FINAL SUPPLEMENT to the Four Marine Protected Area Region Environmental Impact Reports for

Regulatory Amendments Allowing Incidental Take During Work on Pre-existing Artificial Structures in Marine Protected Areas

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LIST OF ABBREVIATIONS

AB	Assembly Bill
ASBS	Areas of Special Biological Significance
BLM	US Bureau of Land Management
BOEM	Bureau of Ocean Energy Management
BRTF	Blue Ribbon Task Force
California MPA Network	statewide network of 124 individual marine protected areas and 14 special closures along the 1,100-mile California coast
Caltrans	California Department of Transportation
CCC	California Coastal Commission
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CLSC	California State Lands Commission
Commission	California Fish and Game Commission
СР	Conservation Plan
CSLC	California State Lands Commission
CWA	Clean Water Act
DPS	Distinct Population Segment
EFH	Essential fish habitat
EIR	environmental impact report
EPA	US Environmental Protection Agency
ESA	federal Endangered Species Act
Final Supplement	Final Supplement to the MPA Region EIRs
GHG	greenhouse gas
HAPCs	Habitat Areas of Particular Concern
LCP	local coastal program
marine resource	any living, geological, or cultural marine resource
MBTA	Migratory Bird Treaty Act
MLPA	Marine Life Protection Act
MMA	marine managed area
MMAIA	Marine Managed Areas Improvement Act
MMPA	Marine Mammal Protection Act

MPA	Marine Protected Area
NOAA	National Oceanic and Atmospheric Administration
NOP	notice of preparation
NPDES	National Pollutant Discharge Elimination System
O&M	operation, maintenance, repair, removal, or replacement
PRC	Public Resources Code
RHA	Rivers and Harbors Act of 1899
RWQCBs	regional water quality control boards
SB	Senate Bill
SCP	Scientific collecting permits
SLC	California State Lands Commission
SMCA	State Marine Conservation Area
SMP	State Marine Park
SMR	State Marine Reserve
SMRMA	State Marine Recreational Management Area
SWRCB	State Water Resources Control Board
take	injury, damage, or take
USACE	US Army Corps of Engineers
USFWS	US Fish and Wildlife Service

EXECUTIVE SUMMARY

INTRODUCTION

The California Fish and Game Commission (Commission) is proposing revisions to California Code of Regulations (CCR), Title 14, Division 1, Subdivision 2, Chapter 11, Section 632, Subsection (a)(1) and the addition of Section 632, Subsections (a)(1)(E), (a)(13), (a)(14), and (a)(15) as they apply to pre-existing artificial structures in marine protected areas (MPAs) (collectively, the "project" or "proposed regulatory amendments"). The California Department of Fish and Wildlife (CDFW) has prepared this Final Supplement to the four MPA region environmental impact reports (EIRs) (Final Supplement) on behalf of the Commission, which is the lead agency under the California Environmental Quality Act (CEQA). This executive summary is provided in accordance with State CEQA Guidelines Section 15123. As stated in Section 15123(a), "[a]n EIR shall contain a brief summary of the proposed action and its consequences. The language of the summary should be as clear and simple as reasonably practical." As required by the guidelines, this chapter includes (1) a summary description of the proposed regulatory amendments, (2) a synopsis of environmental impacts and recommended mitigation measures (Table ES-1, presented at the end of this summary), (3) identification of the alternatives evaluated and the environmentally superior alternative, and (4) a discussion of the areas of controversy associated with the project and issues to be resolved.

SUMMARY DESCRIPTION OF THE PROJECT

Background and Project Location

The Commission, through public planning processes conducted from 2004 to 2012 across four study regions along the California coast, established a network of 124 individual MPAs and 14¹ special closures within the four MPA regions (North Coast, North Central Coast, Central Coast, and South Coast) (collectively "California MPA Network" or "California's Network"). Prior to Commission adoption of the MPA regulations for each study region and establishment of California's Network under Section 632, an EIR was prepared for each region by CDFW and certified by the Commission (the MPA Region EIRs).

Different types of marine managed area (MMA) designations are used in California's Network. MMAs are named, discrete geographic marine or estuarine areas seaward of the mean high tide line or the mouth of a coastal river, including any area of intertidal or subtidal terrain, together with its overlying water and associated flora and fauna. They are designated by law or administrative action to protect, conserve, or otherwise manage a variety of resources and their uses. The resources and uses may include living marine resources and their habitats, scenic views, water quality, recreational values, and cultural or geological resources. General areas that are administratively established for recreational or commercial fishing restrictions, such as seasonal or geographic closures or size limits, are not included in this definition. MPAs are primarily intended to protect or conserve marine life and habitat and therefore are a subset of MMAs.

California's Network includes three MPA designations (state marine reserve [SMR], state marine conservation area [SMCA], state marine park [SMP]), one MMA specific designation (state marine recreational management area [SMRMA]), and special closures. For a description of these MPA designations, see Section 2.1.2, "Marine Managed Area Designations Used in California's Network." Each designation differs primarily according to restricted and allowable uses that can occur within each designated area. The more common term "MPA" is used as an umbrella term to refer to all types of protected areas in California's Network.

¹ Fifteen special closures were designated across the entire California coast (CDFW 2016). On January 1, 2019, one special closure in the North Coast region, Rockport Rocks Special Closure, was repealed. Thus, the statewide network of MPAs now consists of 124 individual MPAs and 14 special closures (collectively "California MPA Network" or "California's Network").

Project Location

The project location includes the four coastal planning regions: North Coast, North Central Coast, Central Coast, and South Coast (Figure ES-1). The North Coast region covers approximately 1,027 square miles of state waters, from the California/Oregon border south to Alder Creek near Point Arena (Mendocino County). This region includes six special closures and 20 MPAs (19 MPAs and one SMRMA). The North Central Coast region covers approximately 763 square miles of state waters, from Alder Creek near Point Arena south to Pigeon Point (San Mateo County). This region includes six special closures and 25 MPAs (22 MPAs and three SMRMAs). The Central Coast region covers approximately 1,144 square miles of state waters, from Pigeon Point, south to Point Conception (Santa Barbara County). This region includes no special closures and 29 MPAs (28 MPAs and one SMRMA). The South Coast region covers approximately 2,351 square miles of state waters, from Point Conception south to the California/Mexico border, including state waters around the Channel Islands. This region includes two special closures and 50 MPAs (50 MPAs and no SMRMAs).

Need for the Proposed Regulatory Amendments

Existing leases for artificial structures are recognized in current MPA regulations. MPAs encompass sovereign tidelands and submerged lands within the jurisdiction of the California State Lands Commission (CSLC). Tidelands occur between the ordinary high-water and ordinary low-water mark of tidal waters. Submerged lands reach from the ordinary low-water mark out to the state-federal fixed boundary 3 nautical miles offshore. The following structures and uses on sovereign lands, including tidelands and submerged lands, are subject to authorization through issuance of a lease, permit, or entitlement by CSLC:

- riprap, seawalls, groins, jetties, breakwaters, deflectors, and bulkheads;
- recreational docks, piers, and buoys;
- commercial piers and facilities, docks, moorings, and buoys;
- commercial marinas, restaurants, and clubhouses;
- helicopter pads, decks, and fuel service facilities;
- oil terminals, piers, wharves, warehouses, and storage sites;
- ▶ power line, communications cable, pipeline, intake, and outfall line rights-of-way; and
- ▶ bridges.

The intent of the original MPA designation process was to account for existing legal entitlements, such as CSLC bottom leases, Commission administrative kelp bed leases, tideland and submerged land grants, private tidelands, and any other legal entitlements. During the original MPA designation process in the North Coast and South Coast regions, it was recognized that many of the MPAs included artificial structures and facilities with existing entitlements and that the continued operation, maintenance, repair, removal, or replacement (collectively called "O&M" herein) of these structures and facilities could result in injury, damage, or take (collectively "take") of any living, geological, or cultural marine resources (collectively "marine resources"), which was prohibited in MPA regulations. As a result, in these two regions the MPA regulations were written to specifically allow take of marine resources incidental to O&M of artificial structures and facilities with existing entitlements. However, this regulatory recognition is limited to the North Coast and South Coast regions, and it was later learned that not all MPAs in those regions recognize all existing artificial structures.

O&M required or authorized by lease or permit for some pre-existing structures and facilities take place on a monthly or annual basis, with regular communication occurring between managing agencies. However, many pre-existing artificial structures and facilities, after they are installed, are managed or used occasionally, on an irregular, as-needed basis as required or authorized by lease or permit rather than on a regularly scheduled basis. Although take of marine resources incidental to O&M of some types of artificial structures and facilities was authorized by individual MPA regulations for a limited number of designated MPAs in the North and South Coast regions, the need to allow for take



Source: Kirlin et al. 2013; adapted by Ascent in 2022.

Figure ES-1 California's Marine Protected Area Regions

of marine resources incidental to O&M of pre-existing artificial structures was not incorporated into all individual MPA regulations throughout all the regions. MPA regulations did not include authorization for take of marine resources incidental to required or authorized O&M of other types of pre-existing artificial structures and facilities in these regions, and for any type of pre-existing artificial structure or facility in other regions. Consequently, throughout California's Network, continued O&M of artificial structures and facilities with entitlements established before approval of the MPAs may not be authorized for take of marine resources by their individual MPA regulations. Currently, O&M of pre-existing artificial structures within MPAs have had to be approved on a case-by-case basis, which is time consuming and burdensome for both the leaseholders and CDFW.

If adopted, the proposed regulatory amendments would allow take of marine resources incidental to authorized O&M activities within a designated incidental take buffer zone around pre-existing artificial structures when the structures are being actively serviced. The proposed regulatory amendments apply this allowance to as limited an area and as brief a period as possible to enable the orderly performance of necessary O&M activities. Implementation of the regulatory amendments would not substantially change the frequency, duration, or amount of authorized O&M activities that would occur but would provide a consistent way for CDFW to approve take of marine resources incidental to O&M activities when the need for these activities arises. No other federal, state, or local regulations would be affected by implementation of the proposed regulatory amendments.

Project Objectives

Consistent with, and in furtherance of the Marine Life Protection Act, the objectives of the proposed regulatory amendments are to:

- align MPA regulations with the original intention of the California MPA Network to consider existing leases, permits, and any other legal entitlements that current regulations do not recognize;
- address O&M (i.e., operations, maintenance, repair, removal, or replacement) needs of pre-existing artificial structures in place before MPA designation and those modified or replaced as a result of addressing human health and safety concerns without seeking individual MPA take prohibition exemptions on a case-by-case basis;
- ► maintain the overall prohibitions in MPAs against take (i.e., injury, damage, or take) of marine resources (i.e., any living, geological, or cultural marine resource) to the extent feasible while allowing take incidental to O&M of pre-existing artificial structures; and
- maintain current fishing regulations and allow all other take regulations within designated MPAs to remain in place.

Proposed Regulatory Amendments Applicable to Operation and Maintenance of Pre-Existing Artificial Structures in Marine Protected Areas

The proposed revisions to Subsection 632(a)(1) and the addition of Subsections 632(a)(1)(E), 632(a)(13), 632(a)(14), and 632(a)(15) of the regulations as they apply to pre-existing artificial structures in MPAs are explained below.

PURPOSE OF SUBSECTION 632(A)(1) AMENDMENTS AND NEW SUBSECTION 632(A)(1)(E)

Subsection 632(a)(1) provides definitions and identifies allowable uses for each designation type. Existing definitions for SMPs, SMCAs, and SMRMAs would be amended to allow for O&M of "pre-existing artificial structures," as defined in new Subsection 632(a)(13), as allowed pursuant to any required federal, state, and local permits. In addition, the existing definition for SMR would be amended to specify that in an SMR a discrete, focused area surrounding a pre-existing artificial structure is excluded from the SMR definition and is defined as an SMCA when the structure is being actively

operated, maintained, repaired, removed, or replaced by the leaseholder(s), permittee(s), or their agent(s). Additionally, the SMCA definition will specify that any area within an SMR that is excluded from the boundaries of the SMR is an SMCA.

Current regulations allow for take of marine resources incidental to O&M of pre-existing artificial structures within a limited number of individually specified MPAs. This amendment would update all designation definitions to allow for take of marine resources in discrete, focused areas immediately surrounding pre-existing artificial structures related to the O&M of a pre-existing artificial structure located in an MPA without having to amend individual MPA designations and take regulations. The proposed amendments to these sections would also specify that no marine resources can be retained or possessed as a result of take incidental to pre-existing artificial structure O&M activities.

SMRs do not allow for take except under a scientific collecting permit issued by CDFW pursuant to Section 650 or specific authorization from the Commission for research, restoration, or monitoring purposes. However, a preexisting artificial structure in an MPA could be actively maintained if it is located in an SMCA, SMP, or SMRMA and has specific regulatory allowances for take of marine resources incidental to O&M activities. Thus, reclassifying the immediate area around a pre-existing artificial structure in an SMR as an SMCA while it is being actively operated, maintained, repaired, removed, or replaced is necessary to allow take of marine resources incidental to O&M for the lease duration without specific authorization from the Commission. Because take of marine resources is prohibited in SMRs, reclassification of the incidental take buffer zones in SMRs to SMCAs would temporarily allow for take of marine resources incidental to O&M activities in those areas. The discrete, focused area immediately surrounding pre-existing artificial structures where take of marine resources incidental to O&M is allowed would become an incidental take buffer zone for the duration of the work.

New Subsection 632(a)(1) is also proposed to clarify that take of marine resources for any purposes other than what is specified in the preceding subsections of Subsection 632(a)(1) for each MPA designation type would be unlawful.

PURPOSE OF NEW SUBSECTIONS 632(A)(13), 632(A)(14), AND 632(A)(15)

Subsection 632(a)(13)

Proposed new Subsection 632(a)(13) would include a definition for what qualifies as a "pre-existing artificial structure" in California's Network. Any structure that was manufactured, created, installed, or constructed in state waters including an incidental take buffer zone around the structure, as defined in new Subsection 632(a)(14), pursuant to federal, state, and local authorizations before the specified regional MPA implementation dates, would qualify as a "pre-existing artificial structure."

For certain MPAs, current regulations do not provide a mechanism to operate, maintain, repair, remove, or replace artificial structures that were in place before MPA implementation statewide. In these areas, maintenance of artificial structures is permitted only in the case of a structural emergency and for health and safety considerations. Specific definitions of what qualifies as pre-existing artificial structures and an incidental take buffer zone are needed to allow O&M activities in certain MPAs, without needing to constantly approve work on a case-by-case basis.

Because the MPA designation process was intended to account for existing leases, grants, and any other legal entitlements, any structure that existed before MPA implementation should be allowed to operate in accordance with the lease conditions without limitation related to MPA regulations. Although these amendments would be applied statewide, given the regional design and implementation process for MPAs, pre-existing artificial structures would be defined by the regional implementation dates when the Commission adopted the MPAs, not when California's Network was completed. In addition, artificial structures constructed or modified because of public health and safety concerns would be considered pre-existing artificial structures regardless of installation date under the amended regulations.

Subsection 632(a)(14)

Proposed new Subsection 632(a)(14) would include a definition for "incidental take buffer zone for pre-existing artificial structures (incidental take buffer zones)." Within a maximum distance of 250 feet in any direction from the pre-existing artificial structure, not including areas above the mean high tide line, take incidental to the O&M of an artificial structure located in an MPA would be allowed.

To limit take of marine resources protected in an MPA, changes to current take prohibitions would occur only in an incidental take buffer zone established around the pre-existing artificial structure. This incidental take buffer zone would allow take of marine resources incidental to O&M of the artificial structure to occur while still maintaining the integrity of the regulations applied to the surrounding MPA. The incidental take buffer zone would include a discrete, focused area immediately surrounding pre-existing artificial structures where injury, damage, or take of marine resources incidental to O&M is allowed. The incidental take buffer zone surrounding a pre-existing artificial structure shall be 250 feet in any direction, not including areas above the mean high tide line. California law provides that the state owns all land below the "ordinary high-water mark" (California Civil Code Section 670). The "ordinary high-water mark" is to be determined by the average height of all high tides at a given location over a period of 18.6 years (*Borax Consolidated, Ltd. V. Los Angeles*, 296 U.S. 10, 1935). This height is referred to as the mean high tide line.

Recognizing that piers are the largest structures located in MPAs, an incidental take buffer zone that would meet the O&M requirements of piers should have space sufficient for similar work on smaller structures. Barges are frequently used for maintenance of large piers, and a typical barge size is around 250 feet by 70 feet (Chakrabarti et al. 2005). An incidental take buffer zone of 250 feet is intended to be adequate for typical O&M work on piers and other artificial structures. Using the 250-foot distance around pre-existing artificial structures, including the surrounding water column, creates sufficient space for O&M of pre-existing artificial structures and maintains the integrity of take prohibitions in the rest of an MPA area outside of that distance.

Subsection 632(a)(15)

Proposed new Subsection 632(a)(15) would include a definition for "identification and permit or lease requirement for pre-existing artificial structure activities" that requires any leaseholder(s), permittee(s), or their agent(s) to have a valid government-issued form of identification, as well as a digital or printed copy of the permit or lease while conducting O&M of a pre-existing artificial structure. Acceptable forms of identification will include a driver's license, a US state photo identification card, a federally recognized tribal photo identification card, or an international passport. Valid identification and a copy of the lease or permit shall be exhibited immediately upon demand by any person authorized by CDFW to enforce this regulation.

Official identification is necessary to provide law enforcement and/or wildlife officers the ability to verify the identity of individuals conducting authorized activities related to O&M of pre-existing artificial structures. It is also necessary to require a copy of the lease or permit to verify that the activities are pursuant to a valid lease or permit.

Operations and Maintenance Activities Allowed with Implementation of the Proposed Regulatory Amendments

The proposed regulatory amendments would allow for continued O&M of pre-existing artificial structures listed in Section ES.2.3, above. All activities would occur in the incidental take buffer zone immediately surrounding the artificial structures. Existing structures are designed to have long-term life spans, typically remaining in place between 10 and 30 years. Most of the existing structures require little to no regular maintenance. O&M activities for these structures are limited to repair and replacement of the structures or portions of the structures on an as-needed basis. The proposed regulatory amendments would not result in a substantial change in the frequency of O&M of any pre-existing artificial structures. In addition, any O&M activities would continue to be subject to federal, state, and local permits, as applicable. These regulations would not expand opportunities to install new structures in MPAs.

A variety of activities associated with O&M of pre-existing artificial structures may occur in the incidental take buffer zone. Descriptions of O&M activities for the most common types of structures are provided in Section 2.4, "Operations and Maintenance Activities Allowed with Implementation of the Proposed Regulatory Amendments," of this Final Supplement to guide the environmental analysis. These activities represent the most intensive O&M activities that are expected to occur related to artificial structures and are examples of reasonably foreseeable compliance responses to the regulatory amendments. Other, less intensive activities may occur.

ENVIRONMENTAL IMPACTS AND RECOMMENDED MITIGATION MEASURES

Project-Specific Impacts

This Final Supplement has been prepared pursuant to CEQA (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (CCR Section 15000 et seq.). It adds to environmental information and analysis in the four MPA Region EIRs and evaluates the potential physical environmental effects associated with reasonably foreseeable compliance responses to the proposed regulatory amendments to Section 632 (14 CCR Section 632). The Commission, which is the lead agency for the project, has the principal responsibility for approving and carrying out the project and for ensuring that the requirements of CEQA have been met. After public review of the Final Supplement and preparation of the Final Supplement is complete, the Commission is responsible for certifying that the Supplement adequately evaluates the impacts of the project.

Table ES-1, presented at the end of this summary, provides a summary of the environmental impacts for the proposed regulatory amendments. The table identifies the level of significance of the impact before mitigation, recommended mitigation measures, if any, and the level of significance of the impact after implementation of any mitigation measures.

Significant and Unavoidable Impacts and Cumulative Impacts

Under State CEQA Guidelines Section 15382, a significant effect on the environment is defined as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance."

Sections 3.2 through 3.4 of this Final Supplement describe in detail the environmental impacts that would result from implementing the proposed regulatory amendments, and Chapter 4 presents a discussion of the cumulative impacts associated with the project. Table ES-1 presents a summary of environmental impacts and their level of significance. The project would not result in any potentially significant or significant and unavoidable impacts.

ALTERNATIVES TO THE PROPOSED PROJECT

Alternatives related to MPA designations were evaluated in the four MPA Region EIRs. For the North Coast Study Region EIR, alternatives are discussed in Chapter 2, "Project Description," and Chapter 8, "Alternatives Analysis" (Commission and CDFG 2012); North Central Coast MPAs Project EIR, Chapter 2, "Project Description," and Chapter 9, "Alternatives Analysis" (CDFG 2009); Central Coast MPAs Project EIR, Chapter 2, "Project Description," and Chapter 9, "Alternatives Analysis" (CDFG 2007); and South Coast Study Region EIR, Chapter 10, "Alternatives," (Commission 2010). The following additional alternatives relevant to the project are evaluated in this Final Supplement:

- Alternative 1: No Project Alternative assumes that no regulatory amendments would be made and therefore that O&M of pre-existing artificial structures in many MPAs would continue to conflict with the MPA regulations.
- ► Alternative 2: Reduced Buffer Zone Alternative would establish an incidental take buffer zone around pre-existing artificial structures in MPAs of 100 feet in any direction from the pre-existing artificial structure, not including areas above the mean high tide line.

Further details on these alternatives, and an evaluation of environmental effects relative to the proposed project, are provided in Chapter 5, "Alternatives."

Environmentally Superior Alternative

CEQA calls for the identification of an environmentally superior alternative in an EIR but gives no definition for the term (State CEQA Guidelines Section 15126.6(e)). For the purposes of this Final Supplement, the environmentally superior alternative is the alternative that would result in the fewest potentially significant impacts while achieving most of the basic project objectives. Table ES-2 presents a comparison of the environmental effects of each alternative relative to the proposed project and identifies whether an alternative would avoid any significant and unavoidable impact of the proposed project. The proposed project would not result in any potentially significant or significant and unavoidable impacts. Therefore, while Alternative 2 has the potential to result in slightly less impact than the proposed project, it would not avoid any significant and unavoidable impacts. In addition, Alternative 2 would not fully meet the project objective to address O&M needs of pre-existing artificial structures because a 100-foot incidental take buffer zone would not allow for O&M of the largest structures requiring large equipment (e.g., barges in excess of 100 feet in length). It would also not meet the objective of addressing O&M needs without seeking individual MPA take prohibition exemptions on a case-by-case basis because any O&M activities requiring an area larger than 100 feet would have to be approved individually.

AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

A notice of preparation (NOP) was distributed for the proposed regulatory amendments on February 23, 2023, to responsible agencies, interested parties, and organizations, as well as private organizations and individuals that may have an interest in the project. The purpose of the NOP was to provide notification that a Supplement to the four MPA Region EIRs was being prepared evaluating the proposed regulatory amendments and to solicit input on the scope and content of the environmental document. The NOP and responses to the NOP are included in Appendix A of this Final Supplement. The following concerns and issues were expressed during the scoping process:

- ▶ implementing efficiency of the regulatory amendments, and
- ▶ compliance with regulations pertaining to cultural and tribal cultural resources.

Following close of the public scoping period, a Draft Supplement was prepared that added to the environmental information and analysis in the four MPA Region EIRs and evaluated the potential environmental impacts associated with reasonably foreseeable compliance responses to the proposed regulatory amendments to 14 CCR Section 632. The Draft Supplement was circulated for public review and comment for a period of 45 days, from July 31, 2023, through September 13, 2023. CDFW convened a public meeting on the Draft Supplement via the Zoom virtual meeting platform on August 31, 2023. Interested persons and organizations had an opportunity to provide oral comments at the public meeting as well as submit their written comments on the Draft Supplement to CDFW on behalf of the Commission during the public review and comment period; however, no members of the public or agencies attended the public meeting, and no written comments were received during the public review and comment period. Therefore, no remaining areas of controversy or issues to be resolved are known to exist. This Final Supplement is a reprint of the Draft Supplement, except that references to "Draft Supplement" have been changed to "Final Supplement" where appropriate, and a summary of the Draft Supplement public review process has been included.

Table ES-1 Summary of Impacts and Mitigation Measures

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Biological Resources			
Impact 3.2-1: Substantially Affect Marine Species through Entanglement, Collisions, or Artificial Lighting	LTS	No mitigation is required for this impact.	LTS
While authorized operation, maintenance, repair, removal, or replacement (collectively referred to as "O&M" herein) activities have the potential to adversely affect sea turtles, fish, and marine invertebrate species, marine mammals, and birds through entanglement with equipment, collision with vessels, or artificial lighting, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow injury, damage, or take (collectively referred to as "take" herein) of any living, geological, or cultural marine resource (collectively referred to as "marine resource") incidental to authorized O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of O&M activities that would occur, the project would not substantially change O&M effects on marine species through entanglement, collision, or artificial lighting.			
Impact 3.2-2: Substantially Affect Marine Mammals, Sea Turtles, and Fish Species through Acoustic Effects While O&M of pre-existing artificial structures could result in harassment, as defined by the MMPA, to marine mammals, if present, through temporary displacement or injury from underwater noise or pressure from activities such as pile driving, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow take of marine resources incidental to authorized O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of authorized O&M activities that would occur, the project would not result in a substantial increase in the risk of adverse effects of acoustic impacts on marine mammals, sea turtles, or fish species.	LTS	No mitigation is required for this impact.	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact 3.2-3: Substantially Affect Marine Species and Habitat through Water Quality Effects While O&M of pre-existing artificial structures could adversely affect marine mammals, birds, sea turtles, marine invertebrates, fish species, and habitat for these species through water quality effects from suspension of sediments during in-water work that could result in increased turbidity and exposure to contaminants or from accidental release of contaminants from equipment or vessel leaks and spills, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow take of marine resources incidental to authorized O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of authorized O&M activities that would occur, the project would not result in a substantial increase in the risk of adverse water quality effects on marine mammals birds sea turtles marine invertebrates fish species or their babitat	LTS	No mitigation is required for this impact.	LTS
Impact 3.2-4: Substantially Affect Marine Mammal Haul-Out and Foraging Areas and State or Federally Listed Birds' Foraging Behavior While O&M of pre-existing artificial structures could result in harassment, as defined by the MMPA, to marine mammals, if present, through short-term disturbance of normal behavior, and O&M activities could also adversely affect birds listed by the California Endangered Species Act (CESA) and the ESA by altering foraging behavior, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow take of marine resources incidental to authorized O&M of pre-existing artificial structures would not change the frequency, duration, or amount of O&M activities that would occur, the project would not substantially affect marine mammal haul-outs or foraging and state or federally listed birds' foraging behavior.	LTS	No mitigation is required for this impact.	LTS
Impact 3.2-5: Result in Disturbance to or Loss of Bird Nests While O&M of pre-existing artificial structures could adversely affect CESA- and ESA- listed birds, bird species listed as CDFW species of special concern, and common nesting birds through disturbance or removal of nests, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow take of marine resources incidental to authorized O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of O&M activities that would occur, the project would not result in more disturbance or loss of bird nests.	LTS	No mitigation is required for this impact.	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact 3.2-6: Result in Loss of Fish from Entrainment or Impingement and Marine Invertebrates by Removal	LTS	No mitigation is required for this impact.	LTS
While O&M of pre-existing artificial structures has the potential to adversely affect fish species through entrainment or impingement and adversely affect marine invertebrates and their habitat through disturbance or direct removal of existing marine organisms, the proposed regulatory amendments would not substantially change authorized O&M activities. Because the proposed regulatory amendments to allow take of marine resources incidental to authorized O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of O&M activities that would occur, the project would not result in the substantial loss of fish species or invertebrates.			
Impact 3.2-7: Result in Loss of ESA-Listed Abalone While O&M of pre-existing artificial structures has the potential to adversely affect black and white abalone and their habitat, including black abalone critical habitat, if pre-existing artificial structures provide habitat or are sited in rocky habitat, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments would not change the frequency, duration, or amount of O&M activities that would occur, the project would not result in a substantial increase in the risk of loss of black and white abalone and their habitat.	LTS	No mitigation is required for this impact.	LTS
Impact 3.2-8: Result in the Introduction or Spread of Aquatic Invasive Species While O&M of pre-existing artificial structures could result in the introduction or spread of aquatic invasive species, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow take of marine resources incidental to authorized O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of O&M activities that would occur, the project would not result in the introduction or spread of aquatic invasive species.	LTS	No mitigation is required for this impact.	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact 3.2-9: Substantially Affect Eelgrass While sedimentation and shading associated with O&M of pre-existing artificial structures could decrease light penetration from turbidity and settling of resuspended sediments, which could adversely affect eelgrass by decreasing growth rates of light-dependent species, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow take of marine resources incidental to authorized O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of O&M activities that would occur, the project would not substantially affect eelgrass.	LTS	No mitigation is required for this impact.	LTS
Impact 3.2-10: Substantially Affect Special-Status Species and Habitat That Occur on Tidelands and Adjacent Terrestrial Habitats through O&M of Pre-Existing Artificial Structures While O&M of pre-existing artificial structures that occur partially or completely on tidelands or that occur immediately adjacent to terrestrial habitats could result in indirect adverse effects on special-status plants, special-status wildlife, or sensitive habitats (e.g., waters of the United States, waters of the state, riparian habitat, sensitive natural communities) if present within the footprint or in the vicinity of pre-existing artificial structures, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow take of marine resources incidental to O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of O&M activities that would occur, the project would not substantially affect habitat in tidelines or adjacent terrestrial areas.	LTS	No mitigation is required for this impact.	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Archaeological, Historical, and Tribal Cultural Resources			
Impact 3.3-1: Cause a Substantial Adverse Change in the Significance of a Historical Resource While O&M of pre-existing artificial structures could result in damage to or destruction	LTS	No mitigation is required for this impact.	LTS
or a historic building or structure, thereby resulting in a substantial adverse change in the significance of a historical resource as defined in State CEQA Guidelines Section 15064.5, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow injury, damage, or take (collectively "take") of any living, geological, or cultural marine resource (collectively "marine resource") incidental to O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of authorized O&M activities that would occur, the project would not result in a substantial adverse change in the significance of a historical resource.			
Impact 3.3-2: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources	LTS	No mitigation is required for this impact.	LTS
While O&M activities that would disturb the sea floor could result in discovery or damage of yet-undiscovered submerged archaeological resources as defined in State CEQA Guidelines Section 15064.5, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow take of marine resources incidental to O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of authorized O&M activities that would occur, the project would avoid impacts on archaeological resources.			

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact 3.3-3: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource While O&M of pre-existing artificial structures could damage submerged tribal cultural resources, if present, through sea floor–disturbing activities, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow take of marine resources incidental to O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of authorized O&M activities that would occur, the project would not result in a substantial adverse change in the significance of a tribal cultural resource, if present. Furthermore, the Commission	LTS	No mitigation is required for this impact.	LTS
and CDFW sent notification for consultation to 317 tribes. One response was received during the 30-day response period for AB 52 as defined in CEQA Section 21080.3.1. Consultation with this Tribe has concluded. Water Quality			
Impact 3.4-1: Violate Any Water Quality Standards or Waste Discharge Requirements or Otherwise Substantially Degrade Surface Water Quality or Conflict with Implementation of a Water Quality Control Plan	LTS	No mitigation is required for this impact.	LTS
While O&M of pre-existing artificial structures in MPAs could include sea floor- disturbing activities, such as directional drilling, pile installation, trenching, dredging, and backfilling within the 250-foot incidental take buffer zones of structures, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow injury, damage, or take (collectively "take") of any living, geological, or cultural marine resource (collectively "marine resource") incidental to O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of authorized O&M activities that would occur, implementation of the regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur. Therefore, the project would not violate water quality standards or waste discharge requirements, substantially degrade surface water quality, or conflict with implementation of a water quality control plan.			

Table ES-2 Summary of Environmental Effects of the Alternatives Relative to the Proposed Regulatory Amendments

Environmental Topic	Proposed Project	Alternative 1: No Project Alternative	Alternative 2: Reduced Incidental Take Buffer Zone Alternative	
Biological Resources	LTS	Similar	Same or Slightly Less	
Archaeological, Historical, and Tribal Cultural Resources	LTS	Similar	Same or Slightly Less	
Water Quality	LTS	Similar	Same or Slightly Less	

Note: LTS = less than significant impact.

Source: Compiled by Ascent in 2023.

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1 INTRODUCTION

To comply with the Marine Life Protection Act (MLPA) (California Fish and Game Code Sections 2850–2863), the MLPA Initiative (a public-private partnership between the California Department of Fish and Wildlife [CDFW], the California Natural Resources Agency, and the Resources Legacy Fund Foundation) was formed to direct the establishment of a statewide network of marine protected areas (MPAs) along the 1,100-mile California coast. The network was designed through a series of public planning processes organized into four MPA study regions: the North Coast (California/Oregon border to Alder Creek near Point Arena), North Central Coast (Alder Creek near Point Arena to Pigeon Point), Central Coast (Pigeon Point to Point Conception), and South Coast (Point Conception to the California/Mexico border). CDFW prepared an environmental impact report (EIR) for each of the four regions to create the regional MPAs (the four EIRs are hereafter collectively called the MPA Region EIRs).

At the end of each study region planning process, proposed regulations for establishing the regional MPAs were considered by the California Fish and Game Commission (Commission). The Commission, which has the sole authority to adopt regulations that create MPAs under the MLPA, certified the four separate EIRs and adopted the regulations during the period of 2007 to 2012. The MPA Region EIRs evaluated the environmental impacts of proposed individual MPA designations within each region and the associated regulations for each proposed designated MPA. Ultimately, a total of 124 individual MPAs and 14 special closures¹ within the four planning regions (North Coast, North Central Coast, Central Coast, and South Coast) (collectively, "California MPA Network" or "California's Network") were approved by the Commission.

MPAs are specific marine or estuarine areas designed to protect or conserve marine life, resources, and habitat. Different classifications are used in California's Network, reflecting a range of allowed uses and resource protection levels. The classifications consist of three MPA designations (state marine reserve [SMR], state marine conservation area [SMCA], state marine park [SMP]), a marine managed area (state marine recreational management area [SMRMA]), and special closures. For a description of these MPA designations, see Section 2.1.2, "Marine Managed Area Designations Used in California's Network." Each designation differs primarily according to restricted and allowable uses that can occur within each designated area. The more common abbreviation "MPA" is used as an umbrella term to refer to all types of protected areas in California's Network.

Artificial structures with entitlements that existed before establishment of the MPAs occupy many individual MPAs in California's Network. Although injury, damage, or take (collectively called "take" herein) as well as possession of any living, geological, or cultural marine resource (collectively called "marine resources" herein) incidental to operation, maintenance, repair, removal, or replacement (collectively referred to as O&M) of some types of artificial structures and facilities was authorized by the MPA regulations for a limited number of designated MPAs within two of the regions, the need to allow for take of marine resources incidental to O&M of existing artificial structures was not incorporated into the individual MPA regulations throughout all of the regions. Therefore, currently, Title 14 of the California Code of Regulations (CCR) Section 632 includes regulations which impose a regulatory constraint that unreasonably impedes required O&M of existing artificial structures.

This environmental document is a Final Supplement to the MPA Region EIRs (Final Supplement), prepared in accordance with Sections 15162 and 15163 of the California Environmental Quality Act (CEQA) Guidelines (State CEQA Guidelines). It adds to environmental information and analysis in the MPA Region EIRs and evaluates the potential environmental impacts associated with reasonably foreseeable compliance responses to the proposed regulatory amendments to Section 632 (14 CCR Section 632). If adopted, the proposed regulatory amendments would allow take of marine resources incidental to O&M activities within a discrete, focused area immediately surrounding pre-existing artificial structures when the structures are being actively maintained. The proposed regulatory amendments apply this allowance to as limited an area and as brief a time period as possible to enable the orderly performance of necessary O&M activities.

¹ Originally, 15 special closures were designated along the entire California coast (CDFW 2016). On January 1, 2019, one special closure in the North Coast region, Rockport Rocks Special Closure, was repealed. Thus, the California MPA Network now consists of 124 MPAs and 14 special closures.

This chapter of the Final Supplement provides information on the:

- ▶ proposed amendments to 14 CCR Section 632 that are the subject of environmental analysis,
- ▶ purpose and intended uses of this Final Supplement,
- scope of this Final Supplement,
- agency roles and responsibilities,
- public review process,
- ▶ organization of this Final Supplement, and
- documents incorporated by reference.

1.1 SUMMARY OF PROPOSED AMENDMENTS TO 14 CCR SECTION 632 REQUIRING ENVIRONMENTAL ANALYSIS

This section presents a synopsis of the project characteristics. For further information on the proposed project, see Chapter 2, "Description of Proposed Regulatory Amendments."

Artificial structures with entitlements that existed before establishment of the MPAs are in many MPAs in California's Network. Although some MPAs have individual regulations allowing for the incidental take of marine resources during the O&M of these pre-existing artificial structures, other MPAs do not. The Commission is proposing to revise the MPA designation of discrete, focused areas immediately surrounding pre-existing artificial structures within SMRs from SMR to SMCA when the structures are actively undergoing O&M. The Commission is also proposing to update SMCA, SMP, and SMRMA designation definitions to allow for incidental take of marine resources in the discrete, focused area immediately surrounding pre-existing artificial structures (hereafter referred to as "incidental take buffer zone") during O&M of the structure for the duration of the structure's lease. This limited regulatory change avoids the need to amend individual MPA designations or regulations.

The amendment would add three new subsections to 14 CCR Section 632(a) and revise existing Section 632(a)(1). The new subsections would (1) define what qualifies as a pre-existing artificial structure in a designated MPA; (2) define an incidental take buffer zone within which take of any marine resource would be allowed around pre-existing artificial structures incidental to authorized O&M activities; and (3) specify identification and permit or lease requirements for O&M of pre-existing artificial structures. In addition, Section 632(a)(1) would be amended to revise the MPA designation of SMR to SMCA for the proposed incidental take buffer zone around pre-existing artificial structures only when structures in SMRs are being actively operated, maintained, repaired, removed, or replaced to allow take of any marine resources to occur incidental to authorized O&M activities. A new subsection would also be added to Section 632(a)(1) to clarify that no take of any marine resources other than that specified for each MPA designation type in this section would be lawful. These proposed amendments would not affect current recreational fishing regulations applicable to the different types of MPAs designated in California's Network, and all other marine resource protection regulations that were implemented after the MPAs were designated would remain in place.

1.2 PURPOSE AND INTENDED USES OF THIS FINAL SUPPLEMENT

As a Final Supplement to the MPA Region EIRs, this document is a "supplement to an EIR" prepared in accordance with Sections 15162 and 15163 of the State CEQA Guidelines. Section 15162 of the State CEQA Guidelines states that a subsequent EIR should be prepared if an EIR has been certified for a project, but one or more of the following conditions are met:

- Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
 - (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - (C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Pursuant to Section 15163 of the State CEQA Guidelines, a lead or responsible agency may choose to prepare a supplement to an EIR, rather than a subsequent EIR, if:

- (1) Any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and
- (2) Only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.

The updates and additions of environmental information are minor, so a Final Supplement has been prepared for public review. This Final Supplement and the MPA Region EIRs together constitute the entire CEQA document for consideration of the proposed regulatory amendments. The MPA Region EIRs are available by request via R7CEQA@wildlife.ca.gov. The four MPA Region EIRs were prepared before adoption of applicable statutory and regulatory requirements related to the Americans with Disabilities Act for documents posted and made available on internet websites and therefore cannot be posted online but can be obtained via an informational request to CDFW.

1.3 SCOPE OF THIS FINAL SUPPLEMENT

The proposed regulatory amendments have been found to result in the need to update and supplement environmental information on a limited set of environmental topics. In other topic areas, the proposed regulatory amendments would not result in any changes in environmental effects, so they have been adequately covered in the MPA Region EIRs. This Final Supplement includes an evaluation of the following three environmental topic areas:

- biological resources;
- archaeological, historical, and tribal cultural resources; and
- water quality.

Minor additions and changes to the previous discussions of these environmental topic areas are needed to make the MPA Region EIRs adequate regarding the analysis of the proposed regulatory amendments. Other standard CEQAmandated issues (e.g., cumulative impacts, growth-inducing impacts, significant and unavoidable impacts, alternatives) also are covered in this Final Supplement.

Under CEQA and the State CEQA Guidelines, a lead agency may limit an EIR's discussion of environmental effects when such effects are not considered potentially significant (CEQA Section 21002.1[e]; State CEQA Guidelines Sections 15128, 15143). Furthermore, a supplement to an EIR need contain only the information necessary to make the previous EIR adequate for the project as revised (State CEQA Guidelines Section 15163[b]). Information used to determine which impacts would be potentially significant was derived from review of the MPA Region EIRs and other applicable planning documents; the results of updated records searches; feedback from public and agency consultation; and comments received on the notice of preparation (NOP) (see Appendix A of this Final Supplement).

The NOP was distributed on February 23, 2023, to responsible and trustee agencies, interested parties, and organizations, as well as private organizations and individuals that may have an interest in the project. The purpose of the NOP was to provide notification that a Supplement to the MPA Region EIRs was being prepared and to solicit input on the scope and content of the environmental document. As a result of the review of existing information and the scoping process, it was determined that the issue areas listed above should be evaluated in this Final Supplement. Further information on the NOP and scoping process is provided below in Section 1.5, "Public Review Process."

1.4 AGENCY ROLES AND RESPONSIBILITIES

1.4.1 Lead Agency

The Commission is the lead agency for approving and carrying out the project and for confirming that the requirements of CEQA have been met. CDFW is aiding the Commission staff in preparation of the Supplement. After the public review process for the Supplement is complete, the Commission will consider the previous MPA Region EIRs as revised by the Supplement, determine whether the Supplement and MPA Region EIRs comply with CEQA, make a finding under State CEQA Guidelines Section 15091 for each significant effect applicable to the proposed regulatory amendments, and determine whether to certify the Supplement to the EIRs (see State CEQA Guidelines Section 15090) and approve the proposed regulatory amendments.

1.4.2 Trustee and Responsible Agencies

A trustee agency is a state agency that has jurisdiction by law over natural resources that are held in trust for the people of the State of California. Trustee agencies that have jurisdiction over resources potentially affected by the project are CDFW, the California Department of Parks and Recreation, the California State Lands Commission, and the University of California (Natural Land and Water Reserve System).

Responsible agencies are public agencies, other than the lead agency, that have discretionary-approval responsibility for reviewing, carrying out, or approving elements of a project. In this case, the proposed project is a change to a regulation. The California Fish and Game Commission would consider adoption of the modifications to existing regulations, and CDFW, acting on behalf of the Commission, would be responsible for implementing the modifications. There are no other responsible agencies with authority to implement the regulations.

1.5 PUBLIC REVIEW PROCESS

As identified above in Section 1.3, "Scope of This Final Supplement," in accordance with the State CEQA Guidelines, an NOP of a Supplement to the MPA Region EIRs was distributed for a 30-day review period starting on February 23, 2023, and ending on March 24, 2023. The NOP and responses to the NOP are included in Appendix A of this Final Supplement.

The Draft Supplement was circulated for public review and comment for a period of 45 days, from July 31, 2023, through September 13, 2023. CDFW convened a public meeting on the Draft Supplement via the Zoom virtual meeting platform on August 31, 2023. A public notice of availability of the Draft Supplement and announcement of the public meeting was published in six newspapers that serve the coastal communities of California and emailed to all organizations and individuals previously requesting notice. The Commission provided an electronic copy of the complete Draft Supplement with appendices and the public notice to the State Clearinghouse, which distributed the Draft Supplement and notice of availability to all interested state agencies for review and comment. The Draft Supplement with associated appendices was also made available for review online at https://fgc.ca.gov/Regulations/2023-New-and-Proposed#632.

Interested persons and organizations had an opportunity to provide oral comments at the public meeting as well as submit their written comments on the Draft Supplement to CDFW on behalf of the Commission during the public review and comment period; no members of the public or agencies attended the public meeting, and no written comments were received during the public review and comment period. Upon completion of the public review and comment period, this Final Supplement was prepared. This Final Supplement is a reprint of the Draft Supplement, except that references to "Draft Supplement" have been changed to "Final Supplement" where appropriate, and this summary of the Draft Supplement public review process has been included.

1.6 FINAL SUPPLEMENT ORGANIZATION

This Final Supplement is organized into chapters, as identified and briefly described below.:

- ► The "Executive Summary": This summary introduces the Supplement; provides a summary of the environmental review process, effects found not to be significant, and key environmental issues; and lists significant impacts and mitigation measures to reduce significant impacts to a less-than-significant level.
- Chapter 1, "Introduction": This chapter provides a description of the proposed amendments, the purpose and intended uses of this Final Supplement, the scope of this Final Supplement, lead and responsible agencies, and the public review process.
- Chapter 2, "Description of Proposed Regulatory Amendments": This chapter describes the location, background, and goals and objectives for the project and describes the project elements in detail.
- Chapter 3, "Environmental Impacts and Mitigation Measures": The sections in this chapter evaluate the expected environmental impacts generated by the project, arranged by subject area (i.e., biological resources; archaeological, historical, and tribal cultural resources; and water quality). In each subsection of Chapter 3, the regulatory background, existing conditions, analysis methodology, and thresholds of significance are described. The anticipated changes to the existing conditions resulting from reasonably foreseeable compliance responses to the proposed regulatory amendments are then evaluated for each subject area. For any significant or potentially significant impact that would result from the reasonably foreseeable compliance responses, mitigation measures are presented, and the level of impact significance after mitigation is identified. Environmental impacts are numbered sequentially in each section (e.g., Impact 3.2-1, Impact 3.2-2). Any required mitigation measures are numbered to correspond to the impact numbering; therefore, the mitigation measure for Impact 3.2-2 would be Mitigation Measure 3.2-2.
- Chapter 4, "Cumulative Impacts": This chapter provides information required by CEQA regarding cumulative impacts that would result from the contribution of any adverse impacts of the project to significant cumulative effects from other past, present, and probable future projects causing related impacts.
- ► Chapter 5, "Alternatives": This chapter evaluates alternatives to the project, including alternatives considered but eliminated from further consideration, the No Project Alternative, and one alternative to the proposed regulatory amendments. The environmentally superior alternative is identified.
- ► Chapter 6, "Other CEQA Sections": This chapter evaluates growth-inducing impacts and irreversible and irretrievable commitment of resources and discloses any significant and unavoidable adverse impacts.

- Chapter 7, "References": This chapter identifies the documents, websites, and individuals used as sources for the analysis.
- ► Chapter 8, "Report Preparers": This chapter identifies the preparers of this document.

1.7 INCORPORATION BY REFERENCE

In accordance with Section 15150 of the State CEQA Guidelines, this Final Supplement incorporates the following documents by reference:

- California Department of Fish and Game. 2006 (November). Draft Environmental Impact Report: California Marine Life Protection Act Initiative – Central Coast Marine Protected Areas Project. State Clearinghouse [SCH] No. 2006072060. Marine Region. Monterey, CA. Prepared by Jones & Stokes. Oakland, CA.
- California Department of Fish and Game. 2007 (March). Final Environmental Impact Report: California Marine Life Protection Act Initiative – Central Coast Marine Protected Areas Project. SCH No. 2006072060. Marine Region. Monterey, CA. Prepared by Jones & Stokes. Oakland, CA.
- California Department of Fish and Game. 2009 (March). Draft Environmental Impact Report: California Marine Life Protection Act Initiative – North Central Coast Marine Protected Areas Project. SCH No. 2008062028. Sacramento, CA. Prepared by Jones & Stokes. Oakland, CA.
- California Department of Fish and Game. 2009 (July). Final Environmental Impact Report: California Marine Life Protection Act Initiative – North Central Coast Marine Protected Areas Project. SCH No. 2008062028. Sacramento, CA. Prepared by Jones & Stokes. Oakland, CA.
- California Fish and Game Commission. 2010 (August). Draft Environmental Impact Report: California Marine Life Protection Act Initiative, South Coast Study Region. SCH No. 2010071012. Sacramento, CA. Prepared by URS. Santa Barbara, CA.
- California Fish and Game Commission. 2010 (December). Final Environmental Impact Report: California Marine Life Protection Act Initiative – South Coast Marine Protected Areas Project. SCH No. 2010071012. Sacramento, CA.
 Prepared by URS. Santa Barbara, CA.
- California Fish and Game Commission and California Department of Fish and Game. 2012 (March). Marine Life Protection Act – North Coast Study Region Draft Environmental Impact Report. SCH No. 2011092029. Sacramento, CA. Prepared by Horizon Water and Environment. Oakland, CA.
- California Fish and Game Commission and California Department of Fish and Game. 2012 (May). Marine Life Protection Act – North Coast Study Region Final Environmental Impact Report. SCH No. 2011092029. Sacramento, CA. Prepared by Horizon Water and Environment. Oakland, CA.

2 DESCRIPTION OF PROPOSED REGULATORY AMENDMENTS

2.1 BACKGROUND AND NEED FOR THE AMENDMENTS

2.1.1 Marine Life Protection Act Initiative

The Marine Life Protection Act (MLPA) (Chapter 10.5, Sections 2850–2863 of Division 3 of the California Fish and Game Code), passed in 1999 by the California Legislature, directed the California Department of Fish and Wildlife (CDFW) to redesign California's previously existing system of 63 marine protected areas (MPAs) covering 2.7 percent of state waters (with less than 0.25 percent in no-take MPAs) to increase its coherence and effectiveness for protecting the state's marine life, habitats, and ecosystems. Rather than attempting to design a single MPA network for the entire state at one time, the MLPA Initiative (a public-private partnership between CDFW, the California Natural Resources Agency, and the Resources Legacy Fund Foundation) called for the design of a statewide network of MPAs. The design of the network was managed and guided by a Blue Ribbon Task Force (BRTF), appointed by the MLPA Initiative, through a series of planning processes implemented in geographic study regions. The coastal waters of the state were organized into study regions, including the North Coast, North Central Coast, Central Coast, and South Coast (Figure 2-1).

From 2004 to 2012, the BRTF directed and informed science-guided and stakeholder-driven MPA design and siting processes for the four coastal regions. At the end of each study region process, the BRTF made recommendations of MPAs to be considered by the Commission for creation through adoption of regulations. The Commission has the sole authority to adopt regulations to establish MPAs under the MLPA. The Commission prepared environmental impact reports (EIRs) for each of the four regional study areas, referred to herein collectively as the MPA Region EIRs. After certifying each EIR and adopting the region's MPA regulations, the MPA designations became effective in the following order: Central Coast (effective date September 21, 2007), North Central Coast (effective date May 1, 2010), South Coast (effective date January 1, 2012), and North Coast (effective date December 19, 2012).

By December 2012, the MPA planning processes for the four coastal regions were completed, resulting in a comprehensive, statewide ecologically connected network of 124 MPAs and 15 special closures across the entire California coast (CDFW 2016). On January 1, 2019, one special closure in the North Coast region, Rockport Rocks Special Closure, was repealed. Thus, the statewide network of MPAs now consists of 124 individual MPAs and 14 special closures within the four MPA regions (North Coast, North Central Coast, Central Coast, and South Coast) (collectively "California MPA Network" or "California's Network"), encompassing approximately 855 square miles (852 square miles in MPAs and 3.3 square miles in special closures), or 16 percent of coastal state waters.

2.1.2 Marine Managed Area Designations Used in California's Network

Different types of marine managed area (MMA) designations are used in California's Network. These designations are defined in the Marine Managed Areas Improvement Act (MMAIA), a companion to the MLPA (Public Resources Code [PRC] Sections 36700 and 36710). The MMAIA provides a standardized classification system for all MMAs.

MMAs are named, discrete geographic marine or estuarine areas seaward of the mean high tide line or the mouth of a coastal river, including any area of intertidal or subtidal terrain, together with its overlying water and associated flora and fauna. They are designated by law or administrative action to protect, conserve, or otherwise manage a variety of resources and their uses. The resources and uses may include living marine resources and their habitats, scenic views, water quality, recreational values, and cultural or geological resources. General areas that are administratively established for recreational or commercial fishing restrictions, such as seasonal or geographic closures or size limits, are not included in this definition. MPAs are primarily intended to protect or conserve marine life and habitat and therefore are a subset of MMAs.





Figure 2-1 California's Marine Protected Area Regions

California's Network includes three MPA designations (state marine reserve, state marine conservation area, state marine park), one MMA specific designation (state marine recreational management area), and special closures. The more common term "MPA" is used throughout this document as an umbrella term to refer to all types of protected areas in California's Network. General definitions for the classifications of protected areas within California's Network are presented below and summarized in Table 2-1. Each designation differs primarily according to restricted and allowable uses that can occur within each designated area:

- State Marine Reserve (SMR): This designation prohibits injury, damage, or take (collectively called "take" herein) and consumptive use of any living, geological, or cultural marine resource (collectively called "marine resource" herein). Scientific research and nonconsumptive uses are allowed. In an SMR, it is unlawful to take any marine resource except under a permit or specific authorization from the managing agency for research, restoration, or monitoring purposes. Although to the extent feasible, the area shall be open to the public for managed enjoyment and study, and the area shall be maintained to the extent practicable in an undisturbed and unpolluted state. Access and use for activities, including walking, swimming, boating, and diving, may be restricted to protect marine resources. Research, restoration, and monitoring may be permitted by the managing agency. Educational activities and other forms of nonconsumptive human use may be permitted by the designating entity or managing agency in a manner consistent with the protection of all marine resources (PRC Section 36710[a]).
- State Marine Conservation Area (SMCA): This designation may allow select recreational and commercial harvest to continue. Scientific research and nonconsumptive uses are allowed. In an SMCA, it is unlawful to take any marine resource for commercial or recreational purposes, or a combination of commercial and recreational purposes, that the designating entity or managing agency determines would compromise protection of the species of interest, natural community, habitat, or geological features. The designating entity or managing agency may permit research, education, and recreational activities, and certain commercial and recreational harvest of marine resources (PRC Section 36710[c]).
- State Marine Park (SMP): This designation prohibits commercial take but may allow select recreational harvest to continue. Scientific research and nonconsumptive uses are allowed. In an SMP, it is unlawful to take any marine resource for commercial exploitation purposes. Any human use that would compromise protection of the species of interest, natural community or habitat, or geological, cultural, or recreational features may be restricted by the designating entity or managing agency. All other uses, including scientific collection with a permit, research, monitoring, and public recreation, including recreational harvest, are allowed unless otherwise restricted. Public use, enjoyment, and education are encouraged in a manner consistent with protecting resource values (PRC Section 36710[b]).
- State Marine Recreational Management Area (SMRMA): This designation provides subtidal protection equivalent to that of an MPA while allowing legal waterfowl hunting. Scientific research and nonconsumptive uses are allowed. In an SMRMA, it is unlawful to perform any activity that, as determined by the designating entity or managing agency, would compromise the recreational values for which the area may be designated. Recreational opportunities may be protected, enhanced, or restricted while preserving basic resource values of the area. No other use is restricted (PRC Section 36710[e]). The Commission may designate, delete, or modify SMRMAs for hunting purposes (PRC Section 36725[a]).
- ► Special Closure: A special closure is a geographically specific area where human entry is prohibited. Special closures are smaller than MPAs and designed to protect breeding seabird and marine mammal populations from human disturbance by prohibiting access or restricting boating activities in waters adjacent to seabird rookeries or marine mammal haul-out sites.

Classification	Summary	Additional Information		
State marine reserve	 Prohibits take and consumptive use (commercial and recreational, living or geologic); scientific research and nonconsumptive uses are allowed. Definition is consistent with "marine life reserve" in the MLPA. 	 It is unlawful to injure, damage, or take (collectively called "take" herein) any living, geological, or cultural marine resource (collectively called "marine resource" herein) for purposes of operation, maintenance, repair, removal, or replacement (collectively called "O&M" herein) of pre-existing artificial structures. Scientific collecting permits (SCPs) may be issued by CDFW pursuant to Section 650 of the California Code of Regulations (CCR), Title 14, or specific authorization from the Commission for research, restoration, or monitoring purposes. Boating, diving, research, and education may be allowed, to the extent feasible, as long as the area is maintained "to the extent practicable in an undisturbed and unpolluted state," but activities, including nonextractive activities, may be restricted to protect marine resources. Restrictions must be based on specific objectives for an individual site and the goals and guidelines of the MLPA. Does not imply that navigation will necessarily be restricted through MPAs or that other nonextractive activities will be regulated. CDFW has also established "no-take state marine conservation areas" in some areas," which for all intents and purposes, are state marine reserves, except that take of any marine resource incidental to O&M activities associated with certain identified existing and previously permitted activities or structures (e.g., wastewater outfalls, piers, jetties, maintenance dredging, beach nourishment) that are regulated by other federal, state, and local agencies is allowed. 		
State marine conservation area	 May allow select recreational and commercial harvest to continue; scientific research and nonconsumptive uses are allowed. 	 It is unlawful to take any marine resource for purposes of O&M of pre-existing artificial structures. SCPs may be issued by CDFW pursuant to Section 650 of the CCR, Title 14, or specific authorization from the Commission for research, education, or recreational purposes and certain commercial and recreational harvest, provided it does not compromise protection. Fishing restrictions may vary by focal species, fishing gear, habitats, and goals and objectives of individual MPAs. 		
State marine park	 Prohibits commercial take but may allow select recreational harvest to continue; scientific research and nonconsumptive uses are allowed. Prohibits injuring, damaging, taking, or possessing for commercial use any living or nonliving marine resources. 	 It is unlawful to take any marine resource for purposes of O&M of pre-existing artificial structures. Other uses that would compromise the protection of living resources, habitat, geological, cultural, or recreational features may be restricted, but all other uses are allowed, consistent with protecting resources. SCPs may be issued by CDFW pursuant to Section 650 of the CCR, Title 14, or specific authorization from the Commission for research, monitoring, and education and certain recreational harvest in a manner consistent with protecting resources. California State Park and Recreation Commission designates SMPs. Fishing restrictions may vary by focal species, habitats, and goals and objectives of individual MPAs. 		
State marine recreational management area	 Provides subtidal protection equivalent to that of an MPA while allowing legal waterfowl hunting, scientific research, and nonconsumptive uses. 	 MMA designation It is unlawful to take most marine resources for purposes of O&M of pre- existing artificial structures. Recreational opportunities may be protected, enhanced, or restricted while preserving the basic resource values of the area. 		

 Table 2-1
 Summary of MPA Classifications

Classification	Summary	Additional Information
Special closure	 Protect terrestrial resources 	► Not an MMA
		 It is unlawful to take most marine resources for purposes of O&M of pre- existing artificial structures.
		 Integrated into the MLPA process and used to reduce disturbance of nesting or roosting seabirds or hauled-out or breeding marine mammals that would not otherwise be protected by MPA designation in the same geographical region.
		 Special closures provide an exception to allow CDFW employees and employees of other specified government agencies to enter the area.
		 Special closures also include an allowance for CDFW to grant permission to access the area at its discretion.

Notes: CCR = California Code of Regulations; CDFW = California Department of Fish and Wildlife; Commission = California Fish and Game Commission; MLPA = Marine Life Protection Act; MMA = marine managed area; MPA = marine protected area; SMP = state marine park; SCP = scientific collecting permit.

Source: Compiled by Ascent Environmental in 2023.

2.1.3 California MPA Network

California's Network consists of 124 individual MPAs and 14 special closures with a unique set of MPAs in each of the planning regions. Table 2-2 provides a summary of the number and types of MPAs in each region and the area of coverage for each type.

Type of MPA	North Coast MPAs (number)	North Coast Area of State Waters (square miles)	North Central Coast MPAs (number)	North Central Coast Area of State Waters (square miles)	Central Coast MPAs (number)	Central Coast Area of State Waters (square miles)	South Coast MPAs (number)	South Coast Area of State Waters (square miles)
SMR	6	51.3	10	84.2	14	97.4	19	241.8
No-take SMCA ¹	0	0.0	0	0.0	0	0.0	10	33.2
SMCA	13	85.3	12	67.6	13	100.1	21	80.4
SMCA/SMP ²	0	0.0	0	0.0	1	6.3	0	0.0
SMRMA	1	0.8	3	0.6	1	3.1	0	0.0
Special closures	6 ³	0.18	6	1.2	0	0.0	2	1.9
Total ⁴	20	137.4	25	152.4	29	206.8	50	355.4

 Table 2-2
 Summary Statistics of MPAs in State Waters across All Coastal Planning Regions

Notes: CDFW = California Department of Fish and Wildlife; MPA = marine protected area; SMCA = state marine conservation area; SMP = state marine park; SMR = state marine reserve; SMRMA = state marine recreational management area.

Statistics are from CDFW's Marine Region Geographic Information System unit. Values are current as of February 2022 and are subject to change as improvements in geographic data become available. For the most recent data, go to https://wildlife.ca.gov/Conservation/Marine/GIS.

¹ "No-take SMCA is an administrative term for an SMCA that would have been an SMR but for certain pre-existing permitted activities on-site.

- ² Dual designation: During the Marine Life Protection Act planning process, proposed SMPs were alternatively adopted as SMCAs except for the Cambria SMCA, which was also designated as Cambria SMP by the California State Park and Recreation Commission and was jointly managed by CDFW and the California Department of Parks and Recreation.
- ³ Seven special closures were originally included in the North Coast MPA region. However, on January 1, 2019, the Rockport Rocks Special Closure area was repealed.
- ⁴ Totals do not include existing San Francisco Bay MPAs or special closures.

Source: CDFW 2023; compiled by Ascent Environmental in 2023.

The North Coast region covers approximately 1,027 square miles of state waters, from the California/Oregon border south to Alder Creek near Point Arena (Mendocino County) (Figure 2-2). This region includes 20 MPAs (19 MPAs and one SMRMA), the fewest in any region, and six special closures that were adopted June 6, 2012, by the Commission and went into effect on December 19, 2012 (see Appendix B, Table B-1). The 20 MPAs cover approximately 137 square miles, or about 13 percent of state waters in the region.

NORTH CENTRAL COAST REGION

The North Central Coast region, the smallest of the four regions, covers approximately 763 square miles of state waters, from Alder Creek near Point Arena south to Pigeon Point (San Mateo County) (Figure 2-3). This region includes 25 MPAs (22 MPAs and three SMRMAs) and six special closures that were adopted August 5, 2009, by the Commission and went into effect May 1, 2010 (see Appendix B, Table B-2). The 25 MPAs cover approximately 152 square miles, or about 20 percent of state waters in the region.

CENTRAL COAST REGION

The Central Coast region covers approximately 1,144 square miles of state waters, from Pigeon Point, south to Point Conception (Santa Barbara County) (Figure 2-4). This region includes 29 MPAs (28 MPAs and one SMRMA) and no special closures that were adopted April 13, 2007, by the Commission and went into effect September 21, 2007 (see Appendix B, Table B-3). The 29 MPAs cover approximately 207 square miles, or about 18 percent of state waters in the region.

SOUTH COAST REGION

The South Coast region, the largest of the four regions, covers approximately 2,351 square miles of state waters, from Point Conception south to the California/Mexico border, including state waters around the Channel Islands (Figure 2-5). This region includes 50 MPAs (50 MPAs and no SMRMAs), the most in any region, and two special closures that were adopted December 15, 2010, by the Commission and went into effect January 1, 2012 (see Appendix B, Table B-4). The 50 MPAs cover approximately 355 square miles, or about 15 percent of state waters in the region.



Source: Prepared by California Department of Fish and Wildlife, Marine Region GIS Lab, September 18, 2018.

Figure 2-2 North Coast MPAs



Source: Prepared by California Department of Fish and Wildlife, Marine Region GIS Lab, September 18, 2018.

Figure 2-3 North Central Coast MPAs


Source: Prepared by California Department of Fish and Wildlife, Marine Region GIS Lab, September 18, 2018.

Figure 2-4 Central Coast MPAs

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Source: Prepared by California Department of Fish and Wildlife, Marine Region GIS Lab, October 1, 2014.

South Coast MPAs Figure 2-5

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Bolsa Chica Basin SMCA (No-Take)

SAN BERNADING

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Upper Newport Bay SMCA Crystal Cove SMCA

Laguna Beach SMR Laguna Beach SMCA (No-Take)

Dana Point SMCA

Oceanside

San Elijo Lagoon SMCA (No-Take)

Escondido

South La Jolla SMCA

Matlahuayl SMR

8 South San La Jolla SMR Diego CA/Mexico Border

2.1.4 Consideration of Artificial Structures in Existing MPA Regulations

Existing leases for artificial structures are recognized in current MPA regulations. MPAs encompass sovereign tidelands and submerged lands within the jurisdiction of the California State Lands Commission (CSLC). Tidelands occur between the ordinary high-water and ordinary low-water mark of tidal waters. Submerged lands reach from the ordinary low-water mark out to the state-federal fixed boundary 3 nautical miles offshore. The following structures and uses on sovereign lands, including tidelands and submerged lands, are subject to authorization through issuance of a lease, permit, or entitlement by CSLC:

- ▶ riprap, seawalls, groins, jetties, breakwaters, deflectors, and bulkheads;
- recreational docks, piers, and buoys;
- commercial piers and facilities, docks, moorings, and buoys;
- commercial marinas, restaurants, and clubhouses;
- ▶ helicopter pads, decks, and fuel service facilities;
- ▶ oil terminals, piers, wharves, warehouses, and storage sites;
- ▶ power line, communications cable, pipeline, intake, and outfall line rights-of-way; and
- bridges.

The intent of the original MPA designation process was to account for existing legal entitlements, such as CSLC bottom leases, Commission administrative kelp bed leases, tideland and submerged land grants, private tidelands, and any other legal entitlements. During the original MPA designation process in the North Coast and South Coast regions, it was recognized that many of the MPAs included artificial structures and facilities with existing entitlements and that the continued operation, maintenance, repair, removal, or replacement (collectively called "O&M" herein) of these structures and facilities could result in take of marine resources, which was prohibited in MPA regulations. As a result, in these two regions, some individual MPA designations included in their regulations a specific allowance for take of marine resources incidental to O&M of artificial structures and facilities with existing entitlements. However, this regulatory recognition is limited to the North Coast and South Coast regions, and it was later learned that not all MPAs in those regions recognize all existing artificial structures.

O&M activities required or authorized by lease or permit for some pre-existing structures and facilities take place on a monthly or annual basis, with regular communication occurring between managing agencies. However, many pre-existing artificial structures and facilities, after they are installed, are managed (e.g., repaired, removed, replaced) or used occasionally, on an irregular, as-needed basis as required or authorized by lease or permit rather than on a regularly scheduled basis. Although take of marine resources incidental to O&M of some types of pre-existing artificial structures and facilities was authorized by individual MPA regulations for a limited number of designated MPAs within the North and South Coast regions (see Appendix B), the need to allow for take of marine resources incidental to O&M of pre-existing artificial structures was not incorporated into all individual MPA regulations throughout all the regions. MPA regulations did not include authorization for take of marine resources incidental to required or authorized O&M of other types of pre-existing artificial structures and facilities in these regions, and for any type of pre-existing artificial structure or facility in other regions. Consequently, throughout California's Network, continued O&M of artificial structures and facilities with entitlements established before approval of the MPAs may not be authorized for take of marine resources by their individual MPA regulations. Currently, O&M of pre-existing artificial structures within MPAs have had to be approved on a case-by-case basis, which is time consuming and burdensome for both the leaseholders and CDFW.

CDFW performed a search of the CSLC Online System for Customer Applications and Records and has identified all known leases in each region that may overlap with MPAs and that existed before the effective date of the MPAs in that region. Since some MPAs contain multiple known leases and some known leases span multiple MPAs, Table 2-3 provides information on these possible overlaps, one from the MPA perspective and one from the lease perspective. The range of numbers shown in Table 2-3 reflects uncertain overlap between MPAs and CSLC leases (i.e., CSLC leases on MPA borders). Table 2-4 lists the individual leases by region and identifies the types of structures covered by each lease.

	SMR	No-Take SMCA	SMCA	SMRMA	SMP
Number of MPAs that overlap with known leases	11	7	23–24	3	5
Number of MPAs that have uncertain overlap with known leases	0	0	1	0	0
Number of MPAs that allow for infrastructure maintenance	0	7	10–11	0	0
Number of MPAs that have known conservation-oriented leases ¹	3	1	9	1	4
Number of MPAs that conflict with known leases ²	10	0	8	3	2
	SMR	No-Take SMCA	SMCA	SMRMA	SMP
Number of known leases that overlap with MPAs	12–14	16–17	35–37	4–5	11–12
Number of known leases that have uncertain overlap with MPAs	2	1	2	1	1
Number of known leases in MPAs that allow for infrastructure maintenance	0	16–17	19–21	0	0
Number of known leases that have a conservation purpose ¹	3	2	7	1	5
Number of known leases that conflict with MPAs ²	9–11	0	13	4–5	6–7

Table 2-3 Summary of the Number of Known Leases in MPAs

Notes: California State Parks = California Department of Parks and Recreation; CDFW = California Department of Fish and Wildlife; CSLC = California State Lands Commission; MPA = marine protected area; SMCA = state marine conservation area; SMP = state marine park; SMR = state marine reserve; SMRMA = state marine recreational management area; USFWS = US Fish and Wildlife Service.

¹ These numbers represent CSLC leases to California State Parks, CDFW, USFWS, and the National Park Service for occupation of state lands for use purposes, such as "wildlife refuge," "park," and "ecological reserve." Like all CSLC leases, conservation-oriented leases are subject to their respective terms. Any activities that take place on the lease premises are expected to be consistent with the lessee agency regulations and best management practices. The provisions of these leases tend not to be highly detailed because CSLC expects a higher level of communication and coordination with sister agencies than it might with a private entity, and the use is predicated on conservation and ecological management rather than an extractive or development purpose. In general, no rent is charged to the lessee, because the use is considered a public benefit. The lease is also meant to ensure that no other competing public trust uses are considered for that lease premise. Any alterations or improvements not stipulated in the existing lease must be reviewed and would result in a lease amendment or termination of the existing lease and issuance of a new lease.

² No provision for infrastructure maintenance in MPA regulations.

Source: Data provided by CDFW in 2022 and compiled by Ascent Environmental in 2022.

Lease Number	MPA Name	MPA Designation	Region	Structure Type
8390 ¹	Anacapa Island	SMR	South	One fixed pier, steel mooring buoys, and docks
3639	Arrow Point to Lion Head Point	SMCA	South	750 moorings, six string lines, two finfish grow-out pens and a shellfish culture research facility
6442	Arrow Point to Lion Head Point	SMCA	South	Two fixed piers, two gangways, two floating dock modules connecting the two piers, and an attached boat landing float; two moorings; four small boat moorings; and a floating barge
6455	Arrow Point to Lion Head Point	SMCA	South	One fixed pier, two gangways, three floating boat dock segments, a seasonal swim area, a floating swim platform, a mooring stringline, and one individual mooring
5311	Bodega Head	SMR	North Central	Two 0.5-inch-diameter water intake pipelines

Table 2-4Known Leases for Pre-Existing Artificial Structures in MPAs

Lease Number	MPA Name	MPA Designation	Region	Structure Type	
5208	Cambria	SMCA	Central	One 8-inch-diameter ocean outfall pipeline	
7858	Cambria	SMCA	Central	Two 10-inch-diameter intake lines and one 10-inch-diameter outfall line	
7958	Carmel Bay	SMCA	Central	Three seawalls used for bluff protection	
6764	Carmel Bay	SMCA	Central	23 mooring buoys with anchors and three attached uncovered floating boat docks	
2714	Carmel Bay	SMCA	Central	One multiuse pier	
8390 ¹	Carrington	SMR	South	One fixed pier, steel mooring buoys, and docks	
6617	Estero Americano	SMRMA	North Central	One 12-inch-diameter polyethylene saltwater intake pipeline and one 8-inch-diameter polyethylene outfall pipeline	
4513	Laguna Beach	SMR	South	Seven marker buoys and three swimmer safety lines	
7644	Morro Bay	SMR	Central	One fixed pier	
9532	Morro Bay	SMR	Central	One fixed pier	
9568	Morro Bay	SMR	Central	One fixed pier	
5161	Natural Bridges	SMR	Central	Saltwater intake and discharge lines (8-inch to 24-inch diameters)	
6827	Navarro River Estuary	SMCA	North	Seventy-six 60^+ -kV electric transmission lines, fiber-optic cables, and related facilities	
335	Navarro River Estuary	SMCA	North	One bridge	
7978	Piedras Blancas	SMR	Central	Rock slope protection	
8985	Point Buchon	SMCA	Central	Four temporary and four long-term ocean bottom seismometers and one approximately 11.4-mile-long, 2-inch-diameter data/power transfer cable	
8168	Point Lobos	SMCA	Central	One fiber optic cable and four steel conduits buried in the ocean floor	
8923	Russian River	SMRMA	North Central	One public boat launch ramp, bank protection, a Public Visitor's Center, and temporary placement of a silt curtain	
3262	Russian River	SMRMA	North Central	One bridge	
8390 ¹	Scorpion	SMR	South	One fixed pier, steel mooring buoys, and docks	
6911	Vandenberg	SMR	Central	One power cable, one 20-inch-diameter crude oil pipeline, one 8.6- inch diameter natural gas pipeline, and one wastewater pipeline	

Notes: kV = kilovolts; MPA = marine protected area; SMCA = state marine conservation area; SMR = state marine reserve; SMRMA = state marine recreational management area.

¹ Indicates lease overlaps with more than one MPA.

Source: Data provided by CDFW in 2022.

2.2 PROJECT OBJECTIVES

Consistent with, and in furtherance of the MLPA, the objectives of the proposed regulatory amendments are to:

- align MPA regulations with the original intention of California's Network to consider existing leases, permits, and any other legal entitlements that current regulations may impair;
- address O&M (i.e., operations, maintenance, repair, removal, or replacement) needs of pre-existing artificial structures in place before MPA designation and those modified or replaced as a result of addressing human health and safety concerns without seeking individual MPA take prohibition exemptions on a case-by-case basis;
- maintain the overall prohibitions in MPAs against take (i.e., injury, damage, or take) of marine resources (i.e., any living, geological, or cultural marine resource) to the extent feasible while allowing take incidental to O&M of pre-existing artificial structures; and
- maintain current fishing regulations and allow all other take regulations within designated MPAs to remain in place.

2.3 PROPOSED REGULATORY AMENDMENTS APPLICABLE TO OPERATION AND MAINTENANCE OF PRE-EXISTING ARTIFICIAL STRUCTURES IN MARINE PROTECTED AREAS

The proposed revisions to Subsection 632(a)(1) and the addition of Subsections 632(a)(1)(E), 632(a)(13), 632(a)(14), and 632(a)(15) of the regulations as they apply to pre-existing artificial structures in MPAs are explained below, followed by the proposed amended regulatory language.

2.3.1 Purpose of Subsection 632(a)(1) Amendments and New Subsection 632(a)(1)(E)

Subsection 632(a)(1) provides definitions and identifies allowable uses for each designation type. Existing definitions for SMPs, SMCAs, and SMRMAs would be amended to allow for O&M of "pre-existing artificial structures" as defined in new Subsection 632(a)(13), as allowed pursuant to any required federal, state, and local permits. In addition, the existing definition for SMR would be amended to specify that in an SMR a discrete, focused area surrounding a pre-existing artificial structure is excluded from the SMR definition and is defined as an SMCA when the structure is being actively operated, maintained, repaired, removed, or replaced by the leaseholder(s), permittee(s), or their agent(s). Additionally, the SMCA definition would be amended to specify that any area within an SMR that is excluded from the boundaries of the SMR is an SMCA.

Current regulations allow for take of marine resources incidental to O&M of pre-existing artificial structures within a limited number of individually specified MPAs. This amendment would update all designation definitions to allow for take of marine resources in discrete, focused areas immediately surrounding pre-existing artificial structures related to the O&M of a pre-existing artificial structure located in an MPA without having to amend individual MPA designations and regulations. The proposed amendments to these sections would also specify that no marine resources can be retained or possessed as a result of pre-existing artificial structure take.

SMRs do not allow for take except under a scientific collecting permit issued by CDFW pursuant to Section 650 or specific authorization from the Commission for research, restoration, or monitoring purposes. However, a preexisting artificial structure in an MPA could be actively maintained if it is located in an SMCA, SMP, or SMRMA and has specific regulatory allowances for take of marine resources incidental to O&M activities. Thus, reclassifying the immediate area around a pre-existing artificial structure in an SMR as an SMCA while it is being actively operated, maintained, repaired, removed, or replaced is necessary to allow take of marine resources incidental to those activities for the lease duration without specific authorization from the Commission. Because take of marine resources is prohibited in SMRs, reclassification of the incidental take buffer zones in SMRs to SMCAs would temporarily allow for take of marine resources incidental to O&M activities in those areas. The discrete, focused area immediately surrounding pre-existing artificial structures where take of marine resources incidental to O&M activities is allowed would become an incidental take buffer zone for the duration of the work.

New Subsection 632(a)(1)(E) is also proposed to clarify that take of marine resources for any purposes other than what is specified in the preceding subsections of Subsection 632(a)(1) for each MPA designation type would be unlawful.

2.3.2 Purpose of New Subsections 632(a)(13), 632(a)(14), and 632(a)(15)

SUBSECTION 632(A)(13)

Proposed new Subsection 632(a)(13) would include a definition for what qualifies as a "pre-existing artificial structure" in California's Network. Any structure that was manufactured, created, installed, or constructed in state waters, including an incidental take buffer zone around the structure, as defined in new Subsection 632(a)(14), pursuant to any required federal, state, and local authorizations before the specified regional MPA implementation dates, would qualify as a "pre-existing artificial structure."

For certain MPAs, current regulations do not provide a mechanism to operate, maintain, repair, remove, or replace artificial structures that were in place before MPA implementation statewide (Table 2-1). In these areas, maintenance of artificial structures is permitted only in the case of a structural emergency and for health and safety considerations. Specific definitions of what qualifies as pre-existing artificial structures and an incidental take buffer zone are needed to allow O&M activities in certain MPAs without needing to constantly approve work on a case-by-case basis.

Because the MPA designation process was intended to account for existing leases, grants, and any other legal entitlements, any structure that existed before MPA implementation should be allowed to operate in accordance with the lease conditions without limitation related to MPA regulations. Although these amendments would be applied statewide, given the regional design and implementation process for MPAs, pre-existing artificial structures would be defined by the regional implementation dates when the Commission adopted the MPAs, not when California's Network was completed. In addition, artificial structures constructed or modified because of public health and safety concerns would be considered pre-existing artificial structures regardless of installation date under the amended regulations.

SUBSECTION 632(A)(14)

Proposed new Subsection 632(a)(14) would include a definition for "incidental take buffer zone for pre-existing artificial structures (incidental take buffer zones)." Within a maximum distance of 250 feet in any direction from the pre-existing artificial structure, not including areas above the mean high tide line, take incidental to the O&M of an artificial structure located in an MPA would be allowed.

To limit take of marine resources protected in an MPA, changes to current take prohibitions would occur only in an incidental take buffer zone established around the pre-existing artificial structure. This incidental take buffer zone would allow take of marine resources incidental to O&M of the artificial structure to occur while still maintaining the integrity of the regulations applied to the surrounding MPA. The incidental take buffer zone would include a discrete, focused area immediately surrounding pre-existing artificial structures where injury, damage, or take of marine resources incidental to O&M is allowed. The incidental take buffer zone surrounding a pre-existing artificial structure shall be 250 feet in any direction, not including areas above the mean high tide line. California law provides that the state owns all land below the "ordinary high-water mark" (California Civil Code Section 670). The "ordinary high-water mark" is to be determined by the average height of all high tides at a given location over a period of 18.6 years (*Borax Consolidated, Ltd. V. Los Angeles,* 296 U.S. 10, 1935). This height is referred to as the mean high tide line.

Recognizing that piers are the largest structures located in MPAs, an incidental take buffer zone that would meet the O&M requirements of piers should have space sufficient for similar work on smaller structures. Barges are frequently used for maintenance of large piers, and a typical barge size is around 250 feet by 70 feet (Chakrabarti et al. 2005).

An incidental take buffer zone of 250 feet is intended to be adequate for typical O&M work on piers and other artificial structures. Using the 250-foot distance around pre-existing artificial structures, including the surrounding water column, creates sufficient space for O&M of pre-existing artificial structures and maintains the integrity of take prohibitions in the rest of an MPA area outside of that distance.

SUBSECTION 632(A)(15)

Proposed new Subsection 632(a)(15) would include a definition for "identification and permit or lease requirement for pre-existing artificial structure activities" that requires any leaseholder(s), permittee(s), or their agent(s) to have a valid government-issued form of identification, as well as a digital or printed copy of the permit or lease while conducting O&M of a pre-existing artificial structure. Acceptable forms of identification will include a driver's license, a US state photo identification card, a federally recognized tribal photo identification card, or an international passport. Valid identification and a copy of the lease or permit shall be exhibited immediately upon demand by any person authorized by CDFW to enforce this regulation.

Official identification is necessary to provide law enforcement and/or wildlife officers the ability to verify the identity of individuals conducting authorized activities related to O&M of pre-existing artificial structures. It is also necessary to require a copy of the lease or permit to verify that the activities are pursuant to a valid lease or permit.

2.3.3 Proposed Language for Amended Section 632, Title 14 CCR

The proposed amendments to the current regulatory language are below.

Section 632. Marine Protected Areas (MPAs), Marine Managed Areas (MMAs), and Special Closures

- (a) General Rules and Regulations: The areas specified in this section have been declared by the Commission to be marine protected areas, marine managed areas, or special closures. Public use of marine protected areas, marine managed areas, or special closures shall be compatible with the primary purposes of such areas. MPAs, MMAs, and special closures are subject to the following general rules and regulations in addition to existing Fish and Game Code statutes and regulations of the Commission, except as otherwise provided for in subsection 632(b), areas and special regulations for use. Nothing in this section expressly or implicitly precludes, restricts or requires modification of current or future uses of the waters identified as marine protected areas, special closures, or the lands or waters adjacent to these designated areas by the Department of Defense, its allies or agents.
 - (1) Protection of Resources in MPAs and MMAs, as defined in Public Resources Code Section 36710:
 - (A) State Marine Reserves: In a state marine reserve, it is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource, except under a scientific collecting permit issued by the department pursuant to Section 650 or specific authorization from the Commission for research, restoration, or monitoring purposes.

(Start new text):

- 1. Notwithstanding the designation specified in this section, the boundaries of all state marine reserves exclude any pre-existing artificial structure when that structure is being actively maintained, repaired, or operated by the leaseholder(s), permittee(s), or their agent(s). (End new text.)
- (B) State Marine Parks: In a state marine park, it is unlawful to injure, damage, take, or possess any living or nonliving marine resource for commercial purposes. Any human use that would compromise protection of the species of interest, natural community or habitat, or geological, cultural, or recreational features, may be restricted by the Commission as specified in subsection 632(b), areas and special regulations for use. The department may issue scientific collecting permits pursuant to Section 650. The Commission may authorize research, monitoring, and educational activities and certain recreational harvest in a manner consistent with protecting resource values. (Start new text):

Take of marine resources incidental to the operation, maintenance, repair, removal, and replacement within the existing footprint of pre-existing artificial structures is allowed in state marine parks pursuant to any required federal, state, and local permits and leases or if otherwise authorized through any applicable federal, state, and local law. This subsection does not authorize retention or possession of any marine resource taken pursuant to this subsection. (End new text.)

- (C) State Marine Conservation Areas: In a state marine conservation area, it is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial or recreational purposes, or a combination of commercial and recreational purposes except as specified in subsection 632(b), areas and special regulations for use. The department may issue scientific collecting permits pursuant to Section 650. The Commission may authorize research, education, and recreational activities, and certain commercial and recreational harvest of marine resources, provided that these uses do not compromise protection of the species of interest, natural community, habitat, or geological features.
 - 1. (Start new text): Any area within a state marine reserve that is excluded from the boundaries of the state marine reserve pursuant to subsection 632(a)(1)(A)(1) is a state marine conservation area. (End new text.)
 - 2. Take of marine resources incidental to the operation, maintenance, repair, removal, and replacement within the existing footprint of pre-existing artificial structures is allowed in state marine conservation areas pursuant to any required federal, state, and local permits and leases or if otherwise authorized through any applicable federal, state, and local law. This subsection does not authorize retention or possession of any marine resource taken pursuant to this subsection.
- (D) State Marine Recreational Management Area: In a state marine recreational management area, it is unlawful to perform any activity that would compromise the recreational values for which the area may be designated. Recreational opportunities may be protected, enhanced, or restricted, while preserving basic resource values of the area. No other use is restricted (Start new text): unless specified in subsection 632(b), "Areas and Special Regulations for Use." Take of marine resources incidental to the operation, maintenance, repair, removal, and replacement within the existing footprint of pre-existing artificial structures is allowed in state marine recreational management areas pursuant to any required federal, state, and local permits and leases or if otherwise authorized through any applicable federal, state, and local law. This subsection does not authorize retention or possession of any marine resource taken pursuant to this subsection.
- (E) It is unlawful to injure, damage, take, retain, or possess any living, geological, or cultural marine resource in any marine managed area except as otherwise specified in subsections 632(a)(1)(A)-(D).

[No amendments to subsections 632(a)(2) through (a)(12)]

- (13) Pre-existing Artificial Structure. For the purpose of this section, "pre-existing artificial structure" refers to any structure manufactured, created, installed, or constructed in state waters pursuant to any required federal, state, or local permits, leases, or other authorizations, including an incidental take buffer zone as defined in subsection 632(a)(14). Any structure constructed and installed pursuant to public safety concerns as defined in subsection 632(a)(10) will be considered a pre-existing artificial structure.
- (14) Incidental Take Buffer Zone for Pre-existing Artificial Structures (Incidental Take Buffer Zones). For the purpose of this section, an "incidental take buffer zone" is established in the peripheral area surrounding a pre-existing artificial structure as defined in subsection 632(a)(13). The incidental take buffer zone shall include the entirety of the surrounding water column within 250 linear feet in any direction from the pre-existing artificial structure, not including areas above the mean high tide line.

(15) Identification and Permit or Lease Requirement for Pre-existing Artificial Structure Activities. At all times, when conducting any operation, maintenance, repair, removal, or replacement activity of a pre-existing artificial structure authorized by a federal, state, or local permit or lease, the leaseholder(s), permittee(s), and their agent(s) shall carry in their possession a valid government-issued form of identification, and a digital or printed copy of the permit or lease. The only acceptable forms of identification are a driver's license or other photo identification card issued by a US state, a valid photo identification card issued by a federally recognized tribe as specified in subsection 632(a)(11), or an international passport. Valid identification and a copy of the lease or permit shall be exhibited immediately upon demand by any person authorized by the department to enforce this regulation. (End new text.)

[No amendments to subsections 632(b)(1) through (b)(147)]

Note: Authority cited: Sections 200, 205(c), 265, 399, 1590, 1591, 2860, 2861 and 6750, Fish and Game Code; and Sections 36725(a) and 36725(e), Public Resources Code. Reference: Sections 200, 205(c), 265, 399, 2861, 5521, 6653, 8420(e) and 8500, Fish and Game Code; and Sections 36700(e), 36710(e), 36725(a) and 36725(e), Public Resources Code.

2.4 OPERATIONS AND MAINTENANCE ACTIVITIES ALLOWED WITH IMPLEMENTATION OF THE PROPOSED REGULATORY AMENDMENTS

The proposed regulatory amendments would allow for continued O&M of pre-existing artificial structures listed in Section 2.1.4. All activities would occur in the incidental take buffer zone immediately surrounding the artificial structures. Existing structures are designed to have long-term life spans, typically remaining in place between 10 and 30 years. Most of the existing structures require little to no regular maintenance. O&M activities for those structures are limited to repair and replacement of the structures or portions of the structures on an as-needed basis. The proposed regulatory amendments would not result in a substantial change in the frequency of O&M of any pre-existing artificial structures. In addition, any O&M activities would continue to be subject to federal, state, and local permits, as applicable. These regulations would not expand opportunities to install new structures in MPAs.

A variety of activities associated with O&M of pre-existing artificial structures may occur in the incidental take buffer zone. Descriptions of O&M activities for the most common types of structures are provided in this document to guide the environmental analysis. These activities represent the most intensive O&M activities that are expected to occur related to artificial structures and are examples of reasonably foreseeable compliance responses to the regulatory amendments. Other, less intensive activities may occur.

2.4.1 Riprap and Seawalls

Riprap and seawalls are often used to protect banks and developed lands from wave erosion. These structures may need to be maintained or replaced periodically because of deterioration or replacement of associated structures. Activities typically include removing all or a portion of the existing concrete or rock and disposing of the debris if needed. If the structure is along a bluff or bank, tie-back anchors may be drilled into the bluff/bank and then tied together with steel reinforcement. If concrete or shotcrete is used, it is sprayed onto the anchors and then sculpted to the desired contours. Excavation may be required before placing riprap. Rock is then placed using a crane from the bank or a barge. Replacement of these types of structures is expected to take 1–3 months (San Mateo County Department of Public Works 2020).

2.4.2 Docks and Piers

Docks and piers typically are replaced within the footprint of the existing structure. If bedrock is present, an air-driven rock hammer is used to create borings into the rock. If softer substrates are present, conventional drilling or pile driving, including the use of H-piles with driving shoes, can be used to install supports. After sockets are drilled, piles are placed into the sockets in a pipe casing. Grout is then placed into the socket to anchor the piles in place, and the casing is subsequently removed. The drilling equipment is powered by diesel-powered air compressors. Upon

completion, the deck and remaining pier components are installed. Most of these activities are performed from floating barges or a temporary staging platform resting on the seafloor. Waste materials from the pile drilling process are extracted, contained, and treated. Wastewater from pile drilling is filtered and treated and discharged back into the ocean. Rock waste and other solid debris are transported off-site by the contractor and disposed of in an appropriate location (NPS 2017).

O&M activities may also include replacement of deteriorating timber piles for docks or piers. The existing guide piles typically are removed with a vibratory hammer and placed on a floating barge for proper disposal. The installation of concrete piles can be completed with impact pile driving using an impact hammer attached to a crane positioned on a crane barge or on the pier. In addition, a hydraulic jet may be used to assist in pile installation. Hydraulic jetting directs pressurized water flow down the pile to the soils directly beneath it. Hydraulic jetting liquefies the soils at the pile tip, reducing friction and causing the pile to descend downward under its own weight. Hydraulic jetting can be used to decrease pile driving time and the number of impact blows required to drive piles. Materials typically are delivered via floating barge or by using the existing boat launch ramp (San Mateo County Harbor District 2022). Replacement of these types of structures is expected to take 3–7 months depending on the extent of repairs.

2.4.3 Oil Terminals

Improvements to oil terminals may include installation of new loading/unloading platforms, access and pipeline trestles, mooring structures, berthing structures, catwalks, fire pump platforms, topside equipment, landside piping, and necessary utilities. Because of the nature of these activities, most of the work is marine based and is conducted using waterborne equipment, such as derrick barges, tugboats, and work boats. Existing structural components, including piles, typically are demolished first. Demolition likely requires the use of both waterborne and land-based equipment, including cranes, a small tugboat, trucks, and small demolition equipment.

After demolition is complete, construction on replacement structures, including minor modifications of shoreside facilities (new piping and isolation valves, valve platforms, emergency generator, operator shelter, and associated support equipment) and installation of utilities to support the structures, begins. Piles likely are driven with a combination of impact and vibratory methods.

Demolition is followed by construction of the replacement platform and associated structures and infrastructure. Construction activities can cause minor sloughing of the shoreline slope, which can reduce water depths such that larger vessels cannot safely berth in that location. In that case, minor clean-up dredging is conducted to remove excess material. Demolition, construction, and commissioning activities are expected to take up to 36 months (City of Los Angeles Harbor Department 2021).

In some cases, demolition may include decommissioning and complete removal of the oil terminal, which would involve activities and equipment similar to those described above for demolition, but completely removing an existing structure may take longer.

2.4.4 Transmission and Telecommunication Lines

Replacement or repair of transmission and telecommunication lines, (i.e., fiber optic and electrical cables) requires work on land and in the marine environment. Cables on land typically travel through an underground conduit system to connect to the underwater portions of the structure. Underwater portions of the cables typically are installed by horizontal directional drilling starting from the cable landing site on land, extending under the beach, and exiting offshore. The cables are buried in shallow waters and placed directly on the seafloor in deeper waters. Cables buried under the seafloor are installed by plowing or using a postlay burial method. A cable lay ship (with the help of a dive support vessel and divers) brings the communications cable to the end of the landing pipe. The cable is then pulled through its own individual landing pipe. An ocean ground bed may be installed onshore or offshore for each subsea cable to ground the cable. Replacement of this type of structure can take more than 1 year. Work can occur 7 days per week, and offshore work continues for 24 hours a day dependent on permit requirements (CLSC 2020).

Repairs to cables may involve use of a grapnel, divers, or a remotely operated vehicle that removes the cable from the burial trench and brings it to the surface. The repair is then made on a work boat or barge, or the damaged structure is taken to an onshore facility for repair. For repairs made in place, a diver makes the repair in the water and reburies the structure in its original position (CSLC 2021).

Removal of cables would involve activities and equipment similar to those described for replacement of cables.

2.4.5 Outfalls and Intake Pipelines

Replacement of an outfall or intake typically involves removal of the existing pipe and construction of a new pipe offsite that is then towed to the location. The new pipe is then inserted into the outfall or intake location. The offshore component of the outfall or intake typically includes removal of existing pipe and installation of a new pipe and concrete weights. The pipe is laid on the seafloor. Rock may be placed on the seafloor end point of the pipe and possibly over the exposed sections to secure it from wave action. Alternatively, the entire length of pipeline can be towed to the site and installed in one piece to avoid jointing underwater.

Any underwater excavation is made with a derrick barge or similar marine construction vessel using a clam bucket or a submersible pump. The purpose of this excavation is to transition the subsurface outfall or intake section from the bore hole exit angle to the slope of the seafloor and to help contain the drilling fluid that is present after the bore exits the seafloor. If the seafloor is composed of silty sand, the excavation spoils are side-cast and left on the seafloor. It is expected that the spoils naturally refill the excavation depression as a result of wave and surge action. If the submersible pump methodology is used, the pump discharge is located on the seafloor to one side of the excavation. Outfall or intake replacement may reasonably require 12–13 months to complete (Callegus Municipal Water District 2007).

2.4.6 Bridges

Bridge replacements and repairs may involve removing the existing bridge with a crane. Bridges are removed using a track-mounted excavator with a breaker arm in addition to jack hammers. Track-mounted equipment is used to break up concrete bridges. A tarp containment system is installed if needed to capture debris from bridge demolition. Debris is loaded into dump trucks using a long reach excavator from the top of the bluff or using loaders. Upon completion of the bridge demolition, the tarp containment system is removed and disposed of. A demolished bridge is placed on a flatbed trailer and removed from the work area.

If the existing bridge abutments will be reused, the concrete and mounting hardware on the abutments are cleaned and inspected. The abutments are modified as needed to accommodate the new bridge. New bridges may be prefabricated or constructed on-site and typically are installed using a crane. Construction activities take 1–2 months (County of San Mateo Department of Public Works 2020).

3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

3.1 APPROACH TO THE ENVIRONMENTAL ANALYSIS AND EFFECTS FOUND NOT TO BE SIGNIFICANT

In accordance with the California Environmental Quality Act (CEQA) Guidelines (State CEQA Guidelines) (Section 15163), this Final Supplement contains only the information necessary to make the environmental impact reports for the four marine protected area (MPA) study regions (hereafter collectively called the MPA Region EIRs) (CDFG 2007, 2009; Commission 2010; Commission and CDFG 2012) adequate for the proposed regulatory amendments. For this reason, this Final Supplement evaluates only those resource areas where the project has the potential to result in a new or substantially more severe significant direct, indirect, or cumulative effect. The topics addressed in this Final Supplement are biological resources; archaeological, historical, and tribal cultural resources; and water quality. For other topics, the proposed regulatory amendments would not result in substantial changes or new information of substantial importance for the MPA Region EIRs. Section 3.1.1, "Effects Found Not to Be Significant," below, describes those resource areas on which the project does not have the potential to result in new or substantially more severe significant direct.

Sections 3.2 through 3.4 of this Final Supplement each include the following components:

- Regulatory Setting: This subsection presents information on the laws, regulations, plans, and policies from the federal, state, and local level that relate to the issue area being discussed. Where the regulatory background provided in the MPA Region EIRs remains applicable to the analysis of the project, it is incorporated by reference. Where regulatory changes subsequent to the adoption of the MPA Region EIRs are relevant to understanding the project's potential impacts, additional background information is provided.
- Environmental Setting: This subsection presents the existing environmental conditions in the project area and the surrounding area as appropriate, in accordance with State CEQA Guidelines Section 15125. The discussions of the environmental setting focus on information relevant to the issue under evaluation. The extent of the environmental setting area evaluated differs among resources, depending on the locations where impacts would be expected. The existing environmental setting information provided in the MPA Region EIRs is incorporated by reference where this information remains applicable to the analysis of the project. Where changes to the existing environmental conditions subsequent to the adoption of the MPA Region EIRs are relevant to understanding the project's potential impacts, additional background information is provided.
- Environmental Impacts: This subsection discloses the impacts from the project. The MPA Region EIRs evaluated the environmental impacts of proposed individual MPA designations in each region and the associated regulations for each proposed designated MPA. During the period of 2007–2012, the California Fish and Game Commission (Commission) considered the EIRs and then adopted a set of MPAs in each region. The environmental impact sections in this Final Supplement focus on evaluating the potential for reasonably foreseeable compliance responses associated with continued operation, maintenance, repair, removal, or replacement (collectively called "O&M" herein) of pre-existing artificial structures in MPAs to have a physical effect on the environment. The significance criteria used to determine the level of significance of the environmental impacts for each resource topic are provided, in accordance with State CEQA Guidelines Sections 15126, 15126.2, and 15143. These significance criteria are based on the checklist presented in Appendix G of the State CEQA Guidelines; best available data; and the applicable regulatory standards of the California Department of Fish and Wildlife (CDFW) and other state and federal agencies.

The project's impacts are numbered sequentially in each subsection (e.g., Impact 3.2-1, Impact 3.2-2, Impact 3.2-3). A summary impact statement precedes a more detailed discussion of each environmental impact. The discussion includes the analysis, rationale, and substantial evidence upon which conclusions are drawn. The determination of the level of significance of the impact is defined in bold text. An impact is identified as "less than significant" if it would not

involve a substantial adverse change in the physical environment. An impact that is "potentially significant" or "significant" could or would involve a substantial adverse change in the physical environment; both are treated the same under CEQA in terms of procedural requirements and the need to identify feasible mitigation. In accordance with CEQA Section 21061.1, "feasible" means capable of being accomplished in a successful manner within a reasonable period, considering economic, environmental, legal, social, and technological factors.

Where an existing law, regulation, or permit specifies mandatory and prescriptive actions about how to fulfill the regulatory requirement as part of the project definition, leaving little or no discretion in its implementation, and would avoid an impact or maintain it at a less-than-significant level, the environmental protection afforded by the regulation is considered before the significance of the project's impact is determined. Where existing laws or regulations specify a mandatory permit process, performance standards without prescriptive actions to accomplish them, or other requirements that allow substantial discretion in how they are accomplished, or have a substantial compensatory component, the significance of the project's impact is determined before the application of the regulatory requirements. In this circumstance, if the impact would be potentially significant or significant, the regulatory requirements to achieve the standards, and commitments to implement such approaches.

3.1.1 Effects Found Not to Be Significant

CEQA allows a lead agency to limit the detail of discussion of environmental effects that are not potentially significant (CEQA Section 21100, State CEQA Guidelines Sections 15126.2[a] and 15128). Based on review of comments received in response to the notice of preparation (Appendix A), research and analysis of relevant project data, and review of details of the proposed project, it was determined that implementing the project would not result in significant environmental impacts in the areas identified below.

The MPA Region EIRs determined that implementing the MPA designations and associated regulations could not cause potentially significant impacts on aesthetics or noise. Accordingly, as required by CEQA, the EIRs presented a brief explanation as to why impacts on each resource were not anticipated, and these resource categories were not evaluated in the EIRs. The regulatory amendments addressed by this Final Supplement also would not cause potentially significant impacts on aesthetics or noise, for the reasons presented below:

Aesthetics: The project area consists of the Pacific Ocean along the coast of California, encompassing state waters¹ that extend from the California/Oregon border in the north to the California/Mexico border in the south. This project area is characterized by open ocean and scattered rocky ocean outcrops. Aesthetic resources include numerous views of coastal and marine features from the coastline and from vessels. For divers in the project area, the aesthetic setting also includes the underwater environment. There are scenic vistas onshore and scenic highways (e.g., State Route 1) along the coast that provide views of the project area.

Equipment such as barges and cranes would be visible during O&M activities. However, these activities would be temporary and infrequent, and implementation of the regulatory amendments would not substantially change the frequency, duration, or amount of authorized O&M activities that would occur in the project area. In addition, these activities would be limited to the incidental take buffer zone immediately surrounding an artificial structure and would therefore be consistent with any developed character of the area. The visual character of the open ocean would not change substantially in the long term. Therefore, implementation of the regulatory amendments would not degrade the visual character of the project area or degrade views from scenic vistas or scenic highways. In addition, O&M activities would occur primarily during daytime hours, and if nighttime construction would be required, the use of lighting would be temporary. For these reasons, implementing the project would not result in significant impacts related to aesthetics, and this issue is not discussed further.

¹ California's state waters generally extend 3 nautical miles from shore; however, the limit extends as much as 12 nautical miles offshore between Santa Cruz and Monterey to encompass all of Monterey Bay.

► Noise: Existing noise conditions are governed by the presence of noise-sensitive human receptors, the location and type of noise sources, and overall ambient noise levels. Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where a quiet setting is an essential element of their intended purpose. The project area is in the marine environment, so it does not contain uses that are generally considered sensitive to increases in exterior noise levels, such as residences. Noise and vibration could increase during O&M activities; however, these increases would be temporary and infrequent, and the frequency, duration, and amount of authorized O&M activities would not substantially change as a result of the regulatory amendments. For these reasons, implementing the project would not result in significant impacts related to noise effects on human receptors, and this issue is not discussed further.

The MPA Region EIRs determined through impact evaluation that implementing the MPA designations and associated regulations would not cause potentially significant impacts on agriculture and forestry resources, air quality, hazards and hazardous materials, land use and planning, mineral resources, population and housing, public services, recreation, transportation and traffic, and utilities and service systems. The regulatory amendments addressed by this Final Supplement also would not cause new or substantially more severe significant impacts on these resources, for the reasons presented below:

- Agriculture and Forestry Resources: The project area is entirely in the marine environment; no lands designated as Important Farmland, Williamson Act land, Forest Land as defined by Public Resources Code Section 12220(g), or Timberland are located in the project area. Therefore, implementation of authorized O&M activities on pre-existing artificial structures would not adversely affect Important Farmland or convert farmland to nonagricultural uses. Furthermore, implementation of authorized O&M activities on pre-existing artificial structures would not affect Forest Land or Timberland and would not result in conversion of Forest Land to nonforest uses. For these reasons, implementing the project would not result in significant impacts related to agriculture or forestry resources, and this issue is not discussed further.
- ► Air Quality: Emissions of criteria air pollutants would result from operation of equipment, hauling/vessel trips, and worker vehicle trips needed for authorized O&M activities on pre-existing artificial structures. However, these activities would be short term and infrequent. In addition, the regulatory amendments would not substantially change the frequency, duration, or amount of authorized O&M activities occurring in the project area. Therefore, implementing the project would not result in significant impacts related to air quality, and this issue is not discussed further.
- ► Hazards and Hazardous Materials: It is not anticipated that O&M activities would occur near schools, public (or public use) airports, private airstrips, or wildlands or that the location of these activities would impair implementation of or physically interfere with an adopted emergency response or evacuation plan. If authorized O&M activities are required on a site included on a list of hazardous materials sites, all applicable federal, state, and local regulations would be complied with to reduce potential exposure of people and the environment to hazards or hazardous materials. In addition, the handling of hazardous materials during authorized O&M activities would be required to comply with all applicable federal, state, and local laws. By complying with all existing hazardous material regulations and not interfering with local emergency operations plans, authorized O&M activities would be protective of public health and the environment. Furthermore, implementation of the regulatory amendments would not substantially change the frequency, duration, or amount of authorized O&M activities that would occur in the project area. Therefore, implementing the project would not result in significant impacts related to hazards and hazardous materials, and these issues are not discussed further.
- Hydrology: Implementation of O&M activities in a marine-based environment would not affect groundwater resources or alter any drainages. Because the project area is entirely in the marine environment, there would be no impacts related to flooding. Although there is the potential for tsunamis to occur in the project area, the project would include only authorized O&M activities and would not substantially change the frequency, duration, or amount of authorized O&M activities that would occur in the project area. Therefore, the project would not increase the potential for damage related to tsunamis. Potential marine water quality impacts are addressed in Section 3.4, "Water Quality." For the reasons described above, implementing the project would not result in significant impacts related to hydrology, and this issue is not discussed further.

- ► Land Use and Planning: The project area is located entirely in the marine environment and is not subject to local government general plans or zoning designations. The California Marine Life Protection Act Master Plan for Marine Protected Areas (CDFW 2016) governs activities in the project area. O&M activities are currently restricted in SMRs. However, with the regulatory amendments proposed as part of the project, 14 California Code of Regulations Section 632 would exclude the incidental take buffer zone around a pre-existing artificial structure in SMRs during O&M activities, allowing injury, damage, or take (collectively called "take" herein) of any living, geological, or cultural marine resource in these limited areas. O&M activities, including replacement of pre-existing artificial structures, would occur only on or adjacent to the pre-existing artificial structures, and would not expand opportunities for new structures to be constructed. There are no communities in the project area, and the project area is not subject to a habitat conservation plan or natural community conservation plan. Therefore, implementation of the regulatory amendments would not divide an established community or conflict with a habitat conservation plan. For these reasons, implementing the project would not result in significant impacts related to land use, and this issue is not discussed further.
- Mineral Resources: Mineral resources in the project area are limited to petroleum hydrocarbon resources, which include oil and gas deposits. The entire coast of California has the potential for the presence of oil and gas reservoirs, and there are currently active submerged lands leases producing petroleum hydrocarbons off the coast of southern California (CDFW 2002). O&M activities could involve operation, maintenance, repair, removal, or replacement of pre-existing oil and gas facilities in the project area. However, these activities would occur only in relation to pre-existing structures and would not result in the loss of availability of any mineral resources. Therefore, implementing the project would not result in significant impacts related to mineral resources, and this issue is not discussed further.
- Population and Housing: There is no housing in the project area; therefore, no homes would be displaced as a result of project implementation. No homes would be constructed as part of the O&M activities. In addition, although O&M activities would result in a demand for workers, implementing the project would not substantially change the frequency, duration, or amount of authorized O&M activities, and the demand for workers to support O&M activities would be temporary and infrequent. Furthermore, the demand would be dispersed throughout the project area, which is expansive, and O&M activities would be performed using workers from the local workforce. Therefore, implementing the project would not result in a substantial increase in demand for workers in any given area that would result in creation of new long-term or permanent jobs, and the project would not directly or indirectly induce population growth. For these reasons, implementing the project would not result in significant impacts related to population and housing, and this issue is not discussed further.
- Public Services: CDFW provides law enforcement related primarily to state fish and game laws in the project area. The California Division of Boating and Waterways oversees all aspects of recreational boating in California, including public access, safety, and education. The US Coast Guard also patrols all navigable waterways along the coast and coordinates regularly with all sheriff's departments. The O&M activities would not result in an increase in population, and public access to the project area would not change from existing conditions. Public access to pre-existing structures could be limited during O&M activities; however, any changes in access would be temporary and infrequent. In addition, implementation of the regulatory amendments is not expected to substantially change the frequency, duration, or amount of authorized O&M activities in a way that could increase the demand for emergency or law enforcement services. Therefore, the project would not cause an increase in demand for police or fire services, public schools, or other governmental services. For these reasons, implementing the project would not result in significant impacts related to public services, and this issue is not discussed further.
- Recreation: Allowable recreational uses vary by MPA but include activities such as diving, kayaking, and boat-based wildlife viewing. O&M activities related to recreational facilities could occur in the project area, and recreation could be restricted in the vicinity of pre-existing artificial structures during authorized O&M activities. However, authorized O&M activities would be temporary and infrequent, and the regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities occurring in the project area. In addition, the project would not result in an increase in population that could indirectly affect demand for recreational facilities or resources, and no new recreational facilities would be constructed as part of the project. For these reasons, implementing the project would not result in significant impacts related to recreation, and this issue is not discussed further.

► Traffic and Transportation: The only type of transportation in the project area is vessel traffic, which includes commercial ships (e.g., tankers, container ships, bulk carriers, military vessels, cruise ships), commercial fishing vessels, research vessels, and recreational boating. However, the project area is adjacent to the coast, which includes numerous roadways that provide access to various pre-existing structures. The major ports in the project area are the Ports of Los Angeles, Long Beach, and San Diego. Several private and public airports located adjacent to the project area contribute to air traffic over the project area. No public transit or bicycle facilities are located in the project area, and no congestion management programs are applicable to the project area, because it occurs in the marine environment and is not subject to any congestion management program for roads or highways.

O&M activities would involve land and vessel traffic related to hauling equipment and materials and worker vehicle trips. However, increases in traffic would be temporary and infrequent and would be dispersed throughout the project area. Therefore, there would not be a substantial increase in traffic on any one roadway. In addition, the regulatory amendments would not result in a substantial change in the frequency, duration, or amount of authorized O&M activities. The regulatory amendments would not change emergency access in the project area, and no new facilities would be constructed. For these reasons, implementing the project would not result in significant impacts related to traffic and transportation, and this issue is not discussed further.

Utilities and Service Systems: Many types of utilities exist off the coast of California, and they can generally be ► classified into three groups: offshore cables, offshore oil and gas pipelines, and service pipelines. Communication cables, both offshore and onshore, are regulated by the Federal Communications Commission and the California Public Utilities Commission. Offshore pipelines fall under the regulatory jurisdiction of several federal and state agencies. The California State Lands Commission; Pipeline Safety Division of the Office of the State Fire Marshal; and California Department of Conservation's Division of Oil, Gas, and Geothermal Resources regulate pipelines in state waters. Service pipelines, such as sewage treatment plant outfalls, are regulated by the State Water Resources Control Board through its issuance of National Pollutant Discharge Elimination System permits. The location of many submerged cables and sewage outfalls is identified on National Oceanic and Atmospheric Administration nautical charts. However, the various locations of the US Navy undersea communication cables are generally classified, and their locations are not known to the public (CDFW 2002). Offshore wind energy generation projects are being proposed in several locations along the California coast in response to state climate action and energy goals, which would potentially include construction of new submerged cable connections between offshore wind turbines and onshore transmission interconnections. Because the regulatory amendments would allow only required O&M activities to occur as authorized for pre-existing artificial structures, which include the types of utilities listed above, the project would not authorize O&M activities for new facilities or result in the construction of any new or expanded utilities.

No land use changes or development would occur as part of the regulatory amendments. Therefore, the project would not generate stormwater, require construction of new stormwater drainage facilities, or require expansion of existing facilities in the project area. In addition, the project would not increase demand for water supply or water facilities. Solid waste would be generated by some O&M activities; however, the regulatory amendments would not result in a substantial change in the frequency, duration, or amount of O&M activities beyond what is already authorized by existing leases, and solid waste would be disposed of in accordance with applicable solid waste regulations. For these reasons, implementing the project would not result in significant impacts related to utilities or service systems, and these issues are not discussed further.

The 2018 update to the State CEQA Guidelines added the resource categories of energy, greenhouse gas (GHG) emissions, and wildfire to the Appendix G Checklist. As described below, the proposed regulatory amendments addressed by this Final Supplement would not cause potentially significant impacts in these resource categories:

Energy: Implementation of authorized O&M activities would involve construction activities that would require consumption of fuels or use of energy. However, implementation of the regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities or the amount of energy that would be expended for O&M activities beyond what is already authorized by existing leases. O&M activities would occur infrequently, as needed, and would not result in the wasteful or inefficient use of energy. For these reasons, implementing the project would not result in significant impacts related to energy, and this issue is not discussed further.

- Greenhouse Gas Emissions: The use of construction equipment, hauling/vessel trips, and worker vehicle trips needed for O&M activities would result in GHG emissions; however, these activities would be temporary and infrequent, and implementation of the regulatory amendments would not substantially change the frequency, duration, or amount of authorized O&M activities or the GHG emissions related to authorized O&M activities. Therefore, implementation of the regulatory amendments would not result in a significant increase in GHG emissions, and this issue is not discussed further.
- ► Wildfire: The project area is entirely in the marine environment, so terrestrial wildfire hazard does not occur. No new structures or utilities would be constructed or installed with implementation of the regulatory amendments. Therefore, implementation of the regulatory amendments would not exacerbate wildfire risks and would not expose people to pollutant concentrations from wildfire or to the uncontrolled spread of wildfire. For these reasons, implementing the project would not result in significant impacts related to wildfire, and this issue is not discussed further.

3.2 BIOLOGICAL RESOURCES

This section addresses common and sensitive biological resources that could be affected by the proposed regulatory amendments as they apply to pre-existing artificial structures in marine protected areas (MPAs).

No comment letter(s) regarding marine biological resources were received in response to the notice of preparation.

3.2.1 Regulatory Setting

Regulatory background relevant to the project is provided in the North Coast Study Region Environmental Impact Report (EIR), Chapter 4, "Biological Resources," Section 4.2, "Regulatory Setting" (Commission and CDFG 2012); North Central Coast MPAs Project EIR, Chapter 6, "Biological Resources," Section 6.1.2, "Regulatory Framework" (CDFG 2009); Central Coast MPAs Project EIR, Chapter 6, "Biological Resources," Section 6.1.2, "Regulatory Framework" (CDFG 2007); and South Coast Study Region EIR, Section 7.0, "Biological Resources," Section 7.1.1, "Regulatory Framework" (Commission 2010). This section presents additional regulatory background relevant to the project addressed by this Final Supplement.

FEDERAL

Clean Water Act

The Clean Water Act establishes the basic structure for regulating discharges of pollutants into waters of the United States and regulating quality standards for surface waters. Waters of the United States include all waters used, or potentially used, for interstate commerce, including all waters subject to the ebb and flow of the tide, all interstate waters, all other waters, all impoundments of waters otherwise defined as waters of the United States, tributaries of waters otherwise defined as waters of the United States, the territorial seas, and wetlands adjacent to waters of the United States.

Section 404 of the Clean Water Act (CWA) requires a permit from the US Army Corps of Engineers (USACE) for the discharge of dredged or fill material into waters of the United States. Section 402 of the CWA requires that a discharge of any pollutant or combination of pollutants to surface waters that are deemed waters of the United States be regulated by a National Pollutant Discharge Elimination System (NPDES) permit. Section 403 of the CWA requires that discharges to the territorial seas, contiguous zones, and oceans comply with regulatory requirements above and beyond those specifically required by a typical NPDES permit. Pursuant to Section 401 of the CWA, projects that apply for a USACE permit for discharge of dredged or fill material must obtain a water quality certification from the regional water quality control board indicating that the project would uphold state water quality standards.

Bald Eagle and Golden Eagle Protection Act

The Bald Eagle and Golden Eagle Protection Act prohibits the taking or possession of and commerce involving bald and golden eagles, with limited exceptions. Under the act, it is a violation to "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or in any manner, any bald eagle...or any golden eagle, alive or dead, or any part, nest, or egg, thereof...." "Take" is defined to include pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, and disturb.

National Marine Sanctuaries Act

The National Marine Sanctuaries Act authorizes the Secretary of Commerce to designate and protect areas of the marine environment with special national significance related to their conservation, recreational, ecological, historic, scientific, cultural, archaeological, educational, or aesthetic qualities as national marine sanctuaries. The designated national marine sanctuaries in California are Cordell Bank National Marine Sanctuary, Greater Farallones National Marine Sanctuary, Monterey Bay National Marine Sanctuary, and Channel Islands National Marine Sanctuary.

STATE

Marine Life Protection Act

The Marine Life Protection Act (California Fish and Game Code Sections 2850–2863) requires the California Department of Fish and Wildlife (CDFW) to develop a master plan for modification of existing MPAs and designation of new MPAs to increase coherence and effectiveness in protecting the state's marine life and habitats, marine ecosystems, and marine natural heritage, as well as to improve recreational, educational, and study opportunities provided by marine ecosystems subject to minimal human disturbance.

California Ocean Plan

The California Ocean Plan designated Areas of Special Biological Significance (ASBS) in ocean areas requiring protection of species or biological communities to the extent that maintenance of natural water quality is assured. Thirty-four ASBS have been designated by the State Water Resources Control Board off the coast of California because the areas support an unusual variety of aquatic life and often host unique species.

California Coastal Act

The California Coastal Act provides long-term protection of California's coastline. Under the California Coastal Act, any development in the coastal zone must obtain a Coastal Development Permit from the California Coastal Commission or a local coastal program that has been certified by the California Coastal Commission as consistent with the California Coastal Act. The California Coastal Commission retains permanent coastal permit jurisdiction over development proposed on tidelands, submerged lands, and public trust lands. Development includes demolition, construction, replacement, or changes to the size of a structure and repair or maintenance activities that could result in environmental impacts.

California State Lands Commission

The California State Lands Commission (CLSC) manages 4 million acres of intertidal and submerged lands and the beds of natural navigable rivers, streams, lakes, bays, estuaries, inlets, and straits. CSLC also monitors sovereign land granted in trust by the California Legislature to approximately 70 local jurisdictions that generally consist of prime waterfront lands and coastal waters. It protects and enhances these lands and natural resources by issuing leases for use or development, providing public access, and resolving boundaries between public and private lands. Through its actions, CSLC secures and safeguards the public's access rights to natural navigable waterways and the coastline and preserves irreplaceable natural habitats for wildlife, vegetation, and biological communities. It also protects state waters from marine invasive species introductions and prevents oil spills by providing the best achievable protection of the marine environment at all marine oil terminals in California and offshore oil platforms and production facilities.

California Fish and Game Code Sections 3503 and 3503.5—Protection of Bird Nests and Birds-of-Prey

California Fish and Game Code Sections 3503 and 3503.5—Protection of Bird Nests and Birds-of-Prey prohibits the take, possession, or destruction of the nest or eggs of any bird.

California Fish and Game Code Sections 2050-2068–California Fully Protected Species

The fully protected classification under the California Fish and Game Code Sections 2050–2068 prohibits take or possession of fully protected species and does not provide for authorization of incidental take.

California Fish and Game Code Section 1602-Streambed Alteration Permit

California Fish and Game Code Section 1602 requires a streambed alteration agreement for activities that would result in the diversion or obstruction of the natural flow of a stream; substantially change its bed, channel, or bank; or involve the use of any materials (including vegetation) from the streambed.

3.2.2 Environmental Setting

The existing environmental setting for the project is described in the North Coast Study Region EIR, Chapter 4, "Biological Resources," Section 4.3, "Environmental Setting" (Commission and CDFG 2012); North Central Coast MPAs Project EIR, Chapter 6, "Biological Resources," Section 6.1.1, "Environmental Setting" (CDFG 2009); Central Coast MPAs Project EIR, Chapter 6, "Biological Resources," Section 6.1.1, "Environmental Setting" (CDFG 2007); and South Coast Study Region EIR, Section 7.0, "Biological Resources," Section 7.1.2, "Environmental Setting" (Commission 2010). The MPA Region EIRs describe the ecosystems and biological habitats, ecological linkages and associations, areas of biodiversity significance, and sensitive biological resources. This section presents additional environmental setting information relevant to the project addressed by this Final Supplement.

SENSITIVE BIOLOGICAL RESOURCES

Special-Status Species

The MPA Region EIRs discuss the potential for occurrence of special-status plants and wildlife. MPAs have been designated to protect or conserve marine life and habitat. Therefore, in addition to the special-status species identified in the MPA Region EIRs, all living marine resources in MPAs and living and nonliving marine resources in a state marine park are considered special-status species for purposes of this analysis.

Critical Habitat

"Critical habitat" is a term defined and used in the Endangered Species Act (ESA). It refers to specific geographic areas designated by the US Fish and Wildlife Service (USFWS) or National Oceanic and Atmospheric Administration (NOAA) Fisheries that contain features essential to the conservation of an endangered or threatened species and that may require special management and protection. Critical habitat designations affect only federal agency actions or federally funded or permitted activities. CDFW, as a state agency, is not required to consult with USFWS or NOAA Fisheries for actions in critical habitat. The list of animal species that have designated critical habitat in the project area is presented for informational purposes.

Critical habitat is present in the project area for the following wildlife species:

- ▶ green sturgeon (Acipenser medirostris), southern distinct population segment (DPS);
- ▶ leatherback sea turtle (Dermochelys coriacea);
- Steller sea lion (Eumetopias jubatus), western DPS;
- black abalone (Haliotis cracherodii);
- ▶ humpback whale (Megaptera novaeangliae), Central America DPS and Mexico DPS; and
- ▶ killer whale (Orcinus orca), southern resident DPS.

Essential Fish Habitat

Essential fish habitat (EFH) is designated by NOAA Fisheries and regulated under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) to protect habitat for commercial and recreational fisheries. EFH includes all types of aquatic habitats where federally managed fish and invertebrates spawn, breed, feed, or grow to maturity. Consultation with NOAA Fisheries is required whenever work by a federal agency would adversely affect essential fish habitat.

Habitat Areas of Particular Concern

Along the West Coast, the Pacific Fishery Management Council identifies habitats that meet the definition of Habitat Areas of Particular Concern (HAPCs), smaller habitat areas in EFH, and recommends them to NOAA Fisheries for designation, consistent with the Magnuson-Stevens Act. HAPCs are considered high-priority areas for conservation, management, or research because they are important to ecosystem function, sensitive to human activities, stressed by development, or rare. These areas provide important ecological functions or are especially vulnerable to

degradation and can be designated based on either specific habitat types or discrete areas. The HAPC designation does not automatically confer additional protections or restrictions on an area, but it helps to prioritize and focus conservation efforts (NOAA Fisheries 2021). HAPCs include estuaries and canopy kelp, seagrass (including eelgrass), and rocky reef habitats.

3.2.3 Environmental Impact Analysis

METHODOLOGY

The focus of the impact analysis is on the potential physical impacts on the environment that may occur as a result of the reasonably foreseeable compliance responses to the proposed regulatory amendments. Evaluation of potential impacts to biological resources is based on a review of existing documents and studies that address biological resources in the area encompassed by the California MPA Network. Information obtained from these sources was reviewed and summarized to describe existing conditions and to identify potential environmental effects, based on the thresholds of significance presented in this section. In determining the level of significance, the analysis assumes that the project would comply with relevant federal, state, and local laws, ordinances, and regulations.

THRESHOLDS OF SIGNIFICANCE

An impact on biological resources would be significant if implementation of the project would:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by CDFW or USFWS;
- have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

ISSUES NOT DISCUSSED FURTHER

Local Policies or Ordinances

The proposed regulatory amendments apply to California's Network, which is located in state waters outside the jurisdiction of any local (i.e., county, city) jurisdiction and thus is not subject to any local policies or ordinances. Therefore, the project would have no impact related to consistency with local policies or ordinances, and this issue is not discussed further.

Habitat Conservation Plans, Natural Community Conservation Plans, or Other Approved Local, Regional, or State Habitat Conservation Plans

The proposed regulatory amendments apply to California's Network, which is located in state waters and is under the jurisdiction of California law. No approved habitat conservation plans, natural community conservation plans, or other approved local, regional, or state habitat conservation plans have plan areas that extend into the marine

environment. Furthermore, there are no approved habitat conservation plans or natural community conservation plans that include marine species or marine habitats as covered species or covered habitats. Therefore, there would be no impact related to consistency with these plans, and this issue is not discussed further.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.2-1: Substantially Affect Marine Species through Entanglement, Collisions, or Artificial Lighting

While authorized operation, maintenance, repair, removal, or replacement (collectively referred to as "O&M" herein) activities have the potential to adversely affect sea turtles, fish, and marine invertebrate species, marine mammals, and birds through entanglement with equipment, collision with vessels, or artificial lighting, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow injury, damage, or take (collectively referred to as "take" herein) of any living, geological, or cultural marine resource (collectively referred to as "marine resource") incidental to authorized O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of O&M activities that would occur, the project would not substantially change O&M effects on marine species through entanglement, collision, or artificial lighting. This impact would be **less than significant**.

Entanglement and Collision Impacts

O&M of pre-existing artificial structures may include replacement of transmission and telecommunication lines, use of vessels, or repair or replacement of mooring systems associated with structures. Vessel operation associated with O&M activities conducted in important migratory corridors or close to nursery sites or foraging grounds could result in collisions between vessels and wildlife, primarily large whales but also including dolphins, pinnipeds, sea turtles, and seabirds. Vessel strikes can result in injury or mortality of marine mammal and sea turtle species. In addition, marine mammals and sea turtles can become entangled in anchor lines, cables, or other lines associated with mooring systems, particularly if these lines are loose. However, the risk of entanglement on these types of lines is relatively modest, and most entanglement is from fishing gear (Benjamins et al. 2014). Most reported collisions involve large whales, seals, or sea lions (NOAA Fisheries 2023a), and entanglements are a more serious problem for larger marine vertebrates, such as whales, dolphins, sea turtles, and large sharks (Benjamins et al. 2014), than for smaller marine vertebrates.

Because the proposed regulatory amendments to allow take of marine resources incidental to authorized O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of O&M activities that would occur, the project would not substantially change O&M effects on marine species through entanglement or collision. Also, because the area subject to O&M activities is limited to the structure and a 250-foot incidental take buffer zone around the structure, interactions with large marine mammals, such as whales, would be minimal. The potential for entanglement during O&M activities would be low because the risk of entanglement or collision would be limited to the amount of time required to operate, maintain, repair, replace, or remove the structure and would be limited to a relatively small area (the incidental take buffer zone). In addition, lease and permit conditions that authorize the O&M activities include best management practices, such as keeping track of all debris created by objects of any kind that fall into the water to facilitate identification and location of debris for recovery and site clearance verification. Entanglement and collision risks are further minimized through implementation of measures required to comply with the Marine Mammal Protection Act (MMPA), such as having a marine mammal observer on-site during in-water activities and following a boat speed limit.

Lighting Impacts

Artificial lighting used during construction at night, as well as permanent lighting associated with any potential replacement structures, such as bridges or oil terminals, could potentially affect marine species. Increased nighttime light intensity could result in the altered behavior of fish and marine invertebrates (e.g., squid) or the altered behavior of predators, which could lead to increased mortality of fish and marine invertebrate species through increased

predation (Tabor et al. 2004). However, because the proposed regulatory amendments to allow take of marine resources incidental to authorized O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of O&M activities that would occur, the project would not substantially change O&M effects on marine species from artificial lighting. Also, only some O&M activities would require nighttime artificial lighting, and those activities would be limited to the time required to complete them. In addition, the area affected by the artificial lighting would be restricted to the pre-existing structure and the 250-foot incidental take buffer zone around the structure, which is a small area relative to the larger marine environment. Lease and permit conditions that authorize O&M activities, such as replacing a bridge, are expected to include best management practices related to new installation of permanent lighting, such as requiring lighting to be the minimum necessary.

Summary

Because the proposed regulatory amendments to allow take of marine resources incidental to authorized O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of O&M activities that would occur, the project would not substantially change O&M effects on marine species through entanglement, collision, or artificial lighting. Also, entanglement, collision, and lighting impacts on sea turtles, fish and marine invertebrate species, marine mammals, and seabirds would be minimal in space and time because lease holders would be subject to prior approval by CSLC for O&M activities and because approval would include compliance with regulatory requirements, including compliance with the MMPA and implementation of measures and best management practices to avoid and minimize lighting, entanglement, and collision impacts. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.2-2: Substantially Affect Marine Mammals, Sea Turtles, and Fish Species through Acoustic Effects

While O&M of pre-existing artificial structures could result in harassment, as defined by the MMPA, to marine mammals, if present, through temporary displacement or injury from underwater noise or pressure from activities such as pile driving, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow take of marine resources incidental to authorized O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of authorized O&M activities that would occur, the project would not result in a substantial increase in the risk of adverse effects of acoustic impacts on marine mammals, sea turtles, or fish species. This impact would be **less than significant**.

Acoustic Impacts on Marine Mammals

O&M of pre-existing artificial structures could include the use of pile driving or jack hammers and drilling, which could result in adverse effects on marine mammals. Marine mammals have a sharp sense of hearing in marine environments because sound travels fast and for long distances in the ocean and is therefore a reliable source of sensory input. Marine mammals can distinguish biologically important signals among many different underwater sounds; however, some types of sound may disrupt or injure marine mammals. Marine mammals use sound to communicate, navigate, and detect predators and prey. Effects of noise include behavioral, physiological, masking, or population-level effects and may range from minor disturbances to injury or mortality (NOAA Fisheries n.d.). *Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing*, prepared by NOAA Fisheries, identifies the received levels, or thresholds, at which individual marine mammals are predicted to experience changes in their hearing sensitivity for acute, incidental exposure to all underwater anthropogenic sound sources (NOAA Fisheries 2018).

Hydroacoustic Impacts on Sea Turtles and Fish

Underwater pressure, vibration, or noise from pile driving (impact and vibratory), use of jack hammers, and drilling associated with O&M of pre-existing artificial structures may temporarily affect sea turtle and fish behavior or cause injury or mortality. Impact pile drivers in or near waterways are known to produce high levels of sound pressure, which

can result in adverse effects on fish (Caltrans 2015). Resource agencies consider use of a vibratory hammer to be less harmful to fish than use of an impact hammer because a vibratory hammer produces a continuous sound wave (Caltrans 2020a). Although exposure to continuous sound for a long duration can harm fish, noise from an impact hammer, which produces an impulsive, high-intensity sound with a rapid rise time, is known to injure or kill fish. Sound from pile driving can also affect fish foraging, migration, and reproduction (depending on the time of year).

Criteria have been established to support assessing acoustic effects on fish species. *Technical Guidance for the Assessment of Hydroacoustic Effects of Pile Driving on Fish*, prepared by the California Department of Transportation (Caltrans), established interim injury thresholds and identifies avoidance and minimization measures, best management practices, and performance standards to avoid or minimize the potential exposure of fish to underwater sound pressure generated by pile driving (Caltrans 2020b). Minimization measures include use of a vibratory hammer instead of an impact hammer or using a "soft start" to pile-driving activities. A "soft start," which applies to impact hammer pile drivers, requires that the initial strikes on a piling be performed at a substantially reduced force and slowly build up to full force over several strikes. Generally, the hammer is operated at approximately 40–60 percent of full energy over a 5-minute period with no less than 1 minute between strikes. Potential effects on fish may vary depending on the type and size of the impact driver equipment, the material that the pile is constructed of, the depth of the pile, the number of impact driver strikes needed to bring the pile to the desired depth, and other factors. Additional analysis would need to be conducted to assess potential effects on fish.

There is currently no specific accepted guidance on assessing the effects of acoustic impacts on sea turtles, but the guidelines for marine mammals and fish are generally accepted as being protective of sea turtles because they are based on the best available data.

Summary

Because the proposed regulatory amendments to allow take of marine resources incidental to authorized O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of O&M activities that would occur, the project would not substantially change acoustic impacts on marine mammals, sea turtles, or fish species. Also, pile driving (impact and vibratory), use of jack hammers, and drilling associated with O&M of pre-existing artificial structures are already conducted in the project area, and these activities have been complying with lease and permit conditions that authorize the O&M activities. Because O&M activities would be subject to the existing regulatory process and would be expected to comply with regulatory requirements, including compliance with the MMPA and implementation of measures and best management practices to avoid and minimize hydroacoustic impacts, authorized O&M activities would not result in a substantial increase in the risk of adverse effects of acoustic impacts on marine mammals, sea turtles, or fish species. For these reasons, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.2-3: Substantially Affect Marine Species and Habitat through Water Quality Effects

While O&M of pre-existing artificial structures could adversely affect marine mammals, birds, sea turtles, marine invertebrates, fish species, and habitat for these species through water quality effects from suspension of sediments during in-water work that could result in increased turbidity and exposure to contaminants or from accidental release of contaminants from equipment or vessel leaks and spills, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow take of marine resources incidental to authorized O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of authorized O&M activities that would occur, the project would not result in a substantial increase in the risk of adverse water quality effects on marine mammals, birds, sea turtles, marine invertebrates, fish species, or their habitat. This impact would be **less than significant**.

O&M of pre-existing artificial structures could result in disturbance to sediments and increase turbidity in the water column in the immediate vicinity of the work area. Elevated levels of suspended sediments could potentially result in

temporary avoidance of the area by marine mammals, sea turtles, birds, and fish species; disrupt normal foraging, rearing, and migratory behavior in fish species; reduce the ability of juvenile fish to detect predators; potentially bury sessile (i.e., permanently attached or fixed and not free-moving) marine organisms; or clog gills of fish or the feeding apparatus of filter feeders.

O&M activities could result in increased exposure of marine mammals, birds, sea turtles, marine invertebrates, and fish to contaminated sediments through disturbance and resuspension of sediments during in-water work and from accidental discharge, such as equipment or vessel leaks or spills. Exposure to these contaminants, including gasoline, oil, grease, lubricants, drilling fluids associated with horizontal directional drilling, and other hazardous materials, could affect the health of marine organisms, potentially reaching lethal levels. The potential magnitude of effects resulting from exposure to contaminants depends on several factors, including the type, volume, concentration, and solubility of the contaminant; the timing and duration of the spill; the species, life stage, duration of exposure, and condition or health of exposed individuals; current conditions; and the physical and chemical properties of the water, such as pH, temperature, and dissolved oxygen.

In addition, resuspension of sediments and turbidity and exposure to contaminants could adversely affect habitat for marine mammals, birds, sea turtles, marine invertebrates, and fish. For example, suspended sediments could bury new kelp shoots upon settling, and kelp beds and forests could experience reduced growth rates and reproductive success as a result of exposure to toxins in the water column or sediments (Office of National Marine Sanctuaries 2021). Kelp beds and forests contain a high diversity of plants and animals and provide several ecosystem functions, such as providing food, shelter for young from predators and severe storms, and rearing habitat for fish and other marine organisms. Increased turbidity may also affect prey availability by causing prey species to avoid the area or be more difficult to detect and capture. Consumption of prey species has been shown to decrease with exposure to contaminants likely because movement and search efficiency are reduced (Clance et al. 2023). Some of the habitat could be federally designated critical habitat or EFH.

Because the proposed regulatory amendments to allow take of marine resources incidental to authorized O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of O&M activities that would occur, the project would not substantially increase the risk of adverse water quality effects on marine mammals, birds, sea turtles, marine invertebrates, fish species, or their habitat. In addition, because the O&M activities are restricted to the time needed to conduct the O&M activities and to the 250-foot incidental take buffer zone around the pre-existing artificial structure, the impacts would be limited in time, and the affected area would be relatively small compared to the surrounding available habitat.

Section 3.4, "Water Quality," describes the potential of O&M activities to adversely affect water quality in more detail. O&M activities are required to comply with water quality requirements in permits issued by USACE (Section 404 CWA), waste discharge requirements and CWA Section 401 water quality certifications issued by the State Water Resources Control Board and regional water quality control boards, and lease agreements from the CSLC. Best management practices to minimize impacts on ocean water quality, such as oil spill contingency plans, are permit or lease conditions and would be implemented before and during O&M activities. Some O&M activities may also require development and implementation of a storm water pollution prevention plan. Because the proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur, these activities would be subject to numerous regulatory requirements, and water quality effects would be localized and temporary, the project would not result in a substantial increase in the risk of adverse water quality effects on marine mammals, birds, sea turtles, marine invertebrates, fish species, or their habitat. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.2-4: Substantially Affect Marine Mammal Haul-Out and Foraging Areas and State or Federally Listed Birds' Foraging Behavior

While O&M of pre-existing artificial structures could result in harassment, as defined by the MMPA, to marine mammals, if present, through short-term disturbance of normal behavior, and O&M activities could also adversely affect birds listed by the California Endangered Species Act (CESA) and the ESA by altering foraging behavior, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow take of marine resources incidental to authorized O&M of pre-existing artificial structures would not change the frequency, duration, or amount of O&M activities that would occur, the project would not substantially affect marine mammal haul-outs or foraging and state or federally listed birds' foraging behavior. This impact would be **less than significant**.

Marine Mammal Haul-Out and Foraging Impacts

Marine mammals, including pinnipeds, such as California sea lion (Zalophus californianus), Steller sea lion, and harbor seal (Phoca vitulina), may use pre-existing artificial structures in MPAs for resting, foraging, and haul-out sites. In addition, haul-out sites may be located adjacent to pre-existing artificial structures. Haul-out sites are areas on land where pinnipeds temporarily spend time outside the water for rest, mating, social activity, thermoregulation, and predator avoidance. These areas may be used at any time of year. Pre-existing artificial structures that could be used as haul-out sites include docks, piers, sea walls, large buoys, and oil terminals. O&M of pre-existing artificial structures could disturb marine mammals, if present, or result in loss of haul-out habitat if these structures are removed. However, the proposed regulatory amendments to allow take of marine resources incidental to authorized O&M of pre-existing artificial structures would not change the frequency, duration, or amount of O&M activities that would occur, and therefore the project would not substantially affect marine mammal haul-outs or foraging or state or federally listed birds' foraging behavior. Also, the disturbance would be temporary and limited to the amount of time required to conduct the O&M activity. Because this type of haul-out habitat is likely subject to general disturbance on a regular basis, as docks, piers, oil terminals, and other pre-existing artificial structures are maintained and used by people, marine mammals using these habitats are likely used to some level of disturbance; therefore, these habitats would be considered marginal. Thus, temporary or permanent loss of this habitat would not adversely affect marine mammals.

Marine mammals have been reported to aggregate around and preferentially forage around structures and pipelines (Todd et al. 2019). Marine mammals could be present in the vicinity of pre-existing artificial structures during O&M of these structures. Marine mammals generally have large home ranges and are highly mobile. Therefore, they would be expected to avoid use of some areas of their home range for short periods with no adverse effects. Transient marine mammals, such as Risso's dolphins (*Grampus griseus*), and migrating whale species, such as gray whale (*Eschrichtius robustus*), could be present in the vicinity of O&M activities if they are foraging in the area. Because the proposed regulatory amendments to allow take of marine resources incidental to authorized O&M of pre-existing artificial structures would not change the frequency, duration, or amount of O&M activities that would occur, and the area of O&M activities is limited to the structure and the 250-foot incidental take buffer zone around the structure, interactions with large, transient marine mammals, such as dolphins and whales, would be minimal.

Disturbance to marine mammals would not substantially change. However, the definition of harassment under the MMPA (16 US Code 1361 et seq.) includes any act of pursuit, torment, or annoyance that has the potential to injure a marine mammal or marine mammal stock in the wild (Level A harassment) or has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavior patterns, including migration, breathing, nursing, breeding, feeding, and sheltering (Level B harassment); therefore, incidental harassment has the potential to occur as a result of O&M activities in the proposed incidental take buffer zone. The lease and permit conditions require compliance with the MMPA, including potentially obtaining an Incidental Harassment Authorization and implementing avoidance and minimization measures to protect marine mammals and their habitat.

Foraging-Related Impacts on State and Federally Listed Birds

CESA- and ESA-listed bird species, such as Scripp's murrelet (*Synthliboramphus scrippsi*), and common nesting birds spend a large amount of time on the ocean and could forage in the vicinity of pre-existing artificial structures. O&M activities of the structures could result in temporary disruption of foraging behavior. However, the regulatory amendments would not substantially change the amount of O&M activities that would occur. These activities would also be limited to the time required to complete the maintenance, repair, replacement, or removal of the pre-existing artificial structure, and the area affected by the activity would be restricted to the pre-existing structure and a 250-foot incidental take buffer zone around the structure, which is a small area relative to the larger marine environment and foraging opportunities. Therefore, impacts on foraging behavior of CESA- and ESA-listed birds would be negligible.

Summary

The proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur and would not result in a substantial increase in disturbance to marine mammals or in the risk of foraging-related adverse effects on CESA- and ESA-listed birds. In addition, lease applicants would be subject to prior approval by CSLC for O&M activities, and approval would include compliance with regulatory requirements, including those of the MMPA, the ESA, and CESA; O&M activities would be temporary; and the affected area during O&M activities would be small relative to the home range and foraging areas of marine mammals and state and federally listed birds. For these reasons, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.2-5: Result in Disturbance to or Loss of Bird Nests

While O&M of pre-existing artificial structures could adversely affect CESA- and ESA-listed birds, bird species listed as CDFW species of special concern, and common nesting birds through disturbance or removal of nests, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow take of marine resources incidental to authorized O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of O&M activities that would occur, the project would not result in more disturbance or loss of bird nests. This impact would be **less than significant**.

CESA- and ESA-listed marine bird species, such as Scripp's murrelet, California least tern (Sternula antillarum browni), and marbled murrelet (Brachyramphus marmoratus), have specific nesting habitat requirements and are sensitive to disturbance at nesting sites and therefore would not be expected to nest in the 250-foot incidental take buffer zone around pre-existing artificial structures. Scripp's murrelets are colonial nesters on offshore islands, most California least terns nest on only five sites in California, and marbled murrelets nest inland in old-growth forest. Because these nesting areas are so specialized, they are generally known areas, and MPAs may have been designated to protect prey items or marine habitat of listed birds. However, some pre-existing artificial structures, such as underwater transmission and telecommunication lines, are not subject to regular human disturbance, and new nesting sites may have become established nearby since the construction or installation of the pre-existing artificial structure. In addition, the bald eagle, a listed bird species not specifically associated with the marine environment but associated with open water, could potentially nest on a pre-existing artificial structure, such as a bridge, in coastal or shoreline areas. Other protected birds, including CDFW species of special concern, and common nesting birds, such as cormorants and swallows, could nest on or in the vicinity of pre-existing artificial structures, such as on bridges. O&M activities of structures could result in disturbance or injury of listed and common nesting birds, leading to potential nest abandonment and injury or mortality of adults, young, or eggs or direct removal of nests. Common nesting birds are those bird species that do not meet the criteria for special-status species as defined in the MPA Region EIRs but are protected under Sections 3503 and 3503.5 of the California Fish and Game Code and the Migratory Bird Treaty Act (MBTA). Disturbance and loss of common nesting birds would be limited because the regulatory amendments would not substantially change the amount of O&M activities that would occur, these activities are temporary, and the area affected by the disturbance would be restricted to the pre-existing structure and a 250-foot incidental take

buffer zone around the structure. Active common bird nests that could be present in this area during the breeding season would be minimal and loss of a nest would not eliminate or reduce local common bird populations below self-sustaining levels.

The proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur, and O&M activities are already conducted in the project area. These activities have been complying with lease and permit conditions that authorize these activities. Compliance with various regulatory policies, including CESA, the ESA, the MBTA, and the Fish and Game Code, and lease agreements from the CSLC, is required for O&M activities. Implementation of limited operating periods (i.e., restricting O&M activities to be conducted outside of the breeding season, or conducting preconstruction surveys for nesting birds and establishing an avoidance buffer if active nests are found) would reduce the potential for take of listed and common nesting birds. Avoidance and minimization measures, such as implementation of limited operating periods and conducting preconstruction surveys and establishing avoidance buffers are established guidelines that are expected to be adopted by the agencies with jurisdiction. For these reasons, implementation of the proposed regulatory amendments would not result in a substantial increase in disturbance to or loss of bird nests. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.2-6: Result in Loss of Fish from Entrainment or Impingement and Marine Invertebrates by Removal

While O&M of pre-existing artificial structures has the potential to adversely affect fish species through entrainment or impingement and adversely affect marine invertebrates and their habitat through disturbance or direct removal of existing marine organisms, the proposed regulatory amendments would not substantially change authorized O&M activities. Because the proposed regulatory amendments to allow take of marine resources incidental to authorized O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of O&M activities that would occur, the project would not result in the substantial loss of fish species or invertebrates. This impact would be **less than significant**.

O&M of pre-existing artificial structures, such as intake pipes, could result in mortality of fish from entrainment or impingement. Entrainment occurs when the current or flow at a water intake is sufficient to draw in fish, generally because of an absent or inadequate screen surrounding the structure. Impingement is the entrapment of fish on the outer part of an intake structure or against a screening device on the structure, which occurs when intake velocities are too high to allow escape. Both entrainment and impingement can be minimized with a well-designed intake screen. Screen pore size should be limited to the extent that fish above a certain size would be physically unable to pass through. In addition, the screened-in area should be large enough such that the rate of water moving through the screen is sufficiently low that a fish may swim to avoid the screen (WVDEP 2015). The proposed regulatory amendments would not substantially change existing O&M activities, and these activities are required to comply with requirements in permits issued by CDFW, the Regional Water Quality Control Boards, and NOAA Fisheries to minimize impacts on fish species, including CESA- and ESA-listed fish, such as Coho salmon (*Oncorhynchus kisutch*), green sturgeon, and steelhead (*Oncorhynchus mykiss irideus*), and lease agreements from the CSLC. Lease and permit conditions include measures such as requiring that fish screens for intake pipes during pipe replacement conform with the standards in the *NOAA Fisheries West Coast Region Anadromous Salmonid Passage Design Manual* (NOAA Fisheries 2023b) or best available guidance.

O&M of pre-existing artificial structures, such as riprap, seawalls, docks, piers, oil terminal supports and piles, transmission and telecommunication lines, outfall or intake pipes, and bridge abutments, could result in removal of marine invertebrates, such as tunicates (i.e., sea squirts), mussels (*Mytilus* spp.), snails, barnacles, anemones, and sea stars, and vegetation such as surfgrass (*Phyllospadix* spp.) and algal assemblages that may have colonized these various structures and are using them as habitat. Loss of these species and habitat would be limited to the structure or parts of the structure being maintained, repaired, replaced, or removed. Burying transmission and

telecommunication lines or pipes in soft bottom habitat could result in crushing sessile and burrowing marine invertebrates. However, because proposed regulatory amendments would not substantially change existing O&M activities and the area encompassed by the pre-existing artificial structures is small, especially compared to the larger marine environment, the loss of a few individuals would not be a substantial adverse effect on the population. The loss of a small amount of this benthic habitat would be offset by the potential for the invertebrates or marine vegetation to attach to the replacement structure or other existing structures or natural habitat, such as rocks. These organisms would be expected to rapidly recolonize the replacement structure or other natural habitats. The loss of habitat would be limited to the amount of time required to maintain, repair, or replace the structure.

The proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur and would not result in a substantial increase in the loss of fish species or marine invertebrates. In addition, impacts on marine invertebrates and habitat would be localized and temporary. Because lease applicants would be subject to prior approval by CSLC for O&M activities, and approval would include compliance with regulatory requirements, including measures and best management practices to avoid and minimize fish entrainment and impingement impacts, O&M activities would be localized and temporary. In addition, the proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur. Therefore, the project would not result in the substantial loss of fish species or marine invertebrates. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.2-7: Result in Loss of ESA-Listed Abalone

While O&M of pre-existing artificial structures has the potential to adversely affect black and white abalone and their habitat, including black abalone critical habitat, if pre-existing artificial structures provide habitat or are sited in rocky habitat, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments would not change the frequency, duration, or amount of O&M activities that would occur, the project would not result in a substantial increase in the risk of loss of black and white abalone and their habitat. This impact would be **less than significant**.

O&M of pre-existing artificial structures, such as transmission or telecommunication lines, docks, piers, oil terminal supports and piles, and bridge abutments, could adversely affect the ESA-listed marine invertebrates black abalone (*Haliotis cracherodii*) and white abalone (*Haliotis sorenseni*) if a cable alignment, supports and piles, or abutments are sited in rocky habitat that may support black or white abalone or are sited in designated critical habitat for black abalone. Replacement of cables, supports and piles, and abutments would be expected to occur in the same location or a location near where the cables, supports and piles, and abutments were originally installed. It is unknown if cables, supports and piles, and abutments were sited to avoid rocky habitat when these structures were installed. However, the proposed regulatory amendments would not substantially change existing O&M activities, and these activities would be subject to the existing regulatory process and would be expected to comply with various regulatory requirements. These requirements could include implementation of project-specific mitigation, such as resiting cable alignment, supports and piles, or abutments outside of rocky habitat.

The proposed regulatory amendments would not change the frequency, duration, or amount of O&M activities that would occur. In addition, O&M activities are already conducted in the project area, and these activities have been complying with lease and permit conditions that authorize the activities. Avoidance and minimization measures to avoid loss of black and white abalone and their habitat are expected to be implemented by the agencies with jurisdiction. For these reasons, implementation of the regulatory amendments would not result in a substantial increase in the risk of adverse effects on black and white abalone and their habitat. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.2-8: Result in the Introduction or Spread of Aquatic Invasive Species

While O&M of pre-existing artificial structures could result in the introduction or spread of aquatic invasive species, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow take of marine resources incidental to authorized O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of O&M activities that would occur, the project would not result in the introduction or spread of aquatic invasive species. This impact would be **less than significant**.

The use of equipment or vessels associated with O&M activities could result in the introduction or facilitate the spread of aquatic invasive species, such as green seaweed (*Caulerpa taxifolia*), green crab (*Carcinus maenas*), and clubbed tunicate (*Styela clava*), if in-water construction equipment or vessels from other regions are used and not properly cleaned. The introduction or spread of aquatic invasive species could adversely affect EFH or designated critical habitat for ESA-listed species. CSLC has developed the Marine Invasive Species Program to reduce the likelihood that harmful nonnative species will be introduced into California bays and harbors. The proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur and would not result in a substantial increase in the introduction or spread of aquatic invasive species. In addition, O&M activities are already conducted in the project area, and these activities have been complying with lease and permit conditions that authorize these activities. Permit and lease conditions are expected to include measures to reduce the potential for introduction and spread of aquatic invasive species, if applicable. Because the proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur, the project would not result in a substantial increase in the introduction or spread of aquatic invasive species. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.2-9: Substantially Affect Eelgrass

While sedimentation and shading associated with O&M of pre-existing artificial structures could decrease light penetration from turbidity and settling of resuspended sediments, which could adversely affect eelgrass by decreasing growth rates of light-dependent species, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow take of marine resources incidental to authorized O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of O&M activities that would occur, the project would not substantially affect eelgrass. This impact would be **less than significant**.

Eelgrass (*Zostera* spp.) habitats are one of the most valuable and productive habitats in the marine environment. Eelgrass serves several important ecosystem functions, including providing foraging areas and shelter to young fish and invertebrates, food for migratory waterfowl and sea turtles, and spawning surfaces for fish. Eelgrass also reduces coastal erosion by trapping sediment, stabilizing the substrate, and reducing the force of wave energy. In addition, eelgrass produces food and oxygen; improves water quality by filtering polluted runoff; absorbs excess nutrients; and stores greenhouse gases, such as carbon dioxide (NOAA Fisheries 2022). Eelgrass is designated as EFH and a Habitat of Particular Concern under the Magnuson-Stevens Act. Eelgrass, if present, could be adversely affected by O&M activities that result in resuspension of sediment that increases turbidity and decreases the ability of light to penetrate. Resuspended sediment could also settle and bury eelgrass, resulting in a reduction in eelgrass cover. In addition, decreased light penetration or direct disturbance/removal could occur if a replacement for a pre-existing artificial structure, such as a dock or pier, occupies a larger area than the prior structure or is shifted from the original location. However, the proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur. In addition, changes to light penetration would be minimal because O&M activities are restricted to the time needed to conduct the O&M activities and are therefore temporary, and because the area occupied by pre-existing artificial structures relative to the available surrounding marine habitat is limited. In addition, if the location of the replacement structure is shifted compared to the location of the original structure, the distance that the structure is shifted would be the minimal distance necessary to qualify as a replacement and not new construction. Removal of a pre-existing artificial structure could remove shading and allow increased light penetration that may facilitate colonization or spread of eelgrass if it occurs in the vicinity of the structure. NOAA Fisheries has established the *California Eelgrass Mitigation Policy and Implementing Guidelines* (NOAA Fisheries 2014) to ensure that actions would result in no net loss of eelgrass habitat function. Water quality best management practices would also be implemented during O&M activities and would minimize the potential for resuspension of sediments to adversely affect eelgrass growth and survival. Compliance with various regulatory policies and lease agreements from the CSLC is required for O&M activities. Lease and permit conditions are expected to include avoidance and minimization measures to reduce the potential for adverse impacts on eelgrass, if present, such as following the *California Eelgrass Mitigation Policy and Implementing Guidelines* (NOAA Fisheries 2014). Because the proposed regulatory amendments would not change the frequency, duration, or amount of O&M activities that would occur, the project would not result in a substantial increase in the risk of adverse effects on eelgrass. Therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.2-10: Substantially Affect Special-Status Species and Habitat That Occur on Tidelands and Adjacent Terrestrial Habitats through O&M of Pre-Existing Artificial Structures

While O&M of pre-existing artificial structures that occur partially or completely on tidelands or that occur immediately adjacent to terrestrial habitats could result in indirect adverse effects on special-status plants, special-status wildlife, or sensitive habitats (e.g., waters of the United States, waters of the state, riparian habitat, sensitive natural communities) if present within the footprint or in the vicinity of pre-existing artificial structures, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow take of marine resources incidental to O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of O&M activities that would occur, the project would not substantially affect habitat in tidelines or adjacent terrestrial areas. This impact would be **less than significant**.

Portions of pre-existing artificial structures may be located on tidelands and may require O&M activities. In addition, pre-existing artificial structures may be located immediately adjacent to terrestrial land. The coastal terrestrial environment contains a wide variety of environments, including dunes, marine terraces, and rocky cliffs, and these may occur adjacent to California's Network. These habitats are known to support many special-status plant and wildlife species; some occur only in coastal environments, including tidelands. Many sensitive aquatic habitats, including river mouths, estuaries, lagoons, creeks, streams, salt marshes, and wetlands, occur in tidelands or adjacent to terrestrial land. Sensitive riparian habitat is likely associated with many of these aquatic features. In addition, terrestrial sensitive natural communities may be present adjacent to pre-existing artificial structures.

O&M of pre-existing artificial structures may include sea floor disturbance, trenching, pile-driving, use of heavy machinery, and the presence of construction vessels and crews. These activities could result in adverse indirect effects on terrestrial special-status species or sensitive habitats if they are present within the footprint or vicinity of the activities. O&M activities could result in disruption of nesting or other behavior related to noise (e.g., during pile-driving) or visual disturbance (e.g., construction equipment, construction personnel), or fill of wetlands or other waters of the United States or state if they are present in proposed O&M areas. However, the proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur, and O&M of pre-existing artificial structures would be subject to compliance with regulatory requirements through permit and lease conditions. Because the proposed regulatory amendments apply only to the marine environment, O&M activities with potential to adversely affect biological resources in the terrestrial environment would be subject to compliance with the regulatory requirements of agencies with jurisdiction over the terrestrial environment, including regulations established by the Coastal Zone Act, the Clean Water Act, and the Porter-Cologne Water Quality Control Act, such that impacts on terrestrial special-status species and associated habitat would be minimized

or avoided. Indirect effects, such as noise and visual disturbances, on terrestrial special-status species would be localized and temporary. In addition, the proposed regulatory amendments would not change the frequency, duration, or amount of O&M activities that would occur. Therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

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3.3 ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

This section analyzes and evaluates the potential impacts on known and unknown cultural resources that could occur with the proposed regulatory amendments as they apply to pre-existing artificial structures in marine protected areas (MPAs). Cultural resources include districts, sites, buildings, structures, or objects generally older than 50 years and considered to be important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. They include prehistoric resources, historic-period resources, and "tribal cultural resources" (the latter as defined by Assembly Bill [AB] 52, Statutes of 2014, in California Environmental Quality Act (CEQA) Section 21074).

Archaeological resources are locations where human activity has measurably altered the earth, including the benthic environment, or left deposits of prehistoric or historic-period physical remains. In the project area, archaeological resources potentially include stone tools, food-gathering implements, bottles, shipwrecks, and pier foundations. Historical (or built environment) resources include standing buildings (e.g., houses, barns, outbuildings, cabins) and intact structures (e.g., dams, bridges, roads, districts), or landscapes. A cultural landscape is defined as a geographic area (including both cultural and natural resources and the wildlife therein) associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values. Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe.

One comment letter regarding cultural resources was received in response to the notice of preparation (see Appendix A). The Native American Heritage Commission requested AB 52 and Senate Bill (SB) 18 compliance information. SB 18 does not apply to the project, because there is not a general plan amendment, which is the trigger for SB 18 compliance; therefore, it is not discussed in this section. AB 52 compliance is described below.

3.3.1 Regulatory Setting

Regulatory background relevant to the project is provided in the North Coast Study Region Environmental Impact Report (EIR), Section 5.2, "Regulatory Setting," Chapter 5, "Cultural Resources" (Commission and CDFG 2012); North Central Coast MPAs Project EIR, Section 7.1.2, "Regulatory Setting," Section 7.1, "Cultural Resources" (CDFG 2009); Central Coast MPAs Project EIR, Section 7.1.2, "Regulatory Setting," Section 7.1, "Cultural Resources" (CDFG 2007); and South Coast Study Region EIR, Section 8.1.1, "Regulatory Framework," Section 8.1, "Cultural Resources" (Commission 2010). This section presents additional regulatory background relevant to the project addressed in this Final Supplement.

FEDERAL

No additional federal plans, policies, regulations, or laws related to archaeological, historical, or tribal cultural resources are applicable to the project.

STATE

Tribal Cultural Resources in the California Environmental Quality Act

AB 52, signed by the California governor in September 2014, established a new class of resources under CEQA: "tribal cultural resources," defined in CEQA Section 21074. CEQA requires public agencies to consider the effects of their actions on "tribal cultural resources." CEQA Section 21084.2 establishes that "[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment." CEQA Section 21074 states:

- a) "Tribal cultural resources" are either of the following:
 - 1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - A) Included or determined to be eligible for inclusion in the California Register of Historical Resources (CRHR).
 - B) Included in a local register of historical resources as defined in subdivision (k) of Public Resources Code (PRC) Section 5020.1.
 - 2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
- b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
- c) A historical resource described in CEQA Section 21084.1, a unique archaeological resource as defined in subdivision
 (g) of CEQA Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of CEQA
 Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

The AB 52 process is described in the relevant statutory provisions of CEQA. Pursuant to CEQA Sections 21080.3.1, 21080.3.2, and 21082.3, lead agencies undertaking CEQA review must, upon written request of a California Native American tribe, begin consultation before the release of an EIR, negative declaration, or mitigated negative declaration. CEQA Sections 21080.3.1 and 21080.3.2 state that within 14 days of determining that a project application is complete, or to undertake a project, the lead agency must provide formal notification, in writing, to the tribes that have requested notification of proposed projects in the lead agency's jurisdiction. If it wishes to engage in consultation on the project, the tribe must respond to the lead agency within 30 days of receipt of the formal notification. The lead agency must begin the consultation process with the tribes that have requested consultation within 30 days of receiving the request for consultation. Consultation concludes when either (1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.

If the lead agency determines that a project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process, provisions under CEQA Section 21084.3(b) describe mitigation measures that may avoid or minimize the significant adverse impacts. Examples include:

- Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
- (2) Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - (A) Protecting the cultural character and integrity of the resource.
 - (B) Protecting the traditional use of the resource.
 - (C) Protecting the confidentiality of the resource.
- (3) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
- (4) Protecting the resource.

California Coastal Act

The California Coastal Act provides long-term protection of California's coastline. Under the California Coastal Act, any development in the coastal zone must obtain a Coastal Development Permit from the California Coastal Commission or a local coastal program that has been certified by the California Coastal Commission as consistent with the California Coastal Act. The California Coastal Commission retains permanent coastal permit jurisdiction over development proposed on tidelands, submerged lands, and public trust lands. Development includes demolition, construction, replacement, or changes to the size of a structure and repair or maintenance activities that could result in environmental impacts. The California Coastal Act requires mitigation for any adverse impacts on cultural resources.

3.3.2 Environmental Setting

The existing environmental setting for the project is described in the North Coast Study Region EIR, Section 5.3, "Environmental Setting," Chapter 5, "Cultural Resources" (Commission and CDFG 2012); North Central Coast MPAs Project EIR, Section 7.1.1, "Environmental Setting," Section 7.1, "Cultural Resources" (CDFG 2009); Central Coast MPAs Project EIR, Section 7.1.1, "Environmental Setting," Section 7.1, "Cultural Resources" (CDFG 2007); and South Coast Study Region EIR, Section 8.1.2, "Environmental Setting," Section 8.1, "Cultural Resources," (Commission 2010). This section presents additional environmental setting relevant to the project addressed in this Final Supplement.

KNOWN RESOURCES

Precontact Archaeology

Much of the current coastal region of California consists of steep, actively eroding coastal bluffs and small pocket beaches. An important factor in coastal California's paleoenvironmental history has been the evolution of the estuary systems along the coast. Many early archaeological sites would have been present along estuary boundaries, areas that are now completely submerged because of the rise in sea level during the late Pleistocene and early Holocene (15,000–10,000 years ago) (Moratto 1984). Precontact sites and artifacts include ceremonial sites; burial grounds and village sites; stone and shell tools; shell and ceramic middens; shell mounds; and rock milling features that indicate food processing sites or larger habitation sites. Many resources, including precontact artifacts and sites, likely lie submerged beneath the water, undiscovered or unrecorded because of the general lack of investigation. However, it is likely that the tribes have particular knowledge of the location of archaeological sites beneath the water that are of cultural importance to them.

Historic-Era Archaeology

Offshore islands and rocky outcroppings along the California coast have been used by the Spanish and Russians for hunting activities and for docking or anchoring their ships. These rocks were also used to stabilize logging flumes that would convey timber to ships that were anchored offshore in the absence of a pier or shoreline dock. Some of the offshore rocks and islands also served as locations for navigational aids, such as lighthouses (Bischoff 2005).

These offshore rocks have also been responsible for numerous shipwrecks throughout California's history. Shipwrecks are the most well-known historic artifacts that lie beneath the water. The California State Lands Commission shipwreck database lists more than 1,500 known shipwreck sites off the coast of California (California State Lands Commission 2023). Because of the sensitivity of known underwater resources and the risk of looting or other damage (intentional or unintentional) to the artifacts and sites, their precise locations are kept confidential.

Of the 1,549 known shipwrecks, 682 do not have a county designation, and 80 are not located in coastal counties but instead are located along rivers and the Sacramento–San Joaquin Delta in inland counties. The remaining 787 shipwrecks are located in the following coastal counties, which approximately match the planning regions:

- North Coast: Del Norte, Humboldt, and Mendocino Counties: 215
- North Central Coast: Sonoma, Marin, San Francisco, and San Mateo Counties: 237
- ► Central Coast: Santa Cruz, Monterey, San Luis Obispo, and Santa Barbara Counties: 111
- South Coast: Ventura, Los Angeles, Orange, and San Diego Counties: 224

Historical Resources

Historical resources that have been listed in the CRHR, which means they have met established criteria and are significant at the local, state, or national level, are shown on the Office of Historic Preservation website. However, this listing does not include resources that have been evaluated as eligible but not listed on the register or resources that have been listed on a local register.

Table 3.3-1 lists known historical resources in the project area as identified in the CRHR by the State Historical Resources Commission. It presents them by county group, which approximately matches the planning regions. It is not a comprehensive list of project area resources in the CRHR and does not include resources listed in the CRHR by consensus determination (Office of Historic Preservation 2023).

Resource Name	NRHP	CRHR	CHL
North Coast: Del Norte, Humboldt, and Mendocino Counties	-	-	-
Crescent City Lighthouse, Del Norte County	Х	Х	
St. George Reef Light Station, Del Norte County	Х	Х	
Punta Gorda Light Station, Humboldt County	Х	Х	
Trinidad Head Light Station, Humboldt County	Х	Х	
Albion River Bridge, Mendocino County	Х	Х	
Point Arena Light Station, Mendocino County	Х	Х	
Point Cabrillo Light Station, Mendocino County	Х	Х	
North Central Coast: Sonoma, Marin, San Francisco, and San Mateo Counties			
Bodega Bay and Harbor, Sonoma County			Х
Salt Point Landing Historical and Archaeological District, Sonoma County	Х	Х	
Point Bonita Light Station, Marin County	Х	Х	
Point Reyes Light Station, Marin County	Х	Х	
Point Reyes Lifeboat Rescue Station, Marin County	Х	Х	
Brock Schreiber Boathouse and Beach, Marin County	Х	Х	
Drakes Bay Historic and Archeological District, Marin County	Х	Х	
C.A. Thayer (schooner), San Francisco County	Х	Х	
Balclutha (ship), San Francisco County	Х	Х	
Alma (schooner), San Francisco County	Х	Х	
Eureka (steamboat), San Francisco County	Х	Х	
Hercules (tugboat), San Francisco County	Х	Х	
SS Jeremiah O'Brien (ship), San Francisco County	Х	Х	
USS Pampanito (submarine), San Francisco County	Х	Х	
M.V. Santa Rosa (ferry), San Francisco County	Х	Х	
San Francisco Maritime National Historic Park, San Francisco County	Х	Х	
Drydock 4 Hunters Point Naval Shipyard, San Francisco County	Х	Х	
Hunters Point Commercial Drydock Historic District, San Francisco County	Х	Х	
Yerba Buena Island Lighthouse, San Francisco County	Х	Х	
San Francisco/Oakland Bay Bridge, San Francisco County	Х	Х	
Presidio of San Francisco, San Francisco County	Х	Х	

Table 3 3-1	Listed Historica	l Resources in	the Project Area
		i nesources in	the ridjett Area

Resource Name		CRHR	CHL
Golden Gate Bridge, San Francisco County	Х	Х	
Central Embarcadero Piers Historic District, San Francisco County	Х	Х	
Point Montara Light Station, San Mateo County	Х	Х	
Pigeon Point Lighthouse, San Mateo County	Х	Х	
Central Coast: Santa Cruz, Monterey, San Luis Obispo, and Santa Barbara Counties	<u>.</u>	•	<u>.</u>
Point Sur Light Station, Monterey County	Х	Х	
Point Pinos Lighthouse, Monterey County	Х	Х	
Port San Luis Site, San Luis Obispo County	Х	Х	
Piedras Blancas Light Station, San Luis Obispo County	Х	Х	
San Luis Obispo Light Station, San Luis Obispo County	Х	Х	
Point Conception Light Station, Santa Barbara County	Х	Х	
Santa Barbara Presidio, Santa Barbara County	Х	Х	
South Coast: Ventura, Los Angeles, Orange, and San Diego Counties			
Anacapa Island Light Station, Ventura County	Х	Х	
Malibu Historic District, Los Angeles County	Х	Х	
RMS Queen Mary (ship), Los Angeles County	Х	Х	
Zumbrota (yacht), Los Angeles County	Х	Х	
Los Angeles Harbor Light Station, Los Angeles County	Х	Х	
Point Fermin Lighthouse, Los Angeles County	Х	Х	
Point Vicente Light, Los Angeles County	Х	Х	
Wild Goose (yacht), Orange County	Х	Х	
Huntington Beach Municipal Pier, Orange County	Х	Х	
Berkeley (ferryboat), San Diego County	Х	Х	
Pilot (boat), San Diego County	Х	Х	
Renown (yacht), San Diego County	Х	Х	
Star of India (ship), San Diego County	Х	Х	
Naval Air Station, San Diego, Historic District, San Diego County	Х	Х	
Old Point Loma Lighthouse, San Diego County	Х	Х	

Notes: NRHP = National Register of Historic Places; CRHR = California Register of Historical Resources; CHL = California Historical Landmark.

Source: Data compiled by Ascent Environmental in 2023.

Tribal Cultural Resources

There continue to be many traditional cultural uses of the coast and ocean waters by tribal people that are consumptive and nonconsumptive. Consumptive uses include traditional subsistence, medicinal, spiritual, and ceremonial contexts. Nonconsumptive use examples include use of the viewshed from a particular place for spiritual purposes. Tribal cultural resources are of particular significance to tribes and tribal communities for the continuation of traditional religious and ceremonial activities and for the continuation of traditional cultural harvesting and gathering. In addition, specific areas are identified for certain resources or uses by a given family, tribe, or group of tribes.

On February 14, 2023, the California Fish and Game Commission (Commission) and California Department of Fish and Wildlife (CDFW) sent out letters to tribal representatives in accordance with its Tribal Communication and Consultation Policy; 317 tribal representatives were contacted. On February 27, 2023, Federated Indians of Graton Rancheria responded with a request for formal consultation. No other responses were received.

The response from the tribal representative of the Federated Indians of Graton Rancheria stated that the Tribe wished to engage in formal consultation on the project. The request for formal consultation identified several topics for consultation, including significance of tribal cultural resources, potential for significant effects to tribal cultural resources, and alternatives and/or appropriate mitigation measures. The Tribe also requested copies of any cultural resources assessments or other assessments completed in the area of potential effects. Consultation with the Tribe has been concluded by the Commission.

Environmental Impact Analysis

METHODOLOGY

The focus of this impact analysis is on the potential physical impacts on the environment that may occur as a result of the reasonably foreseeable compliance responses to the project, which are summarized in Section 2.4, "Operations and Maintenance Activities Allowed with Implementation of the Proposed Regulation Amendments." The analysis is informed by the provisions and requirements of federal, state, and local laws and regulations that apply to cultural resources. A cultural resources inventory, including records search and survey, was not performed and is not needed because of the large geographic area and programmatic nature of this analysis.

CEQA Section 21083.2(g) defines a "unique archaeological resource" as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following CRHR-related criteria: (1) that it contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; (2) that it has a special and particular quality, such as being the oldest of its type or the best available example of its type; or (3) that it is directly associated with a scientifically recognized important prehistoric or historic event or person. An impact on a resource that is not unique is not a significant environmental impact under CEQA (State CEQA Guidelines Section 15064.5[c][4]). If an archaeological resource qualifies as a resource under CRHR criteria, then the resource is treated as a unique archaeological resource for the purposes of CEQA.

CEQA Section 21074 defines "tribal cultural resources" as "[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" that are listed or determined eligible for listing in the CRHR, listed in a local register of historical resources, or otherwise determined by the lead agency to be a tribal cultural resource.

For the purposes of the impact discussion, "historical resource" is used to describe built-environment historic-period resources. Archaeological resources (both prehistoric and historic-period), which may qualify as "historical resources" pursuant to CEQA, are analyzed separately from built-environment historical resources.

THRESHOLDS OF SIGNIFICANCE

An impact on cultural resources would be significant if implementation of the project would:

- cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 of the State CEQA Guidelines;
- cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the State CEQA Guidelines;
- cause a substantial adverse change in the significance of a tribal cultural resource, defined in CEQA Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe; or
- disturb any human remains, including those interred outside of formal cemeteries.

ISSUES NOT DISCUSSED FURTHER

Human Remains

Precontact or historic-era marked or unmarked human interments are present throughout the landscape of California but would not be an issue for the intertidal and open ocean setting of the proposed project. California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains are contained in California Health and Safety Code Section 7050.5 and PRC Section 5097. However, the operation, maintenance, repair, removal, or replacement (collectively "O&M") of pre-existing artificial structures that would be allowed in the incidental take buffer zones under the proposed regulatory amendments (see Section 2.4, "Operations and Maintenance Activities Allowed under Proposed Regulatory Amendments") do not include any ground-disturbing activities where human remains might be present. Therefore, implementation of the project would have no impact on human remains. This issue is not discussed further in this Final Supplement.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.3-1: Cause a Substantial Adverse Change in the Significance of a Historical Resource

While O&M of pre-existing artificial structures could result in damage to or destruction of a historic building or structure, thereby resulting in a substantial adverse change in the significance of a historical resource as defined in State CEQA Guidelines Section 15064.5, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow injury, damage, or take (collectively "take") of any living, geological, or cultural marine resource (collectively "marine resource") incidental to O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of authorized O&M activities that would occur, the project would not result in a substantial adverse change in the significance of a historical resource. This impact would be **less than significant**.

Artificial structures with entitlements that existed before the establishment of the MPAs are located in many MPAs in the California MPA Network. Although some MPAs have individual regulations allowing for the take of marine resources incidental to O&M of pre-existing artificial structures, other MPAs do not authorize this take of marine resources. The project would (1) define what qualifies as a pre-existing artificial structure, (2) define an incidental take buffer zone as a discrete, focused area immediately around pre-existing artificial structures where take of marine resources incidental to continued O&M activities would be allowed, (3) include identification requirements for individuals conducting these activities to facilitate enforcement, and (4) clarify that no take of marine resources other than what is specified for each MPA designation type would be lawful.

The following structures and uses on sovereign lands, including tidelands and submerged lands, are subject to authorization through issuance of a lease, permit, or entitlement by the California State Lands Commission:

- ▶ riprap, seawalls, groins, jetties, breakwaters, deflectors, and bulkheads;
- recreational docks, piers, and buoys;
- commercial piers and facilities, docks, moorings, and buoys;
- commercial marinas, restaurants, and clubhouses;
- helicopter pads, decks, and fuel service facilities;
- ▶ oil terminals, piers, wharves, warehouses, and storage sites;
- ▶ power line, pipeline, intake, and outfall line rights of way; and
- ▶ bridges.

O&M of existing artificial structures have the potential to affect known historic resources. For example, construction of a replacement pier could reduce the integrity of a listed harbor historic district, and the construction of replacement warehouses could alter the setting of adjacent listed historic buildings. Damage to a building or structure that is a designated historical resource, as defined in State CEQA Guidelines Section 15064.5, or one that has not yet been evaluated for its eligibility for recognition under federal, state, or local register criteria, has the potential to result in a change in its historical significance.

Because the proposed regulatory amendments to allow take of marine resources incidental to authorized O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of O&M activities that would occur, the project would not substantially change O&M effects on historical resources. Also, in accordance with existing lease requirements, land-based facilities are required to adhere to the existing regulations and processes of local jurisdictions and, potentially, the California Coastal Commission. This would include evaluation of site-specific conditions by qualified personnel (architectural historian, historian), consistent with CEQA and, as necessary, Section 106 standards of the National Historic Preservation Act of 1966. If resources eligible for inclusion in the NRHP, CRHR, or local register are identified, an assessment of impacts on these resources would be conducted and would include detailed measures to avoid impacts, which may include modification of the activity to avoid adverse effects (i.e., physical demolition, destruction, relocation, or alteration) on significant resources, as well as compliance with the US Secretary of the Interior's Guidelines for Historic Preservation. Adherence to existing requirements (both imbedded in existing lease requirements and in local regulations) would avoid substantial adverse changes in the significance of historical resources or performing professionally accepted and legally compliant procedures for the treatment of historic resources. For these reasons, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.3-2: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources

While O&M activities that would disturb the sea floor could result in discovery or damage of yet-undiscovered submerged archaeological resources as defined in State CEQA Guidelines Section 15064.5, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow take of marine resources incidental to O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of authorized O&M activities that would occur, the project would avoid impacts on archaeological resources. This impact would be **less than significant**.

As described above, because this document covers a large geographic area and the document is programmatic in nature, a records search and survey of the project area was not conducted and is not considered necessary. Approximately 780 shipwrecks are known to be located along California's coastal counties (California State Lands Commission 2023); previously unrecorded shipwrecks also may be located in the project area. In addition, shipwreck locations are often recorded at the site where the vessel was last seen and might not indicate where the sunken vessel actually settled on the seafloor.

The proposed project, as described for Impact 3.3-1, includes reasonably foreseeable compliance responses that are anticipated to include sea floor–disturbing activities that could result in discovery of or damage to undiscovered submerged archaeological resources. However, the proposed regulatory amendments would not substantially change the amount of O&M activities occurring. In addition, pursuant to existing lease requirements, lease applicants are required to comply with the local jurisdictions' requirements related to cultural resource protection, as well as PRC Section 5024. Current state law prohibits unauthorized salvage and removal of artifacts from submerged shipwrecks, aircraft, and other archaeological resources in state waters (PRC Sections 6313 and 6314). Because the proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities, and compliance with PRC Sections 6313 and 6314 would require the protection of archaeological resources, and proper care of significant artifacts if they are recovered, the impact on unique archaeological resources, including shipwrecks, would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.3-3: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource

While O&M of pre-existing artificial structures could damage submerged tribal cultural resources, if present, through sea floor–disturbing activities, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow take of marine resources incidental to O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of authorized O&M activities that would occur, the project would not result in a substantial adverse change in the significance of a tribal cultural resource, if present. Furthermore, the Commission and CDFW sent notification for consultation to 317 tribes. One response was received during the 30-day response period for AB 52 as defined in CEQA Section 21080.3.1. Consultation with this Tribe has concluded. This impact would be **less than significant**.

The proposed project, as described for Impact 3.3-1, includes reasonably foreseeable compliance responses that are anticipated to include sea floor–disturbing activities. O&M of pre-existing artificial structures could result in discovery or damage of undiscovered submerged tribal cultural resources. As described under Impact 3.3-2, the proposed regulatory amendments would not substantially change the amount of O&M activities that would occur, and lease applicants are required to comply with the local jurisdictions' requirements related to tribal cultural resource protection, as well as PRC Section 5024. Current state law prohibits unauthorized salvage and removal of archaeological resources, including ones that may also qualify as tribal cultural resources, and Native American sites in state waters (PRC Section 6314).

As previously described, the Commission and CDFW sent notification for consultation to 317 tribes. One response was received during the 30-day response period for AB 52 as defined in CEQA Section 21080.3.1, and consultation with the Tribe has been concluded by the Commission.

Because the proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities, and compliance with PRC Sections 5024 and 6314 would require the protection of tribal cultural resources, and proper care of significant artifacts if they are recovered, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

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3.4 WATER QUALITY

This section addresses the impacts on water quality that could occur with the proposed regulatory amendments as they apply to pre-existing artificial structures in marine protected areas (MPAs).

No comment letters regarding water quality were received in response to the notice of preparation.

3.4.1 Regulatory Setting

Regulatory background relevant to the project is provided in the North Coast Study Region Environmental Impact Report (EIR), Section 3.4.2, "Regulatory Setting," Section 3.4, "Water Quality" (Commission and CDFG 2012); North Central Coast MPAs Project EIR, Section 5.2.2, "Regulatory Framework," Section 5.2, "Water Quality" (CDFG 2009); Central Coast MPAs Project EIR, Section 5.2.2, "Regulatory Framework," Section 5.2, "Water Quality" (CDFG 2007); and South Coast Study Region EIR, Section 6.3.1, "Regulatory Framework," Section 6.3, "Water Quality" (Commission 2010). This section presents additional regulatory background relevant to the project addressed by this Final Supplement.

FEDERAL

Clean Water Act

The US Environmental Protection Agency (EPA) is the lead federal agency responsible for water quality management. The Clean Water Act (CWA) is the primary federal law that governs and authorizes water quality control activities by EPA, as well as the states. Various elements of the CWA address water quality. They are discussed below.

Section 404

The US Army Corps of Engineers (USACE), through its Regulatory Program, administers and enforces Section 404 of the CWA. Under CWA Section 404, a permit is required for the discharge of dredged or fill material into waters of the United States. In addition to many other water bodies and wetlands in California, marine waters seaward of the mean high tide line to the state's outer limit of jurisdiction are waters of the United States and are subject to USACE's regulatory authority.

National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program was established in the CWA to regulate municipal and industrial discharges to surface waters of the United States. NPDES permit regulations have been established for broad categories of discharges, including point source waste discharges and nonpoint source stormwater runoff. Each NPDES permit identifies limits on allowable concentrations and mass emissions of pollutants contained in the discharge. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits.

Section 401 Water Quality Certification/Waiver

Under Section 401 of the CWA, an applicant for a Section 404 permit (to discharge dredged or fill material into waters of the United States) must first obtain a certificate from the appropriate state agency stating that the fill is consistent with the state's water quality standards and criteria. In California, the authority to either grant water quality certification or waive the requirements is delegated by the State Water Resources Control Board (SWRCB) to the nine regional water quality control boards (RWQCBs).

Rivers and Harbors Act, Section 10

Along with Section 404 of the CWA, USACE, through its Regulatory Program, also administers and enforces Section 10 of the Rivers and Harbors Act of 1899 (RHA). Under RHA Section 10, a permit is required for work on structures in, over, or under navigable waters of the United States.

STATE

California Ocean Plan

The Water Quality Control Plan for Ocean Waters of California (California Ocean Plan) is described in the previous MPA Region EIRs but has been updated since they were certified. The most recent version was published in 2019. The California Ocean Plan states that SWRCB may designate State Water Quality Protected Areas to prevent the undesirable alteration of natural water quality in MPAs. RWQCBs may approve waste discharge requirements or recommend certification for a limited term for activities such as maintenance/repair of existing boat facilities, restoration of sea walls, repair of existing stormwater pipes, and replacement/repair of existing bridges. Limited-term activities may result in temporary and short-term changes in existing water quality.

California State Lands Commission

The California State Lands Commission (CSLC) manages 4 million acres of tide and submerged lands and the beds of natural navigable rivers, streams, lakes, bays, estuaries, inlets, and straits. It also monitors sovereign land granted in trust by the California Legislature to approximately 70 local jurisdictions that generally consist of prime waterfront lands and coastal waters. CSLC protects and enhances these lands and natural resources by issuing leases for use or development, providing public access, and resolving boundaries between public and private lands. Through its actions, CSLC secures and safeguards the public's access rights to natural navigable waterways and the coastline and preserves irreplaceable natural habitats for wildlife, vegetation, and biological communities. CSLC also protects state waters from marine invasive species introductions and prevents oil spills by providing the best achievable protection of the marine environment at all marine oil terminals in California and offshore oil platforms and production facilities.

3.4.2 Environmental Setting

The existing environmental setting for the project is described in the North Coast Study Region EIR, Section 3.4.3, "Environmental Setting," Section 3.4, "Water Quality" (Commission and CDFG 2012); North Central Coast MPAs Project EIR, Section 5.2.1, "Environmental Setting," Section 5.2, "Water Quality" (CDFG 2009); Central Coast MPAs Project EIR, Section 5.2.1, "Environmental Setting," Section 5.2, "Water Quality" (CDFG 2007); and South Coast Study Region EIR, Section 6.3.2, "Environmental Setting," Section 6.3, "Water Quality," (Commission 2010). This section presents additional environmental setting relevant to the project addressed by this Final Supplement.

WATER QUALITY

Point Sources

As described in the previous MPA Region EIRs, specific outfalls, or point sources, where industrial pollution enters coastal waters are generally regulated by state and federal agencies. The 2019 California Ocean Plan lists the following changes to NPDES permitted outfalls since certification of the previous MPA Region EIRs.

North Coast Study Region

Outfalls for the following facilities were added to the list in the previous EIR for the North Coast Study Region:

- ▶ National Park Service Requa Waste Water Facility and
- Evergreen or Louisiana Pacific Pulpmill.

North Central Coast Study Region

The City of Pacifica Wastewater Discharge Facility is no longer listed as having an outfall.

Central Coast Study Region

Outfalls for the following facilities were added to the list in the previous EIR for the Central Coast Study Region:

- ▶ Silverking Oceanic Farms Salmon Ranch,
- ▶ RMC Lonestar Santa Cruz Cement,
- Pacific Mariculture Inc. Abalone,
- Ragged Point Inn Wastewater Treatment Plant,
- ► Abalone Farm, Inc.,
- Chevron Pipe Line Company Chevron Estero Marine Terminal,
- ▶ Pacific Gas and Electric Company Diablo Canyon Power Plant,
- ► Avila Beach Community Services District Wastewater Treatment Plant, and
- ► Tosco Corporation Pipeline.

The Cambria Community Services District is no longer listed as having an outfall.

South Coast Study Region

The following outfalls were added to the list in the previous EIR for the South Coast Study Region:

- ▶ South Orange County Wastewater Authority San Juan Creek Ocean Outfall and
- ▶ Encina Wastewater Authority Encina Ocean Outfall.

The following facilities are no longer listed as having outfalls:

- ► Camrosa Wastewater Treatment Plant,
- Ventura Wastewater Treatment Plant,
- ▶ El Segundo Generating Station,
- SERRA Wastewater Treatment Plant,
- Dana Point,
- Chula Vista Power Plant,
- ► Carlsbad Wastewater Treatment Plant, and
- ▶ Tijuana Wastewater Treatment Plant.

In addition, Southern California Edison Co SONGS Units 1, 2, and 3 are now referred to as San Onofre Nuclear Generation Station Units 1, 2, 3.

Impaired Water Bodies

North Coast Study Region

The North Coast MPA Region EIR (Commission and CDFG 2012) states that 39 impaired water bodies drain into the North Coast region. The 2018 Impaired Waterbodies list still includes 39 impaired water bodies in the North Coast region, but some impairments have changed. A list of the impaired water bodies, the impairments, and the associated MPAs in the North Coast region can be found in Appendix C, Table C-1. The impairments in this region are mostly sediment, indicator bacteria, and temperature (SWRCB 2018).

North Central Coast Study Region

The North Central Coast MPA Region EIR (CDFG 2009) states that no areas along the north-central California coast were designated as impaired. Nine water bodies along the north-central California coast are currently listed as impaired in the 2018 Integrated Report (SWRCB 2018). Most of the impairments are bacteria and sediment (SWRCB 2018).

2018). A list of the impaired water bodies, the impairments, and the associated MPAs in the north-central coast region can be found in Appendix C, Table C-2.

Central Coast Study Region

The Central Coast MPA Region EIR (CDFG 2007) lists only two areas along the central California coast designated as impaired: 12 miles along the south coastline of Monterey Bay (metals and pesticides) and 3.3 miles of coastline at Jalama Beach (fecal coliform bacteria). Sixty-three water bodies along the central California coast are currently listed as impaired in the 2018 Integrated Report (SWRCB 2018). A list of the impaired water bodies, the impairments, and the associated MPAs in the central coast region can be found in Appendix C, Table C-3.

South Coast Study Region

For purposes of the water quality evaluation, the South Coast study region was divided into seven subregions in the South Coast MPA Region EIR (Commission 2010). Numerous impaired water bodies are identified in the South Coast Region EIR, but a complete list was not provided. More than 200 impaired water bodies are located in the South Coast region in the 2018 Impaired Waterbodies list, which is presented in Appendix C, Table C-4.

3.4.3 Environmental Impact Analysis

METHODOLOGY

The focus of the impact analysis is on the potential physical impacts on the environment that may occur as a result of the reasonably foreseeable compliance responses to the proposed regulatory amendments. Evaluation of potential water quality impacts is based on a review of existing documents and studies that address water resources in the area encompassed by the California MPA Network. Information obtained from these sources was reviewed and summarized to describe existing conditions and to identify potential environmental effects, based on the thresholds of significance presented in this section. In determining the level of significance, the analysis assumes that the project would comply with relevant federal, state, and local laws, ordinances, and regulations.

THRESHOLDS OF SIGNIFICANCE

An impact on water quality would be significant if implementation of the project would:

- violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;
- substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would:
 - result in substantial erosion or siltation on- or off-site;
 - result in flooding on-site or off-site;
 - create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
 - impede or redirect flood flows;
- ▶ in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or
- conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

ISSUES NOT DISCUSSED FURTHER

The project would only involve operation, maintenance, repair, removal, or replacement (collectively referred to as "O&M") of pre-existing artificial structures in marine waters and therefore would have no impact on groundwater supplies or recharge, existing drainage patterns, stormwater capacity, flooding, or inundation by tsunami. These topics are dismissed and not discussed further in this section.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.4-1: Violate Any Water Quality Standards or Waste Discharge Requirements or Otherwise Substantially Degrade Surface Water Quality or Conflict with Implementation of a Water Quality Control Plan

While O&M of pre-existing artificial structures in MPAs could include sea floor–disturbing activities, such as directional drilling, pile installation, trenching, dredging, and backfilling within the 250-foot incidental take buffer zones of structures, the proposed regulatory amendments would not substantially change existing O&M activities. Because the proposed regulatory amendments to allow injury, damage, or take (collectively "take") of any living, geological, or cultural marine resource (collectively "marine resource") incidental to O&M of pre-existing artificial structures would not substantially change the frequency, duration, or amount of authorized O&M activities that would occur, implementation of the regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur. Therefore, the project would not violate water quality standards or waste discharge requirements, substantially degrade surface water quality, or conflict with implementation of a water quality control plan. This impact would be **less than significant**.

MPAs are intended to protect, conserve, or otherwise manage a variety of marine resources and their uses, including water quality. Artificial structures with entitlements that existed before the establishment of the MPAs are located in many MPAs. The authorized O&M activities related to these pre-existing artificial structures have the potential to adversely affect water quality. The project would designate incidental take buffer zones around pre-existing artificial structures in which take of any marine resource associated with continued O&M activities would be allowed, but the proposed regulations would not substantially change the frequency, duration, or amount of O&M activities that would occur. O&M of the following artificial structures could adversely affect water quality as follows:

- Riprap, seawalls, groins, jetties, breakwaters, deflectors, and bulkheads: Potential water quality impacts that could occur during O&M of these structures include sediment disturbance, concrete contamination, oil and gas spills, and drilling mud spills.
- Recreational or commercial docks, piers, buoys, commercial marinas, restaurants, clubhouses, helicopter pads, decks, fuel service facilities, oil terminals, piers, wharves, warehouses, bridges, and storage sites: Potential water quality impacts that could occur during O&M of these structures include sediment disturbance, creosote or other treated timber contamination, wastewater spill from pile driving, drilling mud spills, grout contamination, and oil and gas spills.
- ► Fiber optic cables, power lines, and pipelines: Potential water quality impacts that could occur during O&M of these structures include sediment disturbance, drilling mud spills, and oil and gas spills.
- Intake and outfall line rights-of-way: Potential water quality impacts that could occur during O&M of these structures would include sediment disturbance, oil and gas spills, and outfall material spill (e.g., stormwater, wastewater, pump discharge).

The O&M activities described in Section 2.4 could cause the suspension of sediment and seabed material (which could include contaminants) by disturbing the seafloor with construction equipment, such as marine vessels with clam buckets, submersible pumps, drillers, excavators, rock hammers, and pile drivers. These activities would cause turbidity, as well as localized reductions in dissolved oxygen and pH levels. If present, existing sediment contaminants (e.g., metals and pesticides) could also be resuspended in the water column during these activities. The release of nutrients could promote short-term nuisance growths of phytoplankton. In addition, gasoline, oils, grease, lubricants,

and other hazardous materials from boats and equipment could be accidentally released during O&M activities. This could adversely affect water quality or result in a violation of water quality standards, especially in already impaired water bodies (Appendix C). Directional drilling also has the potential to result in releases of drilling fluids into the environment. These releases frequently occur as the result of excessive down-hole pressure resulting from the choice of drilling mud or drilling practice. Drilling muds typically consist largely of a bentonite clay-water mixture. Bentonite is a naturally occurring, nontoxic, inert substance. However, other materials sometimes used include soda ash and chemical additives. Release of drilling muds can adversely affect water guality by increasing turbidity, introducing toxic material, and changing the pH of adjacent surface water and potentially groundwater. Implementation of the regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur. In addition, it is reasonable to assume that pre-existing artificial structures were installed and are being operated in compliance with environmental permits and approvals. Required permits and approvals would include USACE RHA Section 10 and CWA Section 404 permits, SWRCB and RWQCB waste discharge requirements and/or CWA Section 401 water quality certification, and lease agreements from CSLC. Such permits and approvals require implementation of best management practices and other permit conditions to minimize impacts on marine water guality. Examples include the use of physical barriers, such as caissons or turbidity curtains and sea floor mats, to prevent construction materials from entering the marine environment; limitations on work periods during highenergy storm or wave events; and a variety of other measures that would substantially reduce or prevent impacts on the marine environment. Leases with the CSLC require water quality protections, such as requiring that they review and approve repairs or structural modifications to artificial structures before the activity; lawful application of federal, state, and local environmental laws; hazardous material spill plans; and best management practices that could include those described above. Violation of lease conditions would result in the termination of the lease.

Natural physical processes in the ocean often greatly alter turbidity of nearshore areas where artificial structures are located. Therefore, these areas are accustomed to dramatic changes in turbidity. A study on the impacts of resuspension of sediment during dredging activities found that most sediment resettles within 164 feet of the dredge site within 1 hour (CSLC 2015). Therefore, O&M activities that cause changes in turbidity, dissolved oxygen, and pH within the 250-foot incidental take buffer zone would be brief and localized and would therefore not be expected to cause substantial detrimental water quality effects. Similarly, any drilling fluids released into the marine environment through subsurface fractures likely would be dispersed rapidly by currents and wave-induced turbulence.

O&M activities also would be required to comply with the water quality objectives listed in SWRCB's California Ocean Plan. Given that only O&M activities previously authorized by an existing lease or permit would be allowed in the incidental take buffer zones; O&M activities would be subject to permit requirements and conditions that would reduce water quality impacts; and the proposed regulatory amendments would not result in a substantial change in the frequency, duration, or amount of authorized O&M activities that would occur, the project would not violate any water quality standards or waste discharge requirements, substantially degrade surface water quality, or conflict with implementation of a water quality control plan. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

4 CUMULATIVE IMPACTS

4.1 INTRODUCTION TO THE CUMULATIVE ANALYSIS

This Final Supplement provides an analysis of the cumulative impacts of the proposed project taken together with other past, present, and probable future projects producing related impacts, as required by Section 15130 of the State California Environmental Quality Act (CEQA) Guidelines. The goal of such an exercise is twofold: first, to determine whether the overall long-term impacts of all such projects would be cumulatively significant, and second, to determine whether the incremental contribution to any such cumulatively significant impacts by the project would be "cumulatively considerable" (and thus significant). (See State CEQA Guidelines Sections 15130[a]–[b], Section 15355[b], and Section 15064[h] and *Communities for a Better Environment v. California Resources Agency* [2002] 103 Cal. App. 4th 98, 120.) In other words, the required analysis intends first to create a broad context in which to assess cumulative impacts, viewed on a geographic scale beyond the project site itself, and then to determine whether the project's incremental contribution to any significant and then to determine whether the project's incremental contribution to any significant and then to determine whether the project's incremental contribution to any significant cumulative impacts from all projects is itself significant (i.e., "cumulatively considerable").

Cumulative impacts are defined in State CEQA Guidelines Section 15355 as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." A cumulative impact occurs from "the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time" (State CEQA Guidelines Section 15355[b]).

Consistent with State CEQA Guidelines Section 15130, the discussion of cumulative impacts in this Final Supplement focuses on significant and potentially significant cumulative impacts. Section 15130(b) of the State CEQA Guidelines provides, in part, the following:

The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.

A proposed project is considered to have a significant cumulative effect if:

- the cumulative effects of development without the project are not significant and the project's additional impact is substantial enough, when added to the cumulative effects, to result in a significant impact, or
- the cumulative effects of development without the project are already significant and the project contributes measurably to the effect.

The term "measurably" is subject to interpretation. The standards used herein to determine measurability are that the impact must be noticeable to a reasonable person or must exceed an established threshold of significance (defined throughout the resource sections in Chapter 3 of this Final Supplement).

An adequate discussion of significant cumulative impacts must include either a list of past, present, and probable future projects producing related or cumulative effects or a summary of projections from an adopted local, regional, or statewide plan, related planning document, or related environmental document that describes conditions contributing to the cumulative effect (State CEQA Guidelines Section 15130[b][1]).

Because of the extensive project area under consideration, the following discussion includes a description of the general types of projects that occur or could occur in the project area and could contribute to cumulative impacts in the project area.

4.2 CUMULATIVE SETTING

4.2.1 Geographic Scope

The geographic area that could be affected by the project and is appropriate for a cumulative impact analysis varies depending on the environmental resource topic, as presented in Table 4-1.

Table 4-1 Geographic Scope of Cumulative Impacts

Resource Topic	Geographic Area
Biological Resources	Regional (special-status species populations)
Archaeological, Historical, and Tribal Cultural Resources	Regional (affected tribal territories)
Water Quality	Regional (coastal waters) Local (incidental take buffer zone)

Source: Compiled by Ascent Environmental in 2023.

4.2.2 Types of Past, Present, or Reasonably Foreseeable, Probable Future Activities in the Project Area

Because of the extensive project area under consideration, including a list of specific projects is not feasible. Instead, a list of general types of past, present, and reasonably foreseeable probable future activities is described for the project area; these activities are assessed regarding whether they could contribute to cumulative impacts.

COMMERCIAL AND RECREATIONAL FISHERIES

Commercial and recreational fisheries span the coast from southern to northern California. Both recreational and commercial fishermen follow the regulations enforced by the California Department of Fish and Wildlife (CDFW). The California Fish and Game Commission (Commission) has jurisdiction in state waters and the National Oceanic and Atmospheric Administration has jurisdiction in federal waters. For many years, there has been a significant commercial fishery off the California coast. In 2019, commercial fishing in California generated 143,753 jobs and \$715 million in sales (US Department of Commerce 2019). Recreational fishing off the coast of California includes various activities, including charters (e.g., live-aboard lobster dive charters, sport fishing charters), shore fishing, and personal sport fishing. In 2019, more than 3.4 million fishing trips in California generated approximately \$1.2 billion in sales (US Department of Commerce 2019).

In 2021, 27 whale entanglements in commercial gear were reported off the coast of California, Oregon, and Washington. Most of the large whale entanglements reported were associated with specific fisheries or gear types (NOAA 2022). CDFW is preparing a Conservation Plan for the California Commercial Dungeness Crab Fishery (CP) that describes a comprehensive strategy to monitor, minimize, and mitigate entanglements of blue whales, the Central America Distinct Population Segment (DPS) and Mexico DPS of humpback whales, and Pacific leatherback sea turtles in commercial Dungeness crab fishing gear. CDFW is also proposing to amend regulations to implement the CP and is seeking an incidental take permit for the species covered in the CP. CDFW is preparing an environmental impact report to evaluate the potential effects of implementation of the CP.

Potential contributions to cumulative impacts associated with commercial and recreational fisheries include disturbance to marine bird and mammal migration, feeding, and breeding. Commercial and recreational fishing can also result in mortality to unmarketable or nontarget fish species as a result of incidental catch (also referred to as bycatch). Potential cumulative impacts associated with fishing vessels include injury and death of marine wildlife and water quality degradation.

ENERGY DEVELOPMENT

Oil and Gas Development

Off the coast of California, oil and natural gas development occurs in both federal and state waters. The Pacific Outer Continental Shelf Region of the Bureau of Ocean Energy Management (BOEM) manages oil and gas facilities in federal waters offshore of California. Thirty federal oil and gas leases offshore of southern California cover approximately 89 million acres (BOEM 2023a).

Oil and gas facilities in state waters are managed by the California Coastal Commission (CCC), California State Lands Commission (CSLC), and any local government with authority offshore. Oil production from offshore wells accounts for roughly 15 percent of California's total oil production. New oil and gas development along the coast of California is limited by the fact that there is a moratorium on new offshore oil and gas leasing in federal and state waters (BOEM 2022).

Potential contributions to cumulative impacts associated with oil and gas development include effects on water quality and injury and death of biological resources related to accidental spills, vessel traffic, and operations and maintenance activities.

Ocean Energy, Including Offshore Wind

Increasing interest is occurring in the development of renewable energy from the ocean off the coast of California in response to state policies for increased renewable energy generation to combat climate change. Sources of renewable ocean energy include wind, waves, ocean currents, and the sun. BOEM is the bureau in the US Department of the Interior responsible for managing development of the nation's offshore energy resources in an environmentally and economically responsible way. In September 2021, the California Legislature passed, and the governor signed, Assembly Bill (AB) 525, requiring the California Energy Commission, in coordination with the CCC, the Ocean Protection Council, CSLC, the Governor's Office of Planning and Research, CDFW, the Governor's Office of Business and Economic Development, the California Independent System Operator, the California Public Utilities Commission, and other relevant federal, state, and local agencies as needed, to develop a strategic plan for offshore wind energy developments installed off the California coast in federal waters and submit it to the California Natural Resources Agency and the legislature by no later than June 30, 2023 (CEC 2023). In December 2022, BOEM held an offshore wind auction for five lease areas off the coast of California. BOEM continues to coordinate planning for potential offshore renewable energy leasing and development activities through the BOEM California Intergovernmental Renewable Energy Task Force, a partnership of members of federal, state, local agencies and federally recognized Tribal governments (BOEM 2023b).

In 2021, California's first at-sea, long-duration wave energy pilot project was launched off Scripps Pier. The 15-footlong xWave prototype is anchored at the test site and deployed in water nearly 100 feet deep. The project converts wave energy into electricity (US Department of Energy 2022).

Potential contributions to cumulative impacts associated with new ocean energy development include localized water quality degradation from sediment disturbance, disturbance of submerged cultural resources, and damage to marine life or habitat resulting from the future installation and operation of renewable energy facilities.

TRANSMISSION AND TELECOMMUNICATION LINES

The California Energy Commission regulates the construction and operation of transmission and telecommunication lines off the coast of California. Transmission and telecommunication lines typically are laid on or buried in the seafloor and may span the project area, from the shoreline to the outer edge of the coastal zone. Many telecommunication lines extend across oceans connecting the United States to other countries, such as Japan, South Korea, Malaysia, and Australia. Transmission lines are associated with offshore oil, gas facilities, and renewable energy.

Potential cumulative impacts associated with installation of new transmission and telecommunication lines include water quality degradation from sediment disturbance, damage to submerged cultural resources, and damage to marine life or habitat.

MARINE TRANSPORTATION

Shipping channels and safe transport lanes are demarcated throughout the project area and in federally regulated waters. The demarcated lanes are regulated for safe passage by large ocean-going vessels that do not often enter the nearshore zone except to make calls at ports with facilities and physical conditions that are able to accommodate larger vessels. In addition to state-regulated and federally regulated maritime traffic, the project area supports a large volume of recreational and commercial boaters operating closer to shore (sheltered and protected waters and nearshore waters). Recreational vessels include sport fishing vessels discussed above and whale watching vessels, as well as recreational boaters and dive charters. Popular locations for whale watching include southern California, Monterey Bay, Santa Cruz, the Gulf of the Farallones, and Mendocino. Gray whales, humpback whales, dolphins, blue whales, and orcas migrate along the coast of California each year.

The number of whales seriously injured or killed as a result of vessel strikes is an important cumulative impact issue. Several large whale species found off the coast of California are vulnerable to vessel strikes because they migrate along the coast, and many use areas along the coast for feeding, where they overlap with heavy shipping traffic (NOAA 2023a).

Potential contributions to cumulative impacts associated with marine transportation include injury and death of marine wildlife and water quality degradation.

MARINE AQUACULTURE

Marine aquaculture in the United States includes production of fish and shellfish with the primary species being salmon, oysters, clams, and shrimp. Finfish production occurs in ponds, raceways, recirculating systems, and ocean net-pens. Shellfish farmers employ on- and off-bottom culture techniques with mesh bags and trays, floating bags and trays, racks and bags, and long lines suspended from submerged lines and floats. Other farmed fish and shellfish include cobia, mussels and abalone, nonfood ornamental fish, and species used for restoration and enhancement programs, such as white seabass and redfish.

In general, the three types of marine aquaculture facilities, determined based on their location, are land based, subtidal/offshore, and intertidal. Land-based facilities can include tanks, raceways, ponds, and related administrative or support structures. Water used for land-based facilities can be municipally supplied and discharged to sanitary sewers or can be drawn from and discharged to the marine environment. Subtidal/offshore waters encompass the area deeper than the intertidal zone (i.e., the area that is above water at low tide and underwater at high tide) and extend out to the 3-nautical-mile limit of state jurisdiction. Facilities in subtidal/offshore areas may include net-pens or tethered lines with anchors. Most current marine aquaculture operations in California occur in intertidal waters that are shielded from exposure to the open ocean, such as bays or estuaries.

Potential contributions to cumulative impacts associated with marine aquaculture include water quality degradation, damage to submerged cultural resources, and damage to marine life or habitat.

4.2.3 Programs and Plans Applicable to the Project Area

The following plans and programs apply to or affect the project area.

MARINE PROTECTED AREAS

As discussed in Chapter 2, "Description of Proposed Regulatory Amendments," in California, CDFW has taken a regional approach to implementing the MLPA. The act directs the state to evaluate marine protected areas (MPAs) to improve recreational, educational, and research opportunities and establish a statewide network of MPAs along the 1,100-mile California coast (referred to hereafter as the California MPA Network, or California's Network). Different classifications are used in California's Network, reflecting a range of allowed uses and resource protection levels. This Final Supplement addresses the operation, maintenance, repair, removal, or replacement (collectively referred to as

"O&M") of pre-existing artificial structures in MPAs, as well as regulatory amendments to allow O&M activities in MPAs where those activities are not currently permitted.

National Marine Sanctuaries

Across the United States, the National Oceanic and Atmospheric Administration manages 15 national marine sanctuaries and two marine national monuments. Of those, the West Coast Regional Office manages four national marine sanctuaries encompassing 11,388 square miles along California's coast: the Channel Islands, Cordell Bank, Greater Farallones, and Monterey Bay (NOAA 2023b). Each of these sanctuaries provides comprehensive and coordinated conservation management through the implementation of a management plan. Each management plan includes a policy framework that guides current and future activities in the sanctuary (NOAA 2023b).

California Coastal National Monument

The US Bureau of Land Management (BLM) manages more than 20,000 rocks, islands, exposed reefs, and pinnacles off the California coast, as well as 7,924 acres of public land in six onshore units: Trinidad Head, Waluplh-Lighthouse Ranch, Lost Coast Headlands, Point Arena-Stornetta, Cotoni-Coast Dairies, and Piedras Blancas. It prepares resource management plans that serve as land use management tools for sensitive resources. The resource management plans contain guidance, objectives, policies, and management actions designed to resolve a wide range of natural resource and land use issues that exist for this picturesque portion of California's coastal landscape. BLM manages only the portion of these rocks and islands that extend above the mean high tide line, so submerged lands in state waters are the responsibility of the State of California. The principal focus of the management plans is to protect and preserve the geologic, biological, and cultural values that exist on these federal lands. Development of any kind is discouraged on California Coastal National Monuments (BLM 2023).

4.3 ANALYSIS OF CUMULATIVE IMPACTS

This section presents a discussion of the cumulative effects anticipated from implementation of the proposed project taken together with related projects and activities in the project area, for the three environmental issue areas evaluated in this Final Supplement. The analysis conforms with Section 15130(b) of the State CEQA Guidelines, which specifies that the:

discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact.

When considered in relation to other reasonably foreseeable projects, cumulative impacts on some resources could be significant and more severe than those caused by the proposed project alone.

For purposes of this Final Supplement, the project would result in a significant cumulative effect if:

- ► the cumulative effects of related projects (past, current, and probable future projects) are not significant and the incremental impact of implementing the proposed project would be substantial enough, when added to the cumulative effects of related projects, to result in a new cumulatively significant impact, or
- the cumulative effects of related projects (past, current, and probable future projects) are already significant, and implementation of the proposed project would make a considerable contribution to the effect. The standards used herein to determine a considerable contribution are that the impact either must be substantial or must exceed an established threshold of significance.

This cumulative analysis assumes that all mitigation measures identified in Chapter 3 to mitigate project impacts are adopted and implemented. The analysis herein analyzes whether, after implementation of project-specific mitigation that minimizes environmental effects, the residual impacts of the project would cause a cumulatively significant impact or would contribute considerably to existing/anticipated (without the project) cumulatively significant effects. Where the project would contribute, additional mitigation is recommended where feasible.

4.3.1 Biological Resources

The cumulative context for marine biological resources would be the project area within which the California MPA Network is located. Threats to marine organisms and habitat include water quality issues; disturbance to, direct injury to, and mortality of organisms; and the spread of invasive species. As discussed in Section 3.2, "Biological Resources," a variety of habitats, sensitive communities, and special-status animal species are known to occur along the California coast in the marine environment. Cumulative activities in the project area, including those described in Section 4.2.2, continue to contribute to the disturbance and degradation of marine biological resources.

O&M of pre-existing artificial structures could adversely affect marine species through entanglement, collision, and artificial lighting impacts. As discussed for Impact 3.2-1, the proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur. In addition, these impacts would be localized and temporary and further minimized through the use of best management practices and compliance with lease and permit conditions, so they would not combine with cumulative biological resource impacts caused by other related activities in the project area. Therefore, implementation of the proposed regulatory amendments would not result in a considerable contribution to a significant cumulative impact related to damage to or loss of marine species from entanglement, collision, or artificial lighting.

As discussed for Impact 3.2-2, O&M of pre-existing artificial structures could adversely affect marine mammals, sea turtles, and fish species through acoustic effects. However, the proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur. In addition, compliance with existing regulatory protections, as well as lease and permit conditions that authorize the O&M activities, would reduce acoustic effects on marine species. The proposed regulatory amendments would not result in a substantial change in the risk of adverse effects of acoustic impacts on marine mammals, sea turtles, or fish species and therefore; would not result in a considerable contribution to a significant cumulative impact on marine mammals, sea turtles, and fish species related to acoustic effects.

As discussed for Impact 3.2-3, O&M of pre-existing artificial structures could adversely affect marine species and habitat through water quality effects. However, the proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur. In addition, these impacts would be localized and temporary and further minimized through the use of typically applied best management practices and compliance with lease and permit conditions. Therefore, implementation of the proposed regulatory amendments would not result in a considerable contribution to a significant cumulative impact on marine species and habitat related to water quality effects.

As discussed for Impact 3.2-4, O&M of pre-existing artificial structures could affect marine mammal haul-out and foraging areas, as well as birds listed by the California Endangered Species Act (CESA) and federal Endangered Species Act (ESA) by altering foraging behavior. However, the proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur. In addition, impacts on marine mammal haul-out and foraging areas would be minimized through compliance with regulatory conditions to avoid injury, damage, or take (collectively "take") of marine mammals. Also, impacts on listed birds would be localized and temporary. Therefore, implementation of the proposed regulatory amendments would not result in a considerable contribution to a significant cumulative impact on marine mammal haul-out and foraging areas or the foraging behavior of CESA- and ESA-listed birds.

As discussed for Impact 3.2-5, O&M of pre-existing artificial structures could result in disturbance to or loss of bird nests. However, the proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur. In addition, compliance with existing regulatory protections would reduce the potential for disturbance or loss of bird nests. Therefore, implementation of the proposed regulatory amendments would not a significant cumulative impact on bird nests.

As discussed for Impact 3.2-6, O&M of pre-existing artificial structures could adversely affect fish through entrainment or impingement and adversely affect marine invertebrates and habitat through removal. However, the proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M

activities that would occur. In addition, impacts to fish and marine invertebrates would be localized and temporary and offset by the potential for organisms to recolonize the replacement structures or other natural habitat. Further, compliance with existing regulatory protections, as well as lease and permit conditions that authorize the O&M activities, would reduce the risk of fish entrainment and impingement through implementation of avoidance and minimization measures and best management practices. Therefore, implementation of the proposed regulatory amendments would not result in a considerable contribution to significant cumulative impacts on fish and marine invertebrates from adverse effects related to impingement or entrainment or direct removal.

As discussed for Impact 3.2-7, O&M of pre-existing artificial structures could result in loss of ESA-listed abalone. However, the proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur, and compliance with existing regulatory protections, as well as lease and permit conditions that authorize the O&M activities, would reduce the potential for take of abalone. Because implementation of the proposed regulatory amendments would not result in a substantial increase in the loss of ESA-listed abalone, the project would not result in a considerable contribution to a significant cumulative impact related to loss of ESA-listed abalone.

As discussed for Impact 3.2-8, O&M of pre-existing artificial structures could result in the introduction or facilitate the spread of aquatic invasive species. However, the proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur, and compliance with existing regulatory protections, as well as lease and permit conditions that authorize the O&M activities would reduce the risk of introducing or spreading aquatic invasive species through implementation of avoidance and minimization measures and best management practices. Therefore, implementation of the proposed regulatory amendments would not result in a considerable contribution to significant cumulative impacts related to the introduction and spread of aquatic invasive species.

As discussed for Impact 3.2-9, O&M of pre-existing artificial structures could adversely affect eelgrass by decreasing light penetration or burying or removing eelgrass. However, the proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur, and compliance with existing regulatory protections, as well as lease and permit conditions, including establishing best management practices, would reduce adverse effects on eelgrass. Therefore, implementation of the proposed regulatory amendments would not result in a considerable contribution to significant cumulative impacts on eelgrass.

As discussed for Impact 3.2-10, O&M of pre-existing artificial structures that occur partially or completely on tidelands or that occur immediately adjacent to terrestrial habitats could result in adverse effects on special-status plants, special-status wildlife, and sensitive habitats (e.g., waters of the United States, waters of the state, riparian habitat, sensitive natural communities) if they are present within the footprint or in the vicinity of pre-existing artificial structures. However, the proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur. In addition, the proposed regulation change applies only to the marine environment. O&M activities with potential to adversely affect biological resources in the terrestrial environment would be subject to compliance with the requirements of regulatory agencies with jurisdiction over the terrestrial environment, such that impacts on terrestrial special-status species and associated habitat would be minimized or avoided. Therefore, implementation of the proposed regulatory amendments would not result in a considerable contribution to significant cumulative impacts on special-status species and habitat that occur in tidelands or the terrestrial environment.

For the reasons discussed above, the proposed regulatory amendments **would not result in a considerable contribution to a significant cumulative impact** on marine biological resources.

4.3.2 Archaeological, Historical, and Tribal Cultural Resources

The cumulative context for archaeological, historical, and tribal cultural resources is the region of the project area, which includes the area within California's Network, the marine resources therein, and the vicinity of pre-existing artificial structures requiring O&M. Because all significant cultural resources are unique and nonrenewable members of finite classes, which means the number of these resources is limited, all adverse effects erode a dwindling resource base. The loss of any one site could affect the scientific and religious value of others in a region because these resources are best understood in the context of the entirety of the cultural system of which they are a part. The archaeological and tribal cultural system is represented by the total inventory of all sites and other remains in the region. As a result, a meaningful approach to preserving and managing these resources must focus on the likely distribution of cultural resources rather than on a single project or parcel boundary.

The historic lands of California tribal peoples, including lands along the California coast, have been affected by development since the arrival of Sir Francis Drake of England in 1579, and the impact quickly grew with the establishment of 21 missions from San Diego to Sonoma between 1769 and 1821. Development of tribal lands continued with the discovery of gold, followed by California's admission to statehood in 1850, the agricultural boom from the late 1800s through the 1930s, and post–World War II population growth. Similarly, historic resources throughout California have been affected by suburban sprawl, downtown redevelopment projects, and transportation projects. These activities have resulted in an existing significant cumulative effect on historic resources, archaeological resources, tribal cultural resources, and human remains. Cumulative development, including that described in Section 4.2.2, continues to contribute to the disturbance and degradation of cultural resources.

As discussed for Impact 3.3-1, O&M of pre-existing artificial structures could result in damage to or destruction of historic buildings or structure; however, the proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur, and existing lease requirements require adherence with applicable resource management and preservation mandates, including local jurisdiction requirements related to identification, evaluation, and protection pursuant to CEQA requirements. Therefore, implementation of the proposed regulatory amendments would not result in a considerable contribution to a significant cumulative impact on historical resources.

As discussed for Impact 3.3-2, impacts on undiscovered submerged archaeological resources resulting from implementation of the reasonably foreseeable compliance responses to the project would be less than significant because the proposed regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur, and existing lease requirements require adherence with applicable resource management and preservation mandates, and current state law prohibits unauthorized salvage and removal of artifacts from submerged shipwrecks, aircraft, and other archaeological resources in state waters. Therefore, implementation of the proposed regulatory amendments would not result in a considerable contribution to a significant cumulative impact related to loss or damage to submerged archaeological resources.

As discussed for Impact 3.3-3, no tribal cultural resources, as defined by CEQA Section 21074, were identified, and the impact on undiscovered tribal cultural resources also would be less than significant because, similar to archaeological resources, the proposed regulatory amendments would not substantially change the frequency, duration, or number of O&M activities that would occur and existing lease requirements require adherence with applicable resource management and preservation mandates. Therefore, implementation of the proposed regulatory amendments would not result in a considerable contribution to a significant cumulative impact related to tribal cultural resources.

Therefore, implementing the project would not result in a considerable contribution to a significant cumulative impact on historical, archaeological, or tribal cultural resources.

4.3.3 Water Quality

The cumulative context for water quality covers a large area of the California coastline, including inshore and offshore marine waters. As discussed in Section 3.4, "Water Quality," water quality is designated as impaired when the levels of a particular pollutant threaten the identified beneficial uses of the water body. Activities that contribute to the impairment and degradation of water quality off the coast of California typically are related to land use and development, such as agricultural uses, activities at industrial facilities, and construction activities. In addition, municipal wastewater discharges, nonpoint source contaminants in urban runoff, wet and dry deposition of airborne pollutants, harbor discharges, marine transportation discharges, and discharges of contaminated groundwater can affect water quality. These activities have resulted in an existing significant cumulative effect on water quality.

As discussed for Impact 3.4-1, O&M of pre-existing artificial structures could cause the suspension of sediment, some of which could contain contaminants, and seabed material, or result in leaks or spills of hazardous materials from equipment, which have the potential to adversely affect water quality or result in a violation of water quality standards. However, implementation of the regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities that would occur. In addition, compliance with existing regulatory requirements, as well as lease and permit conditions, including implementation of best management practices that authorize the O&M activities, would reduce the risk of water quality impacts. Therefore, implementing the proposed regulatory amendments **would not result in a considerable contribution to a significant cumulative impact** related to substantial degradation of water quality, violation of water quality standards, or conflicts with a water quality control plan.

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5 ALTERNATIVES

5.1 INTRODUCTION

Section 15126.6(a) of the State California Environmental Quality Act (CEQA) Guidelines requires environmental impact reports (EIRs) to describe:

a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.

This section of the State CEQA Guidelines also provides guidance regarding what the alternatives analysis should consider. Subsection (b) further states the purpose of the alternatives analysis is as follows:

Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.

The State CEQA Guidelines require that the EIR include information about each alternative sufficient to allow meaningful evaluation, analysis, and comparison with the proposed project. If an alternative would cause one or more significant effects in addition to any that would be caused by the project as proposed, the significant effects of the alternative must be discussed, but in less detail than any significant effects of the project as proposed (State CEQA Guidelines Section 15126.6[d]).

The State CEQA Guidelines further require that the "no project" alternative be considered (Section 15126.6[e]). The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving the proposed project. If the no project alternative is the environmentally superior alternative, CEQA requires that the EIR "shall also identify an environmentally superior alternatives" (Section 15126[e][2]).

In defining "feasibility" (e.g., "feasibly attain most of the basic objectives of the project"), State CEQA Guidelines Section 15126.6(f)(1) states:

Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.

In determining what alternatives should be considered in an EIR, it is important to consider the objectives of the project, the project's significant effects, and unique project considerations. These factors are crucial to the development of alternatives that meet the criteria specified in Section 15126.6(a). Although, as noted above, EIRs must contain a discussion of "potentially feasible" alternatives, the ultimate determination as to whether an alternative is feasible or infeasible is made by the lead agency's decision maker here, the California Fish and Game Commission (Commission). (See CEQA Sections 21081.5, 21081[a][3].)

5.2 CONSIDERATIONS FOR SELECTION OF ALTERNATIVES

5.2.1 Attainment of Project Objectives

Consistent with, and in furtherance of the Marine Life Protection Act, the objectives of the proposed regulatory amendments are to:

- align marine protected area (MPA) regulations with the original intention of the California MPA Network to consider existing leases, permits, and any other legal entitlements that current regulations may impair;
- address O&M (i.e., operations, maintenance, repair, removal, or replacement) needs of pre-existing artificial structures in place before MPA designation and those modified or replaced as a result of addressing human health and safety concerns without seeking individual MPA take prohibition exemptions on a case-by-case basis;
- maintain the overall prohibitions in MPAs against take (i.e., injury, damage, or take) of marine resources (i.e., any living, geological, or cultural marine resource) to the extent feasible while allowing take incidental to O&M of pre-existing artificial structures; and
- ▶ maintain current fishing regulations and allow all other take regulations within designated MPAs to remain in place.

5.2.2 Environmental Impacts of the Project

Sections 3.2 through 3.4 of this Final Supplement to the four MPA Region EIRs address the environmental impacts of implementation of the proposed regulatory amendments. Potentially feasible alternatives were developed with consideration of avoiding or lessening the significant, and potentially significant, adverse impacts of the project. However, the project would not result in any significant or potentially significant impacts. Therefore, the consideration of alternatives that reduce or avoid the significant environmental impacts of the project is limited. For these reasons, while this chapter considers a reasonable range of alternatives in accordance with State CEQA Guidelines Section 15126.6(a), there are no alternatives that would avoid or substantially lessen significant effects related to the project.

5.3 ALTERNATIVES CONSIDERED BUT NOT EVALUATED FURTHER

As described above, State CEQA Guidelines Section 15126.6(c) provides that the range of potential alternatives for the project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. Alternatives that fail to meet the fundamental project purpose need not be addressed in detail in an EIR (*In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* [2008] 43 Cal.4th 1143, 1165–1167). At the time of action on a project, the decision maker(s) may consider evidence beyond that found in the EIR in addressing determinations regarding what alternatives should be considered in an EIR and whether an alternative is feasible or infeasible. The decision maker(s), for example, may conclude that a particular alternative is infeasible (i.e., undesirable) from a policy standpoint and may reject an alternative on that basis provided that the decision maker(s) adopts a finding, supported by substantial evidence, to that effect, and provided that such a finding reflects a reasonable balancing of the relevant economic, environmental, social, and other considerations supported by substantial evidence (*City of Del Mar v. City of San Diego* [1982] 133 Cal.App.3d 401, 417; *California Native Plant Society v. City of Santa Cruz* [2009] 177 Cal.App.4th 957, 998).

State CEQA Guidelines 15126.6(c) further provides that the EIR should also identify any alternatives that were considered by the lead agency but were rejected during the planning or scoping process and briefly explain the reasons underlying the lead agency's determination. The following alternatives were considered by the Commission but are not evaluated further in this Final Supplement.

5.3.1 Incidental Take Buffer Zone Determined by Structure Size

This alternative would involve the use of incidental take buffer zones around each pre-existing artificial structure in an MPA similar to the proposed project; however, the applicable buffer size would vary according to the type of preexisting artificial structure. This alternative may reduce potential impacts on biological resources, cultural resources, and water quality by minimizing the footprint within which impacts could occur. However, this alternative would only partially meet the project objective because the O&M needs of pre-existing artificial structures may not be addressed in some cases if the equipment needed to conduct the O&M activities requires an area to operate larger than that afforded by the designated incidental take buffer zone. For structures where the buffer size would not be adequate to allow for O&M activities, this alternative would not meet the objective to align MPA regulations with the original intention of California's Network to consider existing leases, permits, and any other legal entitlements. For this reason, and because this alternative would only partially meet the objective to address O&M needs of pre-existing artificial structures, this alternative would only partially meet the objective to address O&M needs of pre-existing artificial structures, this alternative would only partially meet the objective to address O&M needs of pre-existing artificial structures, this alternative is not discussed further.

5.3.2 Incidental Take Buffer Zone Determined by Lease Terms

This alternative would involve using incidental take buffer zones around pre-existing artificial structures that are contingent on the lease terms rather than on defining a set incidental take buffer zone size in CCR Title 14, Section 632. This alternative may reduce the potential for impacts on biological resources, cultural resources, and water quality for structures that would have an incidental take buffer zone smaller than is proposed under the project. However, this alternative would only partially meet the project objectives because O&M needs of pre-existing artificial structures may not be addressed in some cases if the equipment requires an area to operate larger than that afforded by the designated incidental take buffer zone. For structures where the buffer size would not be adequate to allow for O&M activities, this alternative would not meet the objective to align MPA regulations with the original intention of California's Network to consider existing leases, permits, and any other legal entitlements. This alternative also has the potential to result in incidental take buffer zones larger than under the proposed project in some instances, which could result in larger impact areas for those structures, potentially resulting in greater impacts on biological resources, cultural resources, and water quality. In addition, this alternative would make it difficult for law enforcement to regulate O&M work. A set incidental take buffer zone for all structures helps law enforcement personnel to determine whether an area larger than that permitted is being used. For these reasons, this alternative is not discussed further.

5.4 ALTERNATIVES SELECTED FOR DETAILED ANALYSIS

Alternatives related to MPA designations were evaluated in the four MPA Region EIRs. For the North Coast Study Region EIR, alternatives are discussed in Chapter 2, "Project Description," and Chapter 8, "Alternatives Analysis" (Commission and CDFG 2012); North Central Coast MPAs Project EIR, Chapter 2, "Project Description," and Chapter 9, "Alternatives Analysis" (CDFG 2009); Central Coast MPAs Project EIR, Chapter 2, "Project Description," and Chapter 9, "Alternatives Analysis" (CDFG 2007); and South Coast Study Region EIR, Chapter 10, "Alternatives" (Commission 2010). This section presents additional alternatives analysis relevant to the project. The following additional alternatives are evaluated in this Final Supplement:

- Alternative 1: No Project Alternative assumes that no regulatory amendments would be made and therefore that O&M of pre-existing artificial structures in many MPAs would continue to conflict with the MPA regulations.
- ► Alternative 2: Reduced Incidental Take Buffer Zone Alternative would establish an incidental take buffer zone around pre-existing artificial structures in MPAs of 100 feet in any direction from the pre-existing artificial structure, not including areas above the mean high tide line.

Further details on these alternatives, and an evaluation of their environmental effects relative to those under the proposed project, are provided below.

5.4.1 Alternative 1: No Project Alternative

Under Alternative 1, the No Project Alternative, no actions would be taken by the Commission, and no regulatory amendments would be made to CCR Title 14, Section 632. Under the No Project Alternative, O&M of pre-existing artificial structures in many MPAs would be in conflict with the MPA regulations. Under this alternative, because many MPA regulations prohibit take of any living, geological, or cultural marine resource in the MPA, either (1) a legislative amendment to the existing definitions of MPAs would be needed or (2) individual exceptions and allowances would need to be written on a case-by-case basis to allow for O&M of pre-existing artificial structures. Although the No Project Alternative would maintain the overall take prohibitions in MPAs, it would not meet the project objectives to address O&M needs of pre-existing artificial structures in place before MPA designation without seeking individual take prohibition exemptions on a case-by-case basis, nor would this alternative align MPA regulations with the original intention of California's Network to consider existing leases, permits, and any other legal entitlements that current regulations may impair. However, as required by CEQA, the No Project Alternative is evaluated in this Final Supplement.

Although it is acknowledged that with the No Project Alternative, there would be no discretionary action by the Commission, and thus no impact, for purposes of comparison with the action alternative, conclusions for each technical area below are characterized as "impacts" that are "greater," "similar," or "less," to describe conditions that are worse than, similar to, or less than those of the proposed project.

BIOLOGICAL RESOURCES

Under Alternative 1, no regulatory amendments would be made to CCR Title 14, Section 632, and pre-existing artificial structures would need to be maintained through a legislative amendment to the existing definitions of MPAs or individual exceptions and allowances made on a case-by-case basis. If a legislative amendment is implemented under Alternative 1, the potential for effects on special-status species and sensitive habitats would be similar to that under the proposed project. If O&M activities would occur only through individual exceptions on a case-by-case basis, there may be fewer maintenance activities in the near term if an exception is not granted, which could cause maintenance to be deferred, potentially resulting in the need for minor repairs to progress to the need for major repairs. In the long term, this could result in greater impacts on biological resources. For O&M activities allowed under an exception, the footprint and potential to affect biological resources may be smaller in some cases but greater in other cases if there is not a standard incidental take buffer zone. Therefore, impacts on biological resources associated with Alternative 1 may be greater in some cases and less in other cases. Overall, the impact on biological resources would be **similar** to that described for the proposed project.

ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

Under Alternative 1, no regulatory amendments would be made to CCR Title 14, Section 632, and pre-existing artificial structures would need to be maintained through a legislative amendment to the existing definitions of MPAs or individual exceptions and allowances made on a case-by-case basis. This alternative has the potential to result in changes to structures that could be historical resources and could lead to seafloor-disturbing activities that could result in discovery or damage of yet-undiscovered archaeological resources, tribal cultural resources, or human remains. Under Alternative 1, O&M of pre-existing structures would occur as needed if a legislative amendment is implemented, resulting in potential impacts on cultural resources similar to those that would occur under the project. If O&M activities would occur only through individual exceptions on a case-by-case basis, there may be fewer maintenance activities in the near term if an exception is not granted, which could cause maintenance to be deferred, potentially resulting in the need for minor repairs to progress to the need for major repairs. In the long term, this could result in greater impacts on cultural resources. For O&M activities that are allowed under an exception, the footprint and potential to affect cultural resources may be smaller in some cases but greater in other cases if there is not a standard incidental take buffer zone. Therefore, impacts on cultural resources and under an exception to that described for the proposed project.

WATER QUALITY

Under Alternative 1, no regulatory amendments would be made to CCR Title 14, Section 632, and pre-existing artificial structures would need to be maintained through a legislative amendment to the existing definitions of MPAs or individual exceptions and allowances made on a case-by-case basis. Alternative 1 has the potential to result in suspension of sediment and seabed material, as well as accidental release of hazardous materials from boats and equipment used during O&M activities that could adversely affect water quality or result in a violation of water quality standards. Under Alternative 1, O&M on pre-existing structures would occur as needed if a legislative amendment is implemented, resulting in potential impacts on water quality similar to those that would occur under the project. If O&M activities would occur only through individual exceptions on a case-by-case basis, there may be less O&M activities in the near term if an exception is not granted, which could cause maintenance to be deferred, potentially resulting in the need for major repairs. In the long term, this could result in greater impacts on water quality may be smaller in some cases but greater in other cases if there is not a standard buffer zone. Therefore, impacts on water quality associated with Alternative 1 may be greater in some cases and less in other cases. Overall, the impact on water quality associated with Alternative 1 would be **similar** to that described for the proposed project.

5.4.2 Alternative 2: Reduced Incidental Take Buffer Zone Alternative

This alternative would include establishment of an incidental take buffer zone around pre-existing artificial structures in MPAs of 100 feet in any direction from the pre-existing artificial structure. Although an incidental take buffer zone of 100 feet would not be large enough to fit all equipment that may be needed for O&M activities, this buffer size would be large enough to accommodate most equipment that could be needed for O&M activities, and it is sufficiently smaller than the incidental take buffer zone proposed under the project (250-foot incidental take buffer zone) to provide a meaningful difference in the size of the impact areas. This alternative would include regulatory amendments to CCR Title 14, Section 632 to allow for O&M needs of pre-existing artificial structures to be addressed without seeking individual take prohibition exemptions on a case-by-case basis. This alternative would meet most of the project objectives. However, this alternative would not fully meet the project objective to address O&M needs of preexisting artificial structures because a 100-foot incidental take buffer zone would not allow for O&M of the largest structures and equipment (e.g., barges). While this alternative may help to decrease take of marine resources in the surrounding area, most projects are limited on the size of the equipment needed to do the work, not the size of the structure itself. Since projects are limited on the size of the equipment and not the size of the structure, the amount of take would likely be comparable because the same equipment would be used regardless of incidental take buffer zone size. If equipment larger than the allowed incidental take buffer zone is needed, additional authorization to conduct O&M activities would be required, which would reduce the overall efficiency built into the regulatory amendments. The current proposed incidental take buffer zone size would ensure all MPAs could accommodate work on pre-existing artificial structures and would fulfill the project intent of allowing all existing lessees access to their structures when required, and not on a case-by-case approval basis. Alternative 2 would also not meet the objective of addressing O&M activities without seeking individual MPA take prohibition exemptions on a case-by-case basis because any O&M activities requiring an area larger than 100 feet would have to be approved individually.

BIOLOGICAL RESOURCES

Under Alternative 2, O&M of pre-existing artificial structures in MPAs would occur within a 100-foot incidental take buffer zone and any O&M activities requiring larger equipment would require additional authorization. The potential for effects on special-status species and sensitive habitats associated with Alternative 2 would be similar to the proposed project because although the incidental take buffer zone within which impacts on biological resources could occur as a result of O&M activities would be smaller in most cases, use of larger equipment would be authorized on an as-needed basis. The frequency and types of potential impacts on biological resources under Alternative 2 would be similar to those that would occur under the proposed project. Overall, the impact on biological resources associated with Alternative 2 would be the **same as or slightly less** than that described for the proposed project.

ARCHAEOLOGICAL, HISTORICAL, AND TRIBAL CULTURAL RESOURCES

Under Alternative 2, O&M of pre-existing artificial structures in MPAs would occur within a 100-foot incidental take buffer zone and any O&M activities requiring larger equipment would require additional authorization. As under the proposed project, this alternative would allow O&M activities that could result in changes to structures that could be historical resources. The number and type of structures that may require O&M would also be the same as under the proposed project. Under Alternative 2, although the incidental take buffer zone would be smaller in most cases, use of larger equipment would be authorized on an as-needed basis; therefore, the potential to damage or disturb archaeological resources, tribal cultural resources, or human remains would be similar to the proposed project. For these reasons, the impact on cultural resources associated with Alternative 2 would be the **same as or slightly less** than that described for the proposed project.

WATER QUALITY

Under Alternative 2, O&M of pre-existing artificial structures in MPAs would occur within a 100-foot incidental take buffer zone and any O&M activities requiring larger equipment would require additional authorization. The potential for water quality effects related to suspension of sediment and seabed material that have the potential to adversely affect water quality or result in a violation of water quality standards would be similar under this alternative compared to the proposed project because although the incidental take buffer zone within which disturbance could occur would be smaller in most cases, use of larger equipment would be authorized on an as-needed basis. Therefore, the impact on water quality associated with Alternative 2 would be the **same as or slightly less** than that described for the proposed project.

5.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA calls for the identification of an environmentally superior alternative in an EIR but gives no definition for the term (State CEQA Guidelines Section 15126.6(e)). For the purposes of this Final Supplement, the environmentally superior alternative is the alternative that would result in the fewest potentially significant impacts while achieving most of the basic project objectives. Table 5-1 presents a comparison of the environmental effects of each alternative relative to the proposed project and identifies whether an alternative would avoid any significant and unavoidable impact of the proposed project. The proposed project would not result in any potentially significant or significant and unavoidable impacts. Therefore, while Alternative 2 has the potential to result in slightly less impact than the proposed project objective to address O&M needs of pre-existing artificial structures because a 100-foot incidental take buffer zone would not allow for O&M of the largest structures requiring large equipment (e.g., barges in excess of 100 feet in length). It would also not meet the objective of addressing O&M needs without seeking individual MPA take prohibition exemptions on a case-by-case basis because any O&M activities requiring an area larger than 100 feet would have to be approved individually.

Table 5-1 Summary of Environmental Effects of the Alternatives Relative to the Proposed Regulatory Amendments

Environmental Topic	Proposed Project	Alternative 1: No Project Alternative	Alternative 2: Reduced Incidental Take Buffer Zone Alternative
Biological Resources	LTS	Similar	Same or Slightly Less
Archaeological, Historical, and Tribal Cultural Resources	LTS	Similar	Same or Slightly Less
Water Quality	LTS	Similar	Same or Slightly Less

Notes: LTS = less than significant impact.

Source: Compiled by Ascent in 2023.

6 OTHER CEQA SECTIONS

6.1 GROWTH INDUCEMENT

California Environmental Quality Act (CEQA) Section 21100(b)(5) specifies that the growth-inducing impacts of a project must be addressed in an environmental impact report. Section 15126.2(e) of the State CEQA Guidelines provides the following guidance for assessing growth-inducing impacts of a project:

Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristics of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

A project can induce growth directly, indirectly, or both. Direct growth inducement would result if a project involved construction of new housing. Indirect growth inducement would result, for instance, if implementing a project resulted in:

- substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises);
- substantial short-term employment opportunities (e.g., construction employment) that indirectly stimulates the need for additional housing and services to support the new temporary employment demand; or
- removal of an obstacle to additional growth and development, such as removing a constraint on a required public utility or service (e.g., construction of a major sewer line with excess capacity through an undeveloped area).

Growth inducement by itself is not an environmental effect but may foreseeably lead to environmental effects. If substantial growth inducement occurs, it can result in secondary environmental effects, such as increased demand for housing, demand for other community and public services and infrastructure capacity, increased traffic and noise, degradation of air or water quality, degradation or loss of plant or animal habitats, and conversion of agricultural and open space land to urban uses.

6.1.1 Growth-Inducing Impacts of the Project

Implementation of the regulatory amendments and the operation, maintenance, repair, removal, or replacement (collectively "O&M") of pre-existing artificial structures would not involve the development of new housing or increase the demand for new housing. In addition, although existing O&M activities result in a demand for workers, implementing the project would not substantially change the frequency, duration, or amount of O&M activities, nor the demand for workers to support O&M activities. The demand would be dispersed throughout the project area, which is expansive, and O&M activities would be performed using workers from the local workforce. Implementing the project would not result in a substantial change in demand for workers in any given area and the project would not directly or indirectly induce population growth. Because the project would not foster economic or population growth, there would not be significant growth-inducing impacts associated with implementation of the regulatory amendments.

6.2 SIGNIFICANT AND UNAVOIDABLE ADVERSE IMPACTS

State CEQA Guidelines Section 15126.2(c) requires environmental impact reports to include a discussion of the significant environmental effects that cannot be avoided if the proposed project is implemented. As documented throughout Chapter 3 (project-level impacts) and Chapter 4, "Cumulative Impacts," of this Final Supplement, all impacts associated with the proposed project would be less than significant. The project would not result in any potentially significant and unavoidable impacts.

6.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

The State CEQA Guidelines require a discussion of any significant irreversible environmental changes that would be caused by the project. Specifically, Section 15126.2(d) states:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generation to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

The project would involve implementing regulatory amendments that would allow previously authorized O&M activities to occur in the incidental take buffer zones around pre-existing artificial structures. However, the regulatory amendments would not substantially change the frequency, duration, or amount of O&M activities and; therefore, the project would not result in the irreversible or irretrievable commitment of energy and material resources.

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Chapter 1 Introduction

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Commission and CDFG. See California Fish and Game Commission and California Department of Fish and Game.

CDFG. See California Department of Fish and Game.

Chapter 6 Other CEQA Sections

No references used in this chapter.

8 REPORT PREPARERS

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Appendix A

Notice of Preparation and Scoping Comments

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CHARLTON H. BONHAM, Director

State of California – Natural Resources Agency DEPARTMENT OF FISH AND WILDLIFE Marine Region 20 Lower Ragsdale Drive, Suite 100 Monterey, CA 93940 www.wildlife.ca.gov

> California Department of Fish and Wildlife Notice of Preparation of an Environmental Impact Report Supplement:

Regulatory Amendments Allowing Incidental Take During Work on Preexisting Artificial Structures in Marine Protected Areas: Supplement to the MPA Region EIRs

Date: February 23, 2023

To: Responsible Agencies, Trustee Agencies, and Interested Persons

RE: Notice of Preparation of a Draft Environmental Impact Report Supplement: Regulatory Amendments Allowing Incidental Take During Work on Preexisting Artificial Structures in Marine Protected Areas: Supplement to the MPA **Region EIRs**

To comply with the Marine Life Protection Act (MLPA) (Fish and Game Code Sections 2850-2863), planning for a comprehensive statewide network of marine protected areas (MPAs) along the 1,100-mile California coast occurred through a series of regional public planning processes. The MPAs were organized into four planning regions: the North Coast (California/Oregon border to Alder Creek near Point Arena), North Central Coast (Alder Creek near Point Arena to Pigeon Point), Central Coast (Pigeon Point to Point Conception), and South Coast (Point Conception to the California/Mexico border). The California Fish and Game Commission (Commission) certified an environmental impact report (EIR) for each of the four regions (collectively referred to hereafter as the MPA Region EIRs).

In accordance with the provisions of the California Environmental Quality Act (CEQA), the California Department of Fish and Wildlife (CDFW) is preparing a Draft EIR Supplement to the four MPA Region EIRs on behalf of the Commission, which is the lead agency under CEQA per Public Resources Code (PRC) (Sections 21000-21177) and the State CEQA Guidelines (California Code of Regulations [CCR], Title 14, Division 6, Chapter 3, Sections 15000-15387). The Commission has determined that the operation and maintenance of preexisting artificial structures within MPAs and associated regulatory changes to CCR, Title 14, Division 1, Subdivision 2, Chapter 11, Section 632 (CCR 14, Section 632) (project) will require preparation of a Supplement to the four MPA Region EIRs.

The purpose of this Notice of Preparation (NOP) is to provide an opportunity for the public, interested parties and public agencies to comment on the scope and proposed content of the EIR Supplement. This NOP initiates the CEQA scoping process. Documents related to this EIR Supplement will be available for review on CDFW's website at: https://wildlife.ca.gov/Notices/CEQA.

NOP Public Comment Period: February 23, 2023, to March 24, 2023

1 PROJECT BACKGROUND

The four MPA Region EIRs evaluated the environmental impacts of proposed MPA designations and adopted the MPA regulations for all MPAs in each region during the period 2007 to 2012. Ultimately, a total of 124 individual MPAs across the four planning regions were adopted by the Commission, thereby establishing California's MPA Network (California's Network). California's Network includes three MPA designations (State Marine Reserve [SMR], State Marine Conservation Area [SMCA], State Marine Park [SMP]) which are a subset of Marine Managed Areas (MMAs), one MMA specific designation (State Marine Recreational Management Area [SMRMA]), and special closures. The more common term "MPA" is used throughout as an umbrella to refer to all types of protected areas in California's Network.

Existing leases for artificial structures are recognized in current MPA regulations. MPAs encompass sovereign tidelands and submerged lands within the jurisdiction of the California State Lands Commission (CSLC). Tidelands occur between the ordinary high water and ordinary low water mark of tidal waters. Submerged lands reach from the ordinary low water mark out to the state-federal fixed boundary three miles offshore. The following structures and uses on sovereign lands, including tidelands and submerged lands, are subject to authorization through issuance of a lease, permit, or entitlement by CSLC:

- ▶ Riprap, seawalls, groins, jetties, breakwaters, deflectors, and bulkheads
- ▶ Recreational docks, piers, and buoys
- ► Commercial piers and facilities, docks, moorings, and buoys
- ► Commercial marinas, restaurants, and clubhouses
- ▶ Helicopter pads, decks, and fuel service facilities
- Oil terminals, piers, wharves, warehouses, and storage sites
- ▶ Power line, pipeline, intake, and outfall line rights of way
- ► Bridges

During the process in the North Coast and South Coast regions, it was recognized that many of the MPAs included within them artificial structures and facilities with existing entitlements, the continued operation and maintenance of which could result in incidental take of marine resources. As a result, in these two regions the MPA regulations were written to specifically allow incidental take associated with some existing entitlements for artificial structures and facilities.

Operation and maintenance activities for some preexisting structures and facilities take place on a monthly or annual basis, with regular communication occurring between managing agencies. However, many preexisting artificial structures and facilities, once installed, are managed or used occasionally, on an irregular, as-needed basis, rather than a regularly scheduled basis. While some artificial structures and facilities that received regular maintenance were identified in the North and South Coast regions and authorized for incidental take of marine resources by their individual MPA regulations, artificial structures and facilities in other regions were not, and some within the North and South Coast regions also were not identified, prior to implementation of the MPA regulations. Consequently, throughout California's Network, continued operation and maintenance of artificial structures and facilities with entitlements established prior to approval of the MPAs may not be authorized for take of marine resources by their individual MPA regulations.

The EIR Supplement will add to environmental information and analysis in the four MPA Region EIRs and evaluate the potential environmental impacts associated with implementation of the proposed regulatory amendments to CCR 14, Section 632.

2 PROJECT LOCATION

The project location includes four coastal planning regions: North Coast, North Central Coast, Central Coast, and South Coast (Figure 1). The North Coast region covers approximately 1,027 square miles of state waters from the California/Oregon border south to Alder Creek near Point Arena (Mendocino County). This region includes 20 MPAs (19 MPAs and one SMRMA). The North Central Coast region, the smallest of the four regions, covers approximately 763 square miles of state waters from Alder Creek near Point Arena south to Pigeon Point (San Mateo County). This region includes 25 MPAs (22 MPAs and three SMRMAs). The Central Coast region covers approximately 1,144 square miles of state waters from Pigeon Point, south to Point Conception (Santa Barbara County). This region includes 29 MPAs (28 MPAs and one SMRMA). The South Coast region, the largest of the four regions, covers approximately 2,351 square miles of state waters from Point Conception south to the California/Mexico border, including state waters around the Channel Islands. This region includes 50 MPAs (50 MPAs and no SMRMAs).



Source: Kirlin, J. 2012; adapted by Ascent Environmental in 2023.



3 PROJECT DESCRIPTION

3.1 PROJECT OBJECTIVES

Consistent with, and in furtherance of the MLPA, the objectives of the proposed regulatory amendments are to:

- address operations and maintenance needs of preexisting artificial structures in place prior to MPA designation without seeking individual take prohibition exemptions on a case-by-case basis;
- maintain the overall take prohibitions in MPAs to the extent feasible while allowing take incidental to operation and maintenance of preexisting artificial structures; and
- align MPA regulations with the original intention of California's Network to consider existing leases, permits, and any other legal entitlements that current regulations may impair.

3.2 PROPOSED REGULATORY AMENDMENTS ALLOWING INCIDENTAL TAKE DURING WORK ON PREEXISTING ARTIFICIAL STRUCTURES IN MARINE PROTECTED AREAS

The proposed revisions to Subsections 632(a)(1) and the addition of Subsections 632(a)(13), 632(a)(14), and 632(a)(15) of the regulations as they apply to preexisting artificial structures in MPAs are explained below.

3.2.1 Purpose of Subsection 632(a)(1) Amendments

Subsection 632(a)(1) provides definitions and allowable uses for each designation type. Existing definitions for SMPs, SMCAs, and SMRMAs would be amended to allow for operation, maintenance, repair, removal, and replacement of "preexisting artificial structures," pursuant to any required federal, state, and local permits. The existing definition for SMR would also be amended to specify that any area within an SMR that surrounds a preexisting artificial structure is excluded from the SMR definition when the structure is being actively maintained, repaired, or operated by the leaseholder(s), permittee(s) or their agent(s).

Current regulations allow for the operation and maintenance of preexisting artificial structures within a limited number of individually specified MPAs. This amendment would update all designation definitions to allow for incidental take of a marine resource in discrete areas related to the operation, maintenance, repair, removal, and replacement of a preexisting artificial structure located within an MPA, without having to amend individual MPA designations and take regulations.

SMRs do not allow for take except under a scientific collecting permit issued by CDFW pursuant to Section 650 or specific authorization from the Commission for research, restoration, or monitoring purposes. However, a preexisting artificial structure within an MPA could be actively maintained if it is located within a SMCA, SMP, or SMRMA, and has specific regulatory allowances for incidental take related to maintenance, repair, and operations activities. Thus, excluding the immediate area around a preexisting artificial structure within a SMR while it is being actively maintained, repaired, or operated, is necessary to allow incidental take of marine resources related to those activities for the lease duration without specific authorization from the Commission. The area of operation, maintenance, repair, removal, or replacement surrounding the structure would become an incidental take buffer zone for the duration of the work.

New Subsection 632(a)(1)(E) is also proposed to clarify that take of marine resources for any purposes other than what is specified in the preceding subsections of Subsection 632(a)(1) for each MPA designation type would be unlawful. There is currently no consistent method for wildlife officers to cite MPA violations. In some cases, a specific MPA is listed in the violation, while in other cases, the general MPA designation is cited. The proposed incidental take buffer zone definition may add an additional layer of citing complexity because the area within an SMR where a

preexisting artificial structure exists would be considered an SMCA when that structure is being maintained. Adding this proposed subsection would simplify issuing citations to violators.

3.2.2 Purpose of New Subsections 632(a)(13), 632(a)(14) and 632(a)(15)

Proposed new Subsection 632(a)(13) would add a definition for what qualifies as a "preexisting artificial structure" within California's Network. Any structure that was manufactured, created, installed, or constructed in state waters pursuant to federal, state, and local authorizations prior to the MPA implementation date; or constructed and installed after MPA implementation pursuant to public health and safety concerns; and including an incidental take buffer zone surrounding the structure, as defined in new Subsection 632(a)(14), would meet the definition of a "preexisting artificial structure."

For certain MPAs, current regulations do not provide a mechanism to maintain, operate, repair, remove, or replace, artificial structures that were in place prior to MPA implementation statewide. In these areas, maintenance of preexisting artificial structures is only permitted in the case of a structural emergency and for health and safety considerations. Specific definitions for what qualify as preexisting artificial structures and an associated incidental take buffer zone are needed to allow routine maintenance within certain MPAs, without needing to constantly approve work on a case-by-case basis.

Because the MPA designation process intended to account for existing leases, grants, and any other legal entitlements, any structure that existed prior to MPA implementation should be allowed to operate per the lease conditions without limitation due to MPA regulations. Additionally, artificial structures constructed or modified due to public health and safety concerns would be considered preexisting artificial structures regardless of installation date under the amended regulations.

Proposed new Subsection 632(a)(14) would add a definition for the "incidental take buffer zone" for preexisting artificial structures. Within a maximum distance of 250 feet in any direction from an artificial structure, not including areas above the mean high tide line, incidental take due to the operation, maintenance, repair, removal, and replacement of a preexisting artificial structure located within an MPA would be allowed.

To limit incidental take of marine resources protected within an MPA, changes to current take prohibitions would only occur within a buffer zone established around the preexisting artificial structure. This buffer zone would allow incidental take related to operation and maintenance work on the artificial structure to occur while still maintaining the integrity of the regulations applied to the surrounding MPA. The buffer zone would include only the immediate area surrounding a preexisting artificial structure but would not include areas above the mean high tide line, where the onshore MPA boundary ends. California law provides that the State owns all land below the "ordinary high-water mark" (California Civil Code Section 670). The "ordinary high-water mark" is determined by the average height of all high tides at a given location over a period of 18.6 years (Borax Consolidated, Ltd. V. Los Angeles, 296 U.S. 10, 1935) — this is referred to as the mean high tide line.

Recognizing that piers comprise the largest structures located within MPAs, a buffer zone that would meet the maintenance and operations requirements of piers means smaller structures should also have sufficient space for similar work. Barges are frequently used for maintenance of large piers, and a typical barge size is around 250 feet by 70 feet (Chakrabarti et al. 2005). Therefore, a buffer zone of 250 feet in all directions should be adequate for typical operations and maintenance work on piers and other artificial structures. Thus, the intent of using the 250-foot distance around preexisting artificial structures is to create sufficient space for maintenance and operation of preexisting artificial structures while maintaining the integrity of take prohibitions within the rest of the MPA area outside of this distance.

Proposed new Subsection 632(a)(15) would add a requirement for leaseholder(s), permittee(s), or their agent(s) to have a valid government-issued form of identification available when conducting activities around preexisting artificial structures, and define the specific types of government-issued identification that would be acceptable. This

requirement is necessary because law enforcement and/or wildlife officers need to be able to verify the identity of individuals conducting authorized activities related to operation, maintenance, repair, removal, or replacement of preexisting artificial structures. Acceptable forms of government-issued identification would include driver's licenses, US state photo identification cards, federally-recognized tribal photo identification cards, or an international passport.

3.2.3 Operations and Maintenance Activities Allowed under Proposed Regulatory Amendments

The proposed regulatory amendments would allow for continued operation, maintenance, repair, replacement, and removal of preexisting artificial structures listed in Section 1, above. All activities would occur within the incidental take buffer zone immediately surrounding the artificial structures. Artificial structures are designed to have long-term life spans, typically remaining in place between 10 and 30 years. Most of the preexisting artificial structures require little to no regular maintenance. Maintenance activities for these structures are limited to repair and replacement of the structures or portions of the structures on an as-needed basis. The proposed regulatory amendments would not result in a change in the frequency of operations, maintenance, repair, or removal of any preexisting artificial structure to be subject to federal, state, and local permits, as applicable.

A variety of activities associated with operation, maintenance, repair, replacement, or removal of preexisting artificial structures may occur within the incidental take buffer zone. Operations and maintenance activities associated with these structures and analyzed in the Draft EIR would represent the most intensive activities that are expected to occur related to preexisting artificial structures. Other, less intensive, activities may occur that would not be described in detail.

4 POTENTIAL ENVIRONMENTAL EFFECTS

CDFW has determined based on preliminary review, in accordance with Section 15060 of the CEQA Guidelines, that an EIR should be prepared. As required by CEQA, the EIR will describe existing conditions and evaluate the potential environmental effects of the project and a reasonable range of alternatives, including the no-project alternative. It will address direct, indirect, and cumulative effects. The EIR will also discuss potential growth-inducing impacts and summarize significant and unavoidable environmental effects. The EIR will identify feasible mitigation measures, if available, to reduce potentially significant impacts. At this time, CDFW has identified a potential for environmental effects in the areas identified below.

- Archaeological and Tribal Cultural Resources;
- ► Marine Biological Resources; and
- ▶ Water Quality.

5 PROVIDING COMMENTS ON THIS NOTICE OF PREPARATION

Written comments on the NOP should be provided no later than 5:00 p.m. on March 24, 2023. Please send all comments to:

California Department of Fish and Wildlife Attn: Brian Owens 3196 South Higuera Street, Suite A San Luis Obispo, CA 93401

Or via E-mail: r7ceqa@wildlife.ca.gov (include "MPA Artificial Structures – NOP Comments" in subject line)

If you are from an agency that will need to consider the EIR when deciding whether to issue permits or other approvals for the project, please provide the name of a contact person. Comments provided by email should include the name and mailing address of the commenter in the body of the email.

5.1 FOCUS OF INPUT

CDFW will rely on responsible and trustee agencies to provide information relevant to the analysis of resources within their jurisdiction. CDFW encourages input on the scope and content of the EIR, with a focus on the following topics:

- Scope of Environmental Analysis. Guidance on the scope of analysis for this EIR, including identification of specific issues that will require closer study due to the location, scale, and character of the proposed preexisting artificial structures and associated operations and maintenance activities;
- Mitigation Measures. Ideas for feasible mitigation, including mitigation that could potentially be imposed by CDFW and that would avoid, eliminate, or reduce potentially significant or significant impacts;
- ► Alternatives. Suggestions for alternatives to the proposed regulatory amendments that could potentially reduce or avoid potentially significant or significant impacts; and
- ► Interested Parties. Identification of public agencies, public and private groups, and individuals that CDFW should notice regarding this project and the accompanying EIR.

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NATIVE AMERICAN HERITAGE COMMISSION

February 27, 2023

STATE OF CALIFORNIA

Brian Owens California Fish and Game Commission P.O. Box 944209 Sacramento, CA 94244



Gavin Newsom, Governor

Re: 2023020567, Regulatory Amendments Allowing Incidental Take During Work on Pre-Existing Artificial Structures in Marine Protected Areas: Supplement to the MPA Regions EIRs Project, Statewide

Dear Mr. Owens:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015. If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). Both SB 18 and AB 52 have tribal consultation requirements. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. <u>Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project</u>: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.

c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).

d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. <u>Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report</u>: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4

(SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. <u>Mandatory Topics of Consultation If Requested by a Tribe</u>: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project.
- **b.** Recommended mitigation measures.
- c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).
- 4. <u>Discretionary Topics of Consultation</u>: The following topics are discretionary topics of consultation:
 - **a.** Type of environmental review necessary.
 - **b.** Significance of the tribal cultural resources.
 - c. Significance of the project's impacts on tribal cultural resources.

d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. <u>Confidentiality of Information Submitted by a Tribe During the Environmental Review Process</u>: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. <u>Discussion of Impacts to Tribal Cultural Resources in the Environmental Document:</u> If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

a. Whether the proposed project has a significant impact on an identified tribal cultural resource.

b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. <u>Conclusion of Consultation</u>: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. <u>Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document</u>: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. <u>Required Consideration of Feasible Mitigation</u>: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

- a. Avoidance and preservation of the resources in place, including, but not limited to:
 - i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

- i. Protecting the cultural character and integrity of the resource.
- ii. Protecting the traditional use of the resource.
- iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. <u>Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource</u>: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: <u>http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf</u>

<u>SB 18</u>

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. <u>Tribal Consultation</u>: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe. (Gov. Code §65352.3 (a)(2)).

<u>No Statutory Time Limit on SB 18 Tribal Consultation</u>. There is no statutory time limit on SB 18 tribal consultation.
 <u>Confidentiality</u>: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).

4. <u>Conclusion of SB 18 Tribal Consultation</u>: Consultation should be concluded at the point in which:

a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or

b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:

- **a.** If part or all of the APE has been previously surveyed for cultural resources.
- **b.** If any known cultural resources have already been recorded on or adjacent to the APE.
- c. If the probability is low, moderate, or high that cultural resources are located in the APE.
- d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.

a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.

b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:

a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.

b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.

b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.

c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: <u>Cody.Campagne@nahc.ca.gov</u>.

Sincerely,

Cody Campagne

Cody Campagne Cultural Resources Analyst

cc: State Clearinghouse

From:	Wildlife R7 CEQA
То:	Stephanie Rasmussen; Andrea Shephard
Cc:	Van Diggelen, Amanda@Wildlife
Subject:	FW: MPA Artificial Structures - NOP Comments
Date:	Monday, March 6, 2023 11:44:54 AM

From: Doug Bush <dbush@culturedabalone.com>
Sent: Friday, February 24, 2023 12:31 PM
To: Wildlife R7 CEQA <R7CEQA@wildlife.ca.gov>
Subject: MPA Artificial Structures - NOP Comments

You don't often get email from dbush@culturedabalone.com. Learn why this is important

WARNING: This message is from an external source. Verify the sender and exercise caution when clicking links or opening attachments.

The Cultured Abalone Farm LLC operates a land based abalone farm adjacent to the "Naples" SMCA. Our seawater intakes transit the SMCA (and terminate outside the boundaries), and qualify as preexisting structures.

The proposed section 632(a) amendments appear to offer a reasonable pathway to allowing incidental take without creating an administrative burden and as described in the NOP we are in support of the amendments.

We would encourage the managers to resist the predictable calls from presumably well intentioned parties calling to make this process more complicated or cumbersome than it needs to be. The network of MLMAs will work best when they work efficiently, and we feel that this effort of amendments recognizes that.

Sincerely, Douglas Bush

douglas bush managing member/gm the cultured abalone farm, llc c. 805 729 4830

Appendix B

Marine Protected Areas by Region

The statewide network of Marine Protected Areas (MPAs) established across the four planning regions by the California Fish and Game Commission consists of a total of 124 individual MPAs and 14 special closures with a unique set of MPAs of varying types making up each of the planning regions. Table B-1 describes MPAs in the North Coast Region, Table B-2 describes MPAs in the North Central Coast Region, Table B-3 describes MPAs in the Central Coast Region, and Table B-4 describes MPAs in the South Coast Region.

	5			
MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Del Norte County			-	
Pyramid Point SMCA	 It is unlawful to injure, damage, take, or possess any living, geological or cultural marine resources for recreational and/or commercial purposes with the following specified exceptions: a. The recreational take of surf smelt by dip net or Hawaiian-type throw net is allowed. b. The following federally recognized tribe is exempts from the area and take regulations and shall comply with all other existing regulations and statutes: Tolowa Dee-ni' Nation [previously the Smith River Rancheria.] 	13.99	2.9	0-124
Point St. George Reef Offshore SMCA	 It is unlawful to injure, damage, take, or possess any living, geological or cultural marine resources for recreational and/or commercial purposes with the following specified exceptions: a. The recreational take of salmon by trolling and Dungeness crab by trap is allowed. b. The commercial take of salmon with troll fishing gear and Dungeness crab by trap is allowed. c. The following federally recognized tribes (listed alphabetically) are exempt from the area and take regulations and shall comply with all other existing regulations and statutes: Elk Valley Rancheria, and Tolowa Dee-ni' Nation [formerly the Smith River Rancheria.] 	9.52	3.4	176-399
Southwest Seal Rock Special Closure	Special restrictions on boating and access apply to Southwest Seal Rock as follows. a. A special closure is designated from the mean high tide line to a distance of 300 feet seaward of the mean lower low tide line of any shoreline of Southwest Seal Rock, located in the vicinity of 41° 48.810' N. lat. 124° 21.099' W. long. b. Except as permitted by federal law or emergency caused by hazardous weather, or as authorized by subsection 632(b)(3)(C), no vessel shall be operated or anchored at any time from the mean high tide line to a distance of 300 feet seaward of the mean lower low tide line of any shoreline of Southwest Seal Rock. c. No person except CDFW employees or employees of the United States Fish and Wildlife Service, National Oceanic and Atmospheric Administration, or United States Coast Guard, in performing their official duties, or unless permission is granted by CDFW, shall enter the area defined in subsection 632(b)(3)(B).	0.02	0.26	0-93

Table B-1 North Coast Region Marine Protected Areas

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Castle Rock Special Closure	Special restrictions on boating and access apply to Castle Rock as follows. a. A special closure is designated from the mean high tide line to a distance of 300 feet seaward of the mean lower low tide line of any shoreline of Castle Rock, located in the vicinity of 41° 45.706' N. lat. 124° 14.949' W. long. b. Except as permitted by federal law or emergency caused by hazardous weather, or as authorized by subsection 632(b)(4)(C), no vessel shall be operated or anchored at any time from the mean high tide line to a distance of 300 feet seaward of the mean lower low tide line of any shoreline of Castle Rock. c. No person except CDFW employees or employees of the United States Fish and Wildlife Service, National Oceanic and Atmospheric Administration, or United States Coast Guard, in performing their official duties, or unless permission is granted by CDFW, shall enter the area defined in subsection 632(b)(4)(B).	0.05	0.96	0-15
False Klamath Rock Special Closure	Special restrictions on boating and access apply to False Klamath Rock as follows. a. A special closure is designated from the mean high tide line to a distance of 300 feet seaward of the mean lower low tide line of any shoreline of False Klamath Rock, located in the vicinity of 41° 35.633' N. lat. 124° 06.699' W. long. during the period of March 1 to August 31. b. Except as permitted by federal law or emergency caused by hazardous weather, or as authorized by subsection 632(b)(5)(C), no vessel shall be operated or anchored from the mean high tide line to a distance of 300 feet seaward of the mean lower low tide line of any shoreline of False Klamath Rock during the period of March 1 to August 31. c. No person except CDFW employees or employees of the United States Fish and Wildlife Service, National Oceanic and Atmospheric Administration, or United States Coast Guard, in performing their official duties, or unless permission is granted by CDFW, shall enter the area defined in subsection 632(b)(5)(B) during the period of March 1 to August 31.	0.03	0.28	0-46
Humboldt County				
Reading Rock SMCA	 Only the following take is allowed in Ten Mile Estuary SMCA: 1. The recreational take of salmon by trolling; surf smelt by dip net or Hawaiian type throw net; & Dungeness crab by trap, hoop net or hand is allowed. 2. The commercial take of salmon with troll fishing gear; surf smelt by dip net; and Dungeness crab by trap is allowed. 3. The following federally recognized tribes are exempt from the area and take regulations for Reading Rock SMCA (subsection 632(b)(6)) & shall comply with all other existing regulations & statutes: Yurok Tribe of the Yurok Reservation, Cher-Ae Heights Indian Community of the Trinidad Rancheria, & Resighini Rancheria. 	11.96	2.9	0-166
Reading Rock SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	9.6	2.9	145-253

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Samoa SMCA	 Only the following take is allowed in Ten Mile Estuary SMCA: 1. The recreational take of salmon by trolling; surf smelt by dip net or Hawaiian type throw net; and Dungeness crab by trap, hoop net or hand. 2. The commercial take of salmon with troll fishing gear; surf smelt by dip net; and Dungeness crab by trap. 3. The following federally recognized tribe is exempt from the area and take regulations for Samoa State Marine Conservation Area (subsection 632(b)(8)) and shall comply with all other existing regulations and statutes: Wiyot Tribe. 	13.06	3.6	0-158
South Humboldt Bay SMRMA	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exception: 1. The following federally recognized tribe is exempt from the area and take regulations for South Humboldt Bay SMRMA (subsection 632(b)(9)) and shall comply with all other existing regulations and statutes: Wiyot Tribe. 2. Waterfowl may be taken in accordance with the general waterfowl regulations (Sections 502, 550, 551, and 552)	0.81	_	_
Sugarloaf Island Special Closure	 Special restrictions on boating and access apply to Sugarloaf Island as follows. a. A special closure is designated from the mean high tide line to a distance of 300 feet seaward of the mean lower low tide line of any shoreline of Sugarloaf Island, located in the vicinity of 40° 26.326' N. lat. 124° 24.827' W. long. b. Except as permitted by federal law or emergency caused by hazardous weather, or as authorized by subsection 632(b)(10)(C), no vessel shall be operated or anchored at any time from the mean high tide line to a distance of 300 feet seaward of the mean lower low tide line of any shoreline of Sugarloaf Island. c. No person except CDFW employees or employees of the United States Fish and Wildlife Service, National Oceanic and Atmospheric Administration, or United States Coast Guard, in performing their official duties, or unless permission is granted by CDFW, shall enter the area defined in subsection 632(b)(10)(B). 	0.03	0.38	0-10
South Cape Mendocino SMR	Prohibits the recreational and/or commercial take of all marine resources.	9.08	1.4	0-277
Steamboat Rock Special Closure	Special restrictions on boating and access apply to Steamboat Rock as follows. a. A special closure is designated from the mean high tide line to a distance of 300 feet seaward of the mean lower low tide line of any shoreline of Steamboat Rock, located in the vicinity of 40° 24.919' N. lat. 124° 24.241' W. long. during the period of March 1 to August 31. b. Except as permitted by federal law or emergency caused by hazardous weather, or as authorized by subsection 632(b)(12)(C), no vessel shall be operated or anchored from the mean high tide line to a distance of 300 feet seaward of the mean lower low tide line of any shoreline of Steamboat Rock during the period of March 1 to August 31. c. No person except CDFW employees or employees of the United States Fish and Wildlife Service, National Oceanic and Atmospheric Administration, or United States Coast Guard, in performing their official duties, or unless permission is granted by CDFW, shall enter the area defined in subsection 632(b)(12)(B) during the period of March 1 to August 31.	0.02	0.13	0-22

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Mattole Canyon SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	9.79	3.5	82-1,646
Sea Lion Gulch SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	10.42	2.0	0-375
Big Flat SMCA	Only the following take is allowed in Ten Mile Estuary SMCA: 1. The recreational take of salmon by trolling; and Dungeness crab by trap, hoop net or hand.	11.59	2.5	0-1,110
	2. The commercial take of salmon with troll fishing gear; and Dungeness crab by trap.			
	3. Certain federally recognized tribes are exempt from the area and take regulations for this MPA. For information regarding tribal take, please see California Code of Regulations Title 14, subsection 632(a)(15)(3)			
Mendocino				•
Double Cone Rock SMCA	Only the following take is allowed in Ten Mile Estuary SMCA: 1. The recreational take of salmon by trolling; and Dungeness crab by trap, hoop net or hand. 2. The commercial take of salmon with troll fishing gear; and Dungeness crab by trap.	18.49	4.9	0-391
	3. Certain federally recognized tribes are exempt from the area and take regulations for this MPA. For information regarding tribal take, please see California Code of Regulations Title 14, subsection 632(a)(11).			
Vizcaino Rock Special	Special restrictions on boating and access are as follows:	0.02	0.29	_
Closure	a. A special closure is designated from the mean high tide line to a distance of 300 feet seaward of the mean lower low tide of any shoreline of Vizcaino Rock west of 123°49.887' W. longitude, during the period of March 1 to August 31.			
	b. Except as permitted by federal law or emergency caused by hazardous weather, or as authorized by subsection 632(b)(18)(C), no vessel shall be operated or anchored from the mean high tide line to a distance of 300 feet seaward of the mean lower low tide line of any shoreline of Vizcaino Rock west of 123° 49.887' W. longitude during the period of March 1 to August 31.			
	c. No person except CDFW employees or employees of the United States Fish and Wildlife Service, National Oceanic and Atmospheric Administration, or United States Coast Guard, in performing their official duties, or unless permission is granted by CDFW, shall enter the area defined in subsection 632(b)(18)(B) during the period of March 1 to August 31.			
Ten Mile SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	11.95	3.1	0-343
Ten Mile Beach SMCA	Only the following take is allowed in Ten Mile Beach SMCA: 1. The recreational take of Dungeness crab by trap, hoop net or hand.	3.54	0.9	0-288
	2. The commercial take of Dungeness crab by trap.			
	3. Certain federally recognized tribes are exempt from the area and take regulations for this MPA. For information regarding tribal take, please see California Code of Regulations Title 14, subsection 632(a)(11).			

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Ten Mile Estuary SMCA	 Only the following take is allowed in Ten Mile Estuary SMCA: 1. Certain federally recognized tribes are exempt from the area and take regulations for this MPA. For information regarding tribal take, please see California Code of Regulations Title 14, subsection 632(a)(11). 2. Waterfowl may be taken in accordance with the general waterfowl regulations (Sections 502, 550, 551, and 552). 3. Operation and maintenance of artificial structures inside the conservation area is allowed pursuant to any required federal, state and local permits, or as otherwise authorized by CDFW 	0.18	_	_
MacKerricher SMCA	 Only the following take is allowed in MacKerricher SMCA: 1. Recreational take is allowed in accordance with current regulations. 2. Commercial take is allowed in accordance with current regulations, except the commercial take of bull kelp (<i>Nerocystis lutkeana</i>) and giant kelp (<i>Macrosyctis pyrifera</i>) is prohibited. 	2.48	3.75	0-119
Point Cabrillo SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	0.44	0.09	0-40
Russian Gulch SMCA	 Only the following take is permitted in Russian Gulch SMCA: 1. Recreational take in is allowed accordance with current regulations. 2. Commercial take in is allowed accordance with current regulations, except the commercial take of bull kelp (<i>Nerocystis lutkeana</i>) and giant kelp (<i>Macrosyctis pyrifera</i>) is prohibited. 	0.22	0.55	0-15
Big River Estuary SMCA	 Only the following take is allowed in Big River Estuary SMCA: 1. The recreational take of surfperch (family Embiotocidae) by hook and line from shore only; and Dungeness crab by hoop net or hand. 2. Certain federally recognized tribes are exempt from the area and take regulations for this MPA. For information regarding tribal take, please see California Code of Regulations Title 14, subsection 632(a)(11). 3. Waterfowl may be taken in accordance with the general waterfowl regulations (Sections 502, 550, 551, and 552). 4. Operation and maintenance of artificial structures inside the conservation area is allowed pursuant to any required federal, state and local permits, or as otherwise authorized by CDFW. 	0.13	_	_
Van Damme SMCA	Only the following take is allowed in Van Damme SMCA: 1. Recreational take in allowed accordance with current regulations. 2. Commercial take in allowed accordance with current regulations, except the commercial take of bull kelp (<i>Nerocystis lutkeana</i>) and giant kelp (<i>Macrosyctis pyrifera</i>) is prohibited.	0.06	0.36	0-17

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Navarro River Estuary SMCA	Only the following take is allowed in Navarro River Estuary SMCA: 1. The recreational take of salmonids by hook and line is allowed consistent with salmonid regulations in Section 7.50. 2. Certain federally recognized tribes are exempt from the area and take regulations for this MPA. For information regarding tribal take, please see California Code of Regulations Title 14, subsection 632(a)(11). Waterfowl may be taken in accordance with the general waterfowl regulations (Sections 502, 550, 551, and 552).	0.09	_	_

Notes: CDFW = California Department of Fish and Wildlife; MPA = marine protected area; SMCA = state marine conservation area; SMR = state marine reserve; SMRMA = state marine recreational management area.

Source: CDFW 2022.

Table B-2	North Central Coast Region Marine Protected Areas
	North Central Coast Region Marine Protected Areas

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Mendocino County				
Point Arena SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	4.38	2.3	0-173
Point Arena SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:	6.74	—	153-324
	a. The recreational take of salmon by trolling is allowed. b. The commercial take of salmon with troll fishing gear is allowed.			
Sea Lion Cove SMCA	 It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exception: a. The recreational and commercial take of finfish* is allowed. 	0.22	0.7	0-39
	* Finfish are defined here as any species of bony fish or cartilaginous fish (sharks, skates and rays).			
Saunders Reef SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:	9.36	2.5	0-276
	a. The recreational take of salmon by trolling is allowed. b. The commercial take of salmon with troll fishing gear and urchin is allowed.			
Sonoma County				
Del Mar Landing SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	0.22	0.7	0-87
Stewarts Point SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:	1.21	3.9	0-134
	a. The following may be taken recreationally from shore only: marine aquatic plants other than sea palm, marine invertebrates, finfish* by hook-and-line, surf smelt by beach net, and species authorized in Section 28.80 of these regulations by hand-held dip net.			
	*Finfish are defined here as any species of bony fish or cartilaginous fish (sharks, skates and rays)			
Stewarts Point SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource	24.03	7.3	0-294
Salt Point SMCA	 It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions: a. The recreational take of abalone and finfish** is allowed. 	1.84	2.8	0-226
	**Finfish are defined here as any species of bony fish or cartilaginous fish (sharks, skates and rays).			
Gerstle Cove SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	0.01	0.01	0-10

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Russian River SMRMA	Only the following take is allowed in Russian River SMRMA: The recreational hunting of waterfowl is allowed unless otherwise restricted by hunting regulations (sections 502, 550, 551, and 552).	0.36	1.8	0-10
Russian River SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:	0.84	1.4	0-57
	a. The recreational take of Dungeness crab by trap, and surf smelt using hand-held dip net or beach net is allowed.			
	b. The commercial take of Dungeness crab by trap is allowed.			
Bodega Head SMR	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource, with the following specified exceptions:	9.34	2.4	0-266
	a. Take pursuant to Fish and Game Code Section 10661 is allowed, and the director of the Bodega Marine Life Refuge may authorize certain activities in the Bodega Marine Life Refuge (Section 10903, Fish and Game Code) pursuant to subsections (b) and (c) of Section 10502.7 and Section 10656 of the Fish and Game Code.			
Bodega Head SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:	12.31	0.2	0-267
	a. The recreational take of pelagic finfish* by trolling, Dungeness crab by trap, and market squid by hand-held dip net is allowed.			
	b. The commercial take of pelagic finfish* by troll fishing gear or round haul net, Dungeness crab by trap, and market squid by round haul net, is allowed. Not more than five percent by weight of any commercial pelagic finfish or market squid catch landed or possessed shall be other incidentally taken species.			
	* Pelagic finfish is defined as: northern anchovy (<i>Engraulis mordax</i>), barracudas (<i>Sphyraena</i> spp.), billfishes (family <i>Istiophoridae</i>), dolphinfish (<i>Coryphaena hippurus</i>), Pacific herring (<i>Clupea pallasii</i>), jack mackerel (<i>Trachurus symmetricus</i>), Pacific mackerel (<i>Scomber japonicus</i>), salmon (<i>Oncorhynchus</i> spp.), Pacific sardine (<i>Sardinops sagax</i>), blue shark (<i>Prionace glauca</i>), salmon shark (<i>Lamna ditropis</i>), shortfin mako shark (<i>Isurus oxyrinchus</i>), thresher sharks (<i>Alopias</i> spp.), swordfish (<i>Xiphias gladius</i>), tunas (family <i>Scombridae</i>) including Pacific bonito (<i>Sarda chiliensis</i>), and yellowtail (<i>Seriola lalandi</i>). The commercial take of marlin is not allowed.			
Estero Americano SMRMA	Only the following take is allowed in Estero Americano SMRMA: Waterfowl may be taken in accordance with the general waterfowl regulations (Sections 502, 550, 551, and 552).	0.13	1.2	0-10
Marin County				
Estero de San Antonio SMRMA	Only the following take is allowed in Estero de San Antonio SMRMA: Waterfowl may be taken in accordance with the general waterfowl regulations (sections 502, 550, 551, and 552).	0.07	1.0	0-10
Point Reyes SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	9.55	6.4	0-132

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Point Reyes SMCA	 It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions: a. The recreational take of salmon by trolling and Dungeness crab by trap is allowed. b. The commercial take of salmon with troll fishing gear and Dungeness crab by trap is allowed. 	12.27	_	51-217
Point Reyes Headlands Special Closure	 Special restrictions on boating and access apply to the Point Reyes headlands as follows. 1. A special closure is designated on the south side of the Point Reyes headlands from the mean high tide line to a distance of 1,000 feet seaward of the mean lower low tide line of any shoreline between lines extending due south from each of the following two points: 37° 59.650' N. lat. 123° 01.000' W. long.; and 37° 59.390' N. lat. 122° 57.800' W. long. 2. No person except CDFW employees or employees of the United States Fish and Wildlife Service, National Park Service, or United States Coast Guard, in performing their official duties, or unless permission is granted by CDFW, shall enter this area at any time. 	0.67	_	0-40
Estero de Limantour SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	1.45	1.2	0-10
Drakes Estero SMCA	 It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions: The recreational take of clams is allowed. 	2.5	0.6	0-10
Point Resistance Rock Special Closure	 Special restrictions on boating and access apply to Point Resistance Rock as follows: 1. A special closure is designated from the mean high tide line to a distance of 300 feet seaward of the mean lower low tide line of any shoreline of Point Resistance Rock, located in the vicinity of 37° 59.916' N. lat. 122° 49.759' W. long. 2. No person except CDFW employees or employees of the United States Fish and Wildlife Service, National Park Service, or United States Coast Guard, in performing their official duties, or unless permission is granted by CDFW, shall enter this area at any time. 	0.01	_	0-10
Double Point/Stormy Stack Rock Special Closure	Special restrictions on boating and access apply to Stormy Stack Rock as follows. 1. A special closure is designated from the mean high tide line to a distance of 300 feet seaward of the mean lower low tide line of any shoreline of Stormy Stack Rock, located in the vicinity of 37° 56.830' N. lat. 122° 47.140' W. long. 2. No person except CDFW employees or employees of the United States Fish and Wildlife Service, National Park Service, or United States Coast Guard, in performing their official duties, or unless permission is granted by CDFW, shall enter this area at any time.	0.02	_	0-32

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Duxbury Reef SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:	0.69	2.8	0-10
	a. The recreational take of finfish* from shore and abalone is allowed.			
	*Finfish are defined here as any species of bony fish or cartilaginous fish (sharks, skates and rays). Take may be authorized for research, restoration, and monitoring purposes under a scientific collecting permit. See California Code of Regulations Title 14, Section 632(a).			
San Francisco County				
North Farallon Islands SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	18.07	8.3	0-275
North Farallon Islands	Special regulations on boating and access apply to the North Farallon Islands as follows.	0.21	_	0-150
Special Closure	1. A special closure is established at the islets comprising the North Farallon Islands.			
	2. Except as permitted by federal law or emergency caused by hazardous weather, or as authorized by [3., below], no vessel shall be operated or anchored at any time from the mean high tide line to a distance of 1,000 feet seaward of the mean lower low tide line of any shoreline of North Farallon Island, or to a distance of 300 feet seaward of the mean lower low tide line of any shoreline of the remaining three southern islets, including the Island of St. James, in the vicinity of 37° 46.025' N. lat. 123° 06.018' W. long.			
	 No person except CDFW employees or employees of the United States Fish and Wildlife Service, National Oceanic and Atmospheric Administration, or United States Coast Guard, in performing their official duties, or unless permission is granted by CDFW, shall enter the area defined in [2., above]. All vessels shall observe a five (5) nautical mile per hour speed limit within 1,000 feet seaward of the mean lower low tide line of any shoreline of the islets defined in [2., above]. 			
	5. In an area bounded by the mean high tide line and a distance of one nautical mile seaward of the mean lower low tide line of any of the four islets comprising the North Farallon Islands, the following restrictions apply: a. All commercial diving vessels operating in the defined area shall have their vessel engine exhaust system terminate either through a muffler for dry exhaust systems, or below the vessel waterline for wet exhaust systems. 			
	b. All commercial diving vessels equipped with an open, deck-mounted air compressor system, while operating in the defined area, shall have their air compressor's engine exhaust system terminate below the vessel waterline.			
Southeast Farallon Island SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	5.36	2.4	0-238

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Southeast Farallon Island Special Closure	Special regulations on boating and access apply to the island and islets comprising the Southeast Farallon Island as follows.	0.18	—	0-19
	1. A special closure is established at the Southeast Farallon Island.			
	2. Except as permitted by federal law or emergency caused by hazardous weather, or as authorized by [4., below], no vessel shall be operated or anchored at any time from the mean high tide line to a distance of 300 feet seaward of the mean lower low tide line of any shoreline of the Southeast Farallon Island year-round, EXCEPT:			
	a. The area north of Fisherman's Bay, from a line extending due west from 37° 42.260' N. lat. 123° 00.160' W. long., following clockwise around the island (including Fisherman's Bay), to a line extending due east from 37° 42.050' N. lat. 123° 00.070' W. long.			
	b. At East Landing, from a line extending due east from 37° 41.830' N. lat. 122° 59.980' W. long. following clockwise around the island, to a straight line connecting the following two points: 37° 41.720' N. lat. 123° 00.050' W. long.; and 37° 41.680' N. lat. 123° 00.070' W. long.			
	3. This closure as defined in [2., above] exists year round, except for the following areas, which are closed only from December 1 through September 14 of each year:			
	a. From Fisherman's Bay to East Landing, from a line extending due east from 37° 42.050' N. lat. 123° 00.070' W. long., following clockwise around the island to a line extending due east from 37° 41.830' N. lat. 122° 59.980' W. long.			
	b. The area southwest of East Landing, from a straight line connecting the following two points: 37° 41.720' N. lat. 123° 00.050' W. long.; and 37° 41.680' N. lat. 123° 00.070' W. long. Following clockwise around the main island to a straight line extending due south from 37° 41.760' N. lat. 123° 00.160' W. long. to 37° 41.640' N. lat. 123° 00.160' W. long, and on the southeast side of Saddle (Seal) Rock, from a straight line extending due south from 37° 41.760' N. lat. 123° 00.160' W. long. to a line extending due west from 37° 41.760' N. lat. 123° 00.160' W. long, following clockwise around Saddle (Seal) Rock, to a line extending due west from 37° 41.600' N. lat. 123° 00.260' W. long.			
	4. No person except CDFW employees or employees of the United States Fish and Wildlife Service, National Oceanic and Atmospheric Administration, or United States Coast Guard, in performing their official duties, or unless permission is granted by CDFW, shall enter the area defined in [2. or 3., above] during the closure period.			
	5. All vessels shall observe a five (5) nautical mile per hour speed limit 1,000 feet seaward of the mean lower low tide line of any shoreline of the Southeast Farallon Island.			
	6. In an area bounded by the mean high tide line and a distance of one nautical mile seaward of the mean lower low tide line of any of the islands and islets comprising the Southeast Farallon Island, the following restrictions apply:			
	a. All commercial diving vessels operating in the defined area shall have their vessel engine exhaust system terminate either through a muffler for dry exhaust systems, or below the vessel waterline for wet exhaust systems.			
	b. All commercial diving vessels equipped with an open, deck-mounted air compressor system, while operating in the defined area, shall have their air compressor's engine exhaust system terminate below the vessel waterline.			

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MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Southeast Farallon Island SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:	12.95	—	130-382
	a. The recreational take of salmon by trolling is allowed. b. The commercial take of salmon with troll fishing gear is allowed.			
San Mateo County				
Egg (Devil's Slide) Rock to Devil's Slide Special Closure	 Special restrictions on boating and access apply as follows. 1. A special closure is designated from the mean high tide line to a distance of 300 feet seaward of the mean lower low tide line of any shoreline of any of the three rocks comprising Egg (Devil's Slide) Rock, located in the vicinity of: 37° 34.640' N. lat. 122° 31.290' W. long. ; 37° 34.660' N. lat. 122° 31.320' W. long. ; and 37° 34.630' N. lat. 122° 31.290' W. long. ; 37° 34.660' N. lat. 122° 31.320' W. long. ; and 37° 34.630' N. lat. 122° 31.290' W. long. ; 37° 34.740' N. lat. 122° 31.080' W. long. ; 37° 34.720' N. lat. 122° 31.310' W. long. ; 37° 34.600' N. lat. 122° 31.330' W. long. ; and 37° 34.520' N. lat. 122° 31.210' W. long. Transit in between the rock and the mainland between these points is prohibited at any time. No person except CDFW employees or employees of the United States Fish and Wildlife Service, U.S. Bureau of Land Management, National Oceanic and Atmospheric Administration, or United States Coast Guard, in performing their official duties, or unless permission is granted by CDFW, shall enter this area. 	0.05		0-10
Montara SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	11.81	3.2	0-168
Pillar Point SMCA	 It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions: The recreational take of pelagic finfish* by trolling, Dungeness crab by trap, and market squid by hand-held dip net is allowed. The commercial take of pelagic finfish* by troll or round haul net, Dungeness crab by trap, and market squid by round haul net, is allowed. Not more than five percent by weight of any commercial pelagic finfish or market squid catch landed or possessed shall be other incidentally taken species. 	6.7	0.3	0-174

Notes: CDFW = California Department of Fish and Wildlife; MPA = marine protected area; SMCA = state marine conservation area; SMR = state marine reserve; SMRMA = state marine recreational management area.

Source: CDFW 2022.

Table B-3

Central Coast Region Marine Protected Areas

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
San Mateo County				
Año Nuevo SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	11.15	7.9	0-175
Santa Cruz County				
Greyhound Rock SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	12.0	3.0	0-220
	a. The recreational take of giant kelp (Macrocystis pyrifera) by hand harvest only, market squid, salmon, and, by hook-and-line from shore only, other finfish* is allowed.			
	b. The commercial take of giant kelp (Macrocystis pyrifera) by hand harvest only, salmon, and market squid is allowed. Not more than five percent by weight of any commercial market squid catch landed or possessed shall be other incidentally taken species.			
Natural Bridges SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	0.25	3.9	0-10
Monterey County				
Elkhorn Slough SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	2.72	0.7	0-10
Elkhorn Slough SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	0.22	0.1	0-10
	a. The recreational take of finfish* by hook-and-line only and clams is allowed. Clams may only be taken on the north shore of the slough in the area adjacent to the Moss Landing State Wildlife Area.			
	* Finfish are defined here as any species of bony fish or cartilaginous fish (sharks, skates and rays).			
Moro Cojo Slough SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	0.2	0.1	0-10
Soquel Canyon SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	22.97	2.9	274-2,113
	a. The commercial and recreational take of pelagic finfish* is allowed. Not more than five percent by weight of any commercial pelagic finfish catch landed or possessed shall be other incidentally taken species.			
	* Pelagic finfish are defined here as: northern anchovy (<i>Engraulis mordax</i>), barracudas (<i>Sphyraena</i> spp.), billfishes (family <i>lstiophoriade</i>), dolphinfish (<i>Coryphaena hippurus</i>), Pacific herring (<i>Clupea pallasii</i>), jack mackerel (<i>Trachurus symmetricus</i>), Pacific mackerel (<i>Scomber japonicus</i>), salmon (<i>Oncorhynchus</i> spp.), Pacific sardine (<i>Sardinops sagax</i>), blue shark (<i>Prionace glauca</i>), salmon shark (<i>Lamna ditropis</i>), shortfin mako shark (<i>lsurus oxyrinchus</i>), thresher sharks (<i>Alopias</i> spp.), swordfish (<i>Xiphias gladius</i>), tunas (family <i>Scombridae</i>) including Pacific bonito (<i>Sarda chiliensis</i>), and yellowtail (<i>Seriola lalandi</i>). The commercial take of marlin is not allowed.			

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Portuguese Ledge SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	10.64	_	302-4,793
	a. The commercial and recreational take of pelagic finfish* is allowed. Not more than five percent by weight of any commercial pelagic finfish catch landed or possessed shall be other incidentally taken species.			
	*Pelagic finfish are defined here as: northern anchovy (<i>Engraulis mordax</i>), barracudas (<i>Sphyraena</i> spp.), billfishes (family <i>lstiophoriade</i>), dolphinfish (<i>Coryphaena hippurus</i>), Pacific herring (<i>Clupea pallasii</i>), jack mackerel (<i>Trachurus symmetricus</i>), Pacific mackerel (<i>Scomber japonicus</i>), salmon (<i>Oncorhynchus</i> spp.), Pacific sardine (<i>Sardinops sagax</i>), blue shark (<i>Prionace glauca</i>), salmon shark (<i>Lamna ditropis</i>), shortfin mako shark (<i>lsurus oxyrinchus</i>), thresher sharks (<i>Alopias</i> spp.), swordfish (<i>Xiphias gladius</i>), tunas (family <i>Scombridae</i>) including Pacific bonito (<i>Sarda chiliensis</i>), and yellowtail (<i>Seriola lalandi</i>). The commercial take of marlin is not allowed.			
Edward F. Ricketts SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	0.23	0.7	0-74
	a. The recreational take of finfish* by hook-and-line is allowed.			
	b. The commercial take of giant kelp (<i>Macrocystis pyrifera</i>) and bull kelp (<i>Nereocystis</i> spp.) is allowed by hand in the area defined by subsection 165(c)(4)(D) under the following conditions:			
	A kelp harvester with a valid license issued pursuant to Section 165 may take no more than 12 tons of kelp from the portion of Administrative Kelp Bed 220 within the Edward F. Ricketts State Marine Conservation Area in any calendar month.			
	 Duplicate landing records must be kept on board the harvest vessel in accordance with the requirements of Section 165. 			
	* Finfish are defined here as any species of bony fish or cartilaginous fish (sharks, skates and rays).			
Lovers Point-Julia Platt SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	0.3	0.9	0-88
MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
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Pacific Grove Marine Gardens SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	0.98	1.3	0-151
	a. The recreational take of finfish* is allowed.			
	b. The commercial take of giant kelp (<i>Macrocystis pyrifera</i>) and bull kelp (<i>Nereocystis</i> spp.) by hand is allowed under the following conditions:			
	A kelp harvester with a valid license issued pursuant to Section 165 may take no more than 44 tons of kelp from the portion of Administrative Kelp Bed 220 within the Pacific Grove Marine Gardens State Marine Conservation Area in any calendar month.			
	 Duplicate landing records must be kept on board the harvest vessel in accordance with the requirements of Section 165. 			
	* Finfish are defined here as any species of bony fish or cartilaginous fish (sharks, skates and rays).			
Asilomar SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	1.51	2.3	0-172
Carmel Pinnacles SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	0.53	—	69-223
Carmel Bay SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	2.2	2.7	0-471
	a. The recreational take of finfish* is allowed.			
	b. The commercial take of giant kelp (<i>Macrocystis pyrifera</i>) and bull kelp (<i>Nereocystis</i> spp.) by hand is allowed under the following conditions:			
	A kelp harvester with a valid license issued pursuant to Section 165 may take no more than 44 tons of kelp from the portion of Administrative Kelp Bed 219 within the Carmel Bay State Marine Conservation Area in any calendar month.			
	 Duplicate landing records must be kept on board the harvest vessel in accordance with the requirements of Section 165. 			
	*Finfish are defined here as any species of bony fish or cartilaginous fish (sharks, skates and rays).			
Point Lobos SMR	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	5.5	4.5	0-408
	2. Within the portion of the Point Lobos State Marine Reserve which also falls within the boundary of the Point Lobos State Reserve (State Park Unit), restrictions on boating and diving activities exist.			
Point Lobos SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	8.47	—	268-1,823
	a. The recreational take of salmon and albacore is allowed.			
	b. The commercial take of salmon, albacore, and spot prawn is allowed			

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Point Sur SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	9.79	5.5	0-183
Point Sur SMCA	 It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions: The commercial and recreational take of salmon and albacore is allowed. 	10.62	_	139-624
Big Creek SMR	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource. 2. Anchoring. Except as pursuant to Federal law or emergency caused by hazardous weather, it is unlawful to anchor or moor a vessel in waters shallower than 10 fathoms in the Big Creek State Marine Reserve.	14.51	6.1	0-2,393
Big Creek SMCA	 It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions: a. The recreational take of salmon and albacore is allowed. 	7.85	_	107-1,964
	b. The commercial take of salmon, albacore, and spot prawn is allowed.			
San Luis Obispo County				
Piedras Blancas SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	10.44	6.5	0-157
Piedras Blancas SMCA	 It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions: The commercial and recreational take of salmon and albacore is allowed. 	8.84	_	94-337
Cambria SMCA and State Marine Park	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exception: recreational take is allowed.	6.26	5.9	0-105
White Rock SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:	2.91	3.5	0-128
	a. The commercial take of giant kelp (Macrocystis pyrifera) and bull kelp (Nereocystis spp.) is allowed under the following conditions:			
	► A kelp harvester with a valid license issued pursuant to Section 165 and holding a valid lease to Administrative Kelp Bed 208 may take no more than 125 tons of kelp from the portion of Administrative Kelp Bed 208 within the White Rock State Marine Conservation Area in any calendar month.			
	 Duplicate landing records must be kept on board the harvest vessel in accordance with the requirements of Section 165. 			

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Morro Bay SMRMA	 Only the following take is allowed north of latitude 35° 19.700'N: 1. The recreational take of finfish. 2. Aquaculture of oysters, pursuant to a valid state water bottom lease and permit. 3. Storing finfish Storing finfish taken outside the Morro Bay SMRMA in a receiver for bait purposes. Recreational hunting of waterfowl is allowed in Morro Bay SMRMA unless otherwise restricted by hunting regulations (sections 502, 550, 551, and 552). 	3.07	—	0-18
Morro Bay SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	0.88	0.8	0-10
Point Buchon SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	6.68	2.5	0-208
Point Buchon SMCA	 It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions: The commercial and recreational take of salmon and albacore is allowed. 	12.19	_	191-391
Santa Barbara County				
Vandenberg SMR	 It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource, with the following specified exceptions: take incidental to base operations and commercial space launch operations identified by the Vandenberg Air Force Base Commander as mission critical is allowed. Public Entry. Public entry into the Vandenberg State Marine Reserve may be restricted at the discretion of CDFW to protect wildlife, aquatic life, or habitat, or by the Commander of Vandenberg Air Force Base to protect and provide safety for base operations. CDFW shall enter into a Memorandum of Understanding (MOU) with the Commander of Vandenberg State Marine Reserve. The MOU shall include, but not be limited to, the identification of Vandenberg Air Force Base's national defense mission activities that are unrestricted by the subject regulations and details on management and administrative roles and 	32.91	14.5	0-127

Notes: MPA = marine protected area; SMCA = state marine conservation area; SMR = state marine reserve; SMRMA = state marine recreational management area.

Source: CDFW 2022.

Table B-4 South Coast Region Marine Protected Areas

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Santa Barbara County				
Point Conception SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	22.52	3.7	0-489
Kashtayit SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	2.02	1.9	0-160
	a. The recreational take of finfish*, invertebrates except rock scallops and mussels, and giant kelp (<i>Macrocystis pyrifera</i>) by hand harvest is allowed.			
	b. The following federally recognized tribe is exempt from the area and take regulations for Kashtayit State Marine Conservation Area and shall comply with all other existing regulations and statutes: Santa Ynez Band of Chumash Indians.			
	c. Take pursuant to maintenance of artificial structures and operation and maintenance of existing facilities is allowed inside the conservation area pursuant to any required federal, state and local permits, or as otherwise authorized by CDFW.			
	* Finfish are defined here as any species of bony fish or cartilaginous fish (sharks, skates and rays).			
Naples SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:	2.6	1.9	0-162
	a. The recreational take by spearfishing of white seabass and pelagic finfish* is allowed.			
	b. The commercial take of giant kelp (Macrocystis pyrifera) by hand harvest or by mechanical harvest is allowed.			
	c. Take pursuant to operation and maintenance of artificial structures inside the conservation area is allowed pursuant to any required federal, state and local permits, or as otherwise authorized by CDFW.			
	The following federally recognized tribe is exempt from the area and take regulations for Naples State Marine Conservation Area and shall comply with all other existing regulations and statutes: Santa Ynez Band of Chumash Indians.			
	Pelagic finfish are defined here as: northern anchovy (<i>Engraulis mordax</i>), barracudas (<i>Sphyraena</i> spp.), billfishes (family <i>Istiophoridae</i>), dolphinfish (<i>Coryphaena hippurus</i>), Pacific herring (<i>Clupea pallasii</i>), jack mackerel (<i>Trachurus symmetricus</i>), Pacific mackerel (Scomber japonicus), Pacific sardine (<i>Sardinops sagax</i>), blue shark (<i>Prionace glauca</i>), salmon shark (<i>Lamna ditropis</i>), shortfin mako shark (<i>Isurus oxyrinchus</i>), thresher sharks (<i>Alopias</i> spp.), swordfish (<i>Xiphias gladius</i>), tunas (family <i>Scombridae</i>) including Pacific bonito (<i>Sarda chiliensis</i>), and yellowtail (<i>Seriola lalandi</i>). *Marlin is not allowed for commercial take. Salmon (<i>Oncorhynchus</i> spp.), a pelagic finfish, may not be taken by			
	spear.			

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MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Campus Point SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	10.56	3.1	0-748
	a. Take pursuant to the operation and maintenance of artificial structures inside the conservation area is allowed pursuant to any required federal, state and local permits, or as otherwise authorized by CDFW.			
Goleta Slough SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	0.16		0-10
	a. Take pursuant to routine maintenance, dredging, habitat restoration, research and education, maintenance of artificial structures, and operation and maintenance of existing facilities in the conservation area is allowed pursuant to any required federal, state and local permits, or activities pursuant to Section 630, or as otherwise authorized by CDFW.			
	2. In waters below the mean high tide line inside the Goleta Slough Ecological Reserve as defined within Section 630, the following restrictions apply:			
	a. Boating, swimming, wading, and diving are prohibited.			
	b. No person shall enter this area and remain therein except on established trails, paths or other designated areas except Department employees or designated employees of Santa Barbara Airport, City of Santa Barbara, Goleta Sanitary District and Goleta Valley Vector Control District for the purposes of carrying out official duties.			

Appendix B

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Los Angeles County				
Point Dume SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	15.92	4.0	0-2,023
	a. The recreational take by spearfishing of white seabass and pelagic finfish* is allowed.			
	b. The commercial take of swordfish by harpoon; and coastal pelagic species** by round haul net, brail gear, and light boat is allowed. Not more than five percent by weight of any commercial coastal pelagic species catch landed or possessed shall be other incidentally taken species.			
	c. The following federally recognized tribe is exempt from the area and take regulations for Point Dume State Marine Conservation Area and shall comply with all other existing regulations and statutes: Santa Ynez Band of Chumash Indians.			
	d. Take pursuant to beach nourishment and other sediment management activities is allowed inside the conservation area pursuant to any required federal, state and local permits, or as otherwise authorized by CDFW.			
	Pelagic finfish are defined here as: northern anchovy (<i>Engraulis mordax</i>), barracudas (<i>Sphyraena</i> spp.), billfishes (family <i>Istiophoridae</i>), dolphinfish (<i>Coryphaena hippurus</i>), Pacific herring (<i>Clupea pallasii</i>), jack mackerel (<i>Trachurus symmetricus</i>), Pacific mackerel (<i>Scomber japonicus</i>), salmon (<i>Oncorhynchus</i> spp.), Pacific sardine (<i>Sardinops sagax</i>), blue shark (<i>Prionace glauca</i>), salmon shark (<i>Lamna ditropis</i>), shortfin mako shark (<i>Isurus oxyrinchus</i>), thresher sharks (<i>Alopias</i> spp.), swordfish (<i>Xiphias gladius</i>), tunas (family <i>Scombridae</i>) including Pacific bonito (<i>Sarda chiliensis</i>), and yellowtail (<i>Seriola lalandi</i>). *Marlin is not allowed for commercial take.			
	** Coastal pelagic species are defined here as: northern anchovy (<i>Engraulis mordax</i>), Pacific sardine (<i>Sardinops sagax</i>), Pacific mackerel (<i>Scomber japonicus</i>), jack mackerel (<i>Trachurus symmetricus</i>) and market squid (<i>Doryteuthis (Loligo) opalescens</i>).			
Point Dume SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	7.53	2.9	0-1,987
Point Vicente SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	15.04	1.4	0-2,640
	a. Take pursuant to remediation activities associated with the Palos Verdes Shelf Operable Unit of the Montrose Chemical Superfund Site is allowed inside the conservation area pursuant to the Interim Record of Decision issued by the United States Environmental Protection Agency and any subsequent Records of Decision.			

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Abalone Cove SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	4.79	1.5	0-2,237
	a. The recreational take by spearfishing of white seabass and pelagic finfish*; and market squid by hand-held dip net is allowed.			
	b. The commercial take of swordfish by harpoon; and coastal pelagic species and Pacific bonito by round haul net, brail gear, and light boat is allowed. Not more than five percent by weight of any commercial coastal pelagic species** or Pacific bonito catch landed or possessed shall be other incidentally taken species.			
	c. Take pursuant to remediation activities associated with the Palos Verdes Shelf Operable Unit of the Montrose Chemical Superfund Site is allowed inside the conservation area pursuant to the Interim Record of Decision issued by the United States Environmental Protection Agency and any subsequent Records of Decision.			
	Pelagic finfish are defined here as: northern anchovy (<i>Engraulis mordax</i>), barracudas (<i>Sphyraena</i> spp.), billfishes (family <i>Istiophoridae</i>), dolphinfish (<i>Coryphaena hippurus</i>), Pacific herring (<i>Clupea pallasii</i>), jack mackerel (<i>Trachurus symmetricus</i>), Pacific mackerel (<i>Scomber japonicus</i>), salmon (<i>Oncorhynchus</i> spp.), Pacific sardine (<i>Sardinops sagax</i>), blue shark (<i>Prionace glauca</i>), salmon shark (<i>Lamna ditropis</i>), shortfin mako shark (<i>Isurus oxyrinchus</i>), thresher sharks (<i>Alopias</i> spp.), swordfish (<i>Xiphias gladius</i>), tunas (family Scombridae) including Pacific bonito (<i>Sarda chiliensis</i>), and yellowtail (<i>Seriola lalandi</i>). *Marlin is not allowed for commercial take.			
	** Coastal pelagic species are defined here as: northern anchovy (<i>Engraulis mordax</i>), Pacific sardine (<i>Sardinops sagax</i>), Pacific mackerel (<i>Scomber japonicus</i>), jack mackerel (<i>Trachurus symmetricus</i>) and market squid (<i>Doryteuthis (Loligo) opalescens</i>).			
Orange County			•	
Bolsa Bay SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	0.07	—	_
	a. The recreational take of finfish* by hook-and-line from shore in designated areas only is allowed.			
	b. Take pursuant to the routine operation and maintenance, habitat restoration, maintenance, dredging, research and education, and maintenance of artificial structures inside the conservation area is allowed pursuant to any required federal, state and local permits, or activities pursuant to Section 630, or as otherwise authorized by CDFW.			
	2. Boating, swimming, wading, and diving are prohibited within the conservation area.			
	 No person, except state and local law enforcement officers, fire suppression agencies and employees of CDFW in the performance of their official duties or persons possessing written permission from CDFW or employees of Signal Corporation and its invitees for the purpose of carrying out oil and gas operations, shall enter this conservation area and remain therein except on established trails, paths, or other designated areas. No person shall enter this conservation area between the hours of 8:00 p.m. and 6:00 a.m. 			
	*Finfish are defined here as any species of bony fish or cartilaginous fish (sharks, skates and rays).			

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Bolsa Chica Basin SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	0.7		—
	a. Take pursuant to routine operation and maintenance, habitat restoration, maintenance dredging, research and education, and maintenance of artificial structures inside the conservation area is allowed pursuant to any required federal, state and local permits, or activities pursuant to Section 630, or as otherwise authorized by CDFW.			
	2. Boating, swimming, wading, and diving are prohibited within the conservation area.			
	 No person, except state and local law enforcement officers, fire suppression agencies and employees of CDFW in the performance of their official duties or persons possessing written permission from CDFW or employees of Signal Corporation and its invitees for the purpose of carrying out oil and gas operations, shall enter this conservation area and remain therein except on established trails, paths, or other designated areas. No person shall enter this conservation area between the hours of 8:00 p.m. and 6:00 a.m. 			
Upper Newport Bay SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	1.24	_	_
	a. The recreational take of finfish* by hook-and-line from shore only is allowed.			
	b. Take pursuant to maintenance dredging, habitat restoration, research and education programs, maintenance of artificial structures, and operation and maintenance of existing facilities inside the conservation area is allowed pursuant to any required federal, state and local permits, or activities pursuant to Section 630, or as otherwise authorized by CDFW.			
	2. In waters below the mean high tide line inside the Upper Newport Bay Ecological Reserve, northeastward of a line connecting Shellmaker Island (33° 37.200' N. lat. 117° 53.510' W. long.) and North Star Beach (33° 37.380' N. lat. 117° 53.600' W. long.) the following restrictions apply:			
	a. Swimming is allowed only in the area between North Star Beach and mid-channel.			
	b. Boats are limited to speeds less than five miles per hour.			
	c. Shoreline access is limited to established trails, paths, or other designated areas.			
	* Finfish are defined here as any species of bony fish or cartilaginous fish (sharks, skates and rays).			

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Crystal Cove SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:	3.53	4.3	0-245
	a. The recreational take of finfish* by hook-and-line or by spearfishing, and spiny lobster and sea urchin is allowed.			
	b. The commercial take of sea urchin; spiny lobster by trap; and coastal pelagic species** by round haul net, brail gear, and light boat is allowed. Not more than five percent by weight of any commercial coastal pelagic species catch landed or possessed shall be other incidentally taken species.			
	c. Take pursuant to beach nourishment and other sediment management activities, and operation and maintenance of artificial structures inside the conservation area is allowed pursuant to any required federal, state and local permits, or as otherwise authorized by CDFW.			
	2. Take of all living marine resources from inside tidepools is prohibited. For purposes of this section, tidepools are defined as the area encompassing the rocky pools that are filled with seawater due to retracting tides between the mean higher high tide line and the mean lower low tide line.			
	* Finfish are defined here as any species of bony fish or cartilaginous fish (sharks, skates and rays).			
	** Coastal pelagic species are defined here as northern anchovy (<i>Engraulis mordax</i>), Pacific sardine (<i>Sardinops sagax</i>), Pacific mackerel (<i>Scomber japonicus</i>), jack mackerel (<i>Trachurus symmetricus</i>) and market squid (<i>Doryteuthis (Loligo) opalescens</i>).			
Laguna Beach SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	6.72	4.4	0-1,231
Laguna Beach SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	3.09	1.2	0-1,408
	a. Take pursuant to operation and maintenance of artificial structures and facilities, beach grooming, maintenance dredging, and habitat restoration inside the conservation area is allowed pursuant to any required federal, state and local permits, or as otherwise authorized by CDFW.			

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Dana Point SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:	3.47	4.0	0-152
	a. The recreational take of finfish* by hook-and-line or by spearfishing, and spiny lobster and sea urchin is allowed.			
	b. The commercial take of sea urchin, spiny lobster by trap, and coastal pelagic species** by round haul net, brail gear, and light boat is allowed. Not more than five percent by weight of any commercial coastal pelagic species catch landed or possessed shall be other incidentally taken species.			
	c. Take pursuant to operation and maintenance of artificial structures inside the conservation area is allowed, pursuant to any required federal, state and local permits, or as otherwise authorized by CDFW.			
	2. Take of all living marine resources from inside tidepools is prohibited. For purposes of this section, tidepools are defined as the area encompassing the rocky pools that are filled with seawater due to retracting tides between the mean higher high tide line and the mean lower low tide line.			
	*Finfish are defined here as any species of bony fish or cartilaginous fish (sharks, skates and rays).			
	** Coastal pelagic species are defined here as northern anchovy (<i>Engraulis mordax</i>), Pacific sardine (<i>Sardinops sagax</i>), Pacific mackerel (<i>Scomber japonicus</i>), jack mackerel (<i>Trachurus symmetricus</i>) and market squid (<i>Doryteuthis (Loligo) opaliescens</i>).			
San Diego County			•	
Batiquitos Lagoon SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	0.51	—	—
	a. Take pursuant to operation and maintenance, habitat restoration, research and education, maintenance dredging and maintenance of artificial structures inside the conservation area is allowed pursuant to any required federal, state and local permits, or activities pursuant to Section 630, or as otherwise authorized by CDFW.			
	2. Boating, swimming, wading, and diving are prohibited within the conservation area.			

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Swami's SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	12.71	3.5	0-982
	a. Recreational take by hook-and-line from shore is allowed.			
	b. The recreational take by spearfishing of white seabass and pelagic finfish* is allowed.			
	c. Take pursuant to beach nourishment and other sediment management activities and operation and maintenance of artificial structures inside the conservation area is allowed pursuant to any required federal, state and local permits, or as otherwise authorized by CDFW.			
	Pelagic finfish are defined here as: northern anchovy (<i>Engraulis mordax</i>), barracudas (<i>Sphyraena</i> spp.), billfishes (family <i>Istiophoridae</i>), dolphinfish (<i>Coryphaena hippurus</i>), Pacific herring (<i>Clupea pallasii</i>), jack mackerel (<i>Trachurus symmetricus</i>), Pacific mackerel (<i>Scomber japonicus</i>), salmon (<i>Oncorhynchus</i> spp.), Pacific sardine (<i>Sardinops sagax</i>), blue shark (<i>Prionace glauca</i>), salmon shark (<i>Lamna ditropis</i>), shortfin mako shark (<i>Isurus oxyrinchus</i>), thresher sharks (<i>Alopias</i> spp.), swordfish (<i>Xiphias gladius</i>), tunas (family <i>Scombridae</i>) including Pacific bonito (<i>Sarda chiliensis</i>), and yellowtail (<i>Seriola lalandi</i>). *Marlin is not allowed for commercial take.			
San Elijo Lagoon SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	0.5		
	a. Take pursuant to operation and maintenance, maintenance dredging, habitat restoration including sediment deposition, research and education, and maintenance of artificial structures inside the conservation area is allowed pursuant to any required federal, state and local permits, or activities pursuant to Section 630, or as otherwise authorized by CDFW.			
	2. Boating, swimming, wading, and diving are prohibited within the conservation area.			

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
San Dieguito Lagoon SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	0.11	—	_
	a. The recreational take of finfish* by hook-and-line from shore is allowed.			
	2. Boating, swimming, wading, and diving are prohibited within the conservation area.			
	3. No person, except state and local law enforcement officers, fire suppression agencies and employees of CDFW in the performance of their official duties or persons possessing written permission from CDFW, shall be permitted on the California least tern nesting island.			
	 No person, except state and local law enforcement officers, fire suppression agencies and employees of CDFW in the performance of their official duties or persons possessing written permission from CDFW, shall enter this conservation area between 8:00 p.m. and 5:00 a.m. The County of San Diego, after consultation with CDFW, may carry out management activities for fish and wildlife, flood control and vector control. Authorized operation and maintenance activities shall include, but shall not be limited to, use of chemicals, vegetation control, water control and use of associated equipment. 			
	6. Collections of fish, wildlife, water and soil may be made by CDFW for the purposes of fish and wildlife management or by San Diego County for the purposes of water quality testing and vector control.			
	*Finfish are defined here as any species of bony fish or cartilaginous fish (sharks, skates and rays).			
San Diego-Scripps Coastal SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	1.46	1.1	0-366
	a. The recreational take of coastal pelagic species*, except market squid, by hook-and-line only is allowed.			
	b. Take pursuant to the operation and maintenance of artificial structures inside the conservation area is allowed pursuant to any required federal, state, and local permits, or as otherwise authorized by CDFW.			
	c. Licensees of the Regents of the University of California and all officers, employees, and students of such university may take, for scientific purposes, invertebrates, fish, or specimens of marine plant or algae under the conditions prescribed in a scientific collecting permit issued by CDFW.			
	* Coastal pelagic species are defined here as: northern anchovy (<i>Engraulis mordax</i>), Pacific sardine (<i>Sardinops sagax</i>), Pacific mackerel (<i>Scomber japonicus</i>), jack mackerel (<i>Trachurus symmetricus</i>) and market squid (<i>Doryteuthis (Loligo) opalescens</i>).			
Matlahuayl SMR	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	1.04	1.7	0-331
	2. Boats may be launched and retrieved only in designated areas and may be anchored within the reserve only during daylight hours.			
South La Jolla SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	5.04	2.3	0-180

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
South La Jolla SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:	2.46	—	147-275
	a. The recreational take of pelagic finfish* by hook-and-line only is allowed.			
	Pelagic finfish are defined here as: northern anchovy (<i>Engraulis mordax</i>), barracudas (<i>Sphyraena</i> spp.), billfishes (family <i>Istiophoridae</i>), dolphinfish (<i>Coryphaena hippurus</i>), Pacific herring (<i>Clupea pallasii</i>), jack mackerel (<i>Trachurus symmetricus</i>), Pacific mackerel (<i>Scomber japonicus</i>), salmon (<i>Oncorhynchus</i> spp.), Pacific sardine (<i>Sardinops sagax</i>), blue shark (<i>Prionace glauca</i>), salmon shark (<i>Lamna ditropis</i>), shortfin mako shark (<i>Isurus oxyrinchus</i>), thresher sharks (<i>Alopias</i> spp.), swordfish (<i>Xiphias gladius</i>), tunas (family <i>Scombridae</i>) including Pacific bonito (<i>Sarda chiliensis</i>), and yellowtail (<i>Seriola lalandi</i>). *Marlin is not allowed for commercial take.			
Famosa Slough SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	0.03	—	_
	a. Take pursuant to habitat restoration, maintenance dredging and operation and maintenance of artificial structures is allowed inside the conservation area pursuant to any required federal, state and local permits, or as otherwise authorized by CDFW.			
Cabrillo SMR	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	0.39	1.0	0-30
Tijuana River Mouth SMCA	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:	3.02	2.2	0-55
	a. The recreational take of coastal pelagic species*, except market squid, by hand-held dip net only is allowed.			
	b. The commercial take of coastal pelagic species [*] , except market squid, by round haul net is allowed. Not more than five percent by weight of any commercial coastal pelagic species catch landed or possessed shall be other incidentally taken species, including market squid.			
	c. Take pursuant to beach nourishment and other sediment management activities and operation and maintenance of artificial structures inside the conservation area is allowed pursuant to any required federal, state and local permits, or as otherwise authorized by CDFW.			
	*Coastal pelagic species are defined here as: northern anchovy (<i>Engraulis mordax</i>), Pacific sardine (<i>Sardinops sagax</i>), Pacific mackerel (<i>Scomber japonicus</i>), jack mackerel (<i>Trachurus symmetricus</i>) and market squid (<i>Doryteuthis</i> <i>opalescens</i>).			
Island MPAs				
Richardson Rock State and Federal Marine Reserve (San Miguel Island)	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	40.75	6.6	0-558

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
San Miguel Island Special Closure	Boating is allowed at San Miguel Island except west of a line drawn between Judith Rock (34° 01.500' N. lat. 120° 25.300' W. long.) and Castle Rock (34° 03.300' N. lat. 120° 26.300' W. long.) where boats are prohibited closer than 300 yards from shore.	0.86	—	0-55
	1. Notwithstanding the 300-yard boating closure between Judith Rock and Castle Rock, the following shall apply:			
	a. Boats may approach San Miguel Island no nearer than 100 yards from shore during the period(s) from March 15 through April 30, and October 1 through December 15; and			
	b. Boats operated by commercial sea urchin divers may enter waters of the 300-yard area between the western boundary of the Judith Rock State Marine Reserve at 120° 26.600' W. long. and Castle Rock for the purpose of fishing sea urchins during the period(s) from March 15 through April 30, and October 1 through December 15.			
	2. The CDFW may rescind permission for boats to enter waters within 300 yards between Judith Rock and Castle Rock upon finding that impairment to the island marine mammal resource is imminent. Immediately following such closure, CDFW will request the commission to hear, at its regularly scheduled meeting, presentation of documentation supporting the need for such closure.			
	Other Requirements:			
	1. Boats traveling within 300 yards of the shoreline or anchorages shall operate with a minimum amount of noise and shall not exceed speeds of five miles per hour.			
	2. Except as permitted by federal law or emergency caused by hazardous weather, boats may be anchored overnight only at Tyler Bight and Cuyler Harbor.			
	3. Landing is allowed on San Miguel Island only at the designated landing beach in Cuyler Harbor.			
	4. No person shall have access to all other offshore rocks and islands at San Miguel Island.			
Harris Point State and	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	25.4	7.0	0-557
Federal Marine Reserve (San Miguel Island)	2. An exemption to the reserve, where commercial and recreational take of living marine resources is allowed, exists between the mean high tide line in Cuyler Harbor and a straight line between the following points: 34° 03.554' N. lat. 120° 21.311' W. long.; and 34° 02.908' N. lat. 120° 20.161' W. long.			
Judith Rock SMR (San Miguel Island)	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	4.56	1.4	0-487
Carrington Point SMR (Santa Rosa Island)	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	12.78	4.8	0-211
Skunk Point SMR (Santa Rosa Island)	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	1.47	2.5	0-83
South Point State and Federal Marine Reserve (Santa Rosa Island)	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	13.08	3.8	0-1,071

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Painted Cave SMCA (Santa Cruz Island)	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	1.78	2.2	0-291
	a. The recreational take of spiny lobster and pelagic finfish* is allowed.			
	* Pelagic finfish are defined here as: northern anchovy (<i>Engraulis mordax</i>), barracudas (<i>Sphyraena</i> spp.), billfishes* (family <i>Istiophoridae</i>), dolphinfish (<i>Coryphaena hippurus</i>), Pacific herring (<i>Clupea pallasii</i>), jack mackerel (<i>Trachurus symmetricus</i>), Pacific mackerel (<i>Scomber japonicus</i>), salmon (<i>Oncorhynchus</i> spp.), Pacific sardine (<i>Sardinops sagax</i>), blue shark (<i>Prionace glauca</i>), salmon shark (<i>Lamna ditropis</i>), shortfin mako shark (<i>Isurus oxyrinchus</i>), thresher sharks (<i>Alopias</i> spp.), swordfish (<i>Xiphias gladius</i>), tunas (family <i>Scombridae</i>) including Pacific bonito (<i>Sarda chiliensis</i>), and yellowtail (<i>Seriola lalandi</i>). *Marlin is not allowed for commercial take.			
Gull Island State and Federal Marine Reserve (Santa Cruz Island)	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	19.93	3.2	0-2,205
Scorpion State and Federal Marine Reserve (Santa Cruz Island)	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	9.64	3.4	0-769
Anacapa Island Special Closure	1. No net or trap may be used in waters less than 20 feet deep off the Anacapa Islands commonly referred to as Anacapa Island.	1.03	—	0-124
	2. A brown pelican fledgling area is designated from the mean high tide mark seaward to a water depth of 20 fathoms (120 feet) on the north side of West Anacapa Island between a line extending 000° True off Portuguese Rock (34° 00.910' N. lat. 119° 25.260' W. long.) to a line extending 000° True off the western edge of Frenchy's Cove (34° 00.411' N. lat. 119° 24.600' W. long.), a distance of approximately 4,000 feet. No person except CDFW employees or employees of the National Park Service in the performance of their official duties shall enter this area during the period January 1 to October 31.			

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Anacapa Island State and Federal Marine	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for commercial and/or recreational purposes, with the following specified exceptions:	7.3	2.2	0-490
Conservation Area	a. The recreational take of spiny lobster and pelagic finfish* and the commercial take of spiny lobster is allowed. [NOTE: No net or trap may be used in waters less than 20 feet deep.]			
	b. The following federally recognized tribe is exempt from the area and take regulations for Anacapa Island State Marine Conservation Area and shall comply with all other existing regulations and statutes: Santa Ynez Band of Chumash Indians.			
	* Pelagic finfish are defined here as: northern anchovy (<i>Engraulis mordax</i>), barracudas (<i>Sphyraena</i> spp.), billfishes* (family <i>Istiophoridae</i>), dolphinfish (<i>Coryphaena hippurus</i>), Pacific herring (<i>Clupea pallasii</i>), jack mackerel (<i>Trachurus symmetricus</i>), Pacific mackerel (<i>Scomber japonicus</i>), salmon (<i>Oncorhynchus</i> spp.), Pacific sardine (<i>Sardinops sagax</i>), blue shark (<i>Prionace glauca</i>), salmon shark (<i>Lamna ditropis</i>), shortfin mako shark (<i>Isurus oxyrinchus</i>), thresher sharks (<i>Alopias</i> spp.), swordfish (<i>Xiphias gladius</i>), tunas (family <i>Scombridae</i>) including Pacific bonito (<i>Sarda chiliensis</i>), and yellowtail (<i>Seriola lalandi</i>). *Marlin is not allowed for commercial take.			
Anacapa Island State and Federal Marine Reserve	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	11.55	3.1	0-709
Footprint State and Federal Marine Reserve (Anacapa Channel)	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	7.05	—	171-1,656
Begg Rock SMR (San Nicolas Island Quad)	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	37.96	—	0-374
Santa Barbara Island State and Federal Marine Reserve	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	12.77	0.8	0-1,655
Arrow Point to Lion Head Point SMCA (Catalina	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:	0.65	2.9	0-259
Island)	a. All recreational take is allowed in accordance with current regulations, except the recreational take of invertebrates is prohibited.			
	b. All commercial take is allowed in accordance with current regulations.			

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Blue Cavern Onshore SMCA (Catalina Island)	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:	2.61	2.2	0-892
	a. Except as pursuant to Federal law, emergency caused by hazardous weather, or as provided in b. below, it is unlawful to anchor or moor a vessel in the formerly designated Catalina Marine Science Center Marine Life Refuge.			
	b. The director of the Catalina Marine Science Center Marine Life Refuge, or any person that the director of the refuge has authorized may anchor or moor a vessel or take, for scientific purposes, any fish or specimen of marine plant life in the formerly designated Catalina Marine Science Center Marine Life Refuge under the conditions prescribed in a scientific collecting permit issued by CDFW.			
	c. Take pursuant to the maintenance of artificial structures inside the conservation area is allowed pursuant to any required federal, state and local permits, or as otherwise authorized by CDFW.			
Blue Cavern Offshore SMCA (Catalina Island)	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:	7.7	—	267-2,616
	a. The recreational take of pelagic finfish* by hook-and-line or by spearfishing, white seabass by spearfishing and market squid by hand-held dip net is allowed.			
	b. The commercial take of pelagic finfish* by hook-and-line and swordfish by harpoon is allowed.			
	* Pelagic finfish are defined here as: northern anchovy (<i>Engraulis mordax</i>), barracudas (<i>Sphyraena</i> spp.), billfishes* (family <i>Istiophoridae</i>), dolphinfish (<i>Coryphaena hippurus</i>), Pacific herring (<i>Clupea pallasii</i>), jack mackerel (<i>Trachurus symmetricus</i>), Pacific mackerel (<i>Scomber japonicus</i>), salmon (<i>Oncorhynchus</i> spp.), Pacific sardine (<i>Sardinops sagax</i>), blue shark (<i>Prionace glauca</i>), salmon shark (<i>Lamna ditropis</i>), shortfin mako shark (<i>Isurus oxyrinchus</i>), thresher sharks (<i>Alopias</i> spp.), swordfish (<i>Xiphias gladius</i>), tunas (family <i>Scombridae</i>) including Pacific bonito (<i>Sarda chiliensis</i>), and yellowtail (<i>Seriola lalandi</i>).			
	*Marlin is not allowed for commercial take.			
Long Point SMR (Catalina Island)	It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.	1.67	2.3	0-749
Casino Point SMCA (Catalina Island)	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:	0.01	0.1	0-73
	a. Take pursuant to maintenance of artificial structures inside the conservation area is allowed pursuant to any required federal, state and local permits, or as otherwise authorized by CDFW.			
	b. Feeding of fish for marine life viewing is allowed.			

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Lover's Cove SMCA (Catalina Island)	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:	0.06	0.4	0-188
	a. The recreational take by hook-and-line from the Cabrillo Mole is allowed.			
	b. Take pursuant to maintenance of artificial structures inside the conservation area is allowed pursuant to any required federal, state and local permits, or as otherwise authorized by CDFW.			
	c. Feeding of fish for marine life viewing is allowed.			
Farnsworth Onshore SMCA (Catalina Island)	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:	2.59	2.2	0-291
	a. The recreational take by spearfishing of white seabass and pelagic finfish*; marlin, tunas, and dorado (dolphinfish) (<i>Coryphaena hippurus</i>) by trolling; and market squid by hand-held dip net is allowed.			
	2. The commercial take of swordfish by harpoon; and coastal pelagic species** by round haul net, brail gear, and light boat is allowed. Not more than five percent by weight of any commercial coastal pelagic species catch landed or possessed shall be other incidentally taken species.			
	Pelagic finfish are defined here as: northern anchovy (<i>Engraulis mordax</i>), barracudas (<i>Sphyraena</i> spp.), billfishes (family <i>Istiophoridae</i>), dolphinfish (<i>Coryphaena hippurus</i>), Pacific herring (<i>Clupea pallasii</i>), jack mackerel (<i>Trachurus symmetricus</i>), Pacific mackerel (<i>Scomber japonicus</i>), salmon (<i>Oncorhynchus</i> spp.), Pacific sardine (<i>Sardinops sagax</i>), blue shark (<i>Prionace glauca</i>), salmon shark (<i>Lamna ditropis</i>), shortfin mako shark (<i>Isurus oxyrinchus</i>), thresher sharks (<i>Alopias</i> spp.), swordfish (<i>Xiphias gladius</i>), tunas (family <i>Scombridae</i>) including Pacific bonito (<i>Sarda chiliensis</i>), and yellowtail (<i>Seriola lalandi</i>).			
Earnsworth Offshoro	1. It is uplawful to injure damage take or possess any living geological or cultural marine resource for recreational	6.67		135_1 000
SMCA (Catalina Island)	and/or commercial purposes, with the following specified exceptions:	0.07		155-1,909
	a. The recreational take of finfish* by hook-and-line or by spearfishing, market squid by hook-and-line, and spiny lobster and sea urchin is allowed.			
	b. The commercial take of sea cucumbers by diving only, and spiny lobster and sea urchin is allowed.			
	c. Aquaculture of finfish pursuant to any required state permits is allowed.			
	d. Take pursuant to maintenance of artificial structures inside the conservation area is allowed pursuant to any required federal, state and local permits, or as otherwise authorized by the Department.			
	* Finfish are defined here as any species of bony fish or cartilaginous fish (sharks, skates and rays).			

MPA Name	Permitted/Prohibited Uses	Size (sq mi)	Along Shore Span (miles)	Depth Range (ft)
Cat Harbor SMCA (Catalina Island)	1. It is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource for recreational and/or commercial purposes, with the following specified exceptions:	0.26	0.4	0-186
	a. The recreational take of pelagic finfish*, by hook-and-line or by spearfishing; white seabass by spearfishing; marlin, tunas and dorado (dolphinfish) (Coryphaena hippurus) by trolling; and market squid by hand-held dip net is allowed.			
	b. The commercial take of swordfish by harpoon; and coastal pelagic species** by round haul net, brail gear, and light boat is allowed. Not more than five percent by weight of any commercial coastal pelagic species catch landed or possessed shall be other incidentally taken species.			
	* Pelagic finfish are defined here as: northern anchovy (Engraulis mordax), barracudas (Sphyraena spp.), billfishes* (family Istiophoridae), dolphinfish (Coryphaena hippurus), Pacific herring (Clupea pallasii), jack mackerel (Trachurus symmetricus), Pacific mackerel (Scomber japonicus), salmon (Oncorhynchus spp.), Pacific sardine (Sardinops sagax), blue shark (Prionace glauca), salmon shark (Lamna ditropis), shortfin mako shark (Isurus oxyrinchus), thresher sharks (Alopias spp.), swordfish (Xiphias gladius), tunas (family Scombridae) including Pacific bonito (Sarda chiliensis), and yellowtail (Seriola lalandi). *Marlin is not allowed for commercial take.			
	** Coastal pelagic species are defined here as: northern anchovy (Engraulis mordax), Pacific sardine (Sardinops sagax), Pacific mackerel (Scomber japonicus), jack mackerel (Trachurus symmetricus) and market squid (Doryteuthis (Loligo) opalescens).			

Notes: CDFW = California Department of Fish and Wildlife; MPA = marine protected area; SMCA = state marine conservation area; SMR = state marine reserve. Source: CDFW 2022.

References

California Department of Fish and Wildlife. 2022. MPA Outreach Materials: MPA Overview Sheets. Available: <u>https://wildlife.ca.gov/Conservation/Marine/MPAs/Outreach-Materials#26716428-mpa-overview-sheets</u>. Accessed February 9, 2023.

CDFW. See California Department of Fish and Wildlife.

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Appendix C

Impaired Water Body List for Each Study Region

Table C-1 Impaired Water Bodies in the North Coast Region

Water Body	Listed Impairment	Associated MPA
Moonstone County Park	Indicator Bacteria	Samoa SMCA
Trinidad State Beach	Indicator Bacteria	Samoa SMCA
Old Home Beach	Indicator Bacteria	Samoa SMCA
Clam Beach (near Mad River mouth)	Indicator Bacteria	Samoa SMCA
Clam Beach (near Strawberry Creek)	Indicator Bacteria	Samoa SMCA
Hare Creek Beach	Indicator Bacteria	MacKerricher SMCA
Pudding Creek Beach	Indicator Bacteria	MacKerricher SMCA
MacKerricher State Park (near Mill Creek)	Indicator Bacteria	MacKerricher SMCA
MacKerricher State Park (near Virgin Creek)	Indicator Bacteria	MacKerricher SMCA
Big River Beach at Mendocino Bay	Indicator Bacteria	Big River Estuary SMCA
Caspar Headlands State Beach	Indicator Bacteria	Point Cabrillo SMR
Russian Gulch	Indicator Bacteria	Russian Gulch SMCA
Van Damme State Park (beach area)	Indicator Bacteria	Van Damme SMCA
Navarro River Beach	Indicator Bacteria	Navarro River Estuary SMCA
Greenwood State Beach	Indicator Bacteria	Navarro River Estuary SMCA
Smith River HU, Tilas Slough	Copper	Pyramid Point SMCA
Smith River HU, Elk Creek	Oxygen, Dissolved	Castle Rock Special Closure
Klamath River HU, Lower HA, Klamath Glen HSA	Sedimentation/Siltation, Aluminum, Temperature, water, Nutrients, Organic Enrichment/Low Dissolved Oxygen	False Klamath Rock Special Closure
Redwood Creek HU, Redwood Creek	Temperature, water, Sedimentation/Siltation, Aluminum	Reading Rock SMCA
Trinidad HU, Little River HA	Indicator Bacteria	Samoa SMCA
Mad River HU, Mad River	Sedimentation/Siltation, Temperature, water, Turbidity, Aluminum	Samoa SMCA
Mad River HU, Norton Creek	Indicator Bacteria	Samoa SMCA
Eureka Plain HU, Jacoby Creek watershed	Sediment, Aluminum	Samoa SMCA
Eureka Plain HU, Elk River Watershed, Lower Elk River and Martin Slough	Sediment, Indicator Bacteria	South Humboldt Bay SMRMA
Eureka Plain HU, Freshwater Creek	Aluminum, Sedimentation/Siltation	Samoa SMCA
Eureka Plain HU, Gannon Slough	Indicator Bacteria	Samoa SMCA
Eureka Plain HU, Salmon Creek	Aluminum, Manganese	South Humboldt Bay SMRMA
Eel River HU, Lower Eel River HA (includes the Eel River Delta)	Sedimentation/Siltation, Aluminum, Temperature, water, Oxygen, Dissolved	South Humboldt Bay SMRMA
Cape Mendocino HU, Mattole River HA, Mattole River Watershed	Temperature, water, Sedimentation/Siltation	Mattole Canyon SMR
Mendocino Coast HU, Rockport HA, Ten Mile River HSA	Sedimentation/Siltation, Temperature, water	Ten Mile Estuary SMCA
Mendocino Coast HU, Noyo River HA, Noyo River	Temperature, water, Sedimentation/Siltation	MacKerricher SMCA

Water Body	Listed Impairment	Associated MPA
Mendocino Coast HU, Noyo River HA, Pudding Creek	Temperature, water, Indicator Bacteria	MacKerricher SMCA
Mendocino Coast HU, Big River HA, Big River	Temperature, water, Sedimentation/Siltation, Oxygen, Dissolved	Big River Estuary SMCA
Mendocino Coast HU, Albion River HA, Albion River	Sedimentation/Siltation, Temperature, water	Navarro River Estuary SMCA
Mendocino Coast HU, Navarro River HA	Sedimentation/Siltation, Nickel, Temperature, water	Navarro River Estuary SMCA
Luffenholtz Beach	Indicator Bacteria	Samoa SMCA
Trinidad State Beach	Indicator Bacteria	Samoa SMCA
Eureka Plain HU, Humboldt Bay	Dioxin Toxic Equivalents, PCBs (Polychlorinated biphenyls)	South Humboldt Bay SMRMA
Mendocino Coast HU, Navarro River HA, Delta	Sedimentation/Siltation	Navarro River Estuary SMCA

Notes: HA = hydrologic area; HU = hydrologic unit; SMCA = state marine conservation area; SMR = state marine reserve; SMRMA = state marine recreational management area.

Source: SWRCB 2018.

Table C-2 Impaired Water Bodies in the North Central Coast Region

Water Body	Listed Impairment	Associated MPA
Campbell Cove	Bacteria	Bodega Head SMR
Millerton Point	Bacteria	Drakes Estero SMCA
Chicken Ranch Beach	Bacteria	Drakes Estero SMCA
Golden Hinde Beach	Bacteria	Drakes Estero SMCA
Pacific Ocean at Pillar Point	Mercury	Pillar Point SMCA
Bodega Harbor	Invasive species	Bodega Head SMR
Tomales Bay	Sediment, Silt, nutrients, Mercury, Pathogens	Estero de San Antonio SMRMA
Bodega Estero Americano HA	Nutrients sediment siltation	Estero Americano SMRMA
San Francisco Bay	DDT (Dichlorodiphenyltrichloroethane), Mercury, PCBs (Polychlorinated biphenyls) (dioxin-like), Dioxin compounds (including 2,3,7,8-TCDD), Furan Compounds, Invasive Species, Trash, Chlordane, Dieldrin, Selenium, PCBs (Polychlorinated biphenyls)	Corte Madera Marsh SMP

Notes: HA = hydrologic area; SMCA = state marine conservation area; SMR = state marine reserve; SMRMA = state marine recreational management area.

Source: SWRCB 2018.

Water Body	Listed Impairment	Associated MPA
Pacific Ocean at Natural Bridges Beach	Total Coliform	Natural Bridges SMR
Pacific Ocean at Main Beach (Santa Cruz County), at Boardwalk	Total Coliform	Natural Bridges SMR
Pacific Ocean at Mitchells Cove Beach	Total Coliform	Natural Bridges SMR
Pacific Ocean at Seabright (Castle) Beach	Total Coliform	Natural Bridges SMR
Pacific Ocean at Capitola Beach (Santa Cruz County)	Total Coliform, Enterococcus, Fecal Coliform	Natural Bridges SMR
Pacific Ocean at Waddell Creek Beach	Total Coliform	Año Nuevo SMR
Pacific Ocean at Monterey State Beach (Del Monte Beach)	Enterococcus, Total Coliform	Edward F. Ricketts SMCA
Pacific Ocean at Stillwater Cove Beach	Enterococcus	Carmel Bay SMCA
Pacific Ocean at Pismo State Beach (San Luis Obispo County), Wadsworth Ave	Total Coliform	Point Buchon SMCA
Pacific Ocean at Pismo State Beach (San Luis Obispo County), Park Ave	Total Coliform	Point Buchon SMCA
Waddell Creek Lagoon	pH, Chloride, Sodium	Año Nuevo SMR
Scott Creek Lagoon	Sodium, Chloride	Greyhound Rock SMCA
Moore Creek	Escherichia coli (E. coli), Specific Conductivity, pH, Oxygen, Dissolved	Natural Bridges SMR
San Lorenzo River	Sedimentation/Siltation, Nitrate, Chlordane, Sodium, PCBs (Polychlorinated biphenyls), Chlorpyrifos, Enterococcus, Escherichia coli (E. coli), Fecal Coliform, Chloride, Temperature, water	Natural Bridges SMR
Arana Gulch	Chlorpyrifos, Escherichia coli (E. coli), Fecal Coliform	Natural Bridges SMR
Aptos Creek	Indicator Bacteria, Sedimentation/Siltation	Soquel Canyon SMCA
Pajaro River	Sedimentation/Siltation, Boron, Sodium, Chromium, Fecal Coliform, Escherichia coli (E. coli), PCBs (Polychlorinated biphenyls), Nitrate, DDT (Dichlorodiphenyltrichloroethane), Chlordane, Dieldrin, Chloride, Oxygen, Dissolved, pH, DDD (Dichlorodiphenyldichloroethane), DDE (Dichlorodiphenyldichloroethylene), Chlorpyrifos, Diazinon, Toxicity, Turbidity	Elkhorn Slough SMR
Watsonville Slough	Oxygen, Dissolved, Escherichia coli (E. coli), Fecal Coliform, Turbidity, Nitrate, Malathion, DDE (Dichlorodiphenyldichloroethylene), Toxicity	Elkhorn Slough SMR
Beach Road Ditch	Nitrate, Oxygen, Dissolved, pH, Turbidity	Elkhorn Slough SMR
Bennett Slough	Oxygen, Dissolved, pH, Chlorophyll-a, Turbidity	Elkhorn Slough SMR
Big Creek (Big Sur Coast)	рН	Big Creek SMR
Willow Creek (Monterey County)	рН	Big Creek SMR
Salinas River (lower, estuary to near Gonzales Rd crossing, watersheds 30910 and 30920)	Toxaphene, pH, Turbidity, Chlordane, Fecal Coliform, Diazinon, Chlorpyrifos, Enterococcus, Escherichia coli (E. coli), PCBs (Polychlorinated biphenyls), Chloride, Total Dissolved Solids, Sodium, DDT	Moro Cojo Slough SMR

Table C-3	Impaired Water Bodies in the Central Coast Region
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Water Body	Listed Impairment	Associated MPA
	(Dichlorodiphenyltrichloroethane), DDE (Dichlorodiphenyldichloroethylene), Dieldrin, Nitrate, Benthic Community Effects, Toxicity	
Old Salinas River	Escherichia coli (E. coli), Fecal Coliform, Diazinon, Chlorpyrifos, Chlorophyll-a, Oxygen, Dissolved, pH, Turbidity, Nitrate, Toxicity	Moro Cojo Slough SMR
Arroyo De La Cruz Lagoon	Escherichia coli (E. coli), Oxygen, Dissolved	Piedras Blancas SMR
San Simeon Creek	Oxygen, Dissolved, Sodium, Chloride, Nitrate	Cambria SMCA
Pico Creek	Oxygen, Dissolved	Cambria SMCA
Villa Creek	Fecal Coliform	White Rock SMCA
Toro Creek	Fecal Coliform	Morro Bay SMRMA
Morro Creek	Fecal Coliform	Morro Bay SMRMA
Chorro Creek	Sedimentation/Siltation, Fecal Coliform, Chloride, Sodium, Total Dissolved Solids, Escherichia coli (E. coli), Nutrients, Benthic Community Effects, Toxicity	Morro Bay SMRMA
Los Osos Creek Estuary	Nitrate, Turbidity, Fecal Coliform, Oxygen, Dissolved	Morro Bay SMR
Pismo Creek	Sodium, Fecal Coliform, Turbidity, Escherichia coli (E. coli), Chloride, Oxygen, Dissolved	Point Buchon SMCA
Arroyo Grande Creek (below Lopez Lake)	Escherichia coli (E. coli), Fecal Coliform, Nickel, Benthic Community Effects, Nitrate, Toxicity	Point Buchon SMCA
Santa Maria River	Dieldrin, Sodium, Turbidity, Chlorpyrifos, Escherichia coli (E. coli), Fecal Coliform, Diazinon, Toxaphene, Malathion, Endrin, Nitrate, Cypermethrin, DDT (Dichlorodiphenyltrichloroethane), DDD (Dichlorodiphenyldichloroethane), DDE (Dichlorodiphenyldichloroethylene), Toxicity, Chloride	Vandenberg SMR
Oso Flaco Creek	Turbidity, Chloride, Sodium, Chlorpyrifos, Ammonia, Malathion, Fecal Coliform, Nitrate, Toxicity	Point Buchon SMCA
Santa Rosa Creek (San Luis Obispo County)	Fecal Coliform, Total Dissolved Solids	Cambria SMCA
Pacific Ocean at Cowell Beach (Santa Cruz County)	Fecal Coliform, Total Coliform	Natural Bridges SMR
Pacific Ocean at Twin Lakes Beach (Santa Cruz County)	Total Coliform	Natural Bridges SMR
Pacific Ocean at New Brighton Beach (Santa Cruz County)	Total Coliform	Natural Bridges SMR
Pacific Ocean at Rio Del Mar (Santa Cruz County), Aptos Creek mouth	Total Coliform	Soquel Canyon SMCA
Pacific Ocean at Guadalupe Dunes (Santa Barbara County)	Total Coliform	Vandenberg SMR
Pacific Ocean at Ocean Beach (Santa Barbara County)	Fecal Coliform, Total Coliform	Vandenberg SMR
Pacific Ocean at Main Beach (Santa Cruz County), at San Lorenzo River mouth	Total Coliform	Natural Bridges SMR
Pacific Ocean at Cayucos (Cayucos Creek Mouth)	Enterococcus	Morro Bay SMRMA

Water Body	Listed Impairment	Associated MPA
Pacific Ocean at Jalama Beach (Santa Barbara County)	Fecal Coliform, Total Coliform	Point Conception SMR
Pacific Ocean at Avila Beach (Avila Pier)	Total Coliform, PCBs (Polychlorinated biphenyls)	Point Buchon SMCA
Pacific Ocean at Olde Port Beach	Total Coliform	Point Buchon SMCA
Pacific Ocean at Avila Beach (SLO Creek mouth)	Enterococcus, Total Coliform	Point Buchon SMCA
Santa Cruz Harbor	Arsenic, Dieldrin, PCBs (Polychlorinated biphenyls), Oxygen, Dissolved, Copper	Natural Bridges SMR
Pajaro River Estuary	DDE (Dichlorodiphenyldichloroethylene), Oxygen, Dissolved, pH, Temperature, water, Malathion, Diazinon, Toxicity	Elkhorn Slough SMR
Moro Cojo Slough	Sedimentation/Siltation, pH, Total Coliform, Escherichia coli (E. coli), Pesticides, Oxygen, Dissolved, Turbidity, Nitrate, Toxicity, Ammonia	Moro Cojo Slough SMR
Santa Maria River Estuary	Total Coliform, DDD (Dichlorodiphenyldichloroethane), Diazinon, Chlorpyrifos, Fecal Coliform, Oxygen, Dissolved, pH, Toxicity, Malathion, DDE (Dichlorodiphenyldichloroethylene), Escherichia coli (E. coli)	Vandenberg SMR
Pacific Ocean, Point Ano Nuevo to Soquel Point	Dieldrin	Natural Bridges SMR
Moss Landing Harbor	Indicator Bacteria, Sedimentation/Siltation, Nickel, Oxygen, Dissolved, pH, Toxicity, Arsenic, Chlorpyrifos, Diazinon, Dieldrin, PCBs (Polychlorinated biphenyls), DDT (Dichlorodiphenyltrichloroethane)	Elkhorn Slough SMCA
Monterey Harbor	PCBs (Polychlorinated biphenyls), Arsenic, Copper, Oxygen, Dissolved, Toxicity	Edward F. Ricketts SMCA
Morro Bay	Sedimentation/Siltation, Indicator Bacteria, Arsenic, Oxygen, Dissolved	Morro Bay SMRMA
Port San Luis	Arsenic, PAHs (Polycyclic Aromatic Hydrocarbons), Dieldrin, PCBs (Polychlorinated biphenyls)	Point Buchon SMCA
San Lorenzo River Lagoon	Indicator Bacteria	Natural Bridges SMR
Soquel Lagoon	Sedimentation/Siltation, Indicator Bacteria	Natural Bridges SMR
Elkhorn Slough	Sedimentation/Siltation, Pesticides, Oxygen, Dissolved, Total Coliform, pH, Nitrate	Elkhorn Slough SMR
Old Salinas River Estuary	Pesticides, Nutrients	Moro Cojo Slough SMR
Salinas River Lagoon (North)	Nutrients, Chlorpyrifos, pH, DDE (Dichlorodiphenyldichloroethylene), Temperature, water, Toxicity	Moro Cojo Slough SMR

Notes: SMCA = state marine conservation area; SMR = state marine reserve; SMRMA = state marine recreational management area.

Source: SWRCB 2018.

Water Body	Listed Impairment	Associated MPA
Abalone Cove Beach	PCBs (Polychlorinated biphenyls) (69361), DDT (Dichlorodiphenyltrichloroethane) (70314)	Abalone Cove SMCA
Agua Hedionda Creek	Nitrogen (68136), Selenium (68692), Manganese (68777), Total Dissolved Solids (69181), Phosphorus (75444), Indicator Bacteria (75644), Toxicity (76603), Benthic Community Effects (76959), Bifenthrin (86950), Chlorpyrifos (86951), Cypermethrin (87004), Malathion (87116)	Batiquitos Lagoon SMCA (No-Take)
Agua Hedionda Lagoon	Toxicity (85627)	Batiquitos Lagoon SMCA (No-Take)
Alamitos Bay	Indicator Bacteria (76725), Oxygen, Dissolved (87991)	Bolsa Bay SMCA
Amarillo Beach	DDT (Dichlorodiphenyltrichloroethane) (69362), PCBs (Polychlorinated biphenyls) (78974)	Point Dume SMR
Anaheim Bay	Nickel (69290), Toxicity (69325), PCBs (Polychlorinated biphenyls) (78840)	Bolsa Bay SMCA
Arroyo Burro Creek	Escherichia coli (E. coli) (71068), Fecal Coliform (75710), Oxygen, Dissolved (80226)	Goleta Slough SMCA (No-Take)
Arundell Barranca (Ventura County)	Indicator Bacteria (96940)	Anacapa Island FMR
Atascadero Creek (Santa Barbara county)	Fecal Coliform (71925), Escherichia coli (E. coli) (72198), Enterococcus (72340), Sodium (72714), Chloride (80006), pH (80236), Temperature, water (80237), Nitrate (83454), Toxicity (89885), Oxygen, Dissolved (100153), Benthic Community Effects (100154)	Goleta Slough SMCA (No-Take)
Avalon Beach	Indicator Bacteria (99413)	Casino Point SMCA (No-Take)
Ballona Creek	Copper (68014), Trash (68083), Cyanide (68349), Zinc (68631), Lead (69146), Viruses (enteric) (69253), Toxicity (69357), Indicator Bacteria (69671)	Point Vicente SMCA (No-Take)
Ballona Creek Estuary	PCBs (Polychlorinated biphenyls) (68364), DDT (Dichlorodiphenyltrichloroethane) (68790), Cadmium (68857), Zinc (69166), Chlordane (69167), Indicator Bacteria (69254), PAHs (Polycyclic Aromatic Hydrocarbons) (69267), Copper (74184), Toxicity (74220), Lead (77835), Silver (100024)	Point Vicente SMCA (No-Take)
Ballona Creek Wetlands	Trash (69271), Habitat alterations (70357), Exotic Vegetation (78327), Reduced Tidal Flushing (78328)	Point Vicente SMCA (No-Take)
Batiquitos Lagoon	Toxicity (86954)	Batiquitos Lagoon SMCA (No-Take)
Big Rock Beach	Coliform Bacteria (68226), DDT (Dichlorodiphenyltrichloroethane) (69509), PCBs (Polychlorinated biphenyls) (70526)	Point Dume SMR
Bluff Cove Beach	PCBs (Polychlorinated biphenyls) (70223), DDT (Dichlorodiphenyltrichloroethane) (99466)	Point Vicente SMCA (No-Take)
Bolsa Bay Marsh	Toxicity (94571)	Bolsa Bay SMCA
Bolsa Chica Ecological Reserve	Toxicity (94747)	Bolsa Bay SMCA
Bolsa Chica State Beach	Nickel (68956), Copper (75648)	Bolsa Chica Basin SMCA (No-Take)

Table C-4 Impaired Water Bodies in the South Coast Area

Water Body	Listed Impairment	Associated MPA
Buena Vista Lagoon	Indicator Bacteria (70094), Nutrients (70343), Sedimentation/Siltation (76394), Toxicity (87320)	Batiquitos Lagoon SMCA (No-Take)
Cabrillo Beach (Outer)	PCBs (Polychlorinated biphenyls) (70427), DDT (Dichlorodiphenyltrichloroethane) (77678)	Abalone Cove SMCA
Calleguas Creek Reach 1 (was Mugu Lagoon on 1998 303(d) list)	Nitrogen (68523), Dieldrin (69060), Endosulfan (tissue) (69197), Nickel (69359), Mercury (69542), Toxicity (69560), Zinc (69577), Copper (69833), Chlordane (tissue) (70032), DDT (tissue & sediment) (74185), Toxaphene (74834), Sedimentation/Siltation (75097), PCBs (Polychlorinated biphenyls) (tissue) (99584)	Point Dume SMCA
Calleguas Creek Reach 2 (estuary to Potrero Rd- was Calleguas Creek Reaches 1 and 2 on 1998 303d list)	Indicator Bacteria (68344), Copper (68384), DDT (Dichlorodiphenyltrichloroethane) (68572), ChemA (68806), Endosulfan (69565), Toxicity (69566), PCBs (Polychlorinated biphenyls) (70103), Sedimentation/Siltation (70556), Chlordane (74181), Trash (77088), Toxaphene (93402), Dieldrin (100126), Ammonia (100562)	Point Dume SMCA
Canada De La Gaviota	Boron (69727), Sodium (71688), Chloride (71814), Escherichia coli (E. coli) (71865), Fecal Coliform (71922)	Kashtayit SMCA
Canada Del Capitan	Toxicity (80821)	Naples SMCA
Canada Del Refugio	Chloride (72716), Sodium (73373), Fecal Coliform (80519)	Naples SMCA
Carbon Beach	DDT (Dichlorodiphenyltrichloroethane) (69352), PCBs (Polychlorinated biphenyls) (71547), Indicator Bacteria (77938)	Point Dume SMR
Carpinteria Creek (below Gobernador Creek)	Chloride (83987), Sodium (84118), Oxygen, Dissolved (84242), Escherichia coli (E. coli) (84280), Fecal Coliform (84320), Nitrate (84368), Toxicity (90970)	Scorpion FMR
Carpinteria Marsh (El Estero)	Oxygen, Dissolved (69135), Priority Organics (69335), Nutrients (69484)	Goleta Slough SMCA (No-Take)
Castlerock Beach	Indicator Bacteria (68217), DDT (Dichlorodiphenyltrichloroethane) (69353), PCBs (Polychlorinated biphenyls) (69354)	Point Dume SMR
Chollas Creek	Diazinon (68022), Copper (69571), Indicator Bacteria (70344), Trash (76068), Nitrogen (76829), Chlorpyrifos (77152), Phosphorus (77851), Lead (77874), Bifenthrin (83247), Malathion (84593), Cypermethrin (84692), Zinc (86392)	Cabrillo SMR
Colorado Lagoon	PCBs (Polychlorinated biphenyls) (69810), DDT (Dichlorodiphenyltrichloroethane) (70320), Zinc (70915), Chlordane (73385), Dieldrin (73386), PAHs (Polycyclic Aromatic Hydrocarbons) (76579), Indicator Bacteria (78682), Lead (98804), Toxicity (98805)	Bolsa Bay SMCA

Water Body	Listed Impairment	Associated MPA
Cottonwood Creek (San Marcos Creek watershed)	DDT (Dichlorodiphenyltrichloroethane) (69170), Nitrogen (76247), Benthic Community Effects (77016), Phosphorus (77465), Selenium (79331), Toxicity (87061)	Swami's SMCA
Dan Blocker Memorial (Coral) Beach	Indicator Bacteria (68408)	Point Dume SMR
Dana Point Harbor	Indicator Bacteria (69555), Copper (76292), Toxicity (76357), Zinc (86371), Oxygen, Dissolved (87273)	Dana Point SMCA
Devereux Creek	Oxygen, Dissolved (72813), Fecal Coliform (80357)	Campus Point SMCA (No-Take)
Dockweiler Beach	Indicator Bacteria (68156)	Point Vicente SMCA (No-Take)
Dominguez Channel Estuary (unlined portion below Vermont Ave)	PCBs (Polychlorinated biphenyls) (68139), Benzo(a)pyrene (68354), Pyrene (68839), Phenanthrene (69111), Chrysene (C1-C4) (69124), Benzo(a)anthracene (69189), Dieldrin (tissue) (69913), Indicator Bacteria (70163), Lead (70528), Benthic Community Effects (72640), Toxicity (76061), Chlordane (tissue) (98920), Copper (98921), DDT (tissue & sediment) (99361)	Abalone Cove SMCA
Dos Pueblos Canyon Creek	Sodium (74178)	Naples SMCA
Downtown Shoreline Marina (part of San Pedro Bay Near/Off Shore Zones)	Copper (73266), Oxygen, Dissolved (93847)	Bolsa Bay SMCA
Duck Pond Agricultural Drains/Mugu Drain/Oxnard Drain No 2	Nitrogen (68859), ChemA (68974), DDT (Dichlorodiphenyltrichloroethane) (69132), Toxicity (69177), Chlordane (69480), Toxaphene (69481), DDD (Dichlorodiphenyldichloroethane) (85873), Bifenthrin (95338), Chlorpyrifos (95497), DDE (Dichlorodiphenyldichloroethylene) (99641)	Point Dume SMCA
East Garden Grove Wintersburg Channel	Ammonia (Unionized) (76724)	Bolsa Bay SMCA
Elkhorn Slough	Sedimentation/Siltation (69062), Pesticides (69405), Oxygen, Dissolved (74013), Total Coliform (80360), pH (81100), Nitrate (86756)	Elkhorn Slough SMCA
Escondido Beach	Indicator Bacteria (69698), PCBs (Polychlorinated biphenyls) (70253), DDT (Dichlorodiphenyltrichloroethane) (73583)	Point Dume SMR
Famosa Slough and Channel	Eutrophic (69556)	Famosa Slough SMCA (No-Take)
Flat Rock Point Beach Area	DDT (Dichlorodiphenyltrichloroethane) (70254), Indicator Bacteria (70705), PCBs (Polychlorinated biphenyls) (73102)	Point Vicente SMCA (No-Take)
Goleta Slough/Estuary	Indicator Bacteria (73717), Priority Organics (77657)	Goleta Slough SMCA (No-Take)
Hobie Beach (Channel Islands Harbor)	Indicator Bacteria (69092)	Anacapa Island FMR
Hueneme Beach Park	Indicator Bacteria (75276)	Anacapa Island FMR
Hueneme Drain	Trash (100202), Escherichia coli (E. coli) (100247)	Anacapa Island FMR
Huntington Beach State Park	PCBs (Polychlorinated biphenyls) (68316)	Upper Newport Bay SMCA, Bolsa Chica Basin SMCA (No-Take)
Huntington Harbour	Chlordane (68183), Copper (68882), PCBs (Polychlorinated biphenyls) (70200), Toxicity (76729), Lead (80431), Indicator Bacteria (97909)	Bolsa Bay SMCA

Water Body	Listed Impairment	Associated MPA
Inspiration Point Beach	DDT (Dichlorodiphenyltrichloroethane) (70298), Indicator Bacteria (74048), PCBs (Polychlorinated biphenyls) (78699)	Abalone Cove SMCA
Inspiration Point Beach	DDT (Dichlorodiphenyltrichloroethane) (70298), Indicator Bacteria (74048), PCBs (Polychlorinated biphenyls) (78699)	Abalone Cove SMCA
J Street Drain (Ventura County)	Trash (96352)	Anacapa Island FMR
La Costa Beach	PCBs (Polychlorinated biphenyls) (69288), DDT (Dichlorodiphenyltrichloroethane) (70299), Indicator Bacteria (70502)	Point Dume SMR
Las Flores Beach	Indicator Bacteria (68530), DDT (Dichlorodiphenyltrichloroethane) (69334), PCBs (Polychlorinated biphenyls) (77679)	Point Dume SMR
Las Tunas Beach	Indicator Bacteria (68809), DDT (Dichlorodiphenyltrichloroethane) (78228), PCBs (Polychlorinated biphenyls) (89781)	Point Dume SMR
Las Tunas Beach	Indicator Bacteria (68809), DDT (Dichlorodiphenyltrichloroethane) (78228), PCBs (Polychlorinated biphenyls) (89781)	Point Dume SMR
Leo Carillo Beach (South of County Line)	Assessed for one or more pollutants, not listed	Point Dume SMCA
Loma Alta Slough	Eutrophic (77702), Indicator Bacteria (83186)	Batiquitos Lagoon SMCA (No-Take)
Long Beach City Beach	Indicator Bacteria (76632)	Bolsa Bay SMCA
Long Point Beach	DDT (Dichlorodiphenyltrichloroethane) (69284), PCBs (Polychlorinated biphenyls) (77795)	Abalone Cove SMCA
Los Angeles Harbor - Cabrillo Marina	PCBs (Polychlorinated biphenyls) (68796), DDT (Dichlorodiphenyltrichloroethane) (68860), Benzo(a)pyrene (76214)	Abalone Cove SMCA
Los Angeles Harbor - Consolidated Slip	Chromium (68144), Toxaphene (tissue) (68148), Zinc (sediment) (68286), Mercury (sediment) (68647), Copper (sediment) (68746), Phenanthrene (68795), Dieldrin (68898), Chlordane (tissue & sediment) (69038), Cadmium (sediment) (69589), 2- Methylnaphthalene (69972), Benzo(a)anthracene (69973), Benthic Community Effects (70615), Pyrene (70764), Chrysene (C1-C4) (72296), DDT (tissue & sediment) (73200), Toxicity (77601), Benzo(a)pyrene (77763), PCBs (Polychlorinated biphenyls) (tissue & sediment) (78282), Lead (sediment) (99089)	Abalone Cove SMCA
Los Angeles Harbor - Fish Harbor	Chrysene (C1-C4) (68844), Lead (68964), Copper (69001), Benzo(a)pyrene (69112), Benzo(a)anthracene (69128), Phenanthrene (69239), Chlordane (69471), Mercury (69472), Toxicity (69541), Dibenz[a,h]anthracene (69732), PAHs (Polycyclic Aromatic Hydrocarbons) (72542), DDT (Dichlorodiphenyltrichloroethane) (73931), PCBs (Polychlorinated biphenyls) (77603), Pyrene (99090), Zinc (99139)	Abalone Cove SMCA

Water Body	Listed Impairment	Associated MPA
Los Angeles Harbor - Inner Cabrillo Beach Area	DDT (Dichlorodiphenyltrichloroethane) (68547), PCBs (Polychlorinated biphenyls) (68842), Indicator Bacteria (73304)	Abalone Cove SMCA
Los Angeles River Estuary (Queensway Bay)	Chlordane (68841), PCBs (Polychlorinated biphenyls) (sediment) (69191), Trash (69821), DDT (sediment) (73081), Toxicity (73350)	Bolsa Bay SMCA
Los Angeles River Reach 1 (Estuary to Carson Street)	Copper, Dissolved (68262), Cadmium (68296), Ammonia (68390), Zinc, Dissolved (68466), pH (68630), Cyanide (68776), Nutrients (Algae) (69238), Indicator Bacteria (70618), Trash (72357), Lead (73148)	Bolsa Bay SMCA
Los Angeles/Long Beach Inner Harbor	DDT (Dichlorodiphenyltrichloroethane) (68696), Benthic Community Effects (68874), PCBs (Polychlorinated biphenyls) (69055), Copper (69723), Toxicity (70284), Chrysene (C1-C4) (76126), Benzo(a)pyrene (76674), Zinc (99194)	Abalone Cove SMCA
Los Angeles/Long Beach Outer Harbor (inside breakwater)	PCBs (Polychlorinated biphenyls) (69174), DDT (Dichlorodiphenyltrichloroethane) (69745), Toxicity (100045)	Abalone Cove SMCA
Los Cerritos Channel	Chlordane (sediment) (68971), Lead (69742), Trash (69820), Indicator Bacteria (70437), Copper (70438), Zinc (70439), Bis(2ethylhexyl)phthalate (DEHP) (72211), Ammonia (77393), pH (78017)	Bolsa Bay SMCA
Los Penasquitos Lagoon	Sedimentation/Siltation (86194), Toxicity (86491)	San Dieguito Lagoon SMCA
Lunada Bay Beach	Indicator Bacteria (69020)	Point Vicente SMCA (No-Take)
Malaga Cove Beach	DDT (Dichlorodiphenyltrichloroethane) (70613), PCBs (Polychlorinated biphenyls) (70790)	Point Vicente SMCA (No-Take)
Malibu Beach	Indicator Bacteria (68027), DDT (Dichlorodiphenyltrichloroethane) (71952)	Point Dume SMR
Malibu Creek	Sulfates (68062), Selenium (68424), Indicator Bacteria (69575), Fish Barriers (Fish Passage) (69985), Sedimentation/Siltation (69986), Scum/Foam- unnatural (72507), Nutrients (Algae) (76173), Toxicity (76225), Invasive Species (76592), Benthic Community Effects (77604), Trash (78692)	Point Dume SMR
Malibu Lagoon	pH (68414), Indicator Bacteria (69576), Eutrophic (69987), Viruses (enteric) (76135), Swimming Restrictions (76137), Benthic Community Effects (99794)	Point Dume SMR
Malibu Lagoon Beach (Surfrider)	Coliform Bacteria (68026), DDT (Dichlorodiphenyltrichloroethane) (69279), PCBs (Polychlorinated biphenyls) (69430)	Point Dume SMR
Marina del Rey Harbor - Back Basins	Indicator Bacteria (68012), Toxicity (68462), DDT (Dichlorodiphenyltrichloroethane) (69150), Dieldrin (69637), Copper (69840), Zinc (70463), Lead (72236), Chlordane (72237), PCBs (Polychlorinated biphenyls) (72419), Oxygen, Dissolved (94258)	Point Vicente SMCA (No-Take)
Marina del Rey Harbor Beach	Indicator Bacteria (68013)	Point Vicente SMCA (No-Take)
McGrath Beach	Indicator Bacteria (68234)	Anacapa Island FMR

Water Body	Listed Impairment	Associated MPA
Mission Bay	PCBs (Polychlorinated biphenyls) (82927), Mercury (83669)	Famosa Slough SMCA (No-Take), South La Jolla SMR
Mission Bay (area at mouth of Rose Creek only)	Eutrophic (69868), Lead (75903)	South La Jolla SMR
Mission Bay (area at mouth of Tecolote Creek only)	Lead (68378), Eutrophic (68595)	Famosa Slough SMCA (No-Take)
Mission Bay at Quivira Basin	Copper (76746)	Famosa Slough SMCA (No-Take)
Mission Bay Shoreline	Indicator Bacteria (76066), Trash	Famosa Slough SMCA (No-Take), South La Jolla SMR
Monterey Harbor	PCBs (Polychlorinated biphenyls) (74799), Arsenic (75661), Copper (75970), Oxygen, Dissolved (83345), Toxicity (85418)	Edward F. Ricketts SMCA
Moss Landing Harbor	Indicator Bacteria (70642), Sedimentation/Siltation (70643), Nickel (81073), Oxygen, Dissolved (82605), pH (82606), Toxicity (82607), Arsenic (83146), Chlorpyrifos (83304), Diazinon (83470), Dieldrin (83728), PCBs (Polychlorinated biphenyls) (83907), DDT (Dichlorodiphenyltrichloroethane) (83951)	Elkhorn Slough SMCA, Moro Cojo Slough SMR
Newport Bay, Lower (entire lower bay, including Rhine Channel, Turning Basin, and South Lido Channel to east end of H-J Moorings)	Indicator Bacteria (68017), Nutrients (68084), Chlordane (68492), PCBs (Polychlorinated biphenyls) (68602), DDT (Dichlorodiphenyltrichloroethane) (70291), Toxicity (70413), Copper (99515)	Upper Newport Bay SMCA
Newport Bay, Upper (Ecological Reserve)	Sedimentation/Siltation (68057), Nutrients (68114), PCBs (Polychlorinated biphenyls) (68519), Toxicity (69700), Indicator Bacteria (97817), Chlordane (99112), DDT (Dichlorodiphenyltrichloroethane) (99315), Copper (99353), Malathion (99614)	Upper Newport Bay SMCA
Newport Slough	Indicator Bacteria (95778)	Upper Newport Bay SMCA
Nicholas Canyon Beach	PCBs (Polychlorinated biphenyls) (70616), DDT (Dichlorodiphenyltrichloroethane) (73352)	Point Dume SMCA
Oceanside Harbor	Toxicity (76038), Copper (77529)	Batiquitos Lagoon SMCA (No-Take)
Old Salinas River Estuary	Pesticides (70097), Nutrients (70645)	Moro Cojo Slough SMR
Ormond Beach	Indicator Bacteria (75960)	Anacapa Island FMR
Ormond Beach Wetlands	Indicator Bacteria (100053), Trash (100200), pH (100201)	Anacapa Island FMR
Oxnard Drain	pH (95001), Nitrogen, Nitrate (100055), Escherichia coli (E. coli) (100248), Trash (100249)	Anacapa Island FMR
Pacific Ocean at Arroyo Burro Beach (Santa Barbara County)	Enterococcus (71133), Total Coliform (80126)	Goleta Slough SMCA (No-Take)
Pacific Ocean at Carpinteria State Beach (Carpinteria Creek mouth, Santa Barbara County)	Fecal Coliform (79670)	Scorpion FMR
Pacific Ocean at East Beach (mouth of Mission Creek, Santa Barbara County)	Enterococcus (72544), Total Coliform (80118), Fecal Coliform (96018)	Goleta Slough SMCA (No-Take)
Pacific Ocean at Hammonds Beach (Santa Barbara County)	Total Coliform (79680), Fecal Coliform (96077)	Goleta Slough SMCA (No-Take)
Pacific Ocean at Hope Ranch Beach (Santa Barbara County)	Fecal Coliform (79837), Total Coliform (79938)	Goleta Slough SMCA (No-Take)

Water Body	Listed Impairment	Associated MPA
Pacific Ocean at Leadbetter Beach (Santa Barbara County)	Enterococcus (73114), Total Coliform (80717)	Goleta Slough SMCA (No-Take)
Pacific Ocean at Refugio Beach (Santa Barbara County)	Total Coliform (80844)	Naples SMCA
Pacific Ocean Shoreline, Aliso HSA, at Aliso Creek mouth	Indicator Bacteria (76517), Toxicity (84122)	Laguna Beach SMCA (No-Take)
Pacific Ocean Shoreline, Batiquitos HSA, at Moonlight State Beach (Cottonwood Creek outlet)	Indicator Bacteria (76853), Trash (84244)	Swami's SMCA
Pacific Ocean Shoreline, Coronado HA, at G Ave, Central Beach	Trash (84247)	Cabrillo SMR
Pacific Ocean Shoreline, Dana Point HSA, at Dana Point Harbor at Baby Beach	Indicator Bacteria (76854)	Dana Point SMCA
Pacific Ocean Shoreline, Dana Point HSA, at Niguel Marine Life Refuge	Toxicity (98466)	Dana Point SMCA
Pacific Ocean Shoreline, Dana Point HSA, at Salt Creek outlet at Monarch	Indicator Bacteria (77132)	Dana Point SMCA
Pacific Ocean Shoreline, Imperial Beach Pier	PCBs (Polychlorinated biphenyls) (68858), Indicator Bacteria (76998), Trash (83782)	Tijuana River Mouth SMCA
Pacific Ocean Shoreline, Laguna Beach HSA, at Broadway Creek	Indicator Bacteria (77517)	Laguna Beach SMR
Pacific Ocean Shoreline, Loma Alta HSA, at Loma Alta Creek mouth	Indicator Bacteria (76921), Trash (84167)	Batiquitos Lagoon SMCA (No-Take)
Pacific Ocean Shoreline, Los Monos HSA, Carlsbad State Beach at Tamarack Ave	Trash (86895)	Batiquitos Lagoon SMCA (No-Take)
Pacific Ocean Shoreline, Lower San Juan HSA, 1000 feet south of outfall	Indicator Bacteria (86378)	Dana Point SMCA
Pacific Ocean Shoreline, Miramar Reservoir HA, Los Penasquitos River mouth	Indicator Bacteria (78120)	San Dieguito Lagoon SMCA
Pacific Ocean Shoreline, Mission San Diego HSA, at Ocean Beach pier at Narrangaset	Trash (83808)	Famosa Slough SMCA (No-Take)
Pacific Ocean Shoreline, Otay Valley HA, at Carnation Ave and Camp Surf Jetty	Indicator Bacteria (76174)	Tijuana River Mouth SMCA
Pacific Ocean Shoreline, Point Loma HA, at Bermuda Ave	Indicator Bacteria (68583)	Famosa Slough SMCA (No-Take)
Pacific Ocean Shoreline, Point Loma HA, at Sunset Cliffs and Froude Street	Trash (84288)	Famosa Slough SMCA (No-Take)
Pacific Ocean Shoreline, San Clemente HA, at Poche Beach	Indicator Bacteria (77900)	Dana Point SMCA
Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue	Indicator Bacteria (77545), Trash (83341)	Famosa Slough SMCA (No-Take)
Pacific Ocean Shoreline, San Diego HU, at the San Diego River outlet, at Dog Beach	Indicator Bacteria (77437)	Famosa Slough SMCA (No-Take)

Water Body	Listed Impairment	Associated MPA
Pacific Ocean Shoreline, San Dieguito HU, at San Dieguito Lagoon Mouth at San Dieguito River Beach	Indicator Bacteria (76816)	San Dieguito Lagoon SMCA
Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at parking lot entrance	Trash (84330)	Swami's SMCA
Pacific Ocean Shoreline, San Elijo HSA, at Cardiff State Beach at San Elijo Lagoon	Indicator Bacteria (77073)	Swami's SMCA
Pacific Ocean Shoreline, San Luis Rey HU, at San Luis Rey river outlet	Indicator Bacteria (77575)	Batiquitos Lagoon SMCA (No-Take)
Pacific Ocean Shoreline, San Luis Rey HU, Oceanside Pier at Pier View Way	Trash (84253)	Batiquitos Lagoon SMCA (No-Take)
Pacific Ocean Shoreline, San Mateo Canyon HA, at San Mateo Creek outlet	Indicator Bacteria (77782)	Dana Point SMCA
Pacific Ocean Shoreline, Scripps HA, at Belmont Park, Mission Beach	Trash (83984)	Famosa Slough SMCA (No-Take)
Pacific Ocean Shoreline, Scripps HA, at Childrens Pool	Indicator Bacteria (86629)	Matlahuayl SMR
Pacific Ocean Shoreline, Scripps HA, at Crystal Pier	Trash (87007)	South La Jolla SMR
Pacific Ocean Shoreline, Scripps HA, at North Lane at Windansea Beach	Trash (84260)	South La Jolla SMR
Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Drive, Pacific Beach	Trash (84261)	South La Jolla SMR
Pacific Ocean Shoreline, Scripps HA, at Pacific Beach Point, Pacific Beach	Indicator Bacteria (86293)	South La Jolla SMR
Pacific Ocean Shoreline, Scripps HA, at Tourmaline Surf Park, Pacific Beach	Trash (87006)	South La Jolla SMR
Pacific Ocean Shoreline, Scripps HA, at Vallecitos Court at La Jolla Shores Beach	Indicator Bacteria (76519), Trash (81497)	Matlahuayl SMR
Pacific Ocean Shoreline, Tijuana HU, at 3/4 mile North of Tijuana River	Indicator Bacteria (76831)	Tijuana River Mouth SMCA
Pacific Ocean Shoreline, Tijuana HU, at Border	Indicator Bacteria (77226)	Tijuana River Mouth SMCA
Pacific Ocean Shoreline, Tijuana HU, at Cortez Avenue	Indicator Bacteria (84299)	Tijuana River Mouth SMCA
Pacific Ocean Shoreline, Tijuana HU, at end of Seacoast Drive	Indicator Bacteria (77693)	Tijuana River Mouth SMCA
Pacific Ocean Shoreline, Tijuana HU, at Monument Road	Indicator Bacteria (76896)	Tijuana River Mouth SMCA
Pacific Ocean Shoreline, Tijuana HU, at Tijuana River mouth	Indicator Bacteria (76813)	Tijuana River Mouth SMCA
Pacific Ocean Shoreline, Torrey Pines State Beach, at North Beach Entrance parking lot	Trash (84342)	San Dieguito Lagoon SMCA
Pacific Ocean, Point Ano Nuevo to Soquel Point	Dieldrin (76612)	Natural Bridges SMR
Paleta Creek	Lead (75413), Copper (76846)	Cabrillo SMR

Water Body	Listed Impairment	Associated MPA
Palo Verde Shoreline Park Beach	Pathogens (68075), Pesticides (70617)	Abalone Cove SMCA
Paradise Cove Beach	DDT (Dichlorodiphenyltrichloroethane) (71816), PCBs (Polychlorinated biphenyls) (77572), Indicator Bacteria (99465)	Point Dume SMR
Paradise Creek, HSA 908.320	Phosphorus (77187), Selenium (78587)	Tijuana River Mouth SMCA
Peninsula Beach	Indicator Bacteria (68271)	Anacapa Island FMR
Point Dume Beach	PCBs (Polychlorinated biphenyls) (68875), DDT (Dichlorodiphenyltrichloroethane) (98666)	Point Dume SMR
Point Fermin Park Beach	PCBs (Polychlorinated biphenyls) (68941), DDT (Dichlorodiphenyltrichloroethane) (70570)	Abalone Cove SMCA
Point Vicente Beach	Indicator Bacteria (69912)	Point Vicente SMCA (No-Take)
Port Hueneme Harbor (Back Basins)	PCBs (Polychlorinated biphenyls) (76630), DDT (Dichlorodiphenyltrichloroethane) (83741), PAHs (Polycyclic Aromatic Hydrocarbons) (98267), Arsenic (98645), Dieldrin (98703)	Anacapa Island FMR
Port Hueneme Pier	PCBs (Polychlorinated biphenyls) (71129)	Anacapa Island FMR
Portuguese Bend Beach	DDT (Dichlorodiphenyltrichloroethane) (68942), PCBs (Polychlorinated biphenyls) (69635)	Abalone Cove SMCA
Puerco Beach	Indicator Bacteria (67994), PCBs (Polychlorinated biphenyls) (76074), DDT (Dichlorodiphenyltrichloroethane) (78698)	Point Dume SMR
Redondo Beach	Indicator Bacteria (68308), PCBs (Polychlorinated biphenyls) (70297), DDT (Dichlorodiphenyltrichloroethane) (99471)	Point Vicente SMCA (No-Take)
Resort Point Beach	Indicator Bacteria (69268)	Point Vicente SMCA (No-Take)
Rhine Channel	PCBs (Polychlorinated biphenyls) (68358), Lead (68793), Mercury (68923), Toxicity (69877), Zinc (70738), Copper (73002)	Upper Newport Bay SMCA
Rincon Beach	Indicator Bacteria (75915)	Scorpion FMR
Rincon Parkway Beach	Indicator Bacteria (99519)	Scorpion FMR
Rio De Santa Clara/Oxnard Drain No. 3	Chlordane (tissue) (68506), ChemA (tissue) (68555), Toxaphene (tissue) (69859), PCBs (Polychlorinated biphenyls) (70611), Nitrogen (75809), DDD (Dichlorodiphenyldichloroethane) (97903), Ammonia (98486), DDE (Dichlorodiphenyldichloroethylene) (99585), DDT (tissue) (99586), Toxicity (99948)	Anacapa Island FMR
Robert H. Meyer Memorial Beach	DDT (Dichlorodiphenyltrichloroethane) (69828), PCBs (Polychlorinated biphenyls) (69829)	Point Dume SMCA
Rocky Point Beach	Assessed for one or more pollutants, not listed	Point Vicente SMCA (No-Take)
Rose Creek	Selenium (71963), Benthic Community Effects (76910), Toxicity (100416)	South La Jolla SMR
Royal Palms Beach	DDT (Dichlorodiphenyltrichloroethane) (69285), PCBs (Polychlorinated biphenyls) (90948)	Abalone Cove SMCA
San Buenaventura Beach	Indicator Bacteria (77522)	Anacapa Island FMR

Water Body	Listed Impairment	Associated MPA
San Diego Bay	PCBs (Polychlorinated biphenyls), Mercury, PAHs (Polycyclic Aromatic Hydrocarbons)	Famosa Slough SMCA (No-Take), Tijuana River Mouth SMCA, Cabrillo SMR
San Diego Bay Shoreline, 32nd St San Diego Naval Station	Sediment Toxicity (69822), Benthic Community Effects (78750), Copper, Indicator Bacteria, Mercury, PAHs (Polycyclic Aromatic Hydrocarbons), zinc, PCB (Polychlorinated biphenyls); Sediment Toxicity, Benthic Community Effects, Chlordane	Famosa Slough SMCA (No-Take), Tijuana River Mouth SMCA, Cabrillo SMR
San Diego Creek Reach 1	Nutrients (67999), Sedimentation/Siltation (68050), Selenium (68215), Toxaphene (73784), Toxicity (95967), Indicator Bacteria (96527), Benthic Community Effects (97086), DDT (Dichlorodiphenyltrichloroethane) (98866), Malathion (99316)	Upper Newport Bay SMCA
San Diego River (Lower)	Phosphorus (68816), Total Dissolved Solids (76008), Nitrogen (76009), Indicator Bacteria (78071), Cadmium (82882), Benthic Community Effects (85490), Oxygen, Dissolved (86555), Toxicity (100431)	Famosa Slough SMCA (No-Take)
San Dieguito River	Benthic Community Effects (72510), Indicator Bacteria (75408), Phosphorus (76430), Toxicity (76431), Nitrogen (76473), Total Dissolved Solids (76802)	San Dieguito Lagoon SMCA
San Elijo Lagoon	Eutrophic (69911), Sedimentation/Siltation (69919), Indicator Bacteria (73749), Toxicity (87220)	Swami's SMCA
San Gabriel River Estuary	Nickel (72675), Oxygen, Dissolved (73104), Dioxin (73163), Copper (73269), Indicator Bacteria (98757)	Bolsa Bay SMCA
San Jose Creek (Santa Barbara County)	Chloride (72941), Temperature, water (73726), Fecal Coliform (74373), Escherichia coli (E. coli) (74598), Enterococcus (74870), Sodium (75091), pH (84619), Specific Conductivity (86850)	Goleta Slough SMCA (No-Take)
San Juan Creek	Phosphorus (68276), DDE (Dichlorodiphenyldichloroethylene) (69108), Toxicity (72543), Selenium (76334), Benthic Community Effects (76806), Nitrogen (77315), Oxygen, Dissolved (82933), Indicator Bacteria (85329)	Dana Point SMCA
San Juan Creek (mouth)	Indicator Bacteria (69906), Cadmium (95364), Copper (95417), Nickel (95470), Nitrogen, ammonia (Total Ammonia) (95526)	Dana Point SMCA
San Luis Rey River, Lower (west of Interstate 15)	Total Dissolved Solids (69905), Chloride (70092), Phosphorus (72043), Indicator Bacteria (76939), Toxicity (77148), Nitrogen (77316), Benthic Community Effects (77549), Bifenthrin (86800)	Batiquitos Lagoon SMCA (No-Take)
San Mateo Creek (San Diego County)	Indicator Bacteria (86879), Invasive Species (95256)	Dana Point SMCA
San Pedro Bay Near/Off Shore Zones	Total DDT (sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD) (69050), PCBs (Polychlorinated biphenyls) (69051), Toxicity (70412), Chlordane (99710)	Bolsa Bay SMCA
San Pedro Creek (Santa Barbara County)	Escherichia coli (E. coli) (73299), Enterococcus (80746), Fecal Coliform (83636), Sodium (85882), Temperature, water (87334), pH (100160)	Goleta Slough SMCA (No-Take)
Sanjon Barranca Creek	Trash (100111), Escherichia coli (E. coli) (100199)	Anacapa Island FMR
Water Body	Listed Impairment	Associated MPA
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Santa Barbara Harbor	Arsenic (76121), Copper (76491), Oxygen, Dissolved (85572), Dieldrin (100251)	Goleta Slough SMCA (No-Take)
Santa Clara River Estuary	ChemA (69282), Toxicity (70337), Indicator Bacteria (70937), Toxaphene (71340), Ammonia (96859)	Anacapa Island FMR
Santa Margarita Lagoon	Eutrophic (70035)	Batiquitos Lagoon SMCA (No-Take)
Santa Margarita River (Lower)	Nitrogen (76241), Indicator Bacteria (76472), Toxicity (76649), Phosphorus (76863), Chlorpyrifos (81632), Benthic Community Effects (83110)	Batiquitos Lagoon SMCA (No-Take)
Santa Monica Bay Offshore/Nearshore	PCBs (Polychlorinated biphenyls) (68362), Trash (68866), Mercury (98793), Arsenic (99631), DDT (Dichlorodiphenyltrichloroethane) (99728)	Point Dume SMR
Sea Level Beach	Indicator Bacteria (70590), DDT (Dichlorodiphenyltrichloroethane) (71581), PCBs (Polychlorinated biphenyls) (72225)	Point Dume SMCA
Seal Beach	PCBs (Polychlorinated biphenyls) (69741), Indicator Bacteria (77585)	Bolsa Bay SMCA
Surfers Point at Seaside	Indicator Bacteria (72561)	Anacapa Island FMR
Sweetwater River, Lower (below Sweetwater Reservoir)	Nitrogen (76883), Phosphorus (77205), Toxicity (77320), Total Dissolved Solids (77469), Selenium (77701), Indicator Bacteria (77735), Benthic Community Effects (85768), Chlorpyrifos (87383)	Tijuana River Mouth SMCA
Sycamore Creek	Turbidity (73892), Fecal Coliform (82931), pH (84719), Chloride (85498), Sodium (85499), Oxygen, Dissolved (85519)	Goleta Slough SMCA (No-Take)
Talbert Channel (Orange County)	Toxicity (96096)	Upper Newport Bay SMCA
Tecolote Creek	Copper (69474), Toxicity (71595), Nitrogen (73157), Cadmium (73361), Phosphorus (76023), Selenium (76045), Zinc (77528), Benthic Community Effects (77552), Turbidity (78696), Bifenthrin (86794), Cypermethrin (86795), Diazinon (86796), Lead (86848), Indicator Bacteria (100418)	Famosa Slough SMCA (No-Take)
Tecolote Creek (Santa Barbara County)	Fecal Coliform (72204), Sodium (72448), Chloride (75806)	Naples SMCA
Tijuana River	Trash (69701), Solids (69841), Eutrophic (74679), Pesticides (76067), Diazinon (76203), Toxicity (76694), Ammonia as Nitrogen (76720), Surfactants (MBAS) (76722), Total Nitrogen as N (76763), Benthic Community Effects (76951), Synthetic Organics (77084), Phosphorus (77295), Sedimentation/Siltation (77353), Trace Elements (77421), Low Dissolved Oxygen (77817), Cadmium (81201), Chlorpyrifos (81465), Malathion (86255), Indicator Bacteria (86830), Selenium (100484)	Tijuana River Mouth SMCA
Tijuana River Estuary	Indicator Bacteria (68885), Pesticides (69199), Turbidity (69251), Low Dissolved Oxygen (69301), Thallium (69416), Nickel (69476), Trash (69867), Eutrophic (70459), Lead (75778), Toxicity (86348)	Tijuana River Mouth SMCA

Water Body	Listed Impairment	Associated MPA
Topanga Beach	Indicator Bacteria (68231), PCBs (Polychlorinated biphenyls) (69276), DDT (Dichlorodiphenyltrichloroethane) (70919)	Point Dume SMR
Torrance Beach	Indicator Bacteria (68436)	Point Vicente SMCA (No-Take)
Trancas Beach (Broad Beach)	Indicator Bacteria (68458), PCBs (Polychlorinated biphenyls) (69015), DDT (Dichlorodiphenyltrichloroethane) (71130)	Point Dume SMCA
Ventura Harbor: Ventura Keys	Coliform Bacteria (70125), Dieldrin (98796), Indicator Bacteria (99080), Arsenic (99234), PCBs (Polychlorinated biphenyls) (99634)	Anacapa Island FMR
Ventura Marina Jetties	PCBs (Polychlorinated biphenyls) (68456), DDT (Dichlorodiphenyltrichloroethane) (68695)	Anacapa Island FMR
Ventura River Estuary	Eutrophic (70126), Algae (70376), Trash (75387), Indicator Bacteria (99469)	Anacapa Island FMR
Whites Point Beach	Indicator Bacteria (68088), PCBs (Polychlorinated biphenyls) (77834), DDT (Dichlorodiphenyltrichloroethane) (100486)	Abalone Cove SMCA
Zuma Beach (Westward) Beach	Indicator Bacteria (69117), PCBs (Polychlorinated biphenyls) (71758), DDT (Dichlorodiphenyltrichloroethane) (77423)	Point Dume SMCA

Notes: FMR = Federal Marine Reserve; HA = hydrologic area; HSA = hydrologic service area; HU = hydrologic unit; SMCA = state marine conservation area; SMR = state marine reserve.

Source: SWRCB 2018.

References

State Water Resources Control Board. 2018. California 2018 Integrated Report. Available:

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SWRCB. See State Water Resources Control Board.