescribed in SB 375, all publicly owned open space must be considered as part of Connect SoCal 2024. The Open Space and Parks topic area depicts conservation areas, open space, and parks across the region and consists of the following datasets:

  County of Ventura Save Open Space and Agricultural Resources (SOAR)

  SOAR is a series of voter initiatives that require a majority vote of the people before agricultural land or open space areas can be rezoned for development. The eight voter-

GREEN REGION RESOURCE AREAS

approved SOAR initiatives passed by the cities of Camarillo, Fillmore, Moorpark, Oxnard, Santa Paula, Simi Valley, Thousand Oaks and Ventura require voter approval for urban development beyond a City Urban Restriction Boundary (CURB), or, in the case of the City of Ventura, before rezoning agricultural land within the city's sphere of influence. The data in this book depicts the protect areas in Ventura County. For more information, refer to the SOAR website at: https://www.soarvc.org/.

California Conservation Easement Database (CCED)

The CCED contains lands protected under conservation easements, which are voluntary agreements with nonprofit land trusts and/or government agencies that allow landowners to limit the type or amount of development on their property while retaining private ownership of the land. CCED is maintained and published by GreenInfo Network with data updates published twice annually. The data in this book reflects data published in August 2021. For more information, refer to the CCED website at: https://data.cnra.ca.gov/dataset/california-conservation-easement-database.

California Protected Areas Database (CPAD)

The CPAD is a GIS inventory of all publicly owned protected open space lands in the State of California protected for open space purposes through fee ownership. CPAD is maintained and published by GreenInfo Network and consists of aggregated open space data from state, local, and other agencies. It is a parallel dataset to the CCED. The first version of the CPAD database was released in April 2014, the latest update is from December 2021. Please note, this book reflects data published in July 2021.

For a clear understanding of the database, it is important to understand two basic definitions of the database. First, the "protected" status in CPAD does not refer to a specific level of conservation for biodiversity values, but a general commitment to maintain the property for open space uses. Second, by fee ownership mechanism, it means that 1) the lands in CPAD are defined based on the agencies that own the fee title to the property, not the managing parties, and 2) CPAD is not the database of all public lands, but that of all "publicly owned" open space. The owning agencies include public and non-profits. Private owners are not currently included, except for parkland owned by some homeowner associations. For more details on the inclusion criteria, see the CPAD manual from their website at https://www.calands.org/wp-content/uploads/2021/12/CPAD-2021b-Database-Manual.pdf.

The database is prepared into three feature classes; Holdings, Units, and Super Units. Holdings are the parcel level open space information, which correspond to assessor or tax parcel boundaries. Units and Super Units are the aggregated features for the cartographic representation. (Units: the aggregation of Holdings into specific parks and reserves / Super Units: the aggregation of federal and state Holdings regardless county boundaries) All classes of data are downloadable through their website at http://www.calands.org. This book reflects only data under the Holdings feature class. For more information on CPAD update histories and changes, see their website at http://www.calands.org/data.

- Endangered Species and Plants* – The Endangered Species and Plants data includes an inventory of the status and locations of rare plants and animals in California. SCAG obtained the California Natural Diversity Database (CNDDB)[5] October 2017 version developed by the California Department of Fish and Wildlife's Biogeographic Data Branch (BDB). The CNDDB is a library of the location and condition of species of rare and sensitive plants, animals, and natural communities in California. It is updated on a continuous basis to be consistent and current but is not an exhaustive and comprehensive inventory of rare species and natural communities. Field verification for the absence and presence of sensitive species is required by end-users. The dataset shown on the map is based on the combination of the three data fields: element type, accuracy, and element occurrence count. Other fields in CNDDB describe the listing status, ranking, location, site description, and source references, to name a few. The types of elements (ELMTYPE) are specified as four categories of plant, animal, terrestrial community, and aquatic community.

VALUE	DEFINITION
1	Plant (ELMCODEs beginning with "P" or "N")
2	Animal (ELMCODEs beginning with "A" or "I")
3	Terrestrial community (ELMCODEs beginning with "CT")
4	Aquatic community (ELMCODEs beginning with "CA", "CE", "CL", "CM" or "CR")

The precision or accuracy level (ACC_CLASS) represents spatial uncertainty on a scale of one to ten, indicating both accuracy type and accuracy value.

VALUE	DEFINITION
80 meters	1: Specific bounded area with an 80 meter radius
Specific	2: Specific bounded area
Nonspecific	3: Non-specific bounded area
1/10 mile	4: Circular feature with a 150 meter radius (1/10 mile)
1/5 mile	5: Circular feature with a 300 meter radius (1/5 mile)
2/5 mile	6: Circular feature with a 600 meter radius (2/5 mile)
3/5 mile	7: Circular feature with a 1000 meter radius (3/5 mile)
4/5 mile	8: Circular feature with a 1,300 meter radius (4/5 mile)
1 mile	9: Circular feature with a 1,600 meter radius (1 mile)
5 miles	10: Circular feature with a 8,000 meter radius (5 miles)

The element occurrence count (EOCOUNT) represents how many occurrences share the same spatial feature. An EOCOUNT greater than one indicates the presence of a "multiple." For more information on the CNDDB, please refer to their website (https://www.wildlife.ca.gov/Data/CNDDB). The CNDDB is offered on a yearly subscription basis, and is prohibited from being distributed to anyone outside the subscribing organizations. The data can be ordered online at https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Also, the web- based CNDDB QuickView Tool which provides users with a list of all tracked elements that have been documented by the CNDDB to occur in a selected USGS 7.5' topographic quad or in a selected county is available at https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data#43018410-cnddb-quickview-tool.

5 The CNDDB is a "natural heritage program" and is part of a nationwide network of similar programs overseen by NatureServe (formerly part of The Nature Conservancy). All natural heritage programs provide location and natural history information on special status plants, animals, and natural communities to the public, other agencies, and conservation organizations. The data help drive conservation decisions, aid in the environmental review of projects and land use changes and provide baseline data helpful in recovering endangered species and for research projects.

- Sensitive Habitat Areas – The Sensitive Habitat Areas data depicts areas sensitive to growth, such as wetlands, habitat connectivity, and habitat quality. This dataset identifies areas sensitive to growth due to natural habitats in wetlands, wildlife corridors, high-biodiversity areas, wildfire prone areas, and floodplains. Sensitive Habitat Areas consists of the following datasets:

  U.S. Fish and Wildlife Services National Wetlands Inventory

  Data on wetlands is sourced from the US Fish and Wildlife Services Wetlands Inventory (NWI), a publicly available resources that provides detailed information on the abundance, characteristics, and distribution of US wetlands. For more information and to access the NWI data, refer to the US Fish and Wildlife Services website at: https://www.fws.gov/node/264586.

  California Department of Fish and Wildlife Areas of Conservation Emphasis

  Data on habitat quality consists of data from the CA Department of Fish and Wildlife, recording Areas of Conservation Emphasis (ACEIIv2). ACEIIv2 consists of a statewide analysis of biological richness by 2.5 square mile hexagons to represent areas with high species richness, high levels of rarity and irreplaceability, and/or sensitive habitats. For more information, visit: https://databasin.org/datasets/d5ae610954114029acae112386eee8c9/. For a detailed description of data inputs and analyses, refer to the ACEII Project Report for at: https://nrmsecure.dfg.ca.gov/FileHandler.ashx?DocumentID=24326.

  California Department of Fish and Wildlife Habitat Connectivity Project

  Data on habitat connectivity corridors was derived from California Essential Habitat Connectivity Project, as developed by the California Department of Fish and Wildlife, which identifies large blocks of intact habitat or natural landscapes with connectivity corridors essential for local wildlife. This dataset benefits from feedback from a selection of federal, state, local, tribal, and non-governmental organizations throughout California, and was made publicly available in 2010.

  The California Department of Transportation (Caltrans) and California Department of Fish and Game (CDFG) commissioned the California Essential Habitat Connectivity Project because a functional network of connected wildlands is essential to the continued support of California's diverse natural communities in the face of human development and climate change. The Essential Connectivity Map depicts large, relatively natural habitat blocks that support native biodiversity (Natural Landscape Blocks) and areas essential for ecological connectivity between them (Essential Connectivity Areas). This coarse-scale map was based primarily on the concept of ecological integrity, rather than the needs of particular species. Essential Connectivity Areas are placeholder polygons that can inform land-planning efforts, but that should eventually be replaced by more detailed Linkage Designs, developed at finer resolution based on the needs of particular species and ecological processes. It is important to recognize that even areas outside of Natural Landscape Blocks and Essential Connectivity Areas support important ecological values that should not be "written off" as lacking conservation value. Furthermore, because the Essential Habitat Connectivity Map was created at the statewide scale, based on available statewide data layers, and ignored Natural Landscape Blocks smaller than 2,000 acres squared, it has errors of omission that should be addressed at regional and local scales.

- Natural Community and Habitat Conservation Plans* – This data set contains Natural Community Conservation Plan (NCCP) and Habitat Conservation Plan (HCP) boundaries in California. NCCPs are California Department of Fish and Wildlife (CDFW) approved plans that take a broad-based approach to protect habitats and species. An NCCP identifies and provides for the regional protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity. Working with landowners, environmental organizations, and other interested parties, a local agency oversees the numerous activities that compose the development of an NCCP/HCP. CDFW and the US Fish and Wildlife Service provide the necessary support, direction, and guidance to NCCP/HCP participants. For more information on NCCP/HCPs, visit: https://www.wildlife.ca.gov/conservation/planning/nccp.

Administrative/Working Lands

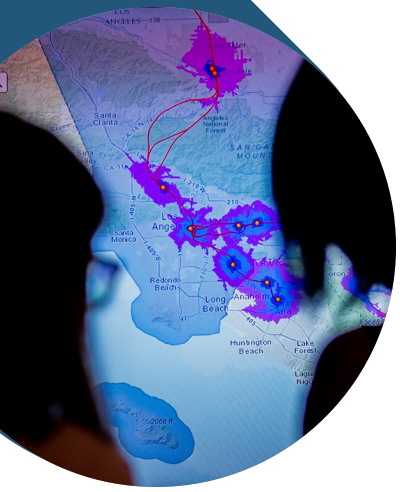
The Administrative/Working Lands category highlights areas with limited to no development allowed, such as tribal, military, and farmlands. Information on the underlying datasets comprising the Administrative/Working Lands Multi-Benefit Asset Map, as well as the individual Administrative/Working Lands layers can be found in the table below.

LAYER NAME	UNDERLYING DATASET(S)
Tribal Lands	American Indian Reservations / Federally Recognized Tribal Entities, 2021, CalOES
Military Installations	USA Department of Defense Lands, 2018, US Department of Defense
Farmlands	California Important Farmland Farmland Mapping & Monitoring Program (FMMP), 2018, CA Department of Conservation

- Tribal Lands - The American Indian Reservations / Federally Recognized Tribal Entities dataset depicts feature location, selected demographics and other associated data for the 561 Federally Recognized Tribal entities in the contiguous U.S. and Alaska. Categories included are: American Indian Reservations (AIR), Federally Recognized Tribal Entities (FRTE) and Alaska Native Villages (ANV). This dataset is used to identify tribal lands in the SCAG region. The data was obtained from the California Governor's Office of Emergency Services (CalOES) and depicts data as of September 2021. For more information, refer to https://gis-calema.opendata.arcgis.com/datasets/CalEMA::indian-lands-and-native-entities/about.
- Military Installations - In the United States, the federal government manages lands in significant parts of the country. These lands include 193 million acres managed by the US Forest Service in the nation's 154 National Forests and 20 National Grasslands, Bureau of Land Management lands that cover 247 million acres in Alaska and the Western United States, 150 million acres managed for wildlife conservation by the US Fish and Wildlife Service, 84 million acres of National Parks and other lands managed by the National Park Service and over 30 million acres managed by the Department of Defense. The Military Installations dataset displays military lands managed by the US Department of Defense. For more information, refer to https://www.arcgis.com/home/item.html?id=6b911a60a5a4465a85fd5c42668bf907#overview.
- Farmlands - Farmland information was obtained from the Farmland Mapping & Monitoring Program (FMMP) in the Division of Land Resource Protection in the California Department of Conservation. Established in 1982, the FMMP is to provide consistent and impartial data and analysis of agricultural land use and land use changes throughout

the State of California. For SCAG's purposes, data from year 2016 (and 2014 in areas where 2016 data was unavailable) underwent review and refinement by local jurisdictions through the Bottom-Up Local Input and Envisioning Process for Connect SoCal 2020.

The Farmlands dataset was obtained from the Farmland Mapping & Monitoring Program (FMMP) in the Division of Land Resource Protection in the California Department of Conservation. Established in 1982, the FMMP is to provide consistent and impartial data and analysis of agricultural land use and land use changes throughout the State of California. For more information, refer to https://gis.conservation.ca.gov/portal/home/item.html?id=c278df0ef3bc4476bb890e5509bcc5cf.



GEOGRAPHICAL BOUNDARIES

City Boundary and Sphere of Influence

City boundary and sphere of influence information are originally from each County's Local Agency Formation Commissions (LAFCO). The city boundary information included here is for the year 2019, the base year of Connect SoCal 2024. For inaccuracy or changes in city boundaries or sphere of influences, local jurisdictions would need to contact LAFCO to reflect the most accurate city and sphere boundaries.

Census Tract Boundary

The census tract boundaries are the 2020 TIGER/Line Shapefiles version, downloaded from U.S. Census, TIGER (Topologically Integrated Geographic Encoding and Referencing) Products website (https://www.census.gov/geographies/mapping-files/time-series/geo/tiger-line-file.2020.html).

Transportation Analysis Zone (TAZ) Boundary

SCAG developed the Transportation Analysis Zones (TAZ) for the SCAG Region. This is used to facilitate Travel Demand and Land Use Modeling needs at SCAG.

DRAFT GROWTH FORECAST (SED)

SCAG prepares a growth forecast at multiple spatial scales with the primary objective of developing the Socioeconomic Data (SED) used to model federally and state-mandated transportation and air quality outcomes over 2019-2050.

The demographic/economic forecast of population, households, and employment is developed at the regional and county levels, was assisted by a panel of experts, and was shared with SCAG's policy committees on February 3, 2022. The region was expected to grow by 1.7 million people, 1.5 million households, and 1.3 million jobs. In all three measures, expected regional growth was lower than in the last RTP/SCS, Connect SoCal 2020.

The small-area forecast of households and employment is developed at the jurisdiction and Transportation Analysis Zone (TAZ) levels and relies primarily on local land use data and existing housing and employment data to allocate county-level growth.

Connect SoCal 2024's growth forecast is the starting point for reaching plan objectives. In past cycles, SCAG developed scenarios based on priority growth areas and constraint areas following the conclusion of local review. In contrast, the preliminary growth forecast for Connect SoCal 2024 sought to integrate growth strategies from prior plans as well as to integrate under-development local plans associated with the 6th cycle housing element update prior to local review. The objective is to strengthen the connection between regional objectives and local policies which are reasonably foreseeable during the Connect SoCal 2024 horizon.



As such, the preliminary household forecast at the jurisdiction and TAZ-levels explicitly sought to (i) reflect capacity changes following the 6th cycle of RHNA, (ii) emphasize growth in four types of Priority Development Areas (PDAs), and (iii) minimize growth in overlapping Green Region Resources Areas (GRRAs), as shown in the Consolidated Map. In order to accomplish this, the small area forecast considers local growth capacity by the following combination of PDAs and GRRAs in twenty steps which reflect the regional strategy:

Number of Priority Development Areas	4	3	2	1	0	4	3	2	1	0	4	3	2	1	0	4	3	2	1	0
Number of Green Region Resource Areas	0	0	0	0	0	1	1	1	1	1	2	2	2	2	2	3+	3+	3+	3+	3+
Step #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

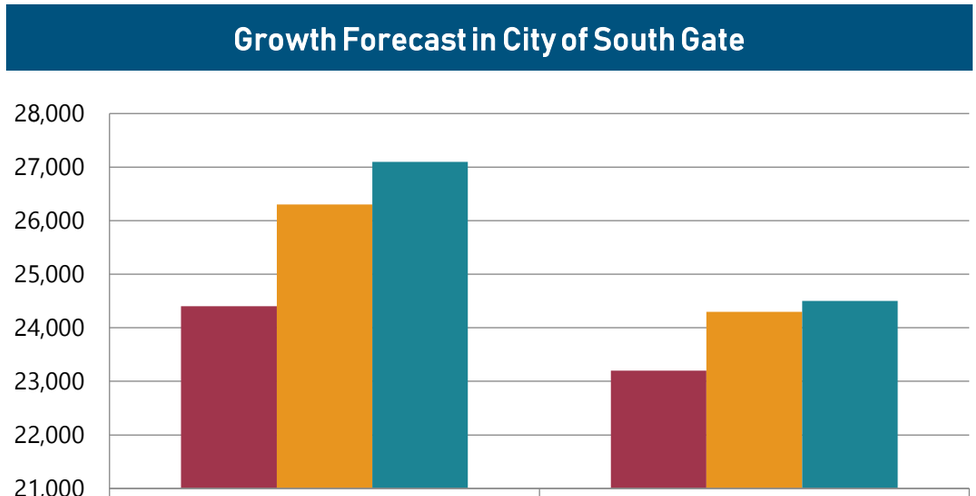
The forecast of total employment at the jurisdiction and TAZ-levels integrates the demographic/economic forecast with locally-reviewed job growth from the last plan and updated land use and employment data across 20 industry sectors.

SCAG invited local jurisdictions to provide input to the growth and land use assumptions, with the understanding that this information is developed in a voluntary, bottom-up process based on interest and participation at the option of each jurisdiction.

The draft growth forecast reflects input from local jurisdictions, and projects 2.3 percent higher household growth and 1.0 percent higher employment growth than the preliminary forecast region-wide. With guidance from the Technical Working Group (TWG), staff found that the draft growth forecast was both technically sound and furthered the plan's targets and objectives beyond what was developed in Connect SoCal 2020.

DRAFT GROWTH FORECAST (SED)

The chart below shows the draft jurisdiction-level growth forecast:



	Households	Employment
2019	24,400	23,200
2035	26,300	24,300
2050	27,100	24,500

The draft Connect SoCal 2024 growth projection reflects SCAG's preliminary, expert-informed growth projection and integrates all edits made by local jurisdictions to total households and total employment in 2019, 2035, and 2050 as part of the Local Data Exchange (LDX) process. These data reflect final input from jurisdictions which provided input or were granted an extension prior to the December 2, 2022 deadline. As such these plan data represent a snapshot in time and may not reflect subsequently available information. Please contact local jurisdictions directly to ensure the most up-to-date planning, development, and construction information.

DEFINITIONS

HOUSEHOLD: An occupied housing unit. Occupants may be one individual, a single family, two or more families living together, or any other group of related or unrelated individuals who share their usual place of residence.

EMPLOYMENT: The number of total jobs counted by place of work. Employment includes wage and salary jobs and self employment (e.g. independent contractors).

Notes: (1) Please note that population data are not requested as part of the local data exchange process. (2) While Government Code 65080(b)(1)(B) et seq. comments on the relationship of the RTP/SCS to the RHNA, a specific requirement does not exist such that forecased household growth at the jurisdictional level is numerically equivalent to a jurisdiction's Regional Housing Needs Allocation.

APPENDIX 1

Sustainable Communities Project (SCP) Criteria
(Extracted from Senate Bill No. 375 Chapter 728)

Chapter 4.2. Implementation of the Sustainable Communities Strategy

21155.1. If the legislative body finds, after conducting a public hearing, that a transit priority project meets all of the requirements of subdivisions (a) and (b) and one of the requirements of subdivision (c), the transit priority project is declared to be a sustainable communities project and shall be exempt from this division.

(a) The transit priority project complies with all of the following environmental criteria:

(1) The transit priority project and other projects approved prior to the approval of the transit priority project but not yet built can be adequately served by existing utilities, and the transit priority project applicant has paid, or has committed to pay, all applicable in-lieu or development fees.

(2)

(A) The site of the transit priority project does not contain wetlands or riparian areas and does not have significant value as a wildlife habitat, and the transit priority project does not harm any species protected by the federal Endangered Species Act of 1973 (16 U.S.C. Sec. 1531 et seq.), the Native Plant Protection Act (Chapter 10 (commencing with Section 1900) of Division 2 of the Fish and Game Code), or the California Endangered Species Act (Chapter 1.5 (commencing with Section 2050) of Division 3 of the Fish and Game Code), and the project does not cause the destruction or removal of any species protected by a local ordinance in effect at the time the application for the project was deemed complete.

(B) For the purposes of this paragraph, "wetlands" has the same meaning as in the United States Fish and Wildlife Service Manual, Part 660 FW 2 (June 21, 1993).

(C) For the purposes of this paragraph:

(i) "Riparian areas" means those areas transitional between terrestrial and aquatic ecosystems and that are distinguished by gradients in biophysical conditions, ecological processes, and biota. A riparian area is an area through which surface and subsurface hydrology connect waterbodies with their adjacent uplands. A riparian area includes those portions of terrestrial ecosystems that significantly influence exchanges of energy and matter with aquatic ecosystems. A riparian area is adjacent to perennial, intermittent, and ephemeral streams, lakes, and estuarine-marine shorelines.

(ii) "Wildlife habitat" means the ecological communities upon which wild animals, birds, plants, fish, amphibians, and invertebrates depend for their conservation and protection.

(iii) Habitat of "significant value" includes wildlife habitat of national, statewide, regional, or local importance; habitat for species protected by the federal Endangered Species Act of 1973 (16 U.S.C. Sec. 1531, et seq.), the California Endangered Species Act (Chapter 1.5 (commencing with Section 2050) of Division 3 of the Fish and Game Code), or the Native Plant Protection Act (Chapter 10 (commencing with Section 1900) of Division 2 of the Fish and Game Code); habitat identified as candidate, fully protected, sensitive, or species of special status by local, state, or federal agencies; or habitat essential to the movement of resident or migratory wildlife.

(3) The site of the transit priority project is not included on any list of facilities and sites compiled pursuant to Section 65962.5 of the Government Code.

(4) The site of the transit priority project is subject to a preliminary endangerment assessment prepared by a registered environmental assessor to determine the existence of any release of a hazardous substance on the site and to determine the potential for exposure of future occupants to significant health hazards from any nearby property or activity.

(A) If a release of a hazardous substance is found to exist on the site, the release shall be removed or any significant effects of the release shall be mitigated to a level of insignificance in compliance with state and federal requirements.

(B) If a potential for exposure to significant hazards from surrounding properties or activities is found to exist, the effects of the potential exposure shall be mitigated to a level of insignificance in compliance with state and federal requirements.

(5) The transit priority project does not have a significant effect on historical resources pursuant to Section 21084.1.

(6) The transit priority project site is not subject to any of the following:

(A) A wildland fire hazard, as determined by the Department of Forestry and Fire Protection, unless the applicable general plan or zoning ordinance contains provisions to mitigate the risk of a wildland fire hazard.

(B) An unusually high risk of fire or explosion from materials stored or used on nearby properties.

(C) Risk of a public health exposure at a level that would exceed the standards established by any state or federal agency.

(D) Seismic risk as a result of being within a delineated earthquake fault zone, as determined pursuant to Section 2622, or a seismic hazard zone, as determined pursuant to Section 2696, unless the applicable general plan or zoning ordinance contains provisions to mitigate the risk of an earthquake fault or seismic hazard zone.

(E) Landslide hazard, flood plain, flood way, or restriction zone, unless the applicable general plan or zoning ordinance contains provisions to mitigate the risk of a landslide or flood.

(7) The transit priority project site is not located on developed open space.

(A) For the purposes of this paragraph, "developed open space" means land that meets all of the following criteria:

(i) Is publicly owned, or financed in whole or in part by public funds.

(ii) Is generally open to, and available for use by, the public.

(iii) Is predominantly lacking in structural development other than structures associated with open spaces, including, but not limited to, playgrounds, swimming pools, ballfields, enclosed child play areas, and picnic facilities.

(B) For the purposes of this paragraph, "developed open space" includes land that has been designated for acquisition by a public agency for developed open space, but does not include lands acquired with public funds dedicated to the acquisition of land for housing purposes.

(8) The buildings in the transit priority project are 15 percent more energy efficient than required by Chapter 6 of Title 24 of the California Code of Regulations and the buildings and landscaping are designed to achieve 25 percent less water usage than the average household use in the region.

(b) The transit priority project meets all of the following land use criteria:

(1) The site of the transit priority project is not more than eight acres in total area.

(2) The transit priority project does not contain more than 200 residential units.

(3) The transit priority project does not result in any net loss in the number of affordable housing units within the project area.

(4) The transit priority project does not include any single level building that exceeds 75,000 square feet.

(5) Any applicable mitigation measures or performance standards or criteria set forth in the prior environmental impact reports, and adopted in findings, have been or will be incorporated into the transit priority project.

(6) The transit priority project is determined not to conflict with nearby operating industrial uses.

(7) The transit priority project is located within one-half mile of a rail transit station or a ferry terminal included in a regional transportation plan or within one-quarter mile of a high-quality transit corridor included in a regional transportation plan.

(c) The transit priority project meets at least one of the following three criteria:

(1) The transit priority project meets both of the following:

(A) At least 20 percent of the housing will be sold to families of moderate income, or not less than 10 percent of the housing will be rented to families of low income, or not less than 5 percent of the housing is rented to families of very low income.

(B) The transit priority project developer provides sufficient legal commitments to the appropriate local agency to ensure the continued availability and use of the housing units for very low, low-, and moderate-income households at monthly housing costs with an affordable housing cost or affordable rent, as defined in Section 50052.5 or 50053 of the Health and Safety Code, respectively, for the period required by the applicable financing. Rental units shall be affordable for at least 55 years. Ownership units shall be subject to resale restrictions or equity sharing requirements for at least 30 years.

(2) The transit priority project developer has paid or will pay in-lieu fees pursuant to a local ordinance in an amount sufficient to result in the development of an equivalent number of units that would otherwise be required pursuant to paragraph (1).

(3) The transit priority project provides public open space equal to or greater than five acres per 1,000 residents of the project.

APPENDIX 2

Draft Socioeconomic Estimates and Projection by TAZ within Jurisdiction
(Split by Jurisdictional Boundary)

TAZ	Household			Employment		
	2019	2035	2050	2019	2035	2050
21588100	471	471	471	46	53	54
21593100	483	483	483	25	25	25
21593200	533	533	533	85	108	111
21596100	295	393	485	123	147	148
21596200	786	1,017	1,067	440	510	519
21598100	508	692	767	637	662	665
21598200	487	718	859	306	360	399
21599100	298	298	298	2,203	2,203	2,204
21599200	582	582	582	140	159	160
21599300	226	226	226	82	84	85
21609100	576	661	690	160	178	180
21609200	527	589	606	480	528	532
21612100	535	561	579	278	283	284
21612200	698	698	698	3	3	3
21616100	662	891	972	231	263	267
21627100	824	824	824	109	134	136
21627200	274	274	274	274	306	308
21630100	496	496	496	244	275	276
21630200	592	592	592	180	203	204
21630300	613	613	613	47	58	59
21638100	718	718	718	217	228	231
21638200	219	219	219	1,571	1,575	1,577
21638300	465	479	488	113	115	117
21641100	1,020	1,020	1,020	243	243	245
21641200	515	515	515	152	160	161
21644100	618	618	618	30	30	30
21644200	756	756	756	242	258	259
21662100	385	385	385	61	61	61
21662200	650	650	650	583	607	617
21662300	519	519	519	284	304	305
21666100	604	663	673	176	221	235
21666200	479	479	479	252	265	266
21666300	356	356	356	448	484	486
21675100	312	312	312	2,058	2,086	2,090
21675200	680	796	877	431	451	453
21695100	249	249	249	149	160	160
21695200	608	718	799	517	540	543
21695300	412	759	891	2,152	2,213	2,219

DISCLAIMER

The draft Connect SoCal 2024 growth projection reflects SCAG's preliminary, expert-informed growth projection and integrates all edits made by local jurisdictions to total households and total employment in 2019, 2035, and 2050 as part of the Local Data Exchange (LDX) process. These data reflect final input from jurisdictions which provided input or were granted an extension prior to the December 2, 2022 deadline. As such these plan data represent a snapshot in time and may not reflect subsequently available information. Please contact local jurisdictions directly to ensure the most up-to-date planning, development, and construction information.

TAZ-level growth projection data are a tool to understand how regional policies and strategies may be reflected at the neighborhood level. They reflect one set of future growth assumptions that would be consistent with the Sustainable Communities Strategy (SCS); however, there are other development assumptions and growth patterns that would also be consistent with the SCS. As such they may not be used to show project inconsistency with Connect SoCal 2024. TAZ-level growth projection data are advisory and non-binding and there is no obligation by a jurisdiction to change its land use policies, General Plan, or regulations to be consistent with them.

APPENDIX 2

Draft Socioeconomic Estimates and Projection by TAZ within Jurisdiction
(Split by Jurisdictional Boundary)

TAZ	Household			Employment		
	2019	2035	2050	2019	2035	2050
21695400	694	790	820	159	161	163
21695500	583	583	583	141	168	171
21713100	510	510	510	1,289	1,308	1,309
21713200	397	397	397	174	185	187
21713300	649	653	653	445	492	497
21713400	434	434	434	298	308	311
21714100	635	635	635	329	356	360
21714200	441	441	441	4,597	4,708	4,769
21760100	0	0	0	26	26	26
TOTAL	24,374	26,266	27,112	23,230	24,255	24,467

DISCLAIMER

The draft Connect SoCal 2024 growth projection reflects SCAG's preliminary, expert-informed growth projection and integrates all edits made by local jurisdictions to total households and total employment in 2019, 2035, and 2050 as part of the Local Data Exchange (LDX) process. These data reflect final input from jurisdictions which provided input or were granted an extension prior to the December 2, 2022 deadline. As such these plan data represent a snapshot in time and may not reflect subsequently available information. Please contact local jurisdictions directly to ensure the most up-to-date planning, development, and construction information.

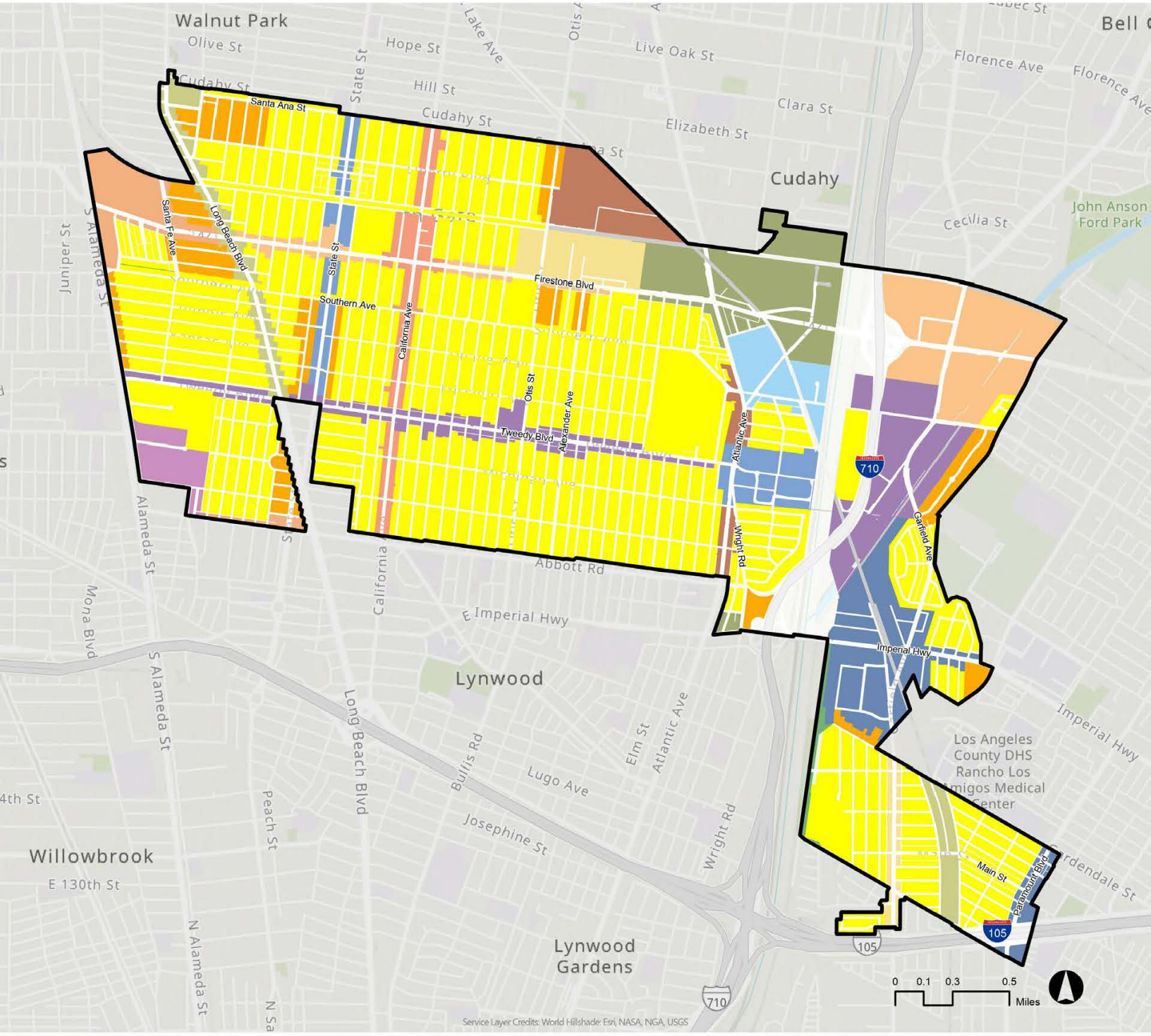
TAZ-level growth projection data are a tool to understand how regional policies and strategies may be reflected at the neighborhood level. They reflect one set of future growth assumptions that would be consistent with the Sustainable Communities Strategy (SCS); however, there are other development assumptions and growth patterns that would also be consistent with the SCS. As such they may not be used to show project inconsistency with Connect SoCal 2024. TAZ-level growth projection data are advisory and non-binding and there is no obligation by a jurisdiction to change its land use policies, General Plan, or regulations to be consistent with them.

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MAP LIST

THE LIST OF GIS MAPS INCLUDED:

- General Plan Land Use with Local General Plan Designations
- General Plan Land Use with SCAG Land Use Codes
- Zoning Codes with Local Zoning Codes
- Zoning Codes with SCAG Land Use Codes
- Specific Plan Land Use with SCAG Land Use Codes
- Existing Land Use with SCAG Land Use Codes
- Key Entitlements
- Neighborhood Mobility Areas (NMAs)
- Livable Corridors
- Job Centers
- High Quality Transit Corridors (HQTCs)
- Transit Priority Areas (TPAs) and Major Transit Stops
- Regional Bikeways
- Regional Truck Routes
- Green Region Resource Areas: Consolidated
- Green Region Resource Areas: Resilience
- Green Region Resource Areas: Flood Hazard Areas
- Green Region Resource Areas: Coastal Inundation (Sea Level Rise)
- Green Region Resource Areas: Wildfire Risk
- Green Region Resource Areas: Habitat
- Green Region Resource Areas: Open Space and Parks
- Green Region Resource Areas: Endangered Species/Plants
- Green Region Resource Areas: Sensitive Habitat Areas
- Green Region Resource Areas: Natural Community and Habitat Conservation
- Green Region Resource Areas: Administrative/Working Lands
- Green Region Resource Areas: Tribal Nations
- Green Region Resource Areas: Military Installations
- Green Region Resource Areas: Farmlands
- Jurisdiction Boundary and Sphere of Influence
- 2020 Census Tract Boundary
- Transportation Analysis Zone (TAZ) Tier 2 Boundary



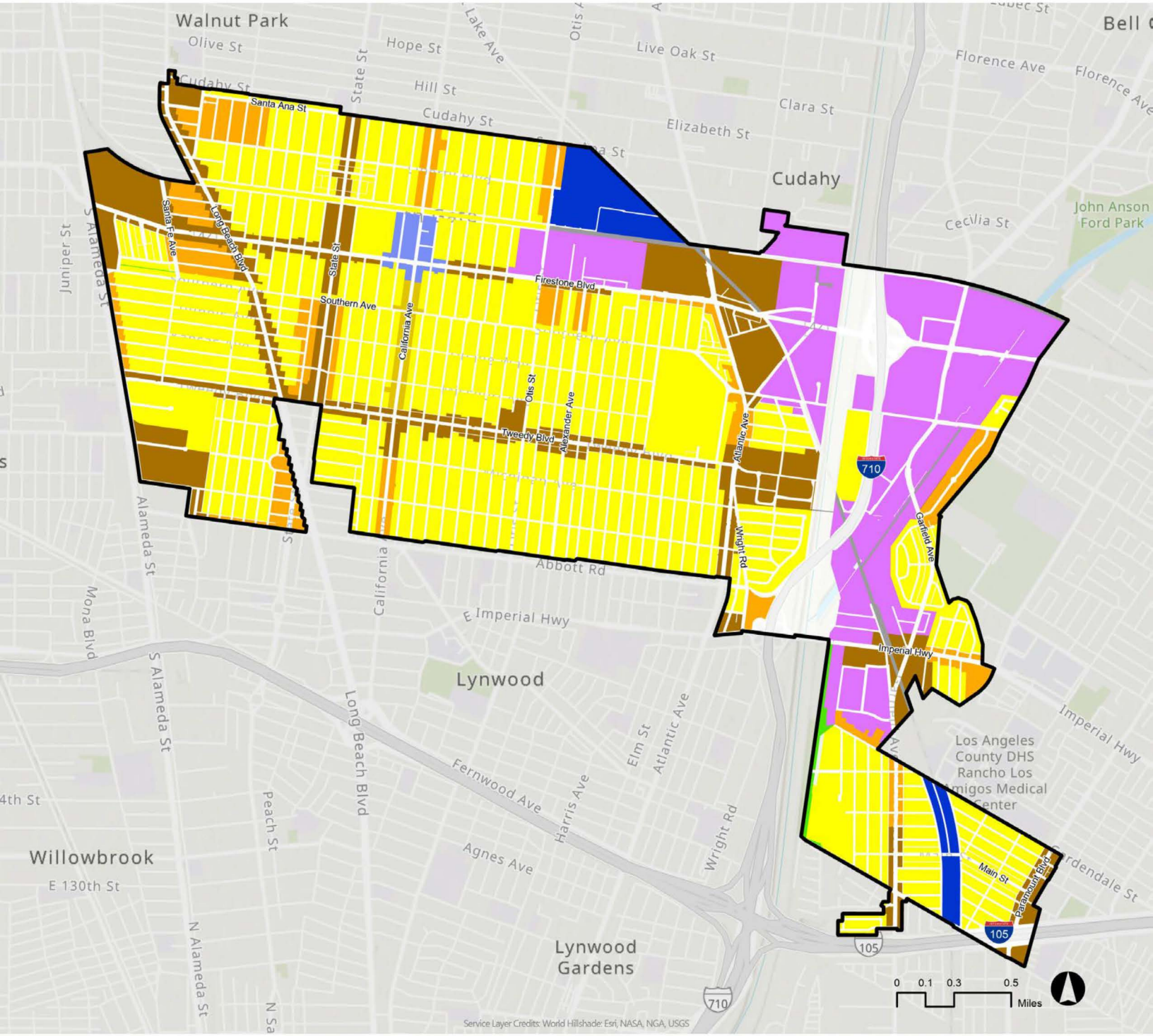
2019 General Plan Land Use in City of South Gate

(Local Jurisdiction's Land Use Designations)

- Neighborhood Low
- Neighbohood Medium
- Open Space
- ROW
- Ardine Industrial
- Civic Center
- South Gate College [2 Sub Areas]
- El Paseo/South Gate Towne Center [3 Sub Areas]
- Firestone Industrial
- Gateway [4 Sub Areas]
- Hollydale Industrial
- Imperial [3 Sub Areas]
- Tweedy Educational District
- Rayo Industrial [2 Sub Areas]
- South Gate Triangle [2 Sub Areas]
- Southwest Industrial
- Atlantic [2 Sub Areas]
- California [5 Sub Areas]
- Century
- Firestone
- Garfield [3 Sub Areas]
- Imperial West
- Long Beach [3 Sub Areas]
- Paramount
- State [4 Sub Areas]
- Tweedy [6 Sub Areas]

Data Source: City of South Gate, SCAG | Data Updated: 2023 | Map Created: 9/8/2023

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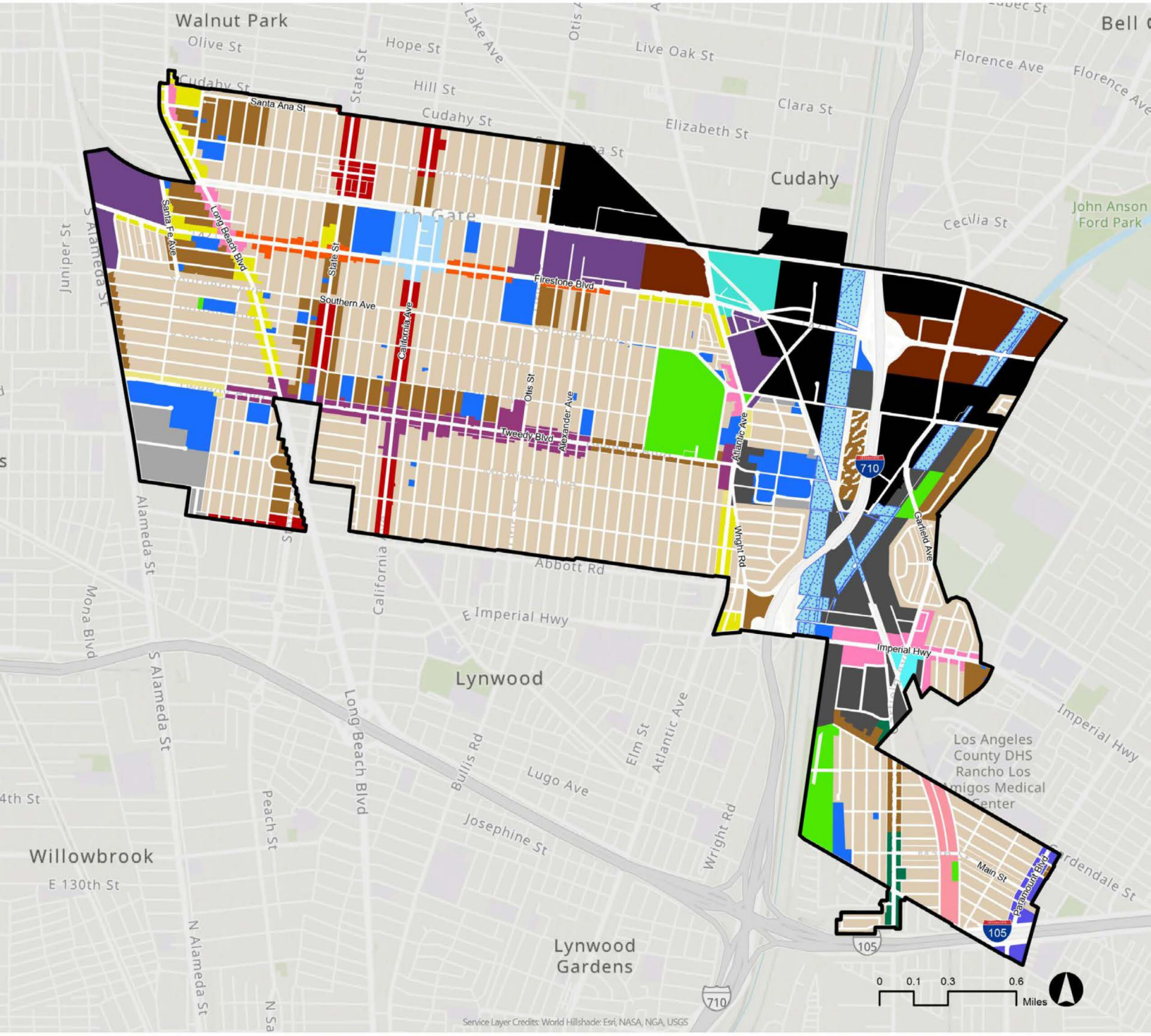
2019 General Plan Land Use in City of South Gate

(SCAG Land Use Codes)

- Single Family Residential
- Multi-Family Residential
- Mobile Homes and Trailer Parks
- Mixed Residential
- Rural Residential
- General Office
- Commercial and Services
- Facilities
- Education
- Military Installations
- Industrial
- Transportation, Communications, and Utilities
- Mixed Commercial and Industrial
- Mixed Residential and Commercial
- Open Space and Recreation
- Agriculture
- Vacant
- Water
- Specific Plan
- Under Construction
- Undevelopable
- Unknown

Data Source: City of South Gate, SCAG | Data Updated: 2023 | Map Created: 9/6/2023

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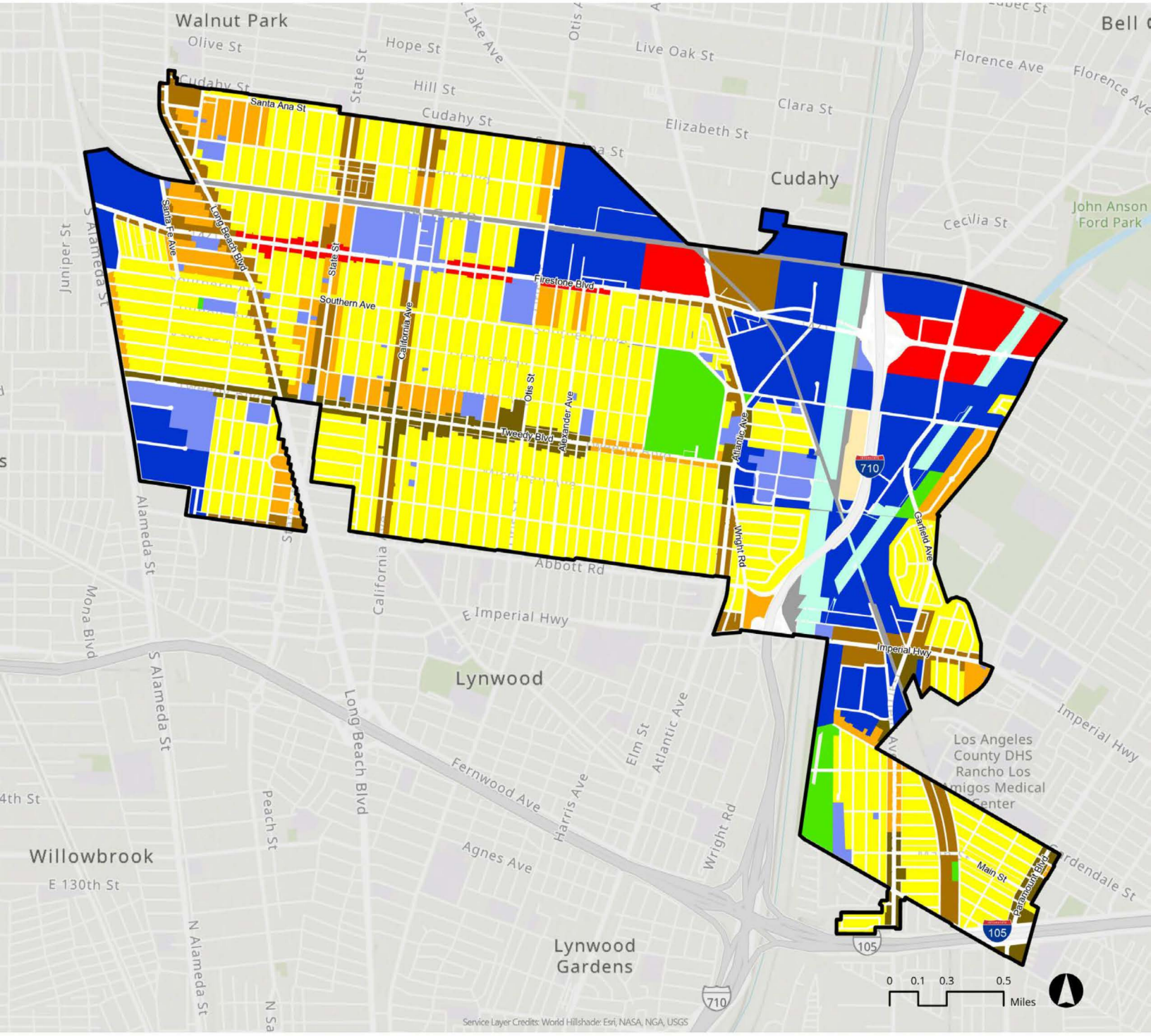
2019 Zoning Codes in City of South Gate

(Local Jurisdiction's Zoning Codes)

- CC Civic Center
- TV Transit Village
- IF Industrial Flex
- CDR1 Corridor 1
- CDR2 Corridor 2
- CDR3 Corridor 3
- UN Urban Neighborhood
- MS Main Street
- NL Neighborhood Low
- NM Neighborhood Medium
- MH Mobile Home Park
- CV Civic
- OS Open Space
- RC Regional Commercial
- LI Light Industrial
- M2 Light Manufacturing
- M3 Heavy Manufacturing
- HMU1 Specific Plan
- HMU2 Specific Plan
- HMU3 Specific Plan
- TMU1 Specific Plan
- TMU2 Specific Plan
- River

Data Source: City of South Gate, SCAG | Data Updated: 2023 | Map Created: 9/8/2023

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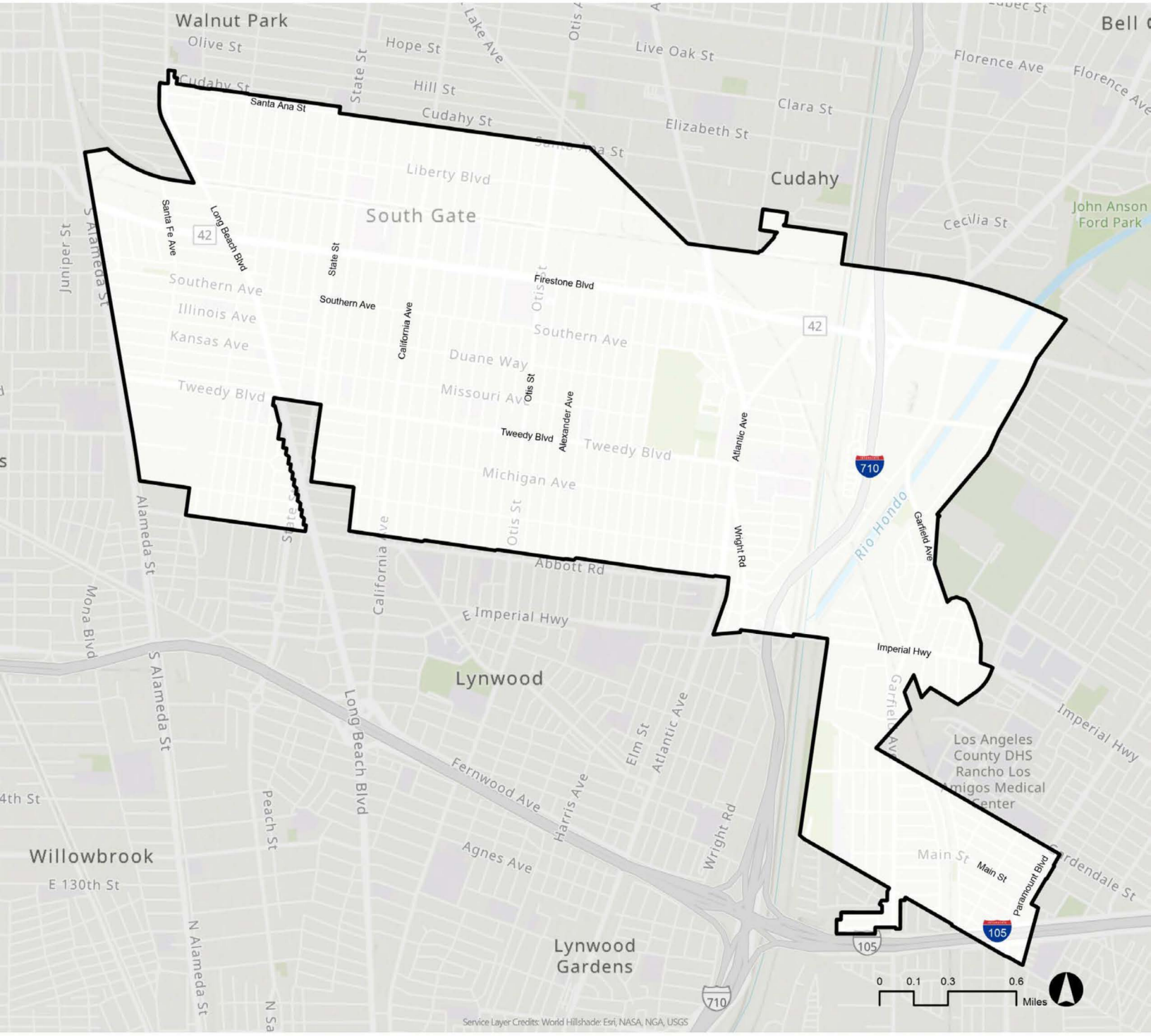
2019 Zoning Codes in City of South Gate

(SCAG Land Use Codes)

- Single Family Residential
- Multi-Family Residential
- Mobile Homes and Trailer Parks
- Mixed Residential
- Rural Residential
- General Office
- Commercial and Services
- Facilities
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- Industrial
- Transportation, Communications, and Utilities
- Mixed Commercial and Industrial
- Mixed Residential and Commercial
- Open Space and Recreation
- Agriculture
- Vacant
- Water
- Specific Plan
- Under Construction
- Undevelopable
- Unknown

Data Source: City of South Gate, SCAG | Data Updated: 2023 | Map Created: 9/7/2023

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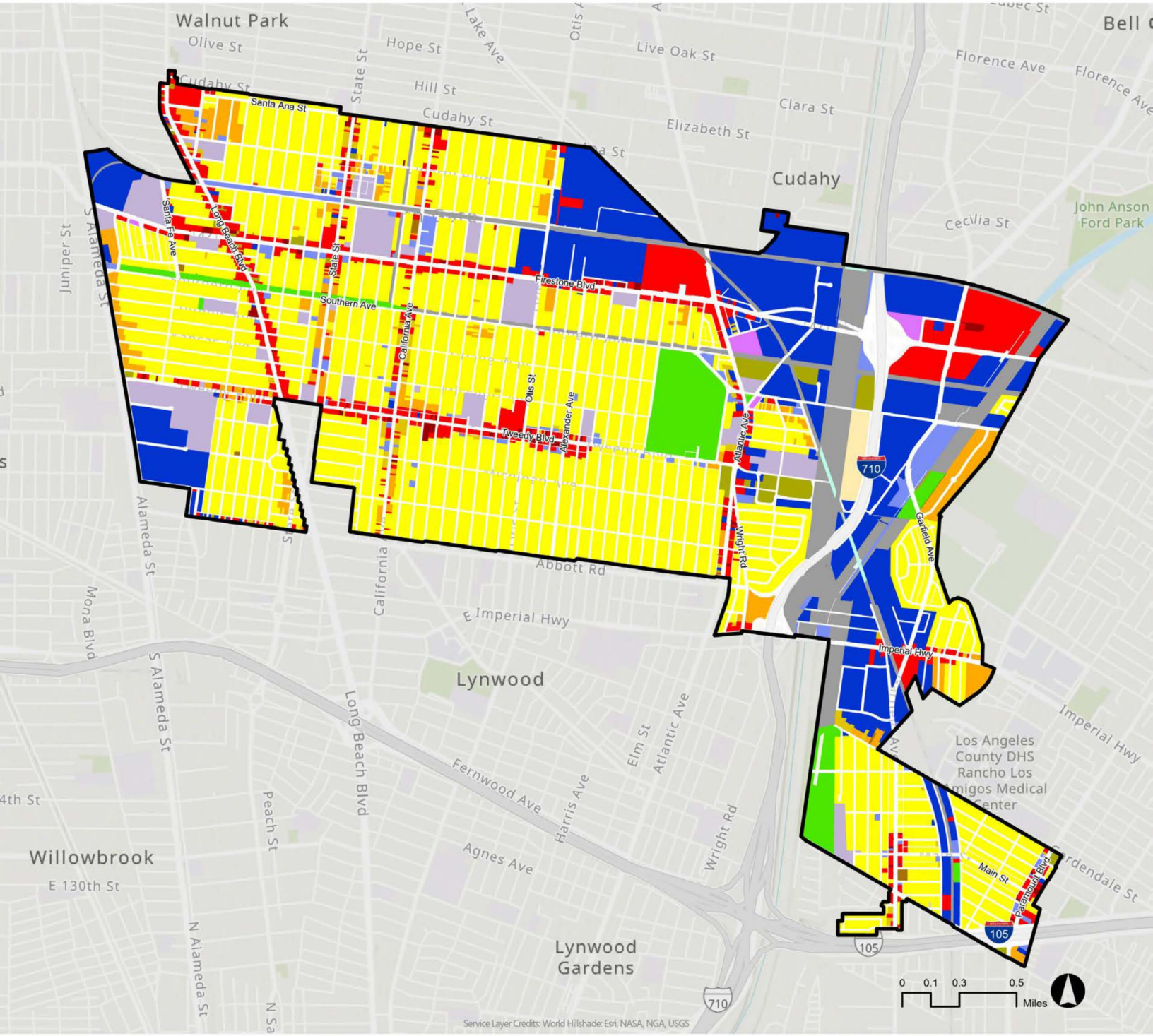
2019 Specific Plan Land Use in City of South Gate

(SCAG Land Use Codes)

- Single Family Residential
- Multi-Family Residential
- Mobile Homes and Trailer Parks
- Mixed Residential
- Rural Residential
- General Office
- Commercial and Services
- Facilities
- Education
- Military Installations
- Industrial
- Transportation, Communications, and Utilities
- Mixed Commercial and Industrial
- Mixed Residential and Commercial
- Open Space and Recreation
- Agriculture
- Vacant
- Water
- Specific Plan
- Under Construction
- Undevelopable
- Unknown

Data Source: City of South Gate, SCAG | Data Updated: 2023 | Map Created: 9/6/2023

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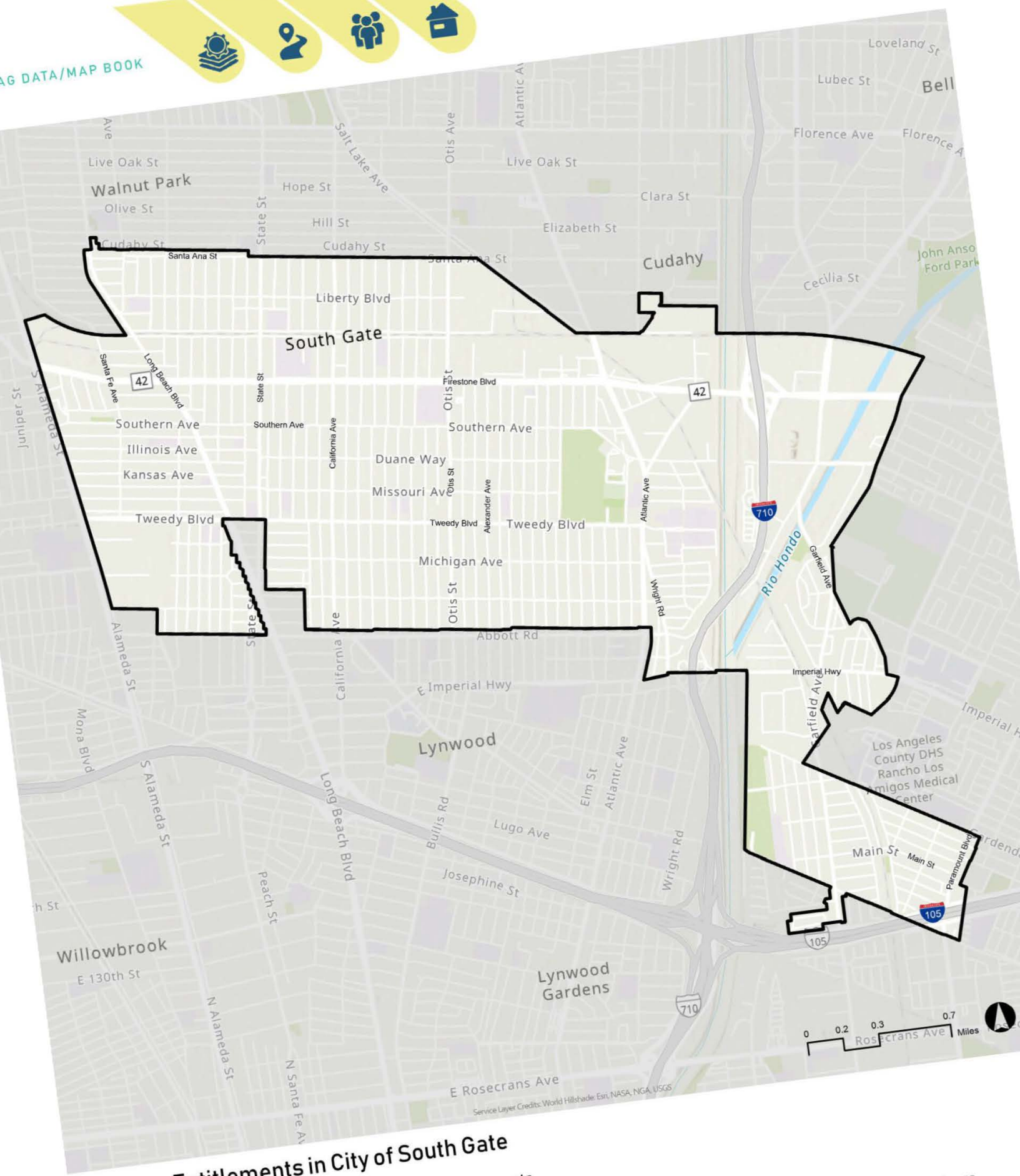
2019 Existing Land Use in City of South Gate

(SCAG Land Use Codes)

- Single Family Residential
- Multi-Family Residential
- Mobile Homes and Trailer Parks
- Mixed Residential
- Rural Residential
- General Office
- Commercial and Services
- Facilities
- Education
- Military Installations
- Industrial
- Transportation, Communications, and Utilities
- Mixed Commercial and Industrial
- Mixed Residential and Commercial
- Open Space and Recreation
- Agriculture
- Vacant
- Water
- Specific Plan
- Under Construction
- Undevelopable
- Unknown

Data Source: City of South Gate, SCAG | Data Updated: 2023 | Map Created: 9/6/2023

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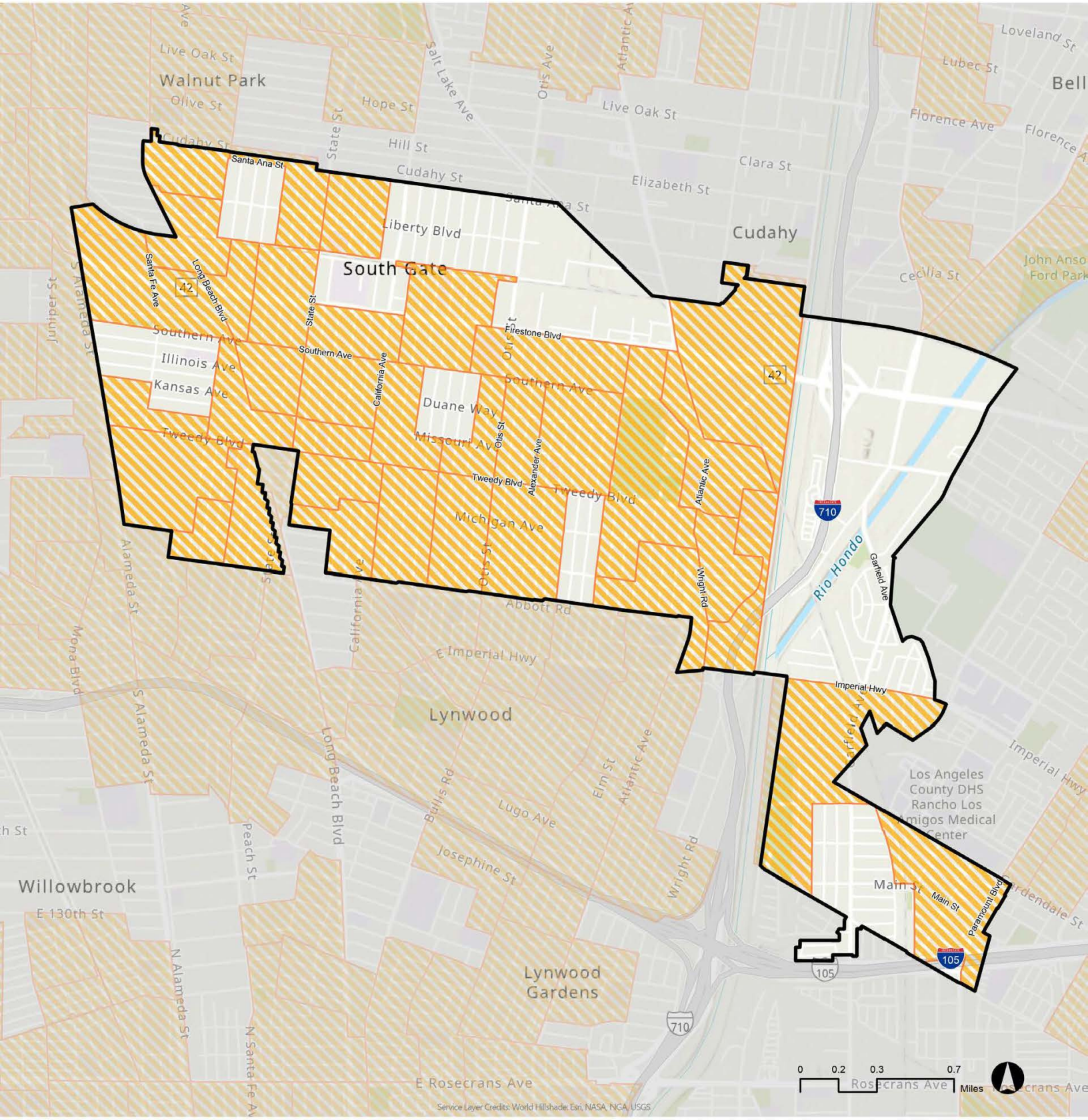
Key Entitlements in City of South Gate

City Boundary

Key Entitlements

Data Source: City of South Gate, SCAG | Data Version: Connect SoCal 2024 | Map Created: 10/11/2023

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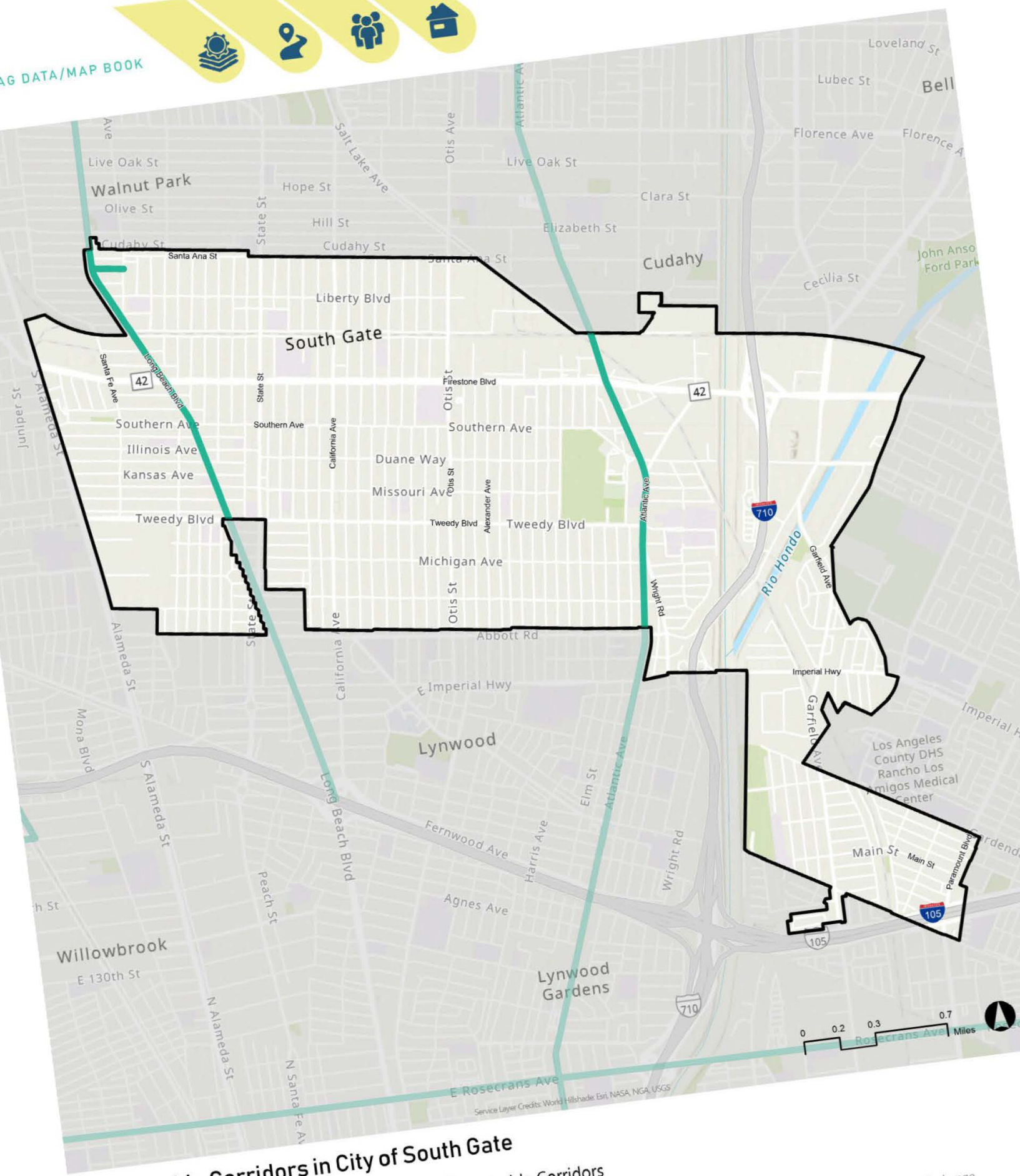
Neighborhood Mobility Areas (NMAs) in City of South Gate

City Boundary

Neighborhood Mobility Areas (NMAs)

Data Source: SCAG | Data Updated: 2023 | Map Created: 10/16/2023

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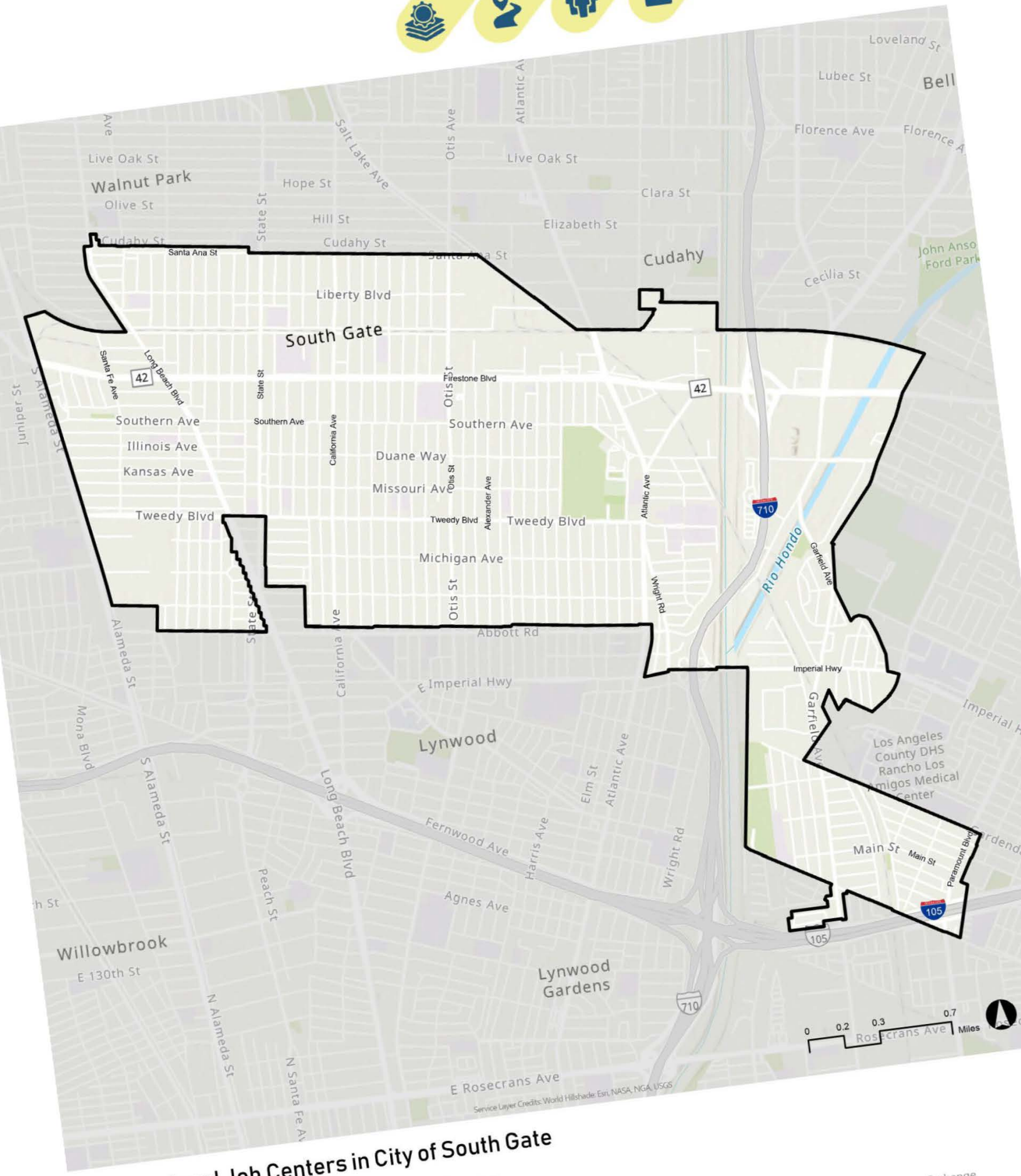
Livable Corridors in City of South Gate

City Boundary

Livable Corridors

Data Source: SCAG | Data Version: Connect SoCal 2024 Plan Year 2050 | Map Created: 9/7/2023

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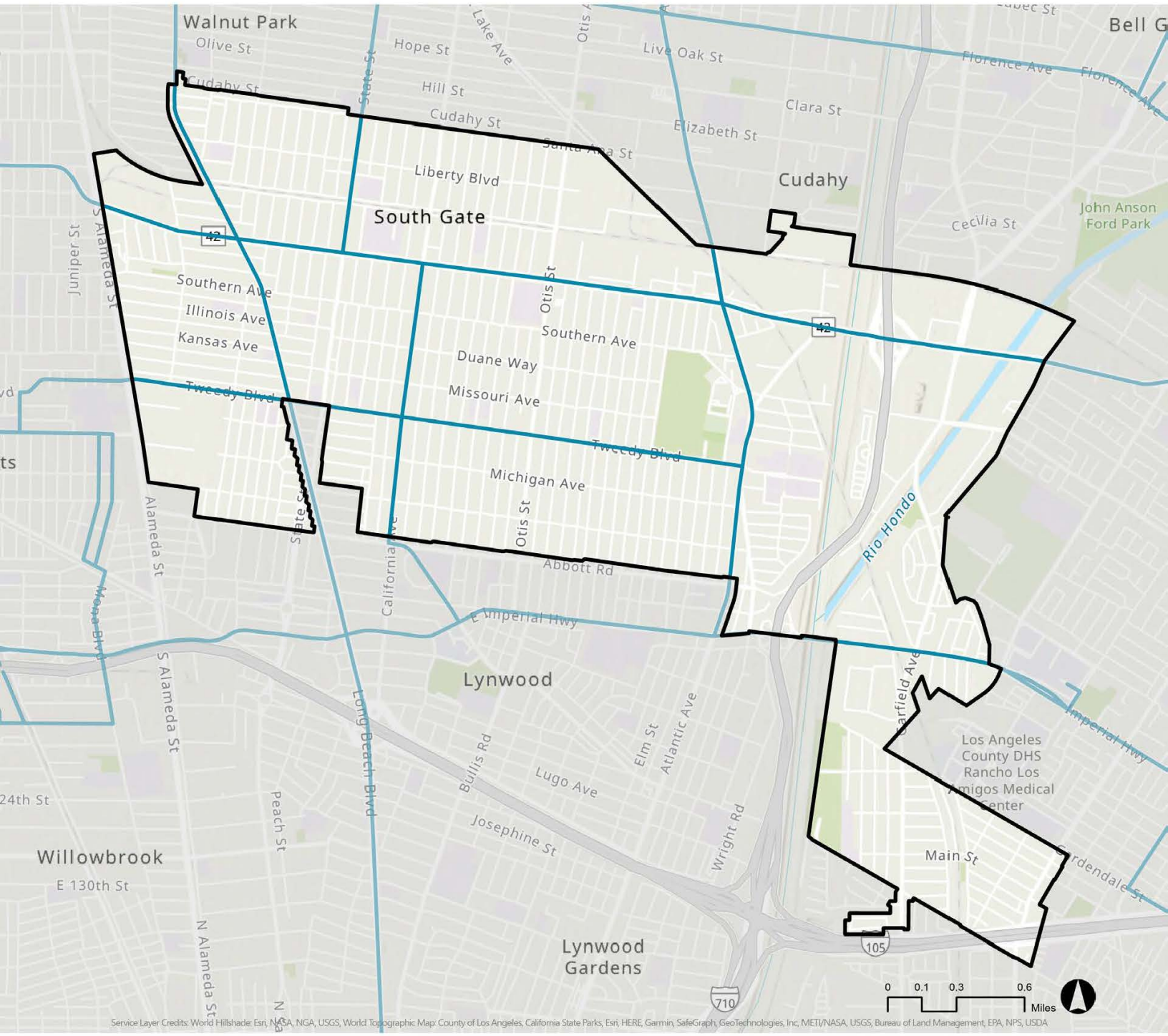
Regional Job Centers in City of South Gate

City Boundary

Job Centers

Data Source: SCAG | Data version: Connect SoCal 2024 Base Year 2019 | Map Created: 9/7/2023

Disclaimer: This map was created as a part of SCAG Data/Map Books to solicit feedback from local jurisdictions during Connect SoCal 2024 Local Data Exchange (LDX). SCAG shall not be responsible for user's misuse or misrepresentation of this map. For the details regarding the data sources, methodologies and limitations of this SCAG Data/Map Book or contact LIST@scag.ca.gov.



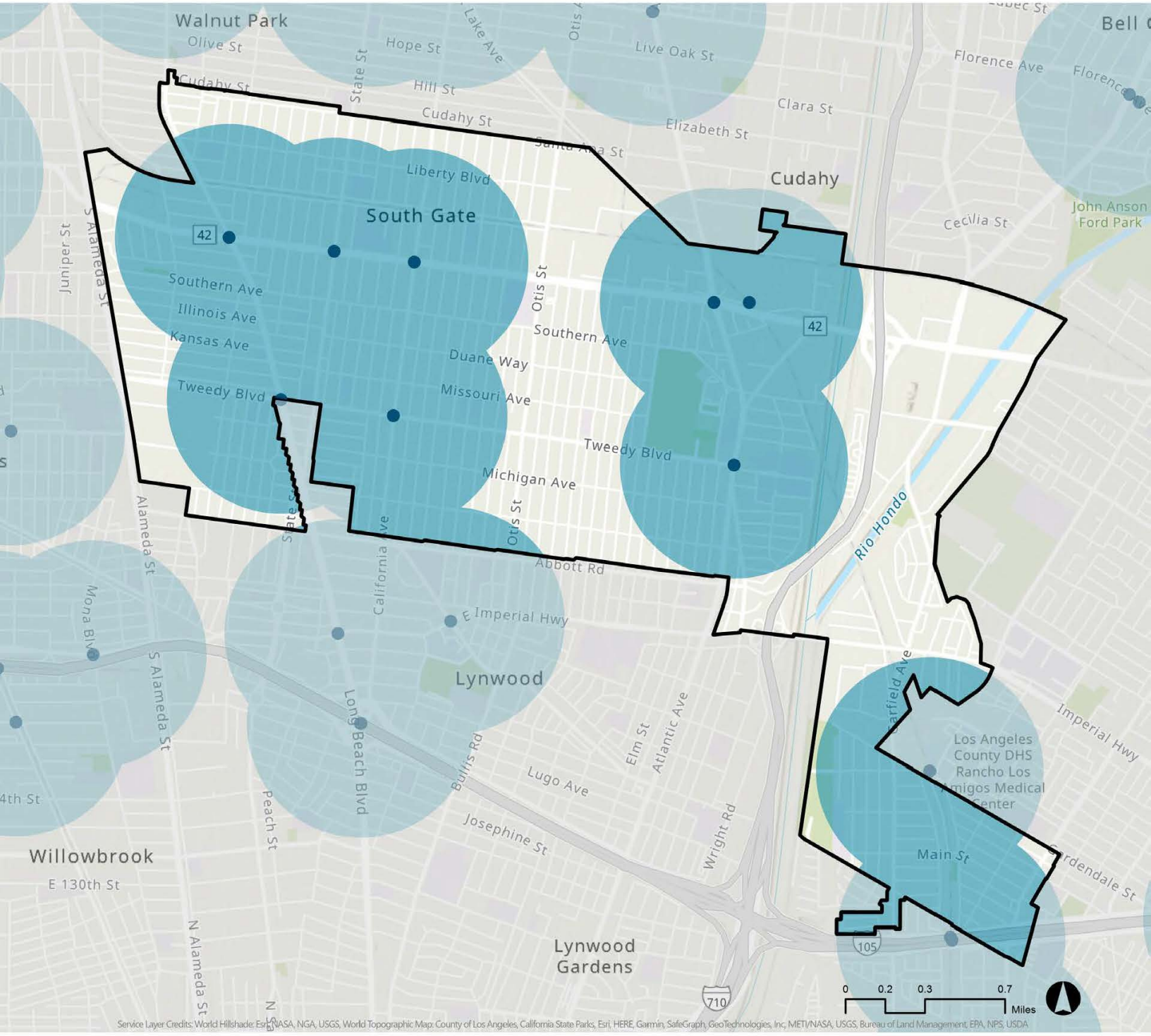
High Quality Transit Corridors in City of South Gate [Connect SoCal 2024 Plan Year 2050]

High Quality Transit Corridors (HQTCs)

Note: HQTCs included in this Data/Map Book are based on the 2050 plan year transit network of Connect SoCal 2024 and are considered draft until the completion of Connect SoCal 2024. Further explanation of the methodology for identifying HQTCs is included in the Connect SoCal 2024 Transit Technical Report Appendix. Please note that SCAG updates HQTCs with the adoption of a new RTP/SCS, once every four years. However, transit planning studies may be completed by transit agencies on a more frequent basis than the RTP/SCS is updated by SCAG. This data is intended for planning purposes only, and SCAG shall incur no responsibility or liability as to the completeness, currentness, or accuracy of this information. SCAG assumes no responsibility arising from use of this information by individuals, businesses, or other public entities. Users should consult with the appropriate transit provider(s) to obtain the latest information on transit routes, stop locations, and service intervals before making determinations regarding CEQA exemption or streamlining.

Data Source: County Transportation Commissions, SCAG | Data Version: Connect SoCal 2024 Plan Year 2050 | Map Created: 9/27/2023

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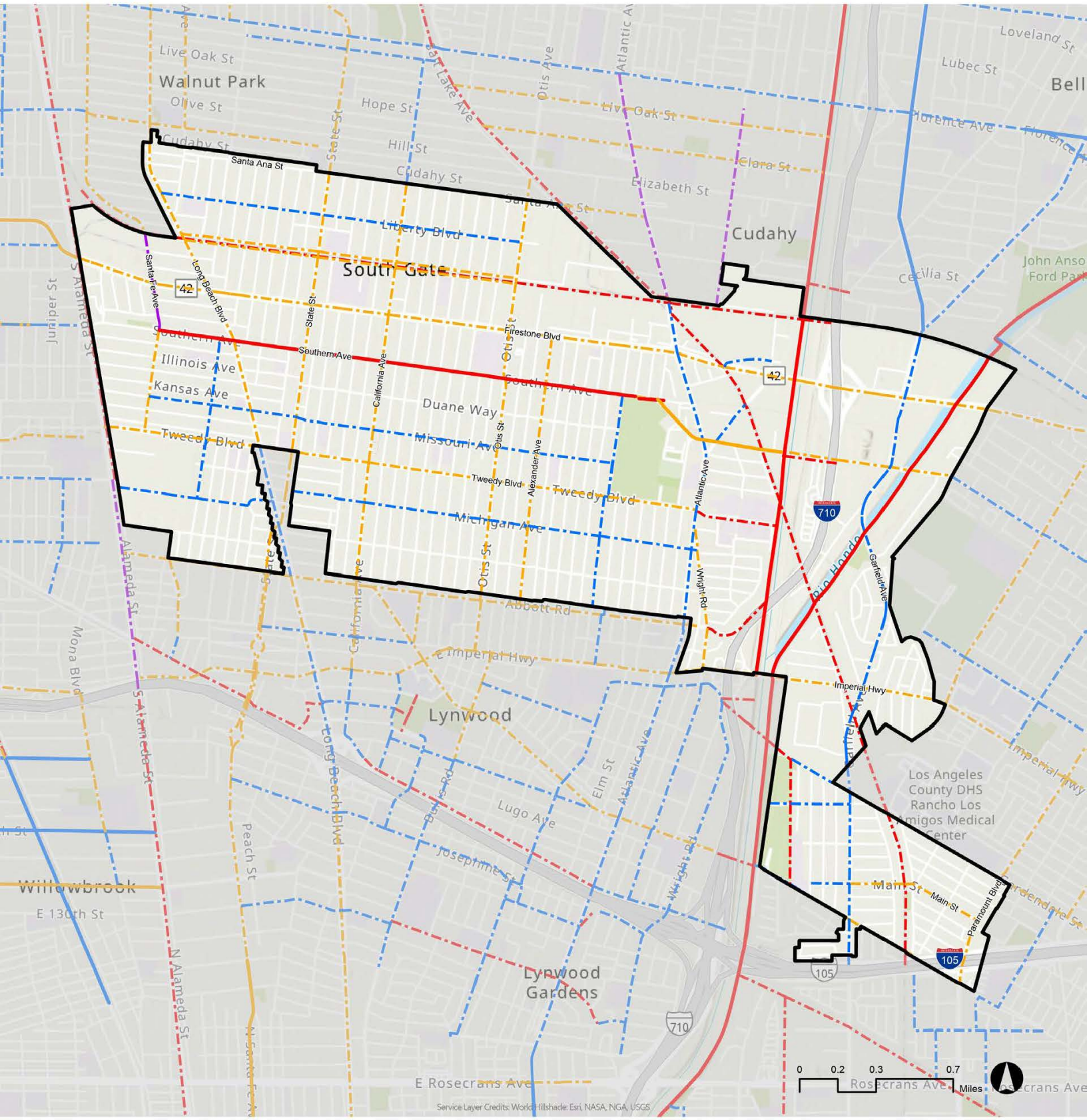
Transit Priority Areas and Major Transit Stops in City of South Gate [Connect SoCal 2024 Plan Year 2050]

● Major Transit Stops ▭ Transit Priority Areas (Areas within One-Half Mile from Major Transit Stops)

Note:The TPAs and major transit stops included in this Data/Map Book are based on the 2050 plan year transit network of Connect SoCal 2024. Please note that SCAG updates its inventory of planned transit network with the adoption of a new RTP/SCS, once every four years. However, transit planning studies may be completed by transit agencies on a more frequent basis than the RTP/SCS is updated by SCAG. This data is intended for planning purposes only, and SCAG shall incur no responsibility or liability as to the completeness, currentness, or accuracy of this information. SCAG assumes no responsibility arising from use of this information by individuals, businesses, or other public entities. Users should consult with the appropriate transit provider(s) to obtain the latest information on transit routes, stop locations, and service intervals before making determinations regarding CEQA exemption or streamlining.

Data Source: County Transportation Commissions, SCAG | Data Version: Connect SoCal 2024 Plan Year 2050 | Map Created: 9/27/2023

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Bikeways in City of South Gate (Existing and Proposed/Planned)

Existing Bikeways

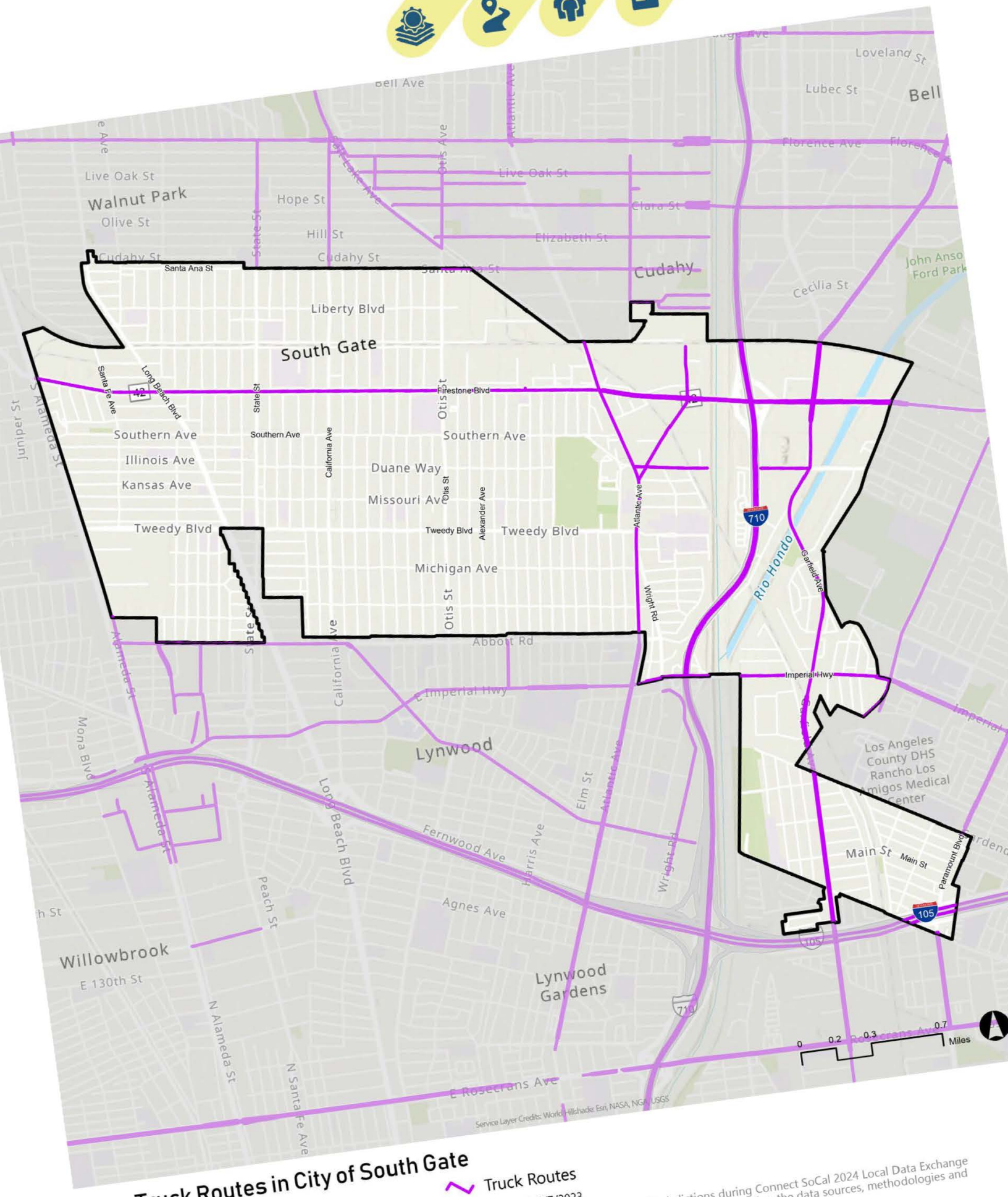
Class I Class II Class III Class IV

Proposed/Planned Bikeways

Class I Class II Class III Class IV

Data Source: Local Data Exchange (LDX), County Transportation Commissions, City of South Gate, SCAG | Data Updated: 2023 | Map Created: 9/27/2023

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Truck Routes in City of South Gate

City Boundary

Truck Routes

Data Source: SCAG, City of South Gate | Data Updated: 2023 | Map Created: 9/7/2023

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Consolidated Green Region Resource Areas in City of South Gate

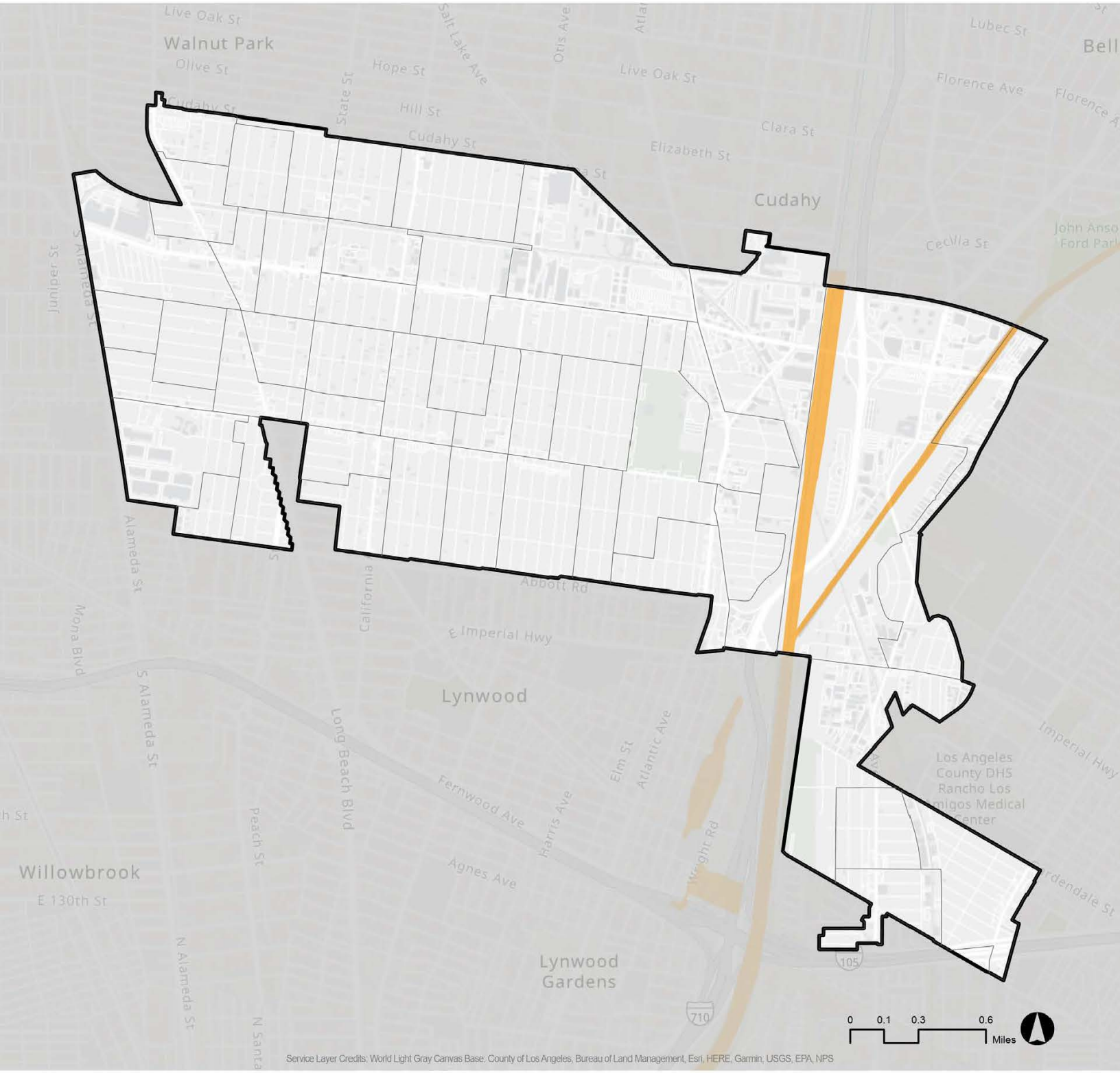
Overall Asset Value

1 2 3 4 5 6 7 8 9

* Transportation Analysis Zones (TAZ) Tier2 boundaries are shown in the map.

Data Source: Federal Emergency Management (FEMA) Effective: 100-Year Floodplains, 2017, FEMA; Coastal Storm Modeling System (CoSMoS) for Southern California, v3.0, Phase 2, 2018, USGS; Fire Hazard Severity Zones Local Responsibility Areas Maps, 2008, CAL FIRE; Fire Hazard Severity Zones State Responsibility Areas Maps, 2007, CAL FIRE; Save Our Agricultural Resources (SOAR), 2017, County of Ventura; California Conservation Easement Database (CCED), 2021, Multiple sources; California Protected Areas Database (CPAD), 2021, Multiple sources; National Wetlands Inventory, 2020, US Fish and Wildlife Services; 2015 Areas of Conservation Emphasis (ACEIIv2), 2015, CA Department of Fish and Wildlife; South Coast Missing Linkages (SCML) Wildlife Corridors, 2018, Conservation Biology Institute; California Essential Habitat Connectivity Project, 2010, CA Department of Fish and Wildlife; Conservation Plan Boundaries; American Indian Reservations / Federally Recognized Tribal Entities, 2021, CalOES; USA Department of Defense Lands, 2018, US Department of Defense; California Important Farmland, Farmland Mapping & Monitoring Program (FMMP), 2018, CA Department of Conservation
Data Updated: 2021 | Map Created: 9/6/2023

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Resilience Multi-Benefit Assets in City of South Gate

Resilience Asset Value

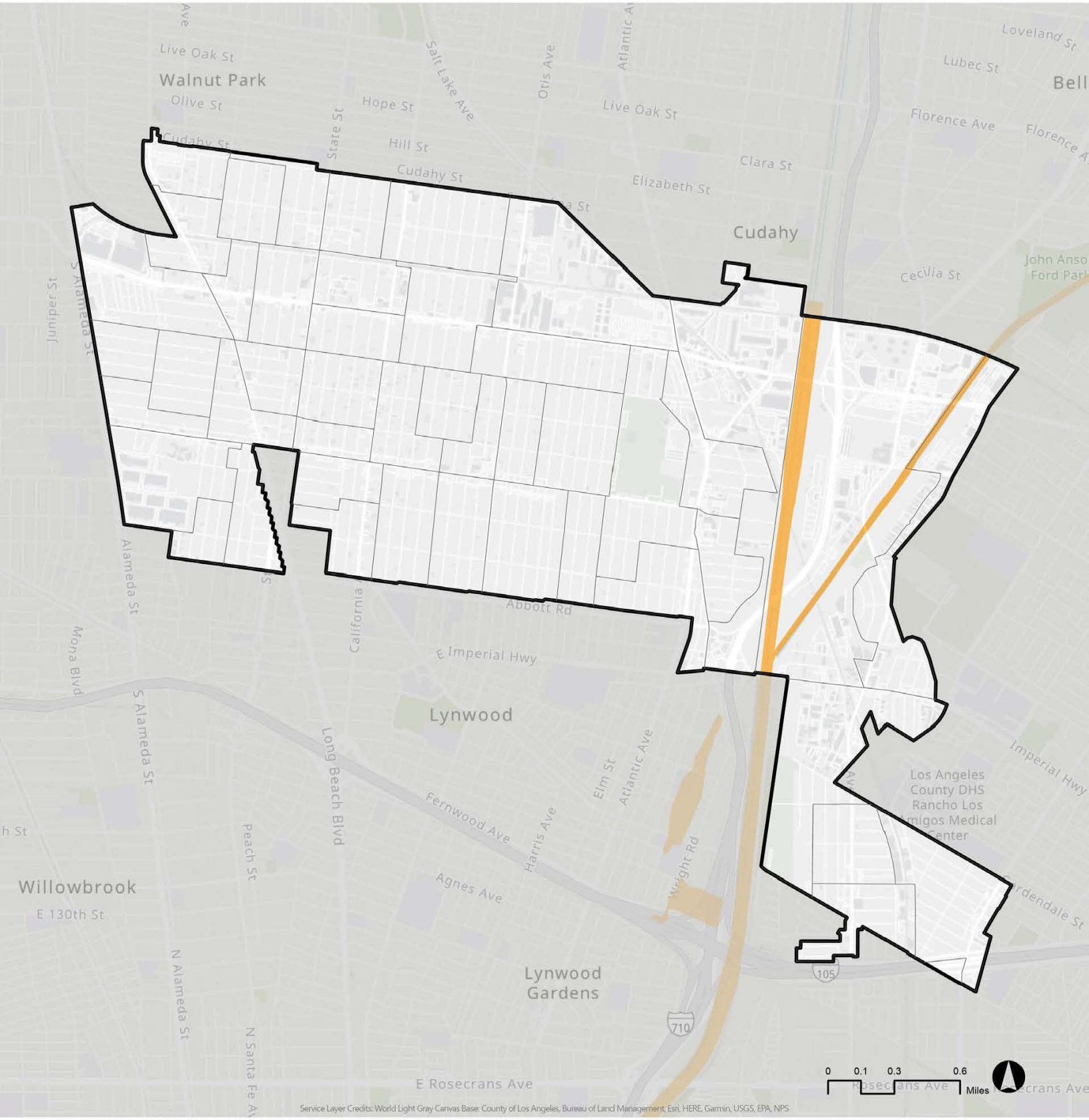
1 2 3 4

* Transportation Analysis Zones (TAZ) Tier2 boundaries are shown in the map.

Data Source:Federal Emergency Management (FEMA) Digital Flood Insurance Rate Map (DFIRM); Coastal Storm Modeling System (CoSMoS for Southern California (v3.0, Phase 2); Fire Hazard Severity Zones Local Responsibility Areas Maps, 2008, CAL FIRE; Fire Hazard Severity Zones State Responsibility Areas Maps, 2007, CAL FIRE; and Wildland Urban Interface & Intermix, 2020, CAL FIRE

Data Updated: 2021 | Map Created: 9/7/2023

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Flood Hazard Areas in City of South Gate

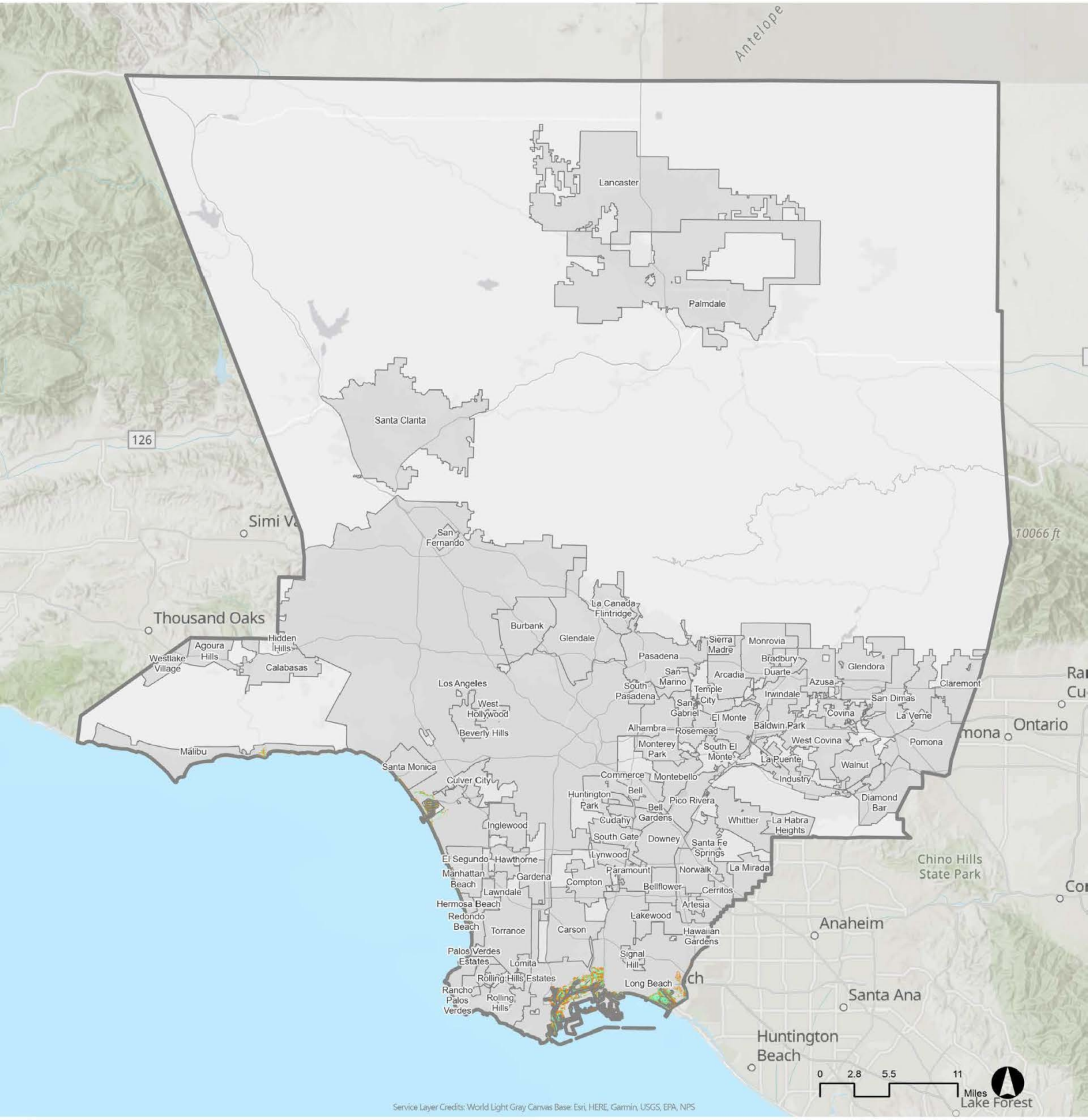
100 Year Floodplain

* Transportation Analysis Zones (TAZ) Tier2 boundaries are shown in the map.

Data Source: Federal Emergency Management (FEMA) Digital Flood Insurance Rate Map (DFIRM)

Data Updated: 2021 | Map Created: 9/7/2023

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Coastal Inundation (Sea Level Rise) in Los Angeles County

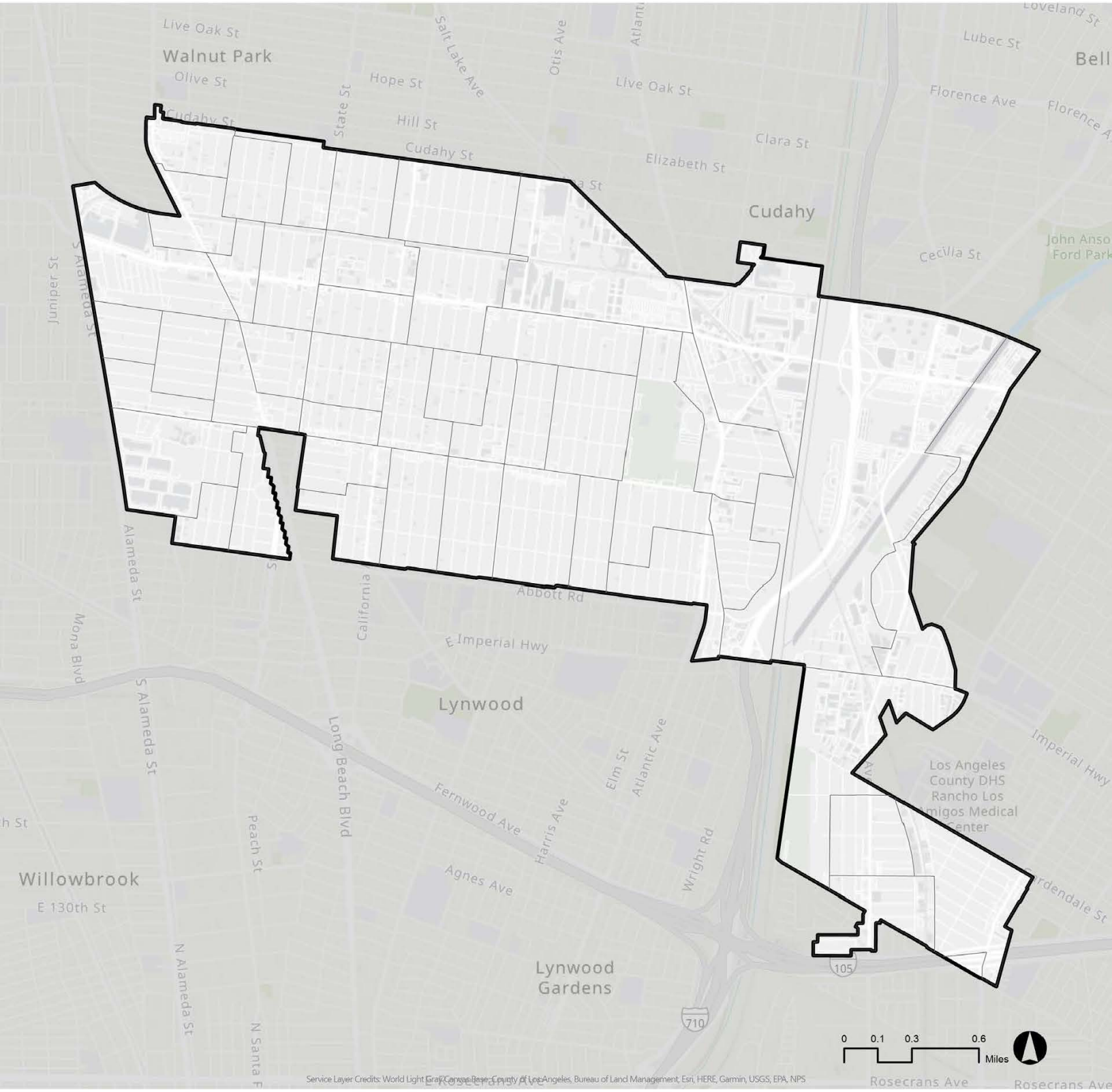
Sea Level Rise 0 - 0.5m

Sea Level Rise 0.5 - 1.0m

Data Source: Coastal Storm Modeling System (CoSMoS for Southern California (v3.0, Phase 2)

Data Updated: 2021 | Map Created: 9/7/2023

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Wildfire Risk in City of South Gate

Wildland Urban Interface

Interface

Intermix

CALFIRE Fire Hazard Severity Zones

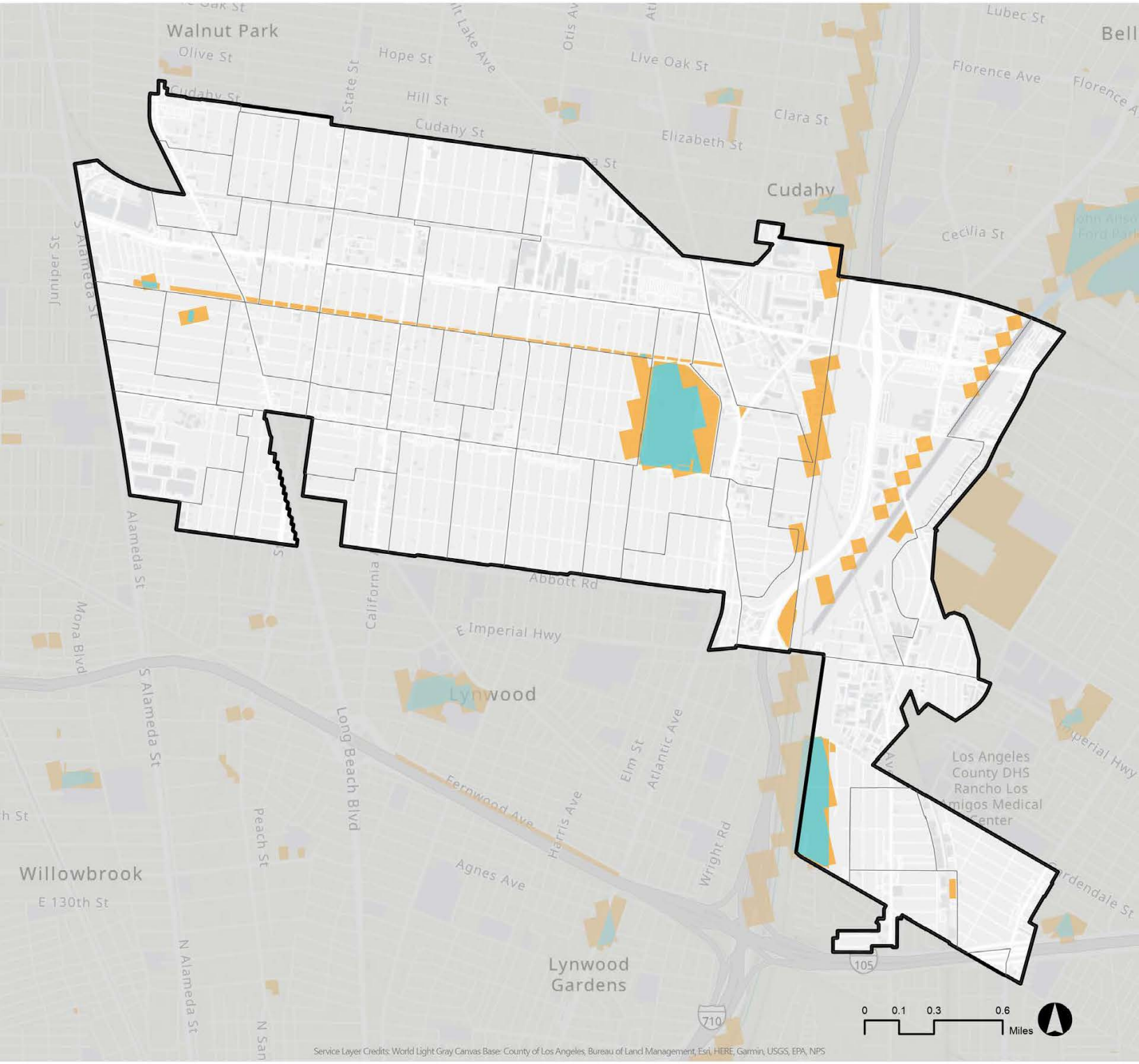
High

Very High

* Transportation Analysis Zones (TAZ) Tier2 boundaries are shown in the map.

Data Source: Fire Hazard Severity Zones Local Responsibility Areas Maps, 2008, CAL FIRE; Fire Hazard Severity Zones State Responsibility Areas Maps, 2007, CAL FIRE; and Wildland Urban Interface, 2020, CAL FIRE
Data Updated: 2021 | Map Created: 9/7/2023

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Open Space/Habitat Multi-Benefit Assets in City of South Gate

Open Space/Habitat Asset Value

1 2 3 4 5 6

* Transportation Analysis Zones (TAZ) Tier2 boundaries are shown in the map.

Data Source: Save Our Agricultural Resources (SOAR), 2017, County of Ventura; California Conservation Easement Database (CCED), 2021, Multiple sources; California Protected Areas Database (CPAD), 2021, Multiple sources; National Wetlands Inventory, 2020, US Fish and Wildlife Services; South Coast Missing Linkages (SCML) Wildlife Corridors, 2018, Conservation Biology Institute; 2015 Areas of Conservation Emphasis (ACEIIv2), 2015, CA Department of Fish and Wildlife
Data Updated: 2021 | Map Created: 9/7/2023

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Open Space and Parks in City of South Gate

Protected open space and parks from the following databases:

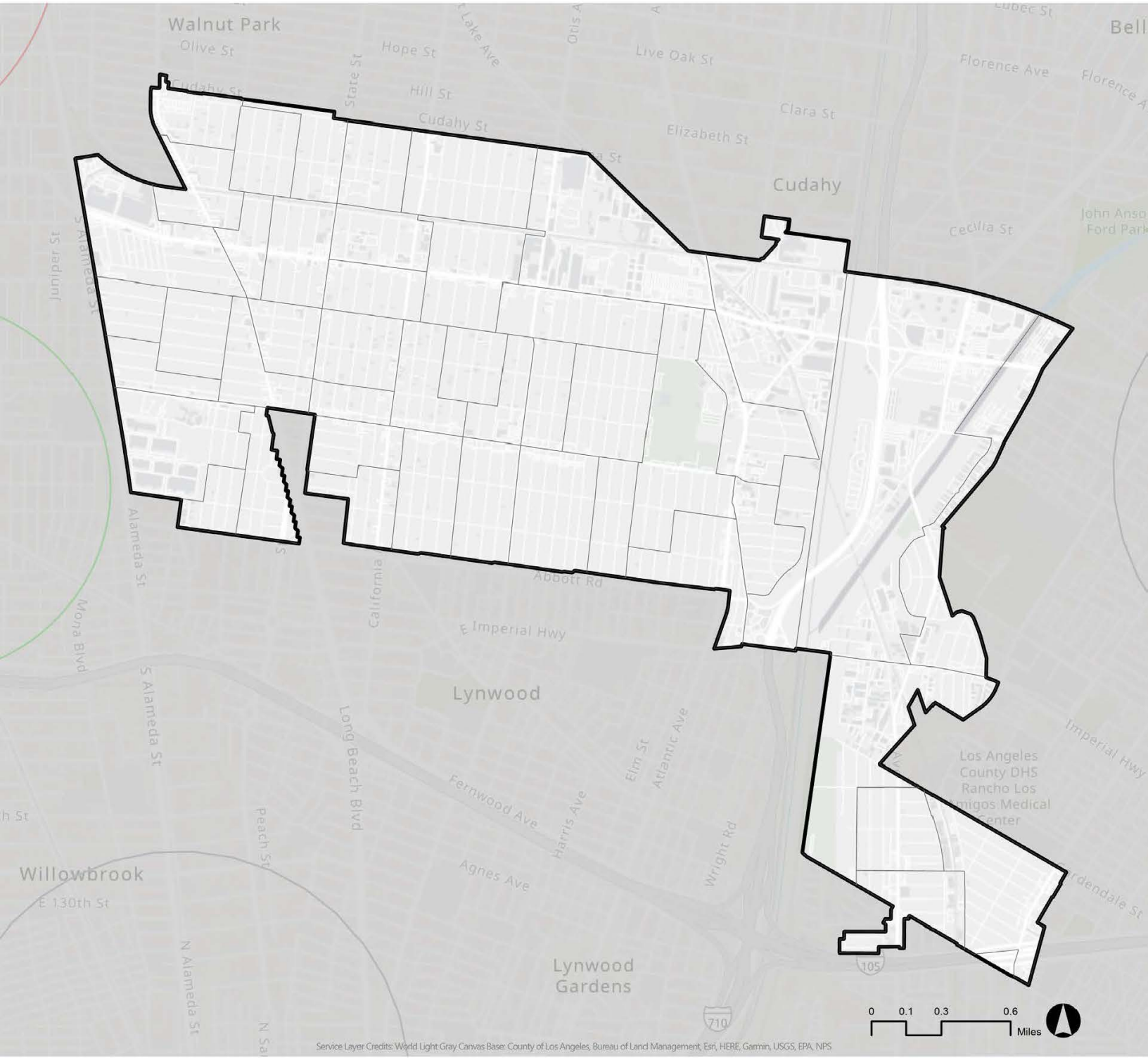
Save Our Agricultural Resources | California Conservation Easement Database | California Protected Areas Database

* Transportation Analysis Zones (TAZ) Tier2 boundaries are shown in the map.

Data Source: Save Our Agricultural Resources (SOAR), 2017, County of Ventura; California Conservation Easement Database (CCED), 2021, Multiple sources; and California Protected Areas Database (CPAD), 2021, Multiple sources

Data Updated: 2021 | Map Created: 9/7/2023

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Endangered Species/Plants in City of South Gate

Plant (80m)	Animal (80m)	Terrestrial Comm. (80m)	Aquatic Comm. (80m)	Multiple (80m)
Plant (specific)	Animal (specific)	Terrestrial Comm. (specific)	Aquatic Comm. (specific)	Multiple (specific)
Plant (non-specific)	Animal (non-specific)	Terrestrial Comm. (non-specific)	Aquatic Comm. (non-specific)	Multiple (non-specific)
Plant (circular)	Animal (circular)	Terrestrial Comm. (circular)	Aquatic Comm. (circular)	Multiple (circular)

* Transportation Analysis Zones (TAZ) Tier2 boundaries are shown in the map.

The California Natural Diversity Database (CNDDB) is a library of the location and condition of species of rare and sensitive plants, animals, and natural communities in California. The dataset shown on the map is based on the combination of the three data fields in CNDDB; element type, accuracy and element occurrence count.

Data Source: California Natural Diversity Database (CNDDB), 2017, CA Department of Fish and Wildlife
Data Updated: 2021 | Map Created: 9/7/2023

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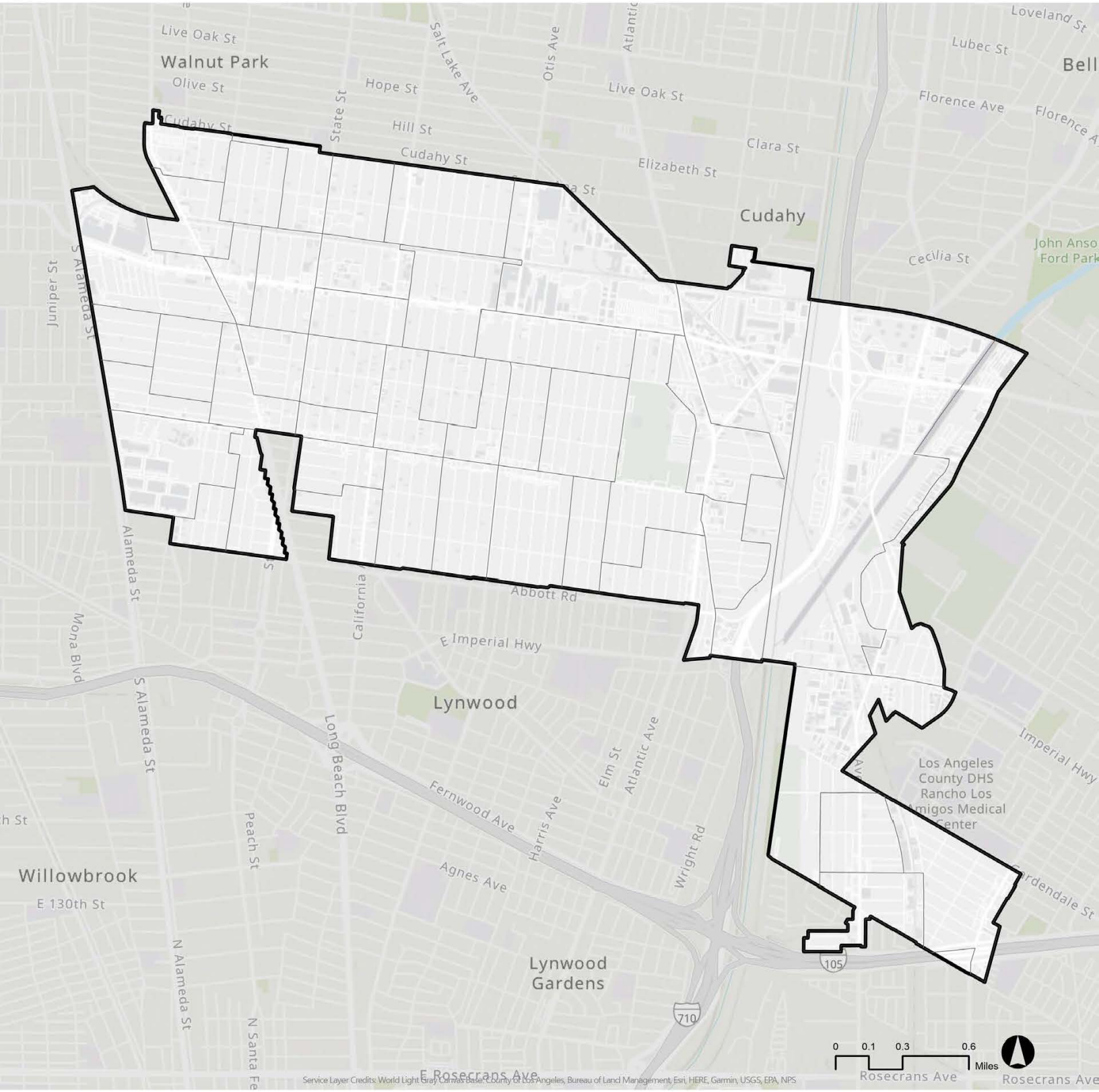
Sensitive Habitat Areas in City of South Gate

Wetlands | Habitat Connectivity Areas | Connect SoCal 2020 Habitat Connectivity

* Transportation Analysis Zones (TAZ) Tier2 boundaries are shown in the map.

Data Source:National Wetlands Inventory, 2020, US Fish and Wildlife Services; South Coast Missing Linkages (SCML) Wildlife Corridors, 2018, Conservation Biology Institute; 2015 Areas of Conservation Emphasis (ACEIIv2), 2015, CA Department of Fish and Wildlife
Data Updated: 2021 | Map Created: 9/7/2023

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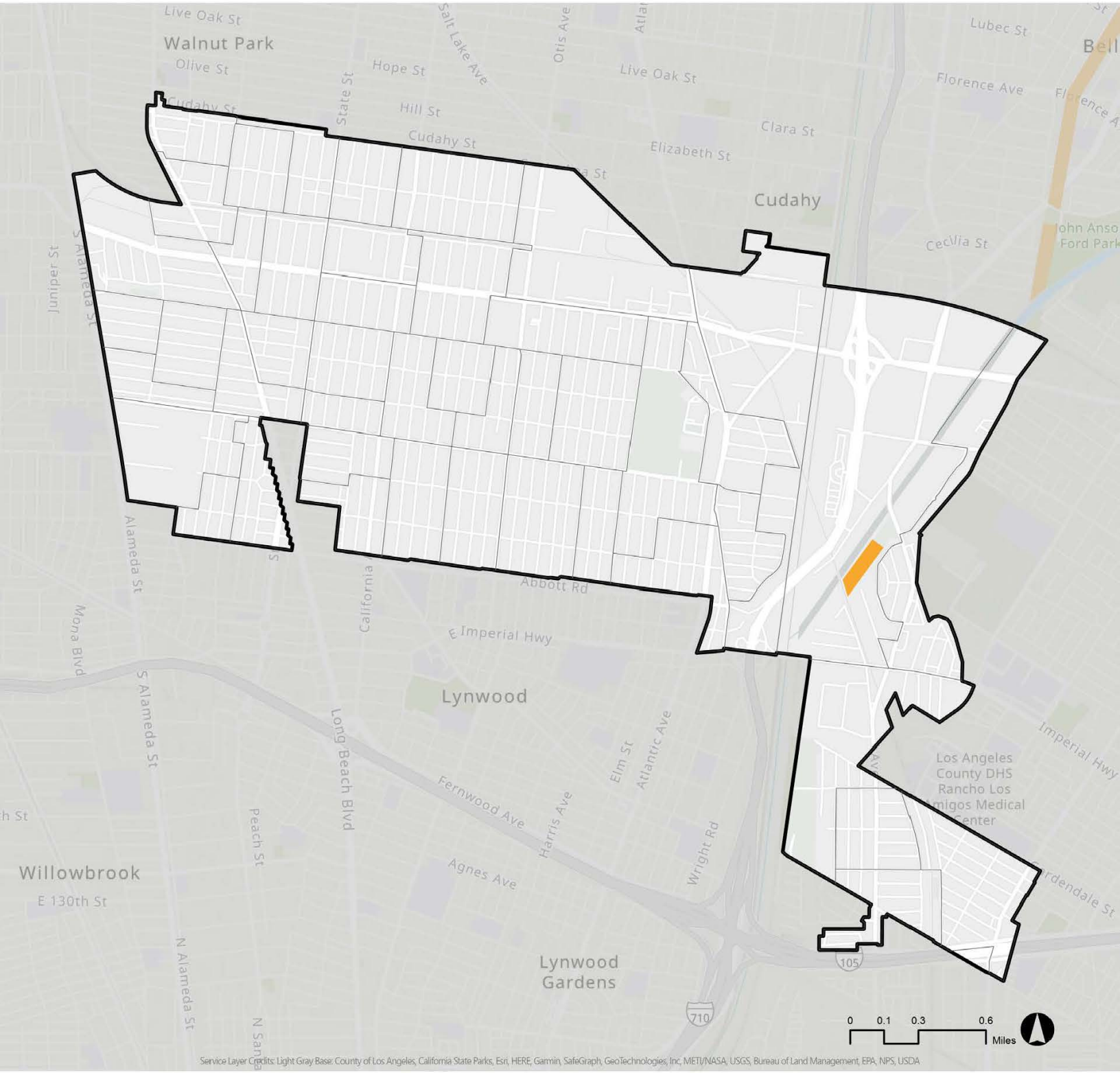
Regional Conservation Plans in City of South Gate

- Natural Community and Habitat Conservation Plan (NCCP)
- Regional NCCP
- Subarea of Regional NCCP
- Discrete linear/energy NCCP

* Transportation Analysis Zones (TAZ) Tier2 boundaries are shown in the map.

Data Source: Conservation Plan Boundaries, Habitat Conservation Plans (HCPs) and Natural Community Conservation Plans (NCCPs), 2021, CA Department of Fish and Wildlife
Data Updated: 2021 | Map Created: 9/6/2023

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Administrative/Working Lands Multi-Benefit Assets in City of South Gate

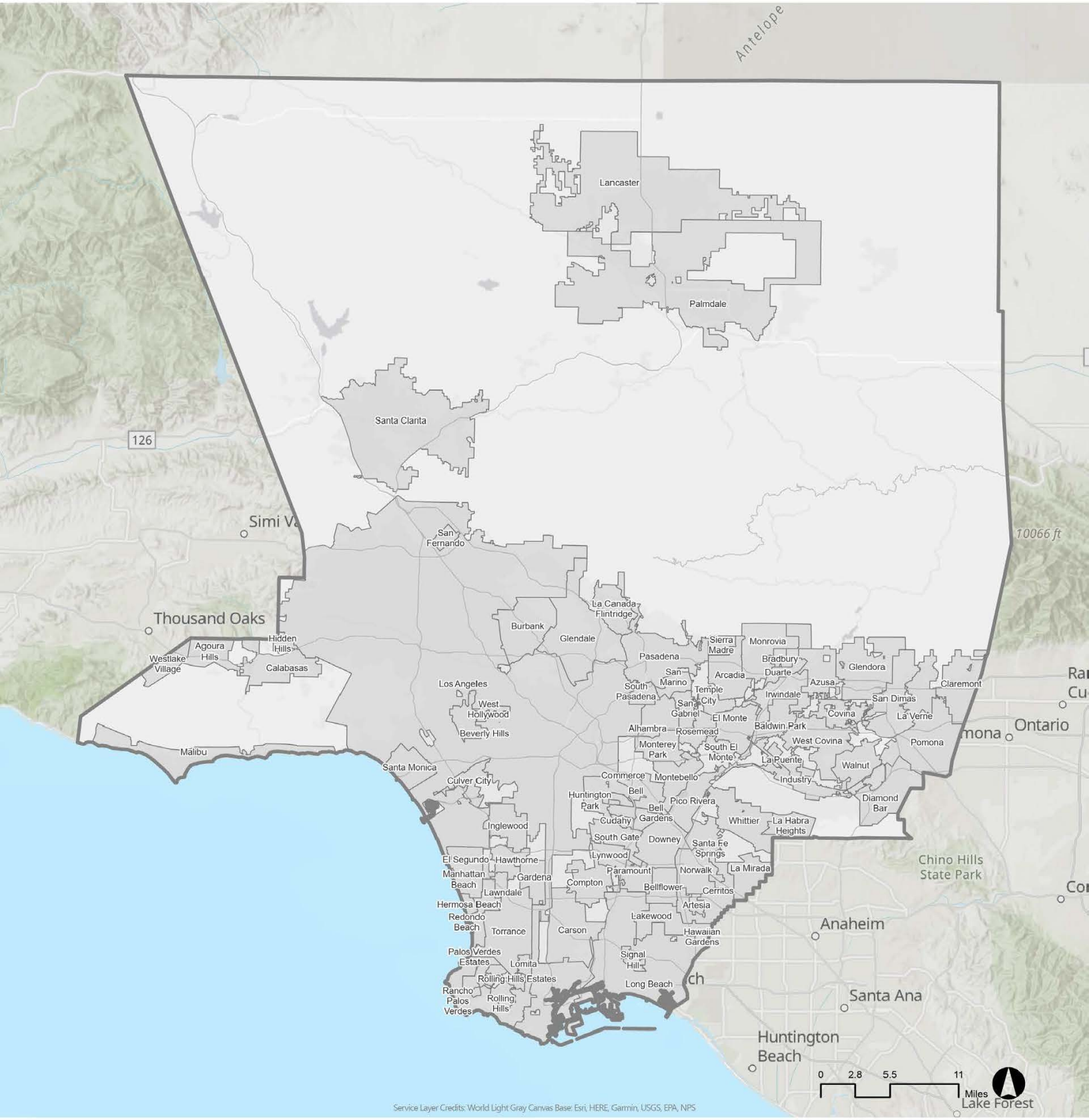
Administrative/Working Lands Asset Value

1 2 3

* Transportation Analysis Zones (TAZ) Tier2 boundaries are shown in the map.

Data Source: American Indian Reservations / Federally Recognized Tribal Entities, 2021, CalOES; USA Department of Defense Lands, 2018, US Department of Defense; and California Important Farmland, Farmland Mapping & Monitoring Program (FMMP), 2018
Data Updated: 2021 | Map Created: 9/6/2023

Disclaimer: This map was created as a part of SCAG Data/Map Books to solicit feedback from local jurisdictions during Connect SoCal 2024 Local Data Exchange (LDX) process. SCAG shall not be responsible for user's misuse or misrepresentation of this map. For the details regarding the data sources, methodologies and contents of this map, please refer to the SCAG Data/Map Book or contact LIST@scag.ca.gov.



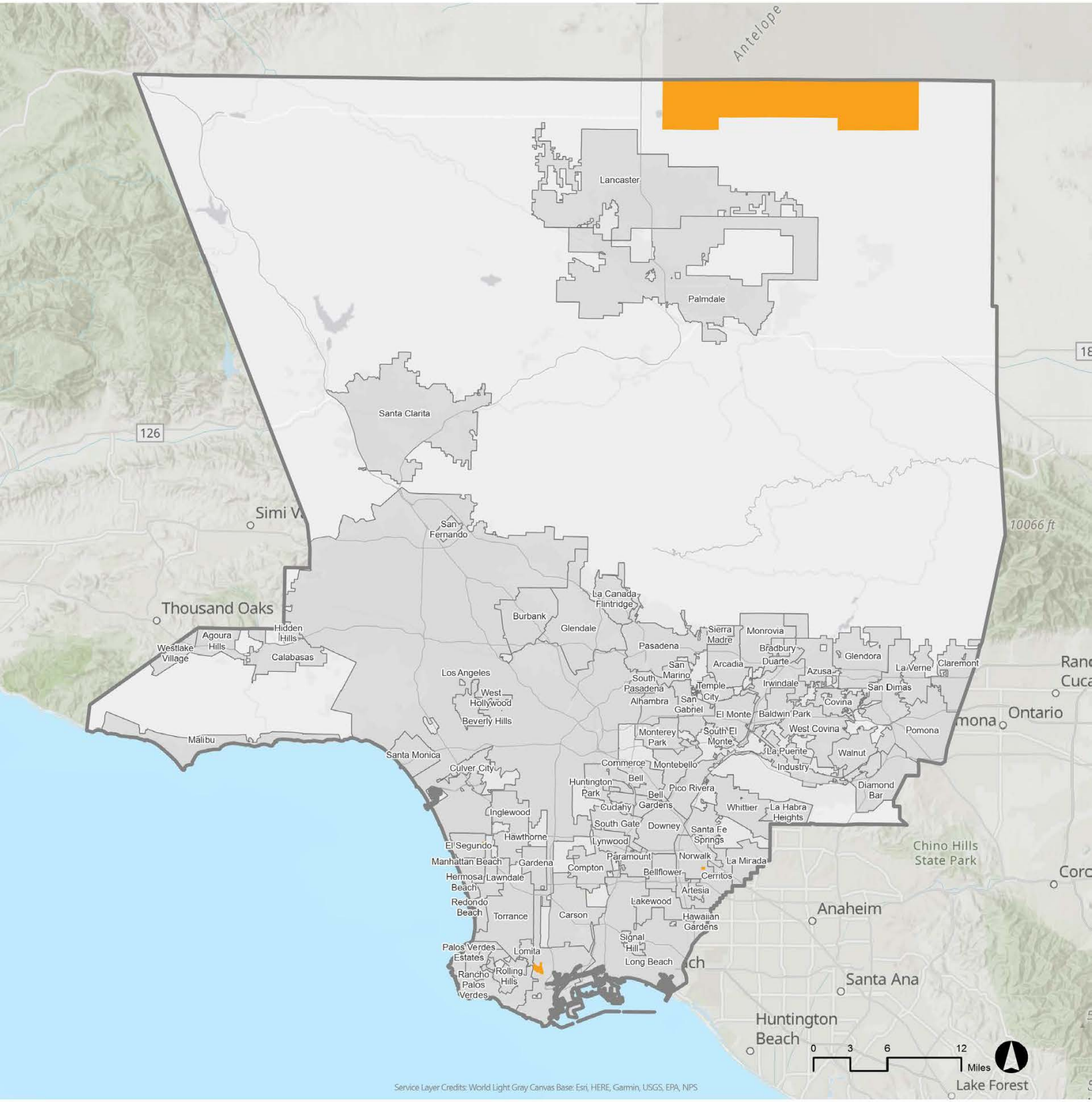
Tribal Lands in Los Angeles County

American Indian Reservation; Federally Recognized Tribal Entity

Data Source: American Indian Reservations / Federally Recognized Tribal Entities, 2021, CalOES

Data Updated: 2021 | Map Created: 9/7/2023

Disclaimer: This map was created as a part of SCAG Data/Map Books to solicit feedback from local jurisdictions during Connect SoCal 2024 Local Data Exchange (LDX) process. SCAG shall not be responsible for user's misuse or misrepresentation of this map. For the details regarding the data sources, methodologies and contents of this map, please refer to the SCAG Data/Map Book or contact LIST@scag.ca.gov.

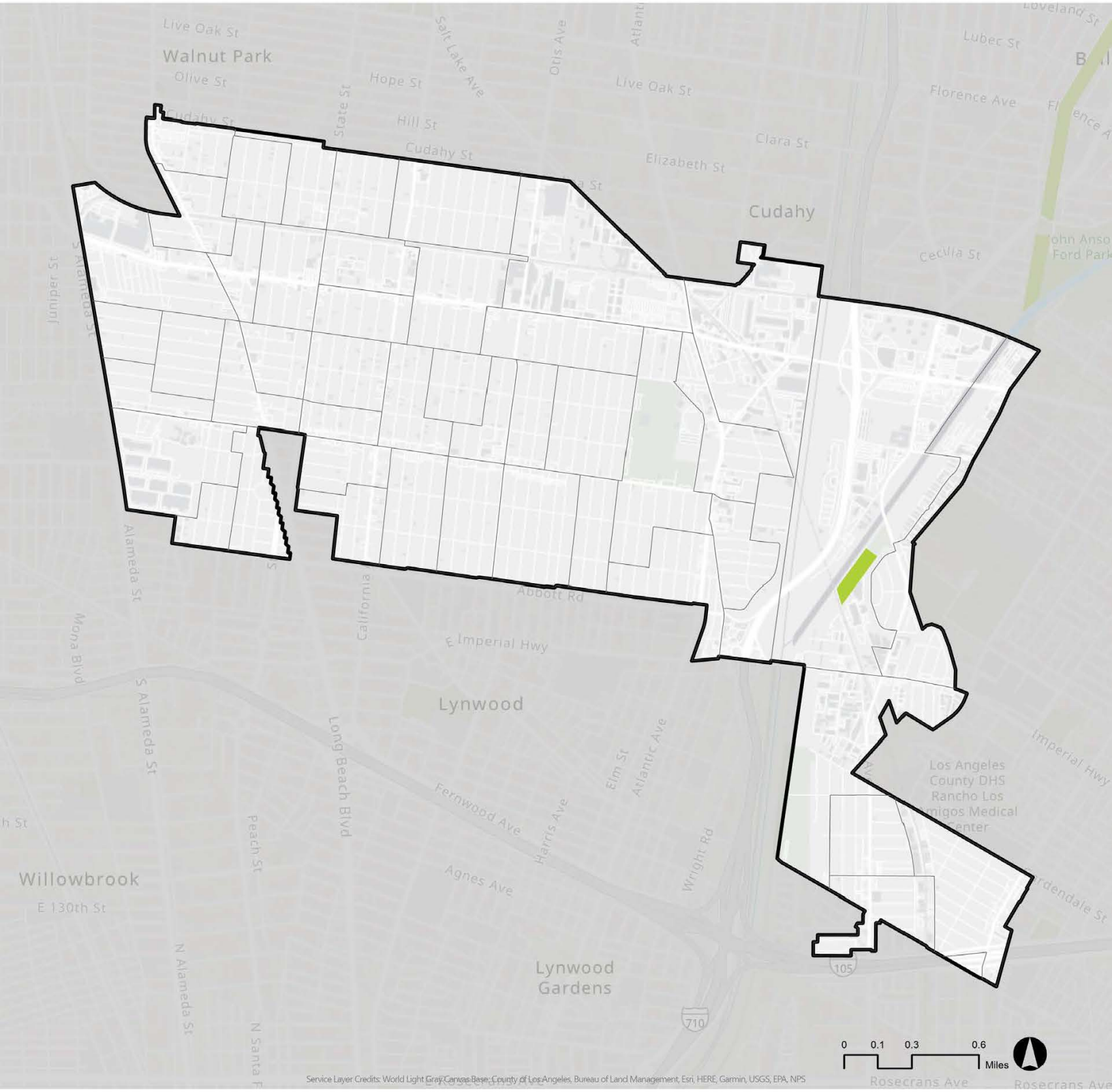


Military Installations in Los Angeles County

Military Installation

Data Source: USA Department of Defense Lands, 2018, US Department of Defense
Data Updated: 2021 | Map Created: 9/7/2023

Disclaimer: This map was created as a part of SCAG Data/Map Books to solicit feedback from local jurisdictions during Connect SoCal 2024 Local Data Exchange (LDX) process. SCAG shall not be responsible for user's misuse or misrepresentation of this map. For the details regarding the data sources, methodologies and contents of this map, please refer to the SCAG Data/Map Book or contact LIST@scag.ca.gov.



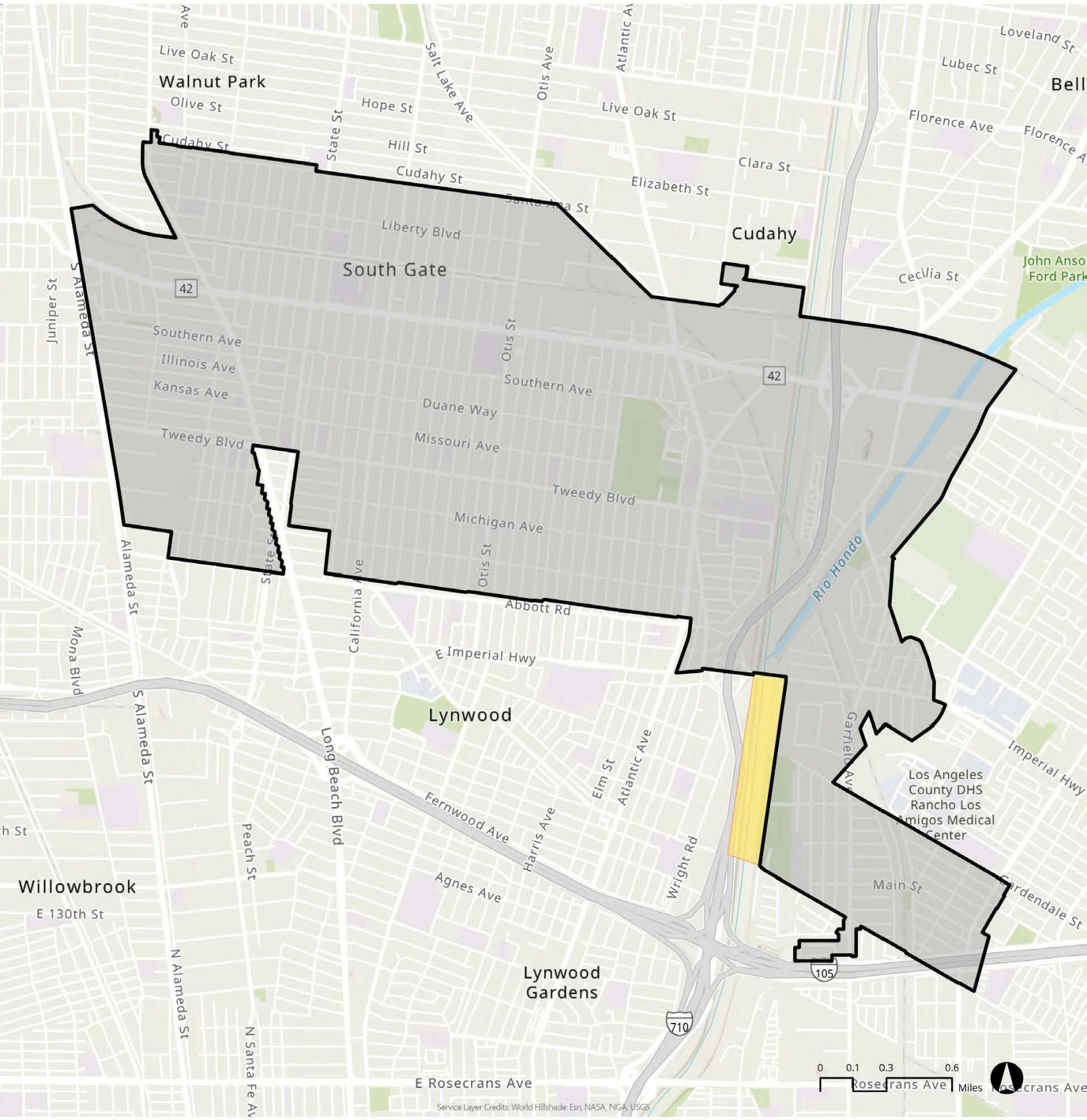
Farmland in City of South Gate

- Farmland of Local Importance
- Farmland of Statewide Importance
- Grazing Land
- Prime Farmland
- Unique Farmland

* Transportation Analysis Zones (TAZ) Tier2 boundaries are shown in the map.

Data Source: California Important Farmland, Farmland Mapping & Monitoring Program (FMMP), 2018, CA Department of Conservation
Data Updated: 2021 | Map Created: 9/7/2023

Disclaimer: This map was created as a part of SCAG Data/Map Books to solicit feedback from local jurisdictions during Connect SoCal 2024 Local Data Exchange (LDX) process. SCAG shall not be responsible for user's misuse or misrepresentation of this map. For the details regarding the data sources, methodologies and contents of this map, please refer to the SCAG Data/Map Book or contact LIST@scag.ca.gov.

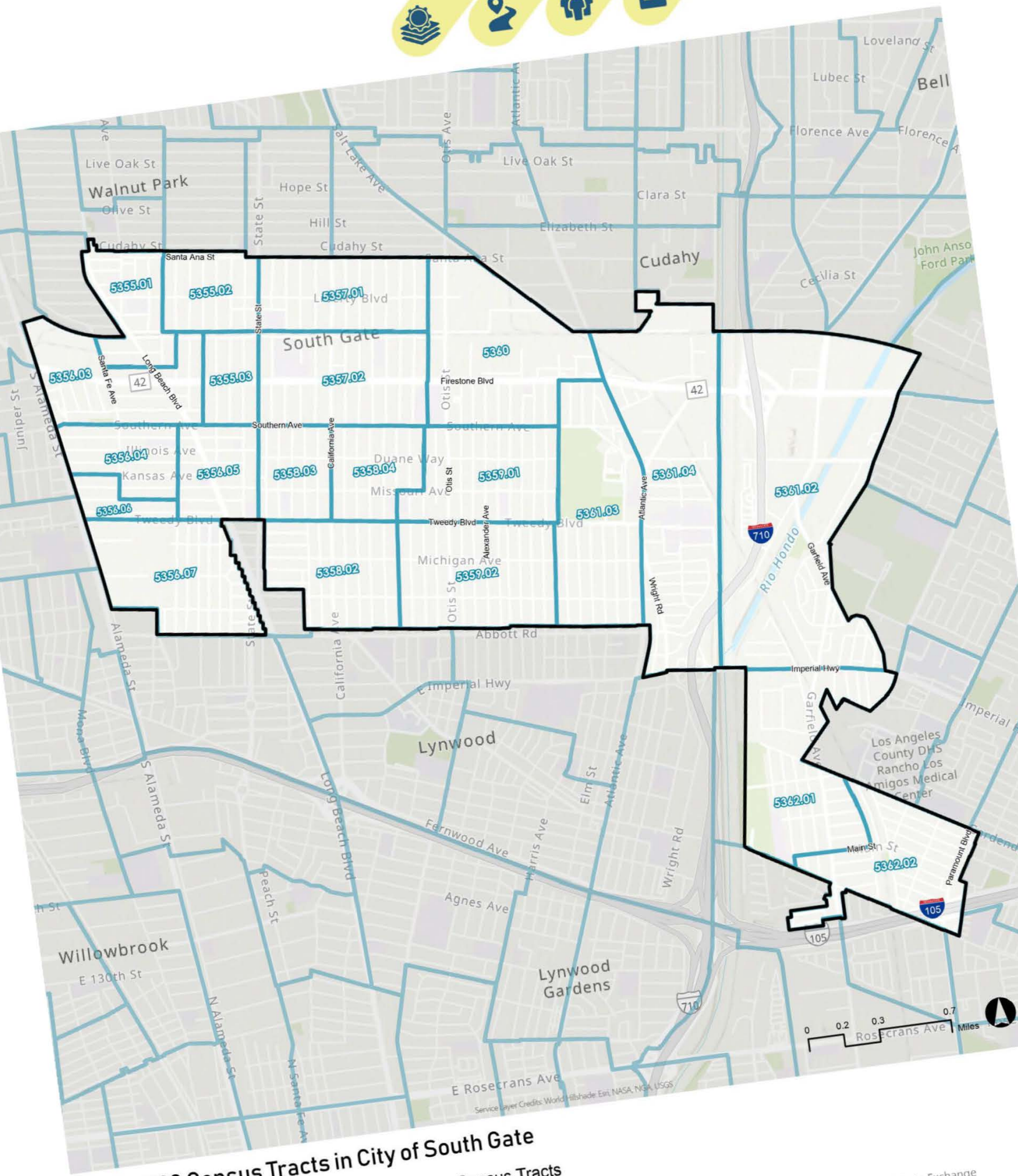


2019 City Boundary and Sphere of Influence for City of South Gate

City Boundary Sphere of Influence

Data Source: Los Angeles County LAFCO | Data Version: 2019 | Map Created: 9/6/2023

Disclaimer: This map was created as a part of SCAG Data/Map Books to solicit feedback from local jurisdictions during Connect SoCal 2024 Local Data Exchange (LDX) process. SCAG shall not be responsible for user's misuse or misrepresentation of this map. For the details regarding the data sources, methodologies and contents of this map, please refer to the SCAG Data/Map Book or contact LIST@scag.ca.gov.



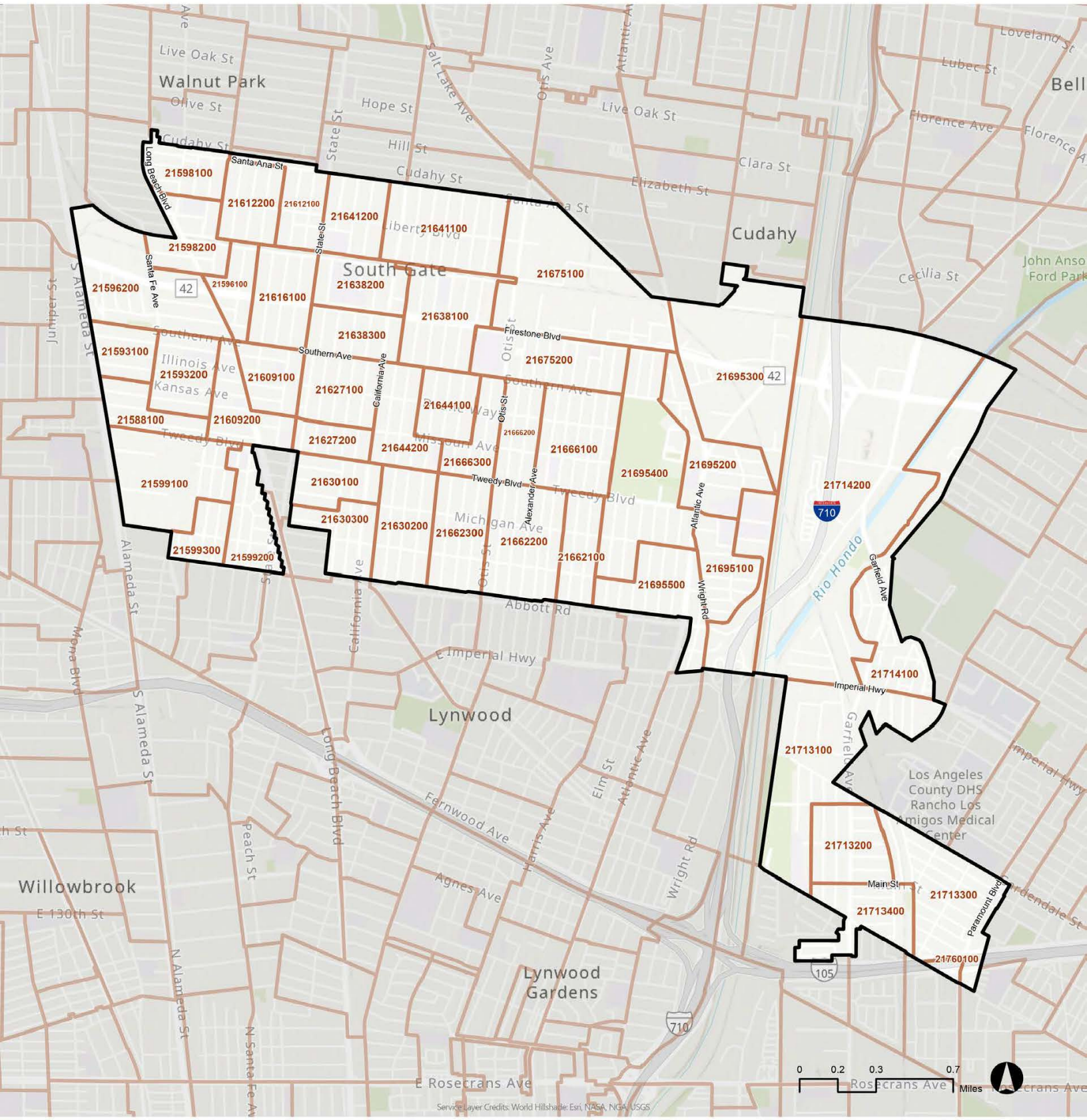
2020 Census Tracts in City of South Gate

City Boundary

2020 Census Tracts

Data Source: US Census, TIGER/Line® Shapefiles, 2020 | Map Created: 9/6/2023

Disclaimer: This map was created as a part of SCAG Data/Map Books to solicit feedback from local jurisdictions during Connect SoCal 2024 Local Data Exchange shall not be responsible for user's misuse or misrepresentation of this map. For the details regarding the data sources, methodologies and SCAG Data/Map Book or contact LIST@scag.ca.gov.



Transportation Analysis Zones (TAZ) Tier2 in City of South Gate

City Boundary

Transportation Analysis Zones (TAZ) Tier2 Boundary

Data Source: SCAG | Data Updated: 2021 | Map Created: 9/7/2023

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Orange, CA 92868
Tel: (213) 630-1548

Riverside County
3403 10th St., Ste. 805
Riverside, CA 92501
Tel: (951) 784-1513

San Bernardino County
1170 W. Third St., Ste. 140
San Bernardino, CA 92410
Tel: (213) 630-1499

Ventura County
4001 Mission Oaks Blvd., Ste. L
Camarillo, CA 93012
Tel: (213) 236-1960

For more information, please email SCAG staff at
LIST@scag.ca.gov

PLEASE RECYCLE AJ #3021

9001-9019 LONG BEACH BOULEVARD HABITAT FOR HUMANITY PROJECT

Appendix H
Statutory Checklist Reference Documents

Sole Source Aquifer Map

California Important Farmland: 1984 - 2022

Overview

The California Important Farmland (CIF) dataset, frequently called the Farmland Mapping and Monitoring Program (FMMP) data, was established in 1982. Government Code Section 65570 mandates FMMP to biennially report on the conversion of farmland and grazing land, and to provide maps and data to local government and the public. FMMP provides data to decision makers for use in planning for the present and future use of California's agricultural land resources.

The data is a current inventory of agricultural resources. This data is for general planning purposes and has a minimum mapping unit of ten acres. The 2022 data is still being developed and will be updated as areas are completed.

GIS Data Download: GIS Data
Map Services: DLRP
Metadata: Metadata

Data Disclaimer

Important Farmland Maps are compiled by the Farmland Mapping and Monitoring Program (FMMP) pursuant to Section 65570 of the California Government Code. To create the GIS data, FMMP combines current land use information with U.S. Department of Agriculture-Natural Resources Conservation Service (NRCS) soil survey data. Soil units qualifying for Prime

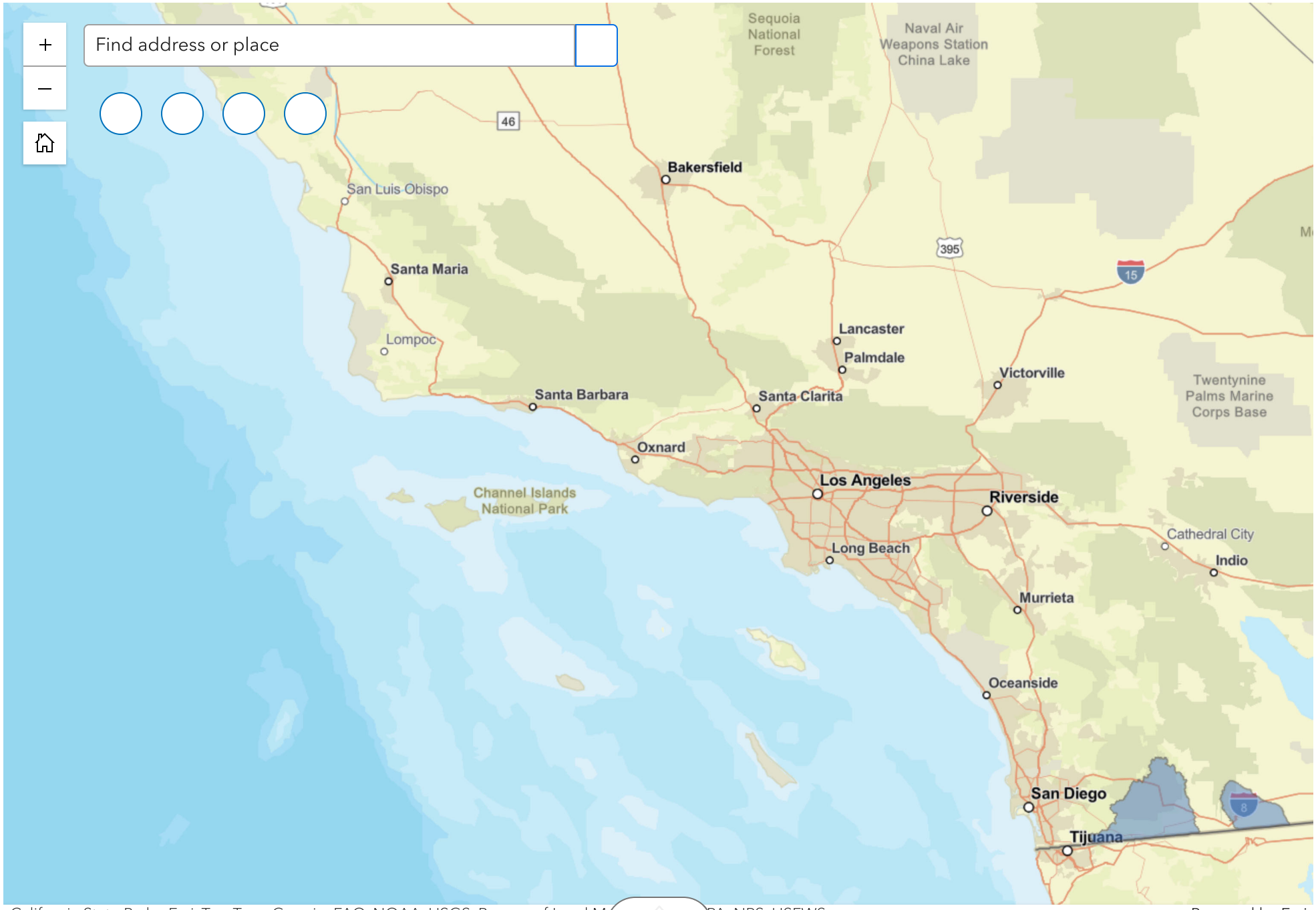


9001-9019 LONG BEACH BOULEVARD HABITAT FOR HUMANITY PROJECT

Appendix H
Statutory Checklist Reference Documents

National Wild and Scenic Rivers (NWSRS) Map

Sole Source Aquifers



California State Parks, Esri, TomTom, Garmin, FAO, NOAA, USGS, Bureau of Land M PA, NPS, USFWS

Powered by Esri

9001-9019 LONG BEACH BOULEVARD HABITAT FOR HUMANITY PROJECT

Appendix H
Statutory Checklist Reference Documents

Important Farmland City of South Gate


Mojave River
Pacific Crest Na
Lancaster
Palmdale
Victorville
Hesperia
Santa Clarita
Santa Paula
ANGELES NATIONAL
Bob Hop Arp FOREST
SAN BER ARDINO
NATIONAL
FOREST
Simi Valley
Oxnard
405
Burbank
Rancho
Cucamonga
Thousand Oaks
Beverly
Hills
Los Angeles
Chino
Ontar Intrnt
Airprt
Yucaipa
Inglewood
Moreno Valley
Downey
215
Palm S
Intrnt
Airprt
Torrance
Corona
Anaheim
Perris
Cathedral
Long Beach
Garden
Grove
Santa Ana
Hemet
Irvine
Lake Elsinore
John Wayn Conty Arp
Murrieta
Laguna Niguel
San Clemente
Gulf of
Santa
Catalina
Oceanside
Vista
Escondido
Legend
esri

9001-9019 LONG BEACH BOULEVARD HABITAT FOR HUMANITY PROJECT

Appendix H
Statutory Checklist Reference Documents

Explosive and Flammable Hazards

Explosive and Flammable Hazards (CEST and EA)

General requirements	Legislation	Regulation
HUD-assisted projects must meet Acceptable Separation Distance (ASD) requirements to protect them from explosive and flammable hazards.	N/A	24 CFR Part 51 Subpart C
Reference		
https://www.hudexchange.info/environmental-review/explosive-and-flammable-facilities		

1. **Is the proposed HUD-assisted project itself the development of a hazardous facility (a facility that mainly stores, handles or processes flammable or combustible chemicals such as bulk fuel storage facilities and refineries)?**

   ☒ No

   → *Continue to Question 2.*

   ☐ Yes

   Explain:

   → *Go directly to Question 5.*

2. **Does this project include any of the following activities: development, construction, rehabilitation that will increase residential densities, or conversion?**

   ☐ No

   → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

   ☒ Yes

   → *Continue to Question 3.*

3. **Within 1 mile of the project site, are there any current *or planned* stationary aboveground storage containers that are covered by 24 CFR 51C? Containers that are NOT covered under the regulation include:**
   - **Containers 100 gallons or less in capacity, containing common liquid industrial fuels OR**
   - **Containers of liquified petroleum gas (LPG) or propane with a water volume capacity of 1,000 gallons or less that meet the requirements of the 2017 version of National Fire Protection Association (NFPA) Code 58.**

   If all containers within the search area fit the above criteria, answer "no." For any other type of aboveground storage container within the search area that holds one of the

flammable or explosive materials listed in Appendix I of 24 CFR part 51 subpart C, answer "yes."

☐ No

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide all documents used to make your determination.*

☒ Yes

→ *Continue to Question 4.*

4. **Visit HUD's website to identify the appropriate tank or tanks to assess and to calculate the required separation distance using the electronic assessment tool. To document this step in the analysis, please attach the following supporting documents to this screen:**
   - **Map identifying the tank selected for assessment, and showing the distance from the tank to the proposed HUD-assisted project site; and**
   - **Electronic assessment tool calculation of the required separation distance.**

   Based on the analysis, is the proposed HUD-assisted project site located at or beyond the required separation distance from all covered tanks?

   ☒ Yes

   → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

   ☐ No

   → *Go directly to Question 6.*

5. **Is the hazardous facility located at an acceptable separation distance from residences and any other facility or area where people may congregate or be present?**

   Please visit HUD's website for information on calculating Acceptable Separation Distance.

   ☐ Yes

   → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations.*

   ☐ No

   → *Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations.*
   Continue to Question 6.

6. **For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Mitigation measures may include both natural and manmade barriers, modification of the project design, burial or removal of the hazard, or other engineered solutions. Describe selected mitigation measures, including the timeline for implementation, and attach an implementation plan. If negative effects cannot be mitigated, cancel the project at this location.**
   Note that only licensed professional engineers should design and implement blast barriers. If a barrier will be used or the project will be modified to compensate for an unacceptable separation distance, provide approval from a licensed professional engineer.

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

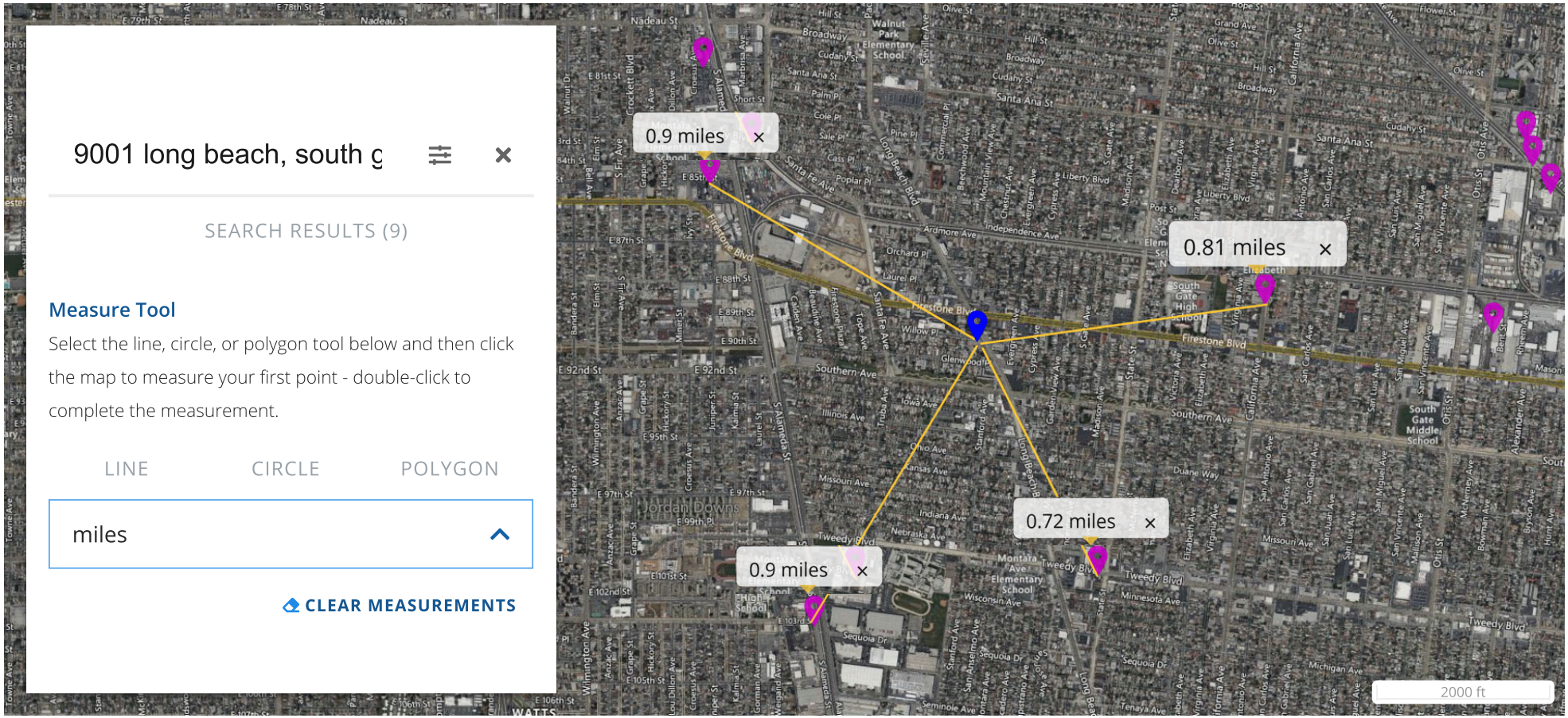
- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The Los Angeles County Fire Department, as the County's Unified Program Agency (CUPA), administers the Aboveground Petroleum Storage Tank Program and reports to the California Environmental Reporting System. Reviewing the CalEPA Regulated Site Portal, there is not a site within one mile of the Project site that is part of the Aboveground Petroleum Storage regulatory program. The CalEPA Regulated Site Portal combines data about environmentally regulated facilities and sites throughout California into a single, searchable database and interactive map. The portal includes data on hazardous waste and materials, state and federal cleanups, impacted ground and surface waters, and toxic releases (https://siteportal.calepa.ca.gov/nsite/map/help, accessed December 22, 2022).

Are formal compliance steps or mitigation required?

☐ Yes

☒ No


9001 long beach, south g
SEARCH RESULTS (9)
Measure Tool
Select the line, circle, or polygon tool below and then click the map to measure your first point - double-click to complete the measurement.
LINE
CIRCLE
POLYGON
miles
CLEAR MEASUREMENTS
0.9 miles
0.81 miles
0.72 miles
0.9 miles
2000 ft

SOUTH GATE CITY HALL

8650 CALIFORNIA AVE
SOUTH GATE CA 90280

PROFILE | MAP | REGULATORY PROGRAMS | COMPLIANCE | CHEMICALS

Description	Source System	Program Id	Start Date	End Date	Long Description
Aboveground Petroleum Storage	California Environmental Reporting System	10274371	07/10/2013		Facilities that store petrol
Chemical Storage Facilities	California Environmental Reporting System	10274371	07/10/2013		Facilities that store hazarc

SOUTH GATE CITY HALL

8650 CALIFORNIA AVE
SOUTH GATE CA 90280

PROFILE | MAP | REGULATORY PROGRAMS | COMPLIANCE | CHEMICALS

Chemical Storage

REPORTING PERIOD	SUBMITTED ON
2025	04/21/2025

Chemicals

Name	Max Daily Amount / Unit	Avg Daily Amount / Unit	Days Onsite
DIESEL	120-599 Gallons	0-11 Gallons	365

COMMON NAME
—

EHS NAME
—

HAZARD TYPE(S)
—

DOT HAZARD CLASS
3 - Flammable and Combustible Liquids

CAS NUMBER
684-76-30-2

HEALTH EFFECT(S)
—

CHEMICAL MIXES
—

JIFFY LUBE #358
9901 STATE ST
LYNWOOD CA 90262

PROFILE | MAP | REGULATORY PROGRAMS | COMPLIANCE | CHEMICALS

Description	Source System	Program Id	Start Date	End Date	Long Description
Aboveground Petroleum Storage	California Environmental Reporting System	10281148	07/10/2013		Facilities that store petrol
Chemical Storage Facilities	California Environmental Reporting System	10281148	07/10/2013		Facilities that store hazarc
Hazardous Waste Generator	California Environmental Reporting System	10281148	07/10/2013		Faclities that generate eitl agencies.

JIFFY LUBE #358
9901 STATE ST
LYNWOOD CA 90262

PROFILE | MAP | REGULATORY PROGRAMS | COMPLIANCE | CHEMICALS

Chemical Storage

REPORTING PERIOD	SUBMITTED ON
2024	03/08/2024

Chemicals

Name	Max Daily Amount / Unit	Avg Daily Amount / Unit	Days Onsite
WASTE OIL	600-1199 Gallons	120-599 Gallons	365

COMMON NAME
—

EHS NAME
—

HAZARD TYPE(S)
—

DOT HAZARD CLASS
3 - Flammable and Combustible Liquids

CAS NUMBER
64742-65-0

HEALTH EFFECT(S)
—

CHEMICAL MIXES

WASTE OIL

100.00%
WEIGHT

CAS NUMBER	IS EHS?
	No

+	WASTE COOLANT	120-599 Gallons	60-119 Gallons	365
+	SULFURIC LEAD ACID	500-999 Pounds	100-499 Pounds	365
+	OILY WATER	12-59 Gallons	12-59 Gallons	365
+	LUBE BASE OIL	120-599 Gallons	60-119 Gallons	365
−	LUBE BASE OIL	600-1199 Gallons	120-599 Gallons	365

COMMON NAME
—

EHS NAME
—

HAZARD TYPE(S)
—

DOT HAZARD CLASS
3 - Flammable and Combustible Liquids

CAS NUMBER
64742-65-0

HEALTH EFFECT(S)
—

CHEMICAL MIXES

ADDITIVES	LUBRICATING BASE OIL
15.00% WEIGHT	85.00% WEIGHT
CAS NUMBER: IS EHS? No	CAS NUMBER: 64742-65-0 IS EHS? No

+	LUBE BASE OIL	120-599 Gallons	60-119 Gallons	365
+	LUBE BASE OIL	120-599 Gallons	120-599 Gallons	365
+	LUBE BASE OIL	120-599 Gallons	120-599 Gallons	365

+	LUBE BASE OIL	60-119 Gallons	60-119 Gallons	365
+	LUBE BASE OIL	120-599 Gallons	120-599 Gallons	365
+	LUBE BASE OIL	120-599 Gallons	60-119 Gallons	365
+	ETHYLENE GLYCOL	120-599 Gallons	60-119 Gallons	365
+	EMPTY	600-1199 Gallons	0-11 Gallons	365
−	AUTOMATIC TRANSMISSION FLUID	600-1199 Gallons	600-1199 Gallons	365

COMMON NAME
—

EHS NAME
—

HAZARD TYPE(S)
—

DOT HAZARD CLASS
3 - Flammable and Combustible Liquids

CAS NUMBER
64743-57-0

HEALTH EFFECT(S)
—

CHEMICAL MIXES

ADDITIVES	PETROLEUM HYDROCARBBON DISTILLATES
19.00% WEIGHT	81.00% WEIGHT
CAS NUMBER: — IS EHS?: No	CAS NUMBER: 64743-57-0 IS EHS?: No

−	AUTOMATIC TRANSMISSION FLUID	60-119 Gallons	60-119 Gallons	365

COMMON NAME
—

EHS NAME
—

HAZARD TYPE(S)
—

DOT HAZARD CLASS
3 - Flammable and Combustible Liquids

CAS NUMBER
64743-57-0

HEALTH EFFECT(S)
—

CHEMICAL MIXES

ADDITIVES	PETROLEUM HYDROCARBBON DISTILLATES
15.00% WEIGHT	85.00% WEIGHT
CAS NUMBER: IS EHS? No	CAS NUMBER: 64743-57-0 IS EHS? No

SUN-LITE METALS

2210 E 085TH ST
LOS ANGELES CA 90001

PROFILE | MAP | REGULATORY PROGRAMS | COMPLIANCE | CHEMICALS

Description	Source System	Program Id	Start Date	End Date	Long Description
Aboveground Petroleum Storage	California Environmental Reporting System	10273936	07/10/2013		Facilities that store petrol
Chemical Storage Facilities	California Environmental Reporting System	10273936	07/10/2013		Facilities that store hazarc
Hazardous Waste Generator	California Environmental Reporting System	10273936	07/10/2013		Faclities that generate eitl agencies.

SUN-LITE METALS

2210 E 085TH ST
LOS ANGELES CA 90001

PROFILE | MAP | REGULATORY PROGRAMS | COMPLIANCE | CHEMICALS

Chemical Storage

REPORTING PERIOD	SUBMITTED ON
2025	07/01/2025

Chemicals

	Name	Max Daily Amount / Unit	Avg Daily Amount / Unit	Days Onsite
−	Propane	600-1199 Gallons	120-599 Gallons	365

COMMON NAME
—

EHS NAME
—

HAZARD TYPE(S)
—

DOT HAZARD CLASS
2.1 - Flammable Gases

CAS NUMBER
74-98-6

HEALTH EFFECT(S)
—

CHEMICAL MIXES
—

+	Oxygen	120-599 Gallons	120-599 Gallons	365
−	Oxygen	0-2599 Cubic Feet	0-2599 Cubic Feet	365

+	OIL CONTAMINATED SOIL	100-499 Pounds	100-499 Pounds	365
+	OIL CONTAMINATED RAGS	100-499 Pounds	0-99 Pounds	365
+	OIL CONTAMINATED GLOVES	100-499 Pounds	0-99 Pounds	365
+	MOTOR OIL	12-59 Gallons	12-59 Gallons	365
−	Mineral Oil, Compressor Oil	600-1199 Gallons	600-1199 Gallons	365

COMMON NAME
—

EHS NAME
—

HAZARD TYPE(S)
—

DOT HAZARD CLASS
2.2 - Nonflammable Gases

CAS NUMBER
7782-44-7

HEALTH EFFECT(S)
—

CHEMICAL MIXES
—

COMMON NAME
—

EHS NAME
—

HAZARD TYPE(S)
—

DOT HAZARD CLASS
9 - Misc. Hazardous Materials

CAS NUMBER
8042-47-5

HEALTH EFFECT(S)
—

CHEMICAL MIXES
—

+	LUBRICATING OILS - USED	120-599 Gallons	60-119 Gallons	365
+	HYDRAULIC OIL	12-59 Gallons	12-59 Gallons	365
+	HYDRAULIC FLUID	120-599 Gallons	60-119 Gallons	90
+	Ethylene Glycol	12-59 Gallons	12-59 Gallons	365

+	Diesel Fuel No. 2	120-599 Gallons	120-599 Gallons	365
−	Diesel Fuel	600-1199 Gallons	600-1199 Gallons	365

COMMON NAME
—

EHS NAME
—

HAZARD TYPE(S)
—

DOT HAZARD CLASS
3 - Flammable and Combustible Liquids

CAS NUMBER
68334-30-5

HEALTH EFFECT(S)
—

CHEMICAL MIXES
—

SA RECYCLING LLC
10313 S ALAMEDA ST
LOS ANGELES CA 90002

PROFILE | MAP | REGULATORY PROGRAMS | COMPLIANCE | CHEMICALS

Description	Source System	Program Id	Start Date	End Date	Long Description
Aboveground Petroleum Storage	California Environmental Reporting System	10268710	07/10/2013		Facilities that store petrol
Chemical Storage Facilities	California Environmental Reporting System	10268710	07/10/2013		Facilities that store hazarc
Hazardous Waste Generator	California Environmental Reporting System	10268710	07/10/2013		Faclities that generate eitl agencies.
RCRA LQ HW Generator	California Environmental Reporting System	10268710	07/10/2013		Facilities that generate lar agencies.

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LOS ANGELES CA 90002

PROFILE | MAP | REGULATORY PROGRAMS | COMPLIANCE | CHEMICALS

Chemical Storage

REPORTING PERIOD	SUBMITTED ON
2025	02/28/2025

Chemicals

	Name	Max Daily Amount / Unit	Avg Daily Amount / Unit	Days Onsite
+	WASTE REFRIGERANT OIL	120-599 Gallons	12-59 Gallons	365
−	WASTE PETROLEUM HYDROCARBONS	600-1199 Gallons	120-599 Gallons	365

COMMON NAME
—

EHS NAME
—

HAZARD TYPE(S)
—

DOT HAZARD CLASS
3 - Flammable and Combustible Liquids

CAS NUMBER
64742-54-7

HEALTH EFFECT(S)
—

CHEMICAL MIXES

MIXTURE OF NUMEROUS WASTE OILS	HYDROTREATED HEAVY PARAFFINIC DISTILLATES
% WEIGHT	100.00% WEIGHT

CAS NUMBER	IS EHS?
	No

CAS NUMBER	IS EHS?
6474-254-7	No

+	WASTE MERCURY SWITCHES	0-99 Pounds	0-99 Pounds	365
−	WASTE GASOLINE	600-1199 Gallons	120-599 Gallons	365

COMMON NAME
—

EHS NAME
—

HAZARD TYPE(S)
—

DOT HAZARD CLASS
3 - Flammable and Combustible Liquids

CAS NUMBER
86290-81-5

HEALTH EFFECT(S)
—

CHEMICAL MIXES

ETHANOL	ETHYL BENEZE	UNLEADED GASOLINE	ETHYL BENZENE
% WEIGHT	5.00% WEIGHT	91.00% WEIGHT	2.00% WEIGHT
CAS NUMBER IS EHS? No	CAS NUMBER IS EHS? 64-17-5 No	CAS NUMBER IS EHS? 64742-54-7 No	CAS NUMBER IS EHS? 100-41-4 No

BENZENE
2.00% WEIGHT

CAS NUMBER	IS EHS?
71-43-2	No

−	Waste Cylinders	0-2599 Cubic Feet	0-2599 Cubic Feet	365

COMMON NAME
—

EHS NAME
—

HAZARD TYPE(S)
—

DOT HAZARD CLASS
2.1 - Flammable Gases

CAS NUMBER
74-86-2

HEALTH EFFECT(S)
—

CHEMICAL MIXES
—

+	WASTE BALLASTS & CAPACITORS WITH PCBS	500-999 Pounds	100-499 Pounds	365
−	REFRIGERANTS	0-2599 Cubic Feet	0-2599 Cubic Feet	365

COMMON NAME
—

EHS NAME
—

HAZARD TYPE(S)
—

DOT HAZARD CLASS
2.2 - Nonflammable Gases

CAS NUMBER
75-71-8

HEALTH EFFECT(S)
—

CHEMICAL MIXES
—

−	RECYCLED GASOLINE	1200-2999 Gallons	600-1199 Gallons	365

COMMON NAME

EHS NAME

HAZARD TYPE(S)

—

—

—

DOT HAZARD CLASS
3 - Flammable and Combustible Liquids

CAS NUMBER
8006-61-9

HEALTH EFFECT(S)
—

CHEMICAL MIXES

GASOLINE
100.00% WEIGHT

CAS NUMBER	IS EHS?
8006-61-9	No

—	RECYCLABLE LEAD ACID BATTERIES	1000-4999 Pounds	1000-4999 Pounds	365

COMMON NAME
—

EHS NAME
—

HAZARD TYPE(S)
—

DOT HAZARD CLASS
8 - Corrosives (Liquids and Solids)

CAS NUMBER
7439-92-1

HEALTH EFFECT(S)
—

CHEMICAL MIXES

SULFURIC ACID	LEAD DIOXIDE	LEAD	LEAD SULFATE
34.00% WEIGHT	31.00% WEIGHT	34.00% WEIGHT	1.00% WEIGHT

CAS NUMBER	IS EHS?
7664-93-9	No

CAS NUMBER	IS EHS?
1309-60-0	No

CAS NUMBER	IS EHS?
7439-92-1	No

CAS NUMBER	IS EHS?
7446-14-2	No

+	Propane	12-59 Gallons	12-59 Gallons	365
+	PROPANE	60-119 Gallons	12-59 Gallons	365
−	Oxygen	0-2599 Cubic Feet	0-2599 Cubic Feet	0

COMMON NAME
—

EHS NAME
—

HAZARD TYPE(S)
—

DOT HAZARD CLASS
2.2 - Nonflammable Gases

CAS NUMBER
7782-44-7

HEALTH EFFECT(S)
—

CHEMICAL MIXES
—

−	OILY ABSORBENT, SWEEPINGS	1000-4999 Pounds	500-999 Pounds	365

COMMON NAME
—

EHS NAME
—

HAZARD TYPE(S)
—

DOT HAZARD CLASS
9 - Misc. Hazardous Materials

CAS NUMBER

HEALTH EFFECT(S)
—

CHEMICAL MIXES

ABSORBENT	OIL	ETHYBENZENE	ETHANOL
90.00%	10.00%	2.00%	5.00%

WEIGHT	WEIGHT	WEIGHT	WEIGHT
CAS NUMBER IS EHS? No	CAS NUMBER IS EHS? 6474-25-47 No	CAS NUMBER IS EHS? 100-41-4 No	CAS NUMBER IS EHS? 64-17-5 No

+	Lubricating oils (petroleum), HYDROCARBONS	120-599 Gallons	120-599 Gallons	365
+	HaloKlear BHR-P50 Flocculant	120-599 Gallons	60-119 Gallons	365
+	Ethylene Glycol	120-599 Gallons	120-599 Gallons	365
−	DIESEL FUEL	600-1199 Gallons	120-599 Gallons	365

COMMON NAME
—

EHS NAME
—

HAZARD TYPE(S)
—

DOT HAZARD CLASS
3 - Flammable and Combustible Liquids

CAS NUMBER
64741-59-9

HEALTH EFFECT(S)
—

CHEMICAL MIXES

DIESEL FUEL NO. 2

100.00%
WEIGHT

CAS NUMBER	IS EHS?
64741-59-9	No

Acceptable Separation Distance (ASD) Electronic Assessment Tool

The Environmental Planning Division (EPD) has developed an electronic-based assessment tool that calculates the Acceptable Separation Distance (ASD) from stationary hazards. The ASD is the distance from above ground stationary containerized hazards of an explosive or fire prone nature, to where a HUD assisted project can be located. The ASD is consistent with the Department's standards of blast overpressure (0.5 psi-buildings) and thermal radiation (450 BTU/ft^2 - hr - people and 10,000 BTU/ft^2 - hr - buildings). Calculation of the ASD is the first step to assess site suitability for proposed HUD-assisted projects near stationary hazards. Additional guidance on ASDs is available in the Department's guidebook "Siting of HUD- Assisted Projects Near Hazardous Facilities" and the regulation 24 CFR Part 51, Subpart C, Sitting of HUD-Assisted Projects Near Hazardous Operations Handling Conventional Fuels or Chemicals of an Explosive or Flammable Nature.

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☑ **No:** ☐
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☑
Is the container diked?	**Yes:** ☐ **No:** ☐
What is the volume (gal) of the container?	1199
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	
Calculate Acceptable Separation Distance	
Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	232.57

ASD for Blast Overpressure (ASDBOP)	252.57
ASD for Thermal Radiation for People (ASDPPU)	298.29
ASD for Thermal Radiation for Buildings (ASDBPU)	54.68
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options **(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)**

Providing Feedback & Corrections

After using the ASD Assessment Tool following the directions in this User Guide, users are encouraged to provide feedback on how the ASD Assessment Tool may be improved. Users are also encouraged to send comments or corrections for the improvement of the tool.

Please send comments or other input using the **Contact Us (https://www.hudexchange.info/contact-us/)** form.

Related Information

- **ASD User Guide (/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/)**
- **ASD Flow Chart (/resource/3840/acceptable-separation-distance-asd-flowchart/)**

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Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
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Calculate Acceptable Separation Distance	
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ASD for Blast Over Pressure (ASDBOP)	

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