Draft Staff Report and Substitute Environmental Documentation

Amendment of the Water Quality Control Plan For Ocean Waters of California

Addressing

IMPLEMENTATION OF STATE WATER BOARD RESOLUTIONS 2010-0057 AND 2011-0013 DESIGNATING STATE WATER QUALITY PROTECTION AREAS TO PROTECT STATE MARINE PROTECTED AREAS

January 6, 2012

STATE WATER RESOURCES CONTROL BOARD
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

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ASBS	Areas of Special Biological Significance
BMPs	Best Management Practices
Cal/EPA	California Environmental Protection Agency
Cal. Code Regs.	California Code of Regulations
Wat. Code	California Water Code
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CINMS	Channel Islands National Marine Sanctuary
CWA	Clean Water Act
DFG	California Department of Fish and Game
EIR	Environmental Impact Report
GFNMS	Gulf of Farallons National Marine Sanctuary
MBNMS	Monterey Bay National Marine Sanctuary
MGD	Million Gallons per Day
MIS Act	Marine Invasive Species
MMA	Marine Managed Area
MPA	Marine Protected Area
MRP	Monitoring and Reporting Programs
MS4	Municipal Separate Storm Sewer Systems
NMFS	National Marine Fisheries Service
NMS	National Marine Sanctuary
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
OAL	Office of Administrative Law
Ocean Plan	California Ocean Plan
Porter-Cologne	Porter-Cologne Water Quality Control Act
POTWs	Publicly Owned Treatment Works
Regional Water Board	Regional Water Quality Control Board
SCB	Southern California Bight
SCCWRP	Southern California Coastal Water Research Project
SED	Substitute Environmental Documentation
State Water Board	State Water Resources Control Board
SWQPA	State Water Quality Protection Area
tit.	Title
TRW	Triennial Review Work Plan
U.S.C.	United States Code
U.S. EPA	United States Environmental Protection Agency
Water Boards	State and Regional Water Boards
WDR	Waste Discharge Requirement

1. Introduction

1.1.Summary

The State Water Resources Control Board (State Water Board) staff has prepared this draft Substitute Environmental Documentation (draft SED) to support amendment of the 2009 California Ocean Plan (Ocean Plan) that address marine managed areas, specifically State Water Quality Protection Areas (SWQPAs) and Marine Protected Areas (MPAs).

These amendments were initiated in response to State Water Board Resolution 2010-0057 adopted November 16, 2010 and the State Water Boards California Ocean Plan Triennial Review Workplan 2011-2013 adopted March 15, 2011 under Resolution 2011-0013. State Water Board Resolution 2010-0057 directed staff to among other things develop an approach for establishing State Water Quality Protection Areas that are not intended to be designated as Areas of Special Biological Significance. A public scoping meeting was held July 8, 2011 to receive input on the content and analysis included in this SED.

The proposed amendments if adopted would establish criteria for designating State Water Quality Protection Areas, including controls and prohibitions applicable to existing and future point source and nonpoint source discharges to protect water quality in these areas. The proposed amendments would also protect specific types of discharges from more stringent permit conditions based upon the designation of MPAs in the vicinity of these discharges.

The proposed amendments do not attempt to alter or affect existing Ocean Plan provisions protecting SWQPAs designated Areas of Special Biological Significance (ASBS). The proposed amendments also do not designate new SWQPAs.

Based upon the review and analyses described in this SED, the proposed amendments if adopted are not expected to result in significant impact on the environment.

This SED describes the rational and basis for the proposed amendments, the text proposed by staff for inclusion in the Ocean Plan, and the factors, information, and analyses required by California Water Code, California Environmental Quality Act and Federal Clean Water Act in accordance with the State Water Board's water quality planning process. The remainder of the SED is organized as follows: Section 2 describes the organization and history of the California Ocean Plan. Applicable laws and regulations addressing water quality plans and planning are described in Section 3. Section 4 describes ocean waters of the State and the coastal environmental setting by region (North Coast, San Francisco Bay, Central Coast, Los Angeles, Santa Ana, and San Diego). Section 5 describes the project, background, alternatives considered in the development of the proposed amendments, and shows the draft text of the proposed amendments in strikeout/underline format.

2. Overview of the California Ocean Plan

2.1 Purpose

The Ocean Plan establishes water quality objectives for California's ocean waters and provides the basis for regulation of wastes discharged into the California's coastal waters and is applicable to both point and non-point source discharges. The State Water Board adopts the Ocean Plan and the State Water Board, in conjunction with six coastal Regional Water Quality Control Boards (Regional Water Boards), implements and interprets the Ocean Plan. Coastal Regional Water Boards consist of the North Coast, San Francisco Bay, Central Coast, Los Angeles, Santa Ana and San Diego Regions.

2.2 Content

The 2009 Ocean Plan contains three chapters that describe beneficial uses to be protected, water quality objectives, and a program of implementation necessary for achieving water quality objectives (SWRCB 2009).

Chapter One of the Ocean Plan identifies the applicable beneficial uses of marine waters. These uses, as outlined in Chapter One, consist of preservation and enhancement of designated ASBS, rare and endangered species, marine habitat, fish migration, fish spawning, shellfish harvesting, recreation, commercial and sport fishing, mariculture, industrial water supply, aesthetic enjoyment, and navigation.

Chapter Two establishes a set of narrative and numerical water quality objectives designed to protect beneficial uses. These objectives are based on bacterial, physical, chemical, and biological characteristics, as well as radioactivity. The water quality objectives in Table B (One of the proposed amendments in this document is to change the name of Table B to Table 1) apply to all receiving waters under the jurisdiction of the Ocean Plan and are established for protection of aquatic life and for protection of human health from both non-carcinogens and carcinogens. Within Table B there are 21 objectives for protecting aquatic life, 20 objectives for protecting human health from non-carcinogens, and 42 objectives for protecting human health from exposure to carcinogens.

Chapter Three is divided into ten sections designated A-J, as described below.

A. General Provisions - Lists the considerations a discharger must address when proposing a new discharge into marine waters. Section A also identifies how ASBS are designated and the application of United States. Environmental Protection Agency's (U.S. EPA) Combined Sewer Overflow Policy.

B. Table A Effluent Limitations - Contains effluent limitations for the protection of marine waters. The effluent limitations listed in Table A apply to all publicly owned treatment works (POTWs) and to industries that do not have effluent limitation guidelines established by the U.S. EPA.

C. Implementation Provisions for Table B - When a discharge permit is written, the water quality objectives for the receiving water are converted into effluent limitations that apply to discharges into California ocean waters. These effluent limitations are established on a

discharge-specific basis depending on the initial dilution calculated for each outfall and the Table B objectives. Section C describes how Table B is to be implemented, including: calculation of effluent limitations; determination of mixing zones for acute toxicity objectives; toxicity testing requirements; selection of, deviations from, and use of, minimum levels; sample reporting protocols; compliance determination; pollutant minimization program; and, toxicity reduction requirements.

D. Implementation Provisions for Bacterial Characteristics - provides implementation provisions for bacterial assessment and remedial action requirements. The requirements provide a basis for determining the occurrence and extent of any impairment of beneficial use due to bacterial contamination, generating information which can be used to develop an enterococcus standard, and providing the basis for remedial actions necessary to minimize or eliminate any impairment of a beneficial use.

E. Implementation Provisions for ASBS– Describes provisions and prohibitions associated with ASBS. Section E states that waste shall not be discharged to ASBS and that such discharges shall be located a sufficient distance from ASBS to assure maintenance of natural water quality conditions in these areas. It also provides that Regional Water Boards may approve waste discharge requirements or recommend certification for limited-term activities in ASBS.

F. Revision of Waste Discharge Requirements – Describes provisions for amending waste discharge requirements

G. Compliance Schedules in National Pollutant Discharge Elimination System (NPDES) Permits

H. Monitoring Program – Describes the requirements for monitoring to assess compliance with waste discharge requirements

I. Discharge Prohibitions – Describes prohibitions against the discharge of hazardous substances, sludge, and by passing. Section I.2 prohibits the discharge of waste into ASBS except as provided in Chapter III. E.

J. State Water Board Exceptions to Plan Requirements – Describes the process and conditions under which an exception may be considered.

2.3 History

The Ocean Plan was first formulated by the State Water Board as part of the State Policy for Water Quality Control. Changes in the Water Code in 1972 required the State Water Board to redraft its proposed Policy as a Water Quality Control Plan. At that time, it was the intent of the State Water Board to "…determine the need for revising the Plan to assure that it reflects current knowledge…" (SWRCB 1972). The Ocean Plan was reviewed and amended in 1978 to fulfill the intent of the State Water Board and the requirements of state and federal law for periodic review (SWRCB 1978). In 1983, a second review and revision were completed (SWRCB 1983a). Major changes to the Ocean Plan in 1983 included the addition of several chemicals to the receiving water limitations, modification of the bacterial standards, the addition of Tables C and D, and incorporation of parts of the 1972 and 1978 guideline documents. Later revisions are summarized below.

The 1988 amendments (SWRCB 1988) changed several beneficial use designations to be consistent with the State Water Board's standard list, revised water quality objectives in Table B, established a uniform procedure for granting exceptions to Ocean Plan objectives, and made several relatively minor changes.

The 1990 amendments (SWRCB 1990a; 1990b) added the following: (1) an appendix for standard monitoring procedures; (2) a bacterial monitoring requirement for enterococcus; (3) new and/or revised water quality objectives to Table B for protection of aquatic life and human health; (4) definitions of acute and chronic toxicity to replace previous definitions; (5) a chronic toxicity objective to Table B; (6) an appendix for implementing the acute toxicity requirement in Table A and the chronic toxicity receiving water objective in Table B; and (7) a list of seven critical life stage test protocols for use in measuring chronic toxicity.

The 1997 Amendments added the list in Appendix II of test protocols used to measure compliance with chronic toxicity objective was revised to reflect advances in conducting these tests, and a number of minor changes were made to clarify and standardize terminology referring to water quality objectives and effluent limitations (SWRCB 1997a; 1997b).

The 2001 amendments addressed the following: (1) replacement of the technology-based acute toxicity effluent limit with a water quality based toxicity objective; (2) revision of chemical water quality objectives for protection of marine life and human health; (3) compliance determination for chemical water quality objectives; (4) format of the Ocean Plan; (5) development of special protection for water quality and designated uses in ocean waters of California; and (6) administrative changes to the Ocean Plan (SWRCB 2000; 2001).

The 2004 amendments addressed indicator organisms for water-contact bacterial standards.

The 2005 amendments included (1) changes to the language in Chapter III (Program of Implementation) of the Ocean Plan; (2) additional reasonable potential procedures added as Appendix VI; (3) names of specific ASBS were changed and the classification of ASBS as SWQPAs in accordance with the Public Resources Code were incorporated; (4) and new provisions requiring that exceptions to the Ocean Plan (including non-ASBS related exceptions) be reviewed during the Triennial Review and (5) an appendix listing all current exceptions to the Ocean Plan (SWRCB 2005).

The 2009 amendments included non-substantive changes, such as: (1) the clarification that metals are expressed as total recoverable metals; (2) the removal of Section III (F)(1) on compliance schedules; (3) the addition of Section III (G)(1) on Compliance Schedules in National Pollution Discharge Elimination System (NPDES) Permits; (4) the correction of toxicity definitions and references in Appendix 1; (5) the addition of maps of California's ocean waters, bays, and estuaries; (6) and the update of the list of exceptions in Appendix VII (SWRCB 2009). The 2009 Ocean Plan became effective October 8, 2010 when it was approved by the U.S. EPA (U.S. EPA 2010).

3 Regulatory Background

3.1 Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne), enacted in 1969 as division 7 of the Water Code, is the primary water quality law in California. Porter-Cologne addresses two primary functions: water quality control planning and waste discharge regulation. Porter-Cologne is administered regionally, within a framework of statewide coordination and policy. The state is divided into nine regions, each governed by a Regional Water Board. The State Legislature, in adopting Porter-Cologne, directed that California's waters "shall be regulated to attain the highest water quality which is reasonable".

3.1.1 Water Quality Control Plans

Porter-Cologne provides the basis for the State and Regional Water Boards' processes for adopting water quality control plans. The Regional Water Boards have primary responsibility for formulating and adopting water quality control plans for their respective regions. (Wat. Code, § 13240)

The Water Code (commencing with section 13160) requires the State Water Board to formulate and adopt the Ocean Plan. The Ocean Plan designates ocean waters for a variety of beneficial uses, including rare and endangered species, marine habitat, fish spawning and migration and other uses (including industrial water supply), and establishes water quality objectives to protect beneficial uses. The State Water Board is also charged with adopting state policies for water quality control, which may consist of principles or guidelines deemed essential by the State Water Board for water quality control.

When the State Water Board adopts a water quality control plan, the state plan supersedes regional water quality control plans for the same waters, to the extent of any conflict. (Wat.Code § 13170.) Fundamentally, a water quality control plan establishes water quality standards for waters within a specified area. The water quality standards consist of the beneficial uses to be protected, water quality objectives, and a program of implementation. (Wat.Code § 13050(j).) Prior to adopting or amending a water quality objective, Water Code section13241 requires the State or Regional Water Board to assess specific factors to ensure the reasonable protection of beneficial uses. Factors the Water Boards shall consider when establishing water quality objectives include the following:

- Past, present, and probable future beneficial uses of water.
- Environmental characteristics of the hydrographic unit under consideration.
- Water quality conditions that could reasonably be achieved through control of all factors affecting water quality.
- Economic considerations.
- The need for developing housing within the region.
- The need to develop and use recycled water.

Water Code section 13242 requires the Water Boards to formulate a program of implementation to achieve each water quality objective. The program of implementation shall include, but not be limited to:

- A description of the nature of actions that is necessary to achieve the objectives, including recommendations for appropriate action by any entity, public or private.
- A time schedule for the actions to be taken.
- A description of surveillance to be undertaken to determine compliance with objectives

The regulatory provisions of all Ocean Plan amendments must be approved by the state Office of Administrative Law (OAL). Amendments that include the adoption or modification of a new or existing water quality standard or general policy affecting the application or implementation of standards must also be approved by U.S. EPA in order to be effective. After a water quality control plan is adopted, Water Code section 13240 and Clean Water Act section 303(c)(1) require, respectively, a periodic and a triennial review of water quality standards.

3.1.2 Waste Discharge Requirements

Under Porter-Cologne, the State and Regional Water Boards regulate waste discharges that could affect water quality through waste discharge requirements. In addition, the State is authorized to issue NPDES permits to point source dischargers of pollutants to navigable waters. In 1972, the California Legislature amended Porter-Cologne to provide the state the necessary authority to implement an NPDES permit program in lieu of a U.S. EPA-administered program under the federal Clean Water Act (CWA). To ensure consistency with the CWA requirements, Porter-Cologne requires that the Water Boards issue and administer NPDES permits such that all applicable CWA requirements are met. The State Water Board is designated as the State water pollution control agency under the CWA and is authorized to exercise any powers accordingly delegated to the State.

3.2 California Environmental Quality Act

The Water Boards' planning processes must comply with the California Environmental Quality Act (CEQA). The objectives of CEQA are to: 1) inform the decision makers and public about the potential significant environmental effects of a proposed project, 2) identify ways that environmental damage may be mitigated, 3) prevent significant, avoidable damage to the environment by requiring changes in projects, through the use of alternative or mitigation measures when feasible, and 4) disclose to the public why an agency approved a project if significant effects are involved. (Cal. Code Regs., tit. 14, § 15002(a).)

Although state agencies are subject to the environmental impact assessment requirements of CEQA (Public Resources Code, §21000 et seq.), CEQA authorizes the Secretary of the Natural Resources Agency to exempt specific state regulatory programs from the requirements to prepare Environmental Impact Reports (EIRs), Negative Declarations, and Initial Studies, if certain conditions are met. (Public Resources Code, §21080.5). With respect to the State Water Board, the Secretary of the Natural Resources Agency has certified as exempt the Water Quality Control (Basin)/208 Planning Program for the protection, maintenance, and enhancement of water quality in California, including all components of California's water quality management plan as defined in 40 C.F.R sections 130.2(k) and 130.6.. (Cal. Code Regs., tit. 14, § 15251(g).), that includes actions associated with amendment of the California Ocean Plan.

Despite this limited exemption, the State Water Board must still comply with CEQA's overall objectives, which are to: 1) inform the decision makers and public about the potential significant environmental effects of a proposed project; 2) identify ways that environmental damage may be mitigated; 3) prevent significant, avoidable damage to the environment by requiring changes

in projects, through the use of alternative or mitigation measures when feasible; and 4) disclose to the public why an agency approved a project if significant effects are involved (Pub. Resources Code, § 21080.5, subd. (a)).

Agencies qualifying for this exemption must comply with CEQA's goals and policies; evaluate environmental impacts; consider cumulative impacts; consult with other agencies with jurisdiction; provide public notice and allow public review; respond to comments on the draft environmental document; adopt CEQA findings; and provide for monitoring of mitigation measures. Accordingly, the State Water Board has prepared substitute environmental documentation (SED) in lieu of an EIR or negative declaration. State Water Board regulations, (Cal. Code Regs., tit. 23, § 3777.) require that the draft SED prepared for its certified regulatory programs must include:

- A written report prepared for the board, containing a brief description and an environmental analysis of the proposed project;
- An identification of any significant or potentially significant adverse environmental impacts of the proposed project;
- An analysis of reasonable alternatives to the project and mitigation measures to avoid or reduce any significant or potentially significant adverse environmental impacts;
- A completed Environmental Checklist; and
- Other documentation as the State Water Board may include.

This Staff Report and its attachments fulfill the requirements of an SED. Responses to public comments and consequent revisions to the information in the Draft SED will be subsequently presented in a Final SED for consideration by the State Water Board. After the State Water Board has approved the Final SED and adopted the project, a Notice of Decision will be filed with the Secretary of the Natural Resources Agency. A Draft SED is prepared by the State Water Board and circulated for public review and comment. Responses to comments and consequent revisions to the information in the Draft SED are subsequently presented in a Draft Final SED (Draft FSED) for consideration by the State Water Board. After the State Water Board has certified the document as adequate, the title of the document becomes the Final SED (FSED).

3.3 California Health and Safety Code Scientific Peer Review

In 1997, Section 57004 was added to the California Health and Safety Code (Senate Bill 1320-Sher), which requires external scientific peer review of the scientific basis for any rule proposed by any board, office or department within Cal/EPA. Scientific peer review is a mechanism for ensuring that regulatory decisions and initiatives are based on sound science. Scientific peer review also helps strengthen regulatory activities, establishes credibility with stakeholders, and ensures that public resources are managed effectively. Because scientific analysis does not serve as the basis for any portion of these amendments, peer review was not performed on these proposed amendments.

4 Environmental Setting

Maps of the coastal and ocean features along California's coast are in the 2009 Ocean Plan in Appendix VIII. These maps present NPDES ocean outfalls, county and regional board boundaries, MPA, National Marine Sanctuaries (NMS), and ASBS. The California Department of Fish and Game's website contains additional information about California's marine region and can be accessed at: http://dfg.ca.gov/marine .

The state is divided into nine regions, each governed by a Regional Water Board. Six of the Regional Water Boards regulate discharges to California's ocean waters. These six regions are described below.

4.1 North Coast Region

The North Coast Region (See Figures 1 - 3) comprises all regional basins, including Lower Klamath Lake and Lost River Basins, draining into the Pacific Ocean from the California-Oregon state line southerly to the southerly boundary of the watershed of the Estero de San Antonio and Stemple Creek in Marin and Sonoma Counties.

Two natural drainage basins, the Klamath River Basin and the North Coastal Basin, divide the Region. The Region covers all of Del Norte, Humboldt, Trinity, and Mendocino Counties, major portions of Siskiyou and Sonoma Counties, and small portions of Glenn, Lake, and Marin Counties. It encompasses a total area of approximately 19,390 square miles, including 340 miles of coastline and remote wilderness areas, as well as urbanized and agricultural areas. Beginning at the Smith River in northern Del Norte County and heading south to the Estero de San Antonio in northern Marin County, the Region encompasses a large number of major river estuaries, including the Klamath River, Redwood Creek, Little River, Mad River, Eel River, Noyo River, Navarro River, Elk Creek, Gualala River, Russian River, and Salmon Creek. Northern Humboldt County coastal lagoons include Big Lagoon and Stone Lagoon (See Figure 2). The two largest enclosed bays in the Region are Humboldt Bay and Arcata Bay in Humboldt County (See Figure 2). Another enclosed bay, Bodega Bay, is located in Sonoma County near the southern border of the Region (See Figure 3).Tidelands and marshes are extremely important to many species of waterfowl and shore birds, both for feeding and nesting. Cultivated land and pasturelands also provide supplemental food for many birds, including small pheasant populations. Tideland areas along the north coast provide important habitat for marine invertebrates and nursery areas for forage fish, game fish, and crustaceans. Offshore coastal rocks are used by many species of seabirds as nesting areas. Major components of the economy are tourism and recreation, logging and timber milling, aggregate mining, commercial and sport fisheries, sheep, beef and dairy production, and vineyards and wineries. The largest urban centers are Eureka in Humboldt County and Santa Rosa in Sonoma County.

There is one existing MPA in Humboldt County, eight existing MPAs in Mendocino County, and nine existing MPAs in Sonoma County. Eight ASBS are located in the North Coast Region: Jughandle Cove (#1), Del Mar Landing (#2), Gerstle Cove (#3), Bodega (#4), Saunders Reef (#5), Trinidad Head (#6), King Range (#7), and Redwoods National Park (#8). (See Figures 2 and 3).

The Gulf of the Farallones National Marine Sanctuary (GFNMS), designated in 1981, is located in the North Coast, San Francisco Bay, and Central Coast Regions (Regions 1, 2, and 3).

GFNMS spans 1,279 square-miles (966 square-nautical-miles) just northwest of San Francisco Bay. (Refer to Section 2.1.2 for more information about the Farallon Islands and GFNMS. See Figure 3)

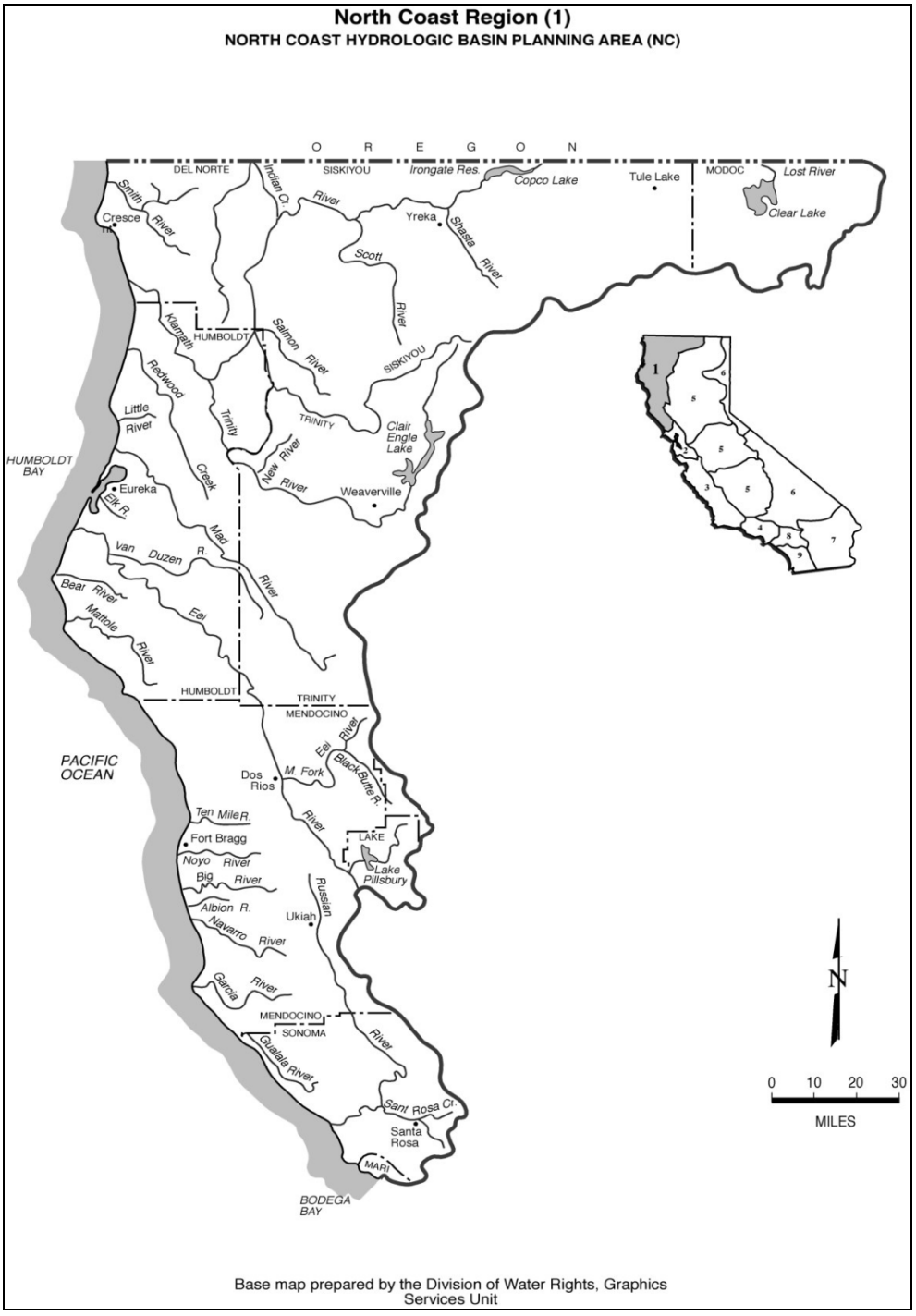

Figure 1.Hydrology of Region 1.

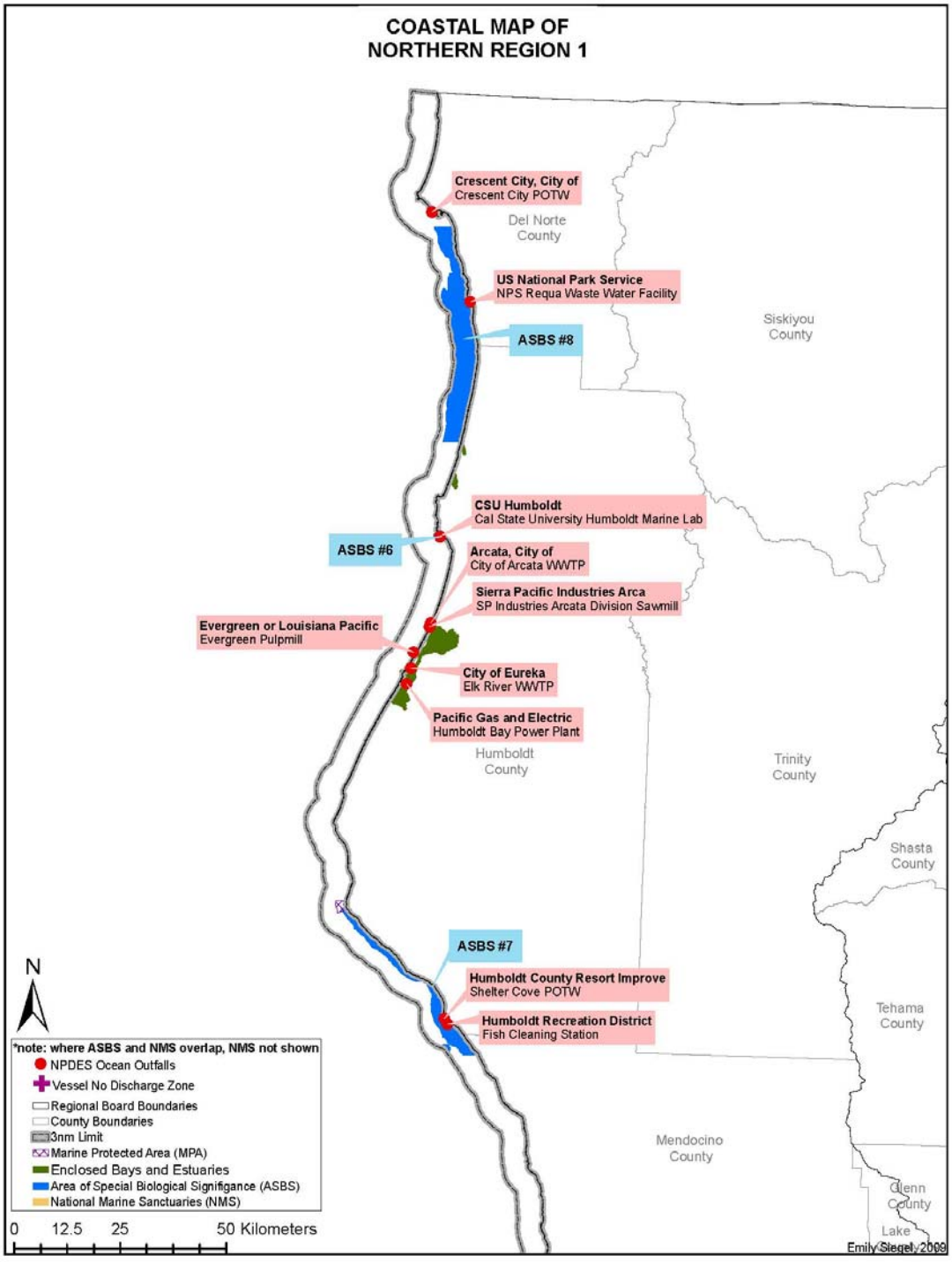

Figure 2.Coastal and ocean features of the North Coast Region.

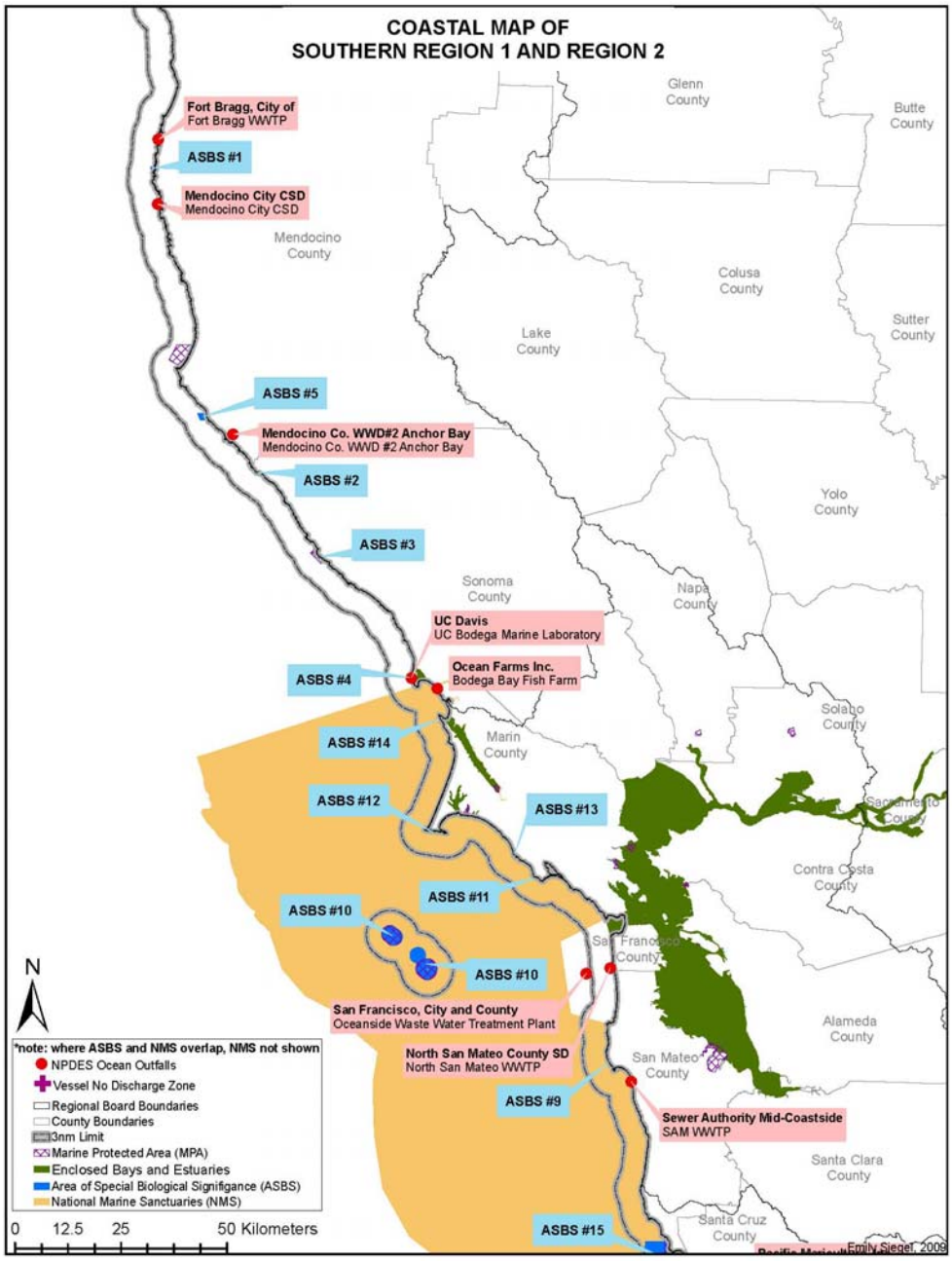

Figure 3. Coastal features of southern North Coast Region and San Francisco Bay Region

4.2 San Francisco Bay Region

The San Francisco Bay Region, (see Figures 3 and 4) comprises San Francisco Bay, Suisun Bay, from Sacramento River and San Joaquin River westerly from a line which passes between Collinsville and Montezuma Island and follows thence the boundary common to Sacramento and Solano Counties and that common to Sacramento and Contra Costa Counties to the westerly boundary of the watershed of Markley Canyon in Contra Costa County, all basins draining into the bays and rivers westerly from this line, and all basins draining into the Pacific Ocean between the southerly boundary of the north coastal region and the southerly boundary of the watershed of Pescadero Creek in San Mateo and Santa Cruz Counties. The Region comprises most of the San Francisco Estuary to the mouth of the Sacramento-San Joaquin Delta. The San Francisco Estuary conveys the waters of the Sacramento and San Joaquin Rivers to the Pacific Ocean. The Bay is located on the north central coast of California and functions as the only drainage outlet for waters of the Central Valley. It also marks a natural topographic separation between the northern and southern coastal mountain ranges.

The Region's waterways, wetlands, and bays form the centerpiece of the fourth largest metropolitan area in the United States, including all or major portions of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties. The San Francisco Bay Regional Water Board has jurisdiction over the part of the San Francisco Estuary that includes all of the San Francisco Bay segments extending east to the Delta (Winter Island near Pittsburg). The San Francisco Estuary sustains a highly dynamic and complex environment. Within each section of the Bay system lie deepwater areas that are adjacent to large expanses of very shallow water. Salinity levels in the Bay range from hypersaline to fresh water, and water temperature varies widely. The Bay system's deepwater channels, tidelands, marshlands, fresh water streams, and rivers provide a wide variety of habitats within the Region. Coastal embayments including Tomales Bay and Bolinas Lagoon are also located in this Region. The Central Valley Regional Water Board has jurisdiction over the Delta and rivers extending further eastward.

The Sacramento and San Joaquin Rivers enter the Bay system through the Delta at the eastern end of Suisun Bay and contribute almost all of the fresh water inflow into the Bay. Many smaller rivers and streams also convey fresh water to the Bay system. The rate and timing of these fresh water flows are among the most important factors influencing physical, chemical, and biological conditions in the Estuary. Flows in the Region are highly seasonal, with more than 90 percent of the annual runoff occurring during the winter rainy season between November and April. The San Francisco Estuary is made up of many different types of aquatic habitats that support a great diversity of organisms. Suisun Marsh in Suisun Bay is the largest brackish-water marsh in the United States. San Pablo Bay is a shallow embayment strongly influenced by runoff from the Sacramento and San Joaquin Rivers. The Central Bay is the portion of the Bay most influenced by oceanic conditions. The South Bay, with less freshwater inflow than the other portions of the Bay, acts more like a tidal lagoon. Together these areas sustain rich communities of aquatic life and serve as important wintering sites for migrating waterfowl and spawning areas for anadromous fish. Other bays within the Region 2 boundaries include Tomales Bay, Bolinas Bay and Half Moon Bay.

Approximately 20 miles (32 km) south from the coast of Point Reyes, lie the Farallon Islands. The islands are northwest of San Francisco Bay, located within the boundaries of the City and County of San Francisco, the San Francisco Bay Regional Water Board, and GFNMS (See Figure 3). The boundaries of the GFNMS also extend into the North and Central Coast Regions. The sanctuary is comprised of several ecosystems: coastal beaches, open ocean, near-shore tidal flats, rocky intertidal, subtidal reefs and estuarine wetlands. The Farallon

Islands serve as feeding and breeding grounds for at least twenty-five endangered or threatened species and at least thirty-six federally-protected marine mammal species, including one of the few remaining populations of Stellar sea lions. Other pinnipeds known to utilize the islands as breeding grounds and a haul out sites are the northern elephant seal, harbor seal, California sea lion, and the northern fur seal. Twelve species of seabirds and shorebirds, making up over a quarter-million individuals, nest on the islands. These species of birds include the western gull, Brandt's cormorant, pelagic cormorant, double-crested cormorant, pigeon guillemot, common murre, Cassin's auklet, tufted puffin, black oystercatcher, rhinoceros auklet, ashy storm-petrel, and Leach's storm-petrel. One of the most significant white shark populations on the planet is known to utilize the waters surrounding the islands for hunting. Species of cetaceans that are found in the surrounding waters consist of gray whales, blue whales, and humpback whales. Public access to the island is highly restricted and there is no human settlement in GFNMS except for the presence of research scientists and a U.S. Coast Guard lighthouse facility on the Southeast Island. Between 1946 and 1970, over 47,000 55-gallon drums, concrete blocks and other containers of low-level radioactive waste were dumped onto the ocean floor off the California coast, in and near the GFNMS. There were three designated dumping sites for the containers, but studies conducted by the United States Geological Survey (USGS) conclude that they litter an area of sea floor of at least 1,400 km2. This area is known as the Farallon Island Radioactive Waste Dump.

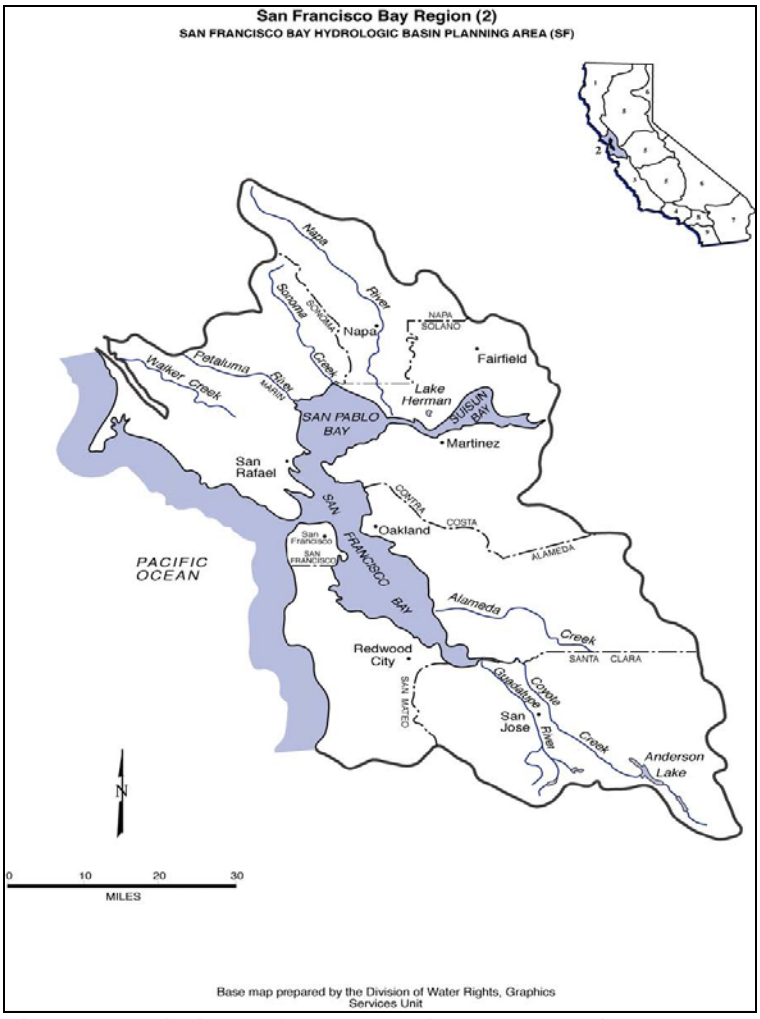

Figure 4.Hydrology of San Francisco Bay Region.

There are twelve MPAs in Marin County (two of the MPAs are estuarine), five in San Francisco County, one estuarine MPA in Solano County, two estuarine MPAs in Alameda County, and seven MPAs in San Mateo County. Five of the seven MPAs in San Mateo county are located within the San Francisco Bay Regional Water Board boundaries, two of which are estuarine MPAs, and the other two are located within the Central Coast Regional Water Board boundaries. Six ASBS are located in the San Francisco Bay Region: James V. Fitzgerald (#9), Farallon Islands (#10), Duxbury Reef (#11), Point Reyes Headlands (#12), Double Point (#13), and Bird Rock (#14) (See Figure 3).

4.3 Central Coast (Region 3)

The Central Coast Region (See Figures 5 - 7) comprises all basins draining into the Pacific Ocean from the southerly boundary of the watershed of Pescadero Creek in San Mateo and Santa Cruz Counties to the southeasterly boundary, located in the westerly part of Ventura County, of the watershed of Rincon Creek.

The Region extends over a 300 mile (483 km) long by 40 mile (64 km) wide section of the state's central coast. Its geographic area encompasses all of Santa Cruz, San Benito, Monterey, San Luis Obispo, and Santa Barbara Counties as well as the southern one-third of Santa Clara County, and small portions of San Mateo, Kern, and Ventura Counties. Included in the Region are urban areas such as the Monterey Peninsula and the Santa Barbara coastal plain; prime agricultural lands such as the Salinas, Santa Maria, and Lompoc Valleys; National Forest lands; extremely wet areas such as the Santa Cruz Mountains; and arid areas such as the Carrizo Plain.

Water bodies in the Central Coast Region are varied. Enclosed bays and harbors in the region include Morro Bay, Elkhorn Slough, Tembladero Slough, Santa Cruz Harbor, Moss Landing Harbor, Monterey Harbor, Port San Luis, and Santa Barbara Harbor. Several small estuaries also characterize the region, including the Santa Maria River Estuary, San Lorenzo, River Estuary, Big Sur River Estuary, and many others. Major rivers, streams, and lakes include San Lorenzo River, San Benito River, Pajaro River, Salinas River, Santa Maria River, Cuyama River, Estrella River and Santa Ynez River, San Antonio Reservoir, Nacimiento Reservoir, Twitchel Reservoir, and Cuchuma Reservoir.

Año Nuevo State Park is located in San Mateo County, within the Central Coast Region, and includes Año Nuevo Island and properties on the western slope of the coast range, inland from Año Nuevo Point (See Figure 6). Four perennial streams at the park support steelhead trout and coho salmon. Año Nuevo Island and adjacent mainland beaches are considered to be one of the most important pinniped rookery and resting areas in central and northern California. Pinnipeds found at Año Nuevo include: Northern elephant seals, Stellar's sea lions, California sea lions, and harbor seals. Over 300 species of marine invertebrates have been recorded at Año Nuevo, including an unusual number of rare species. Over 20,000 people visit Año Nuevo State Park annually.

Three National Marine Sanctuaries are located in the Central Coast Region: Channel Islands National Marine Sanctuary (CINMS), Monterey Bay National Marine Sanctuary (MBNMS), and GFNMS. GFNMS is also located in the San Francisco Bay and North Coast Regions (refer to 2.1.2 for more information about GFNMS).

MBNMS, designated in 1992, lies between Marin and Cambria. The sanctuary has a shoreline length of 276 miles (444 km), averages a distance of 30 miles (48 km) from shore, and includes 6,094 square miles (15,783 square km) of ocean. MBNMS is the largest Marine Sanctuary and includes the largest kelp forest in the United States. The MPA network within MBNMS consists of 72 zoned areas and 13 different zone types. Also encompassed in MBNMS is the Monterey Bay Canyon which extends off the coast of Moss Landing about 2.4 miles (almost 4km) in depth at its deepest point. Monterey Bay Canyon is North America's largest underwater canyon and the closest-to-shore deep ocean environment in the continental United States. It is home to one of the most diverse marine ecosystems in the world, including 33 species of marine mammals, 94 species of seabirds, 345 species of fishes, and numerous invertebrates and plants.

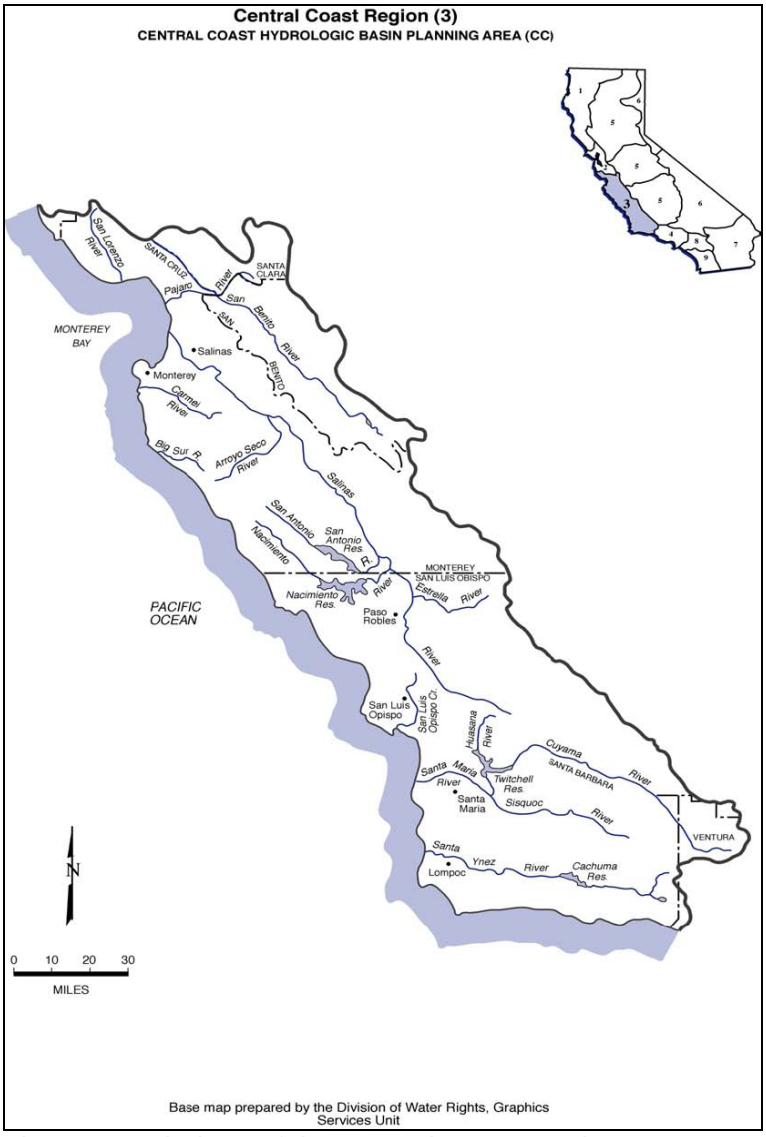

Figure 5.Hydrology of the Central Coast Region.

The Southern Sea Otter is protected under the federal Endangered Species Act as a threatened species. Most of its current range lies within the coastal areas of Region 3. The Southern Sea Otter's population, according to the U.S. Geological Survey, appears to be declining for the

second consecutive year as of 2010, despite decades of federal and state protection and a decade of previous population growth.

Sea otters are active predators that rely on near-shore coastal waters. As a result, they are constantly exposed to many stressors, such as chemicals and pathogens from coastal water pollution, ingestion of toxin-contaminated prey, and reduced food abundance. Chronic exposure to multiple stressors could make otters more susceptible to illness and injury, and lead to a greater chance of death.

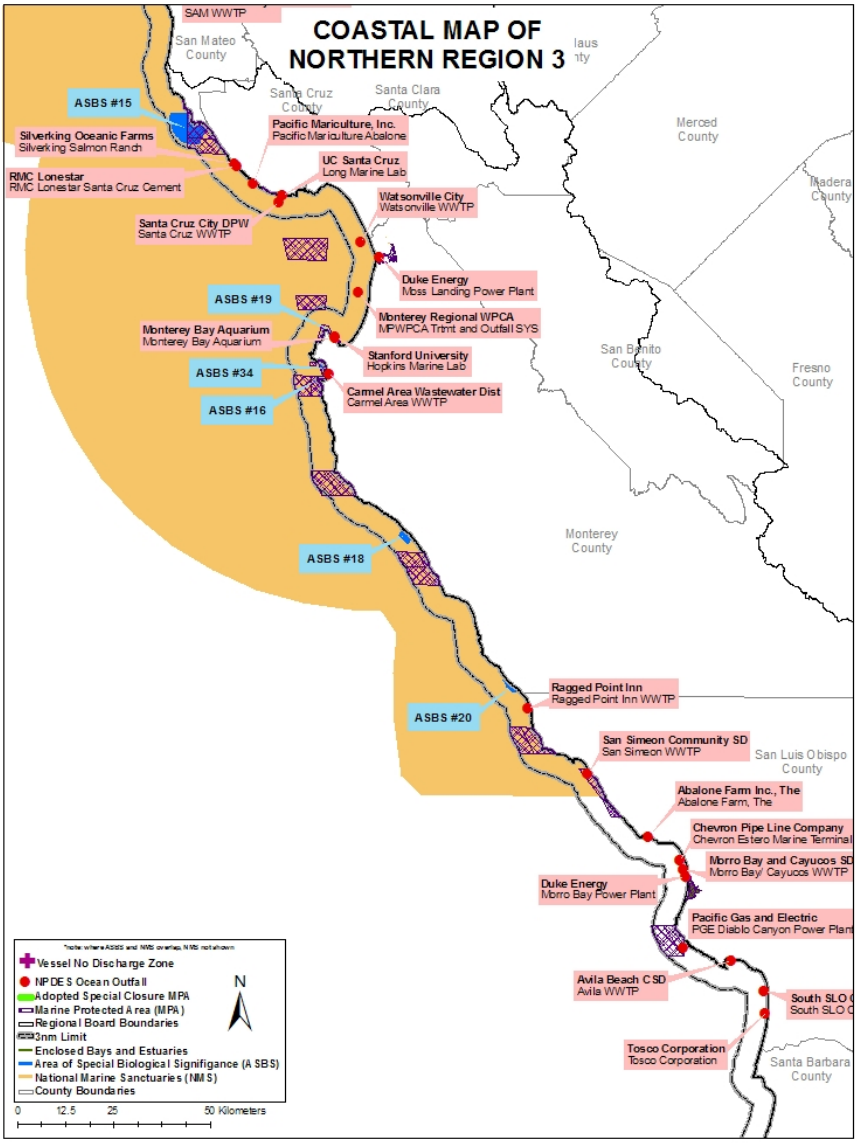

Figure 6. Coastal features of the northern Central Coast Region.

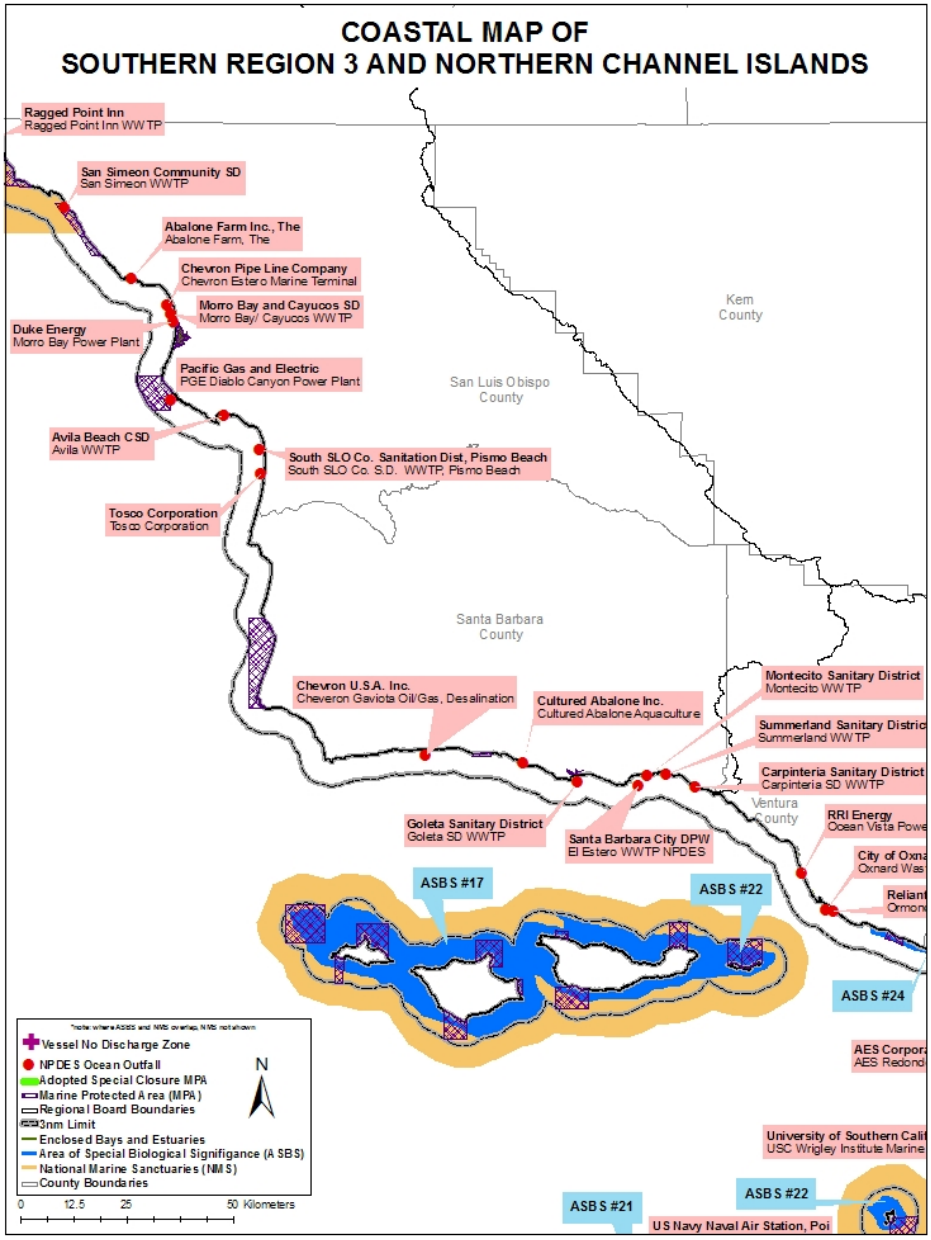

Figure 7. Coastal features of the southern Central Coast Region and the Northern Channel Islands.

The Channel Islands are located off the southern California coast (See Figures 7 and 9) and are comprised of eight islands, separated into two groups: the northern and southern Channel Islands. San Miguel, Santa Rosa, and Santa Cruz Islands are part of the northern Channel Islands and are the three Channel Islands within the Region 3 boundaries. The three islands are part of the Channel Islands National Park, as well as part of CINMS. Santa Cruz Island is California's largest island at 62,000 acres. Found on the island are large colonies of nesting seabirds, breeding seals and sea lions, and other diverse marine animals. The island boasts

one of the largest known sea caves in the world, Painted Cave. Santa Rosa Island is the second largest island off the coast of California at approximately 53,000 acres in size. Santa Rosa Island hosts colonies of seabirds, seals, and sea lions. San Miguel Island is approximately 9,325 acres and includes 27 miles (44 km) of isolated coastline. Up to five different pinniped species and 30,000 individuals can be found at Point Bennett, one of the largest concentrations of wildlife in the world. In the waters surrounding San Miguel, other marine mammals include dolphins and porpoises, gray whales, orcas, and blue whale. Also present in the spring and summer around San Miguel are western gulls, California brown pelicans, cormorants, and black oystercatchers. Cassin's auklets nest on nearby Prince Island.

CINMS, designated in 1980, encompasses approximately 1,470 square-miles (1,110 square-nautical-miles) of water surrounding Anacapa, Santa Cruz, Santa Rosa, San Miguel and Santa Barbara Islands, extending to six nautical-miles offshore around each of the five islands. Changes to and expansion of the boundaries of CINMS are currently being studied. Of the 41 MPAs in the Region, 13 are located in CINMS: 11 marine reserves where all take and harvest is prohibited and two marine conservation areas that allow limited take of lobster and pelagic fish. The MPA network in CINMS encompasses 318 square-miles (241 square-nautical-miles) making it the largest network off of the continental United States.

Included in the MPA network of the entire Central Coast Region, the number of MPA in each county are as follows: two MPAs in San Mateo Country, 17 MPAs in Monterey County, 8 MPAs in San Luis Obispo County, and 14 MPAs in Santa Barbara County (one of which is estuarine). Located in the Central Coast Region are 7 ASBS: Año Nuevo (#15); Pacific Grove (#19); Carmel Bay (#34); Point Lobos (#16); Julia Pfeiffer Burns (#18); San Miguel, Santa Rosa, and Santa Cruz Islands (#17); and Salmon Creek Coast (#20).

4.4 Los Angeles (Region 4)

The Los Angeles Region, (see Figures 8 and 9) comprises all basins draining into the Pacific Ocean between the southeasterly boundary, located in the westerly part of Ventura County, of the watershed of Rincon Creek and a line which coincides with the southeasterly boundary of Los Angeles County from the ocean to San Antonio Peak and follows thence the divide between San Gabriel River and Lytle Creek drainages to the divide between Sheep Creek and San Gabriel River drainages.

The Region encompasses all coastal drainages flowing into the Pacific Ocean between Rincon Point (on the coast of western Ventura County) and the eastern Los Angeles County line, as well as the drainages of five coastal islands (Anacapa, San Nicolas, Santa Barbara, Santa Catalina, and San Clemente). In addition, the Region includes all coastal waters within three miles of the continental and island coastlines. Two large deepwater harbors (Los Angeles and Long Beach Harbors) and one smaller deepwater harbor (Port Hueneme) are contained in the Region. There are small craft marinas within the harbors, as well as tank farms, naval facilities, fish processing plants, boatyards, and container terminals. Several small-craft marinas also exist along the coast (Marina del Ray, King Harbor, Ventura Harbor); these contain boatyards, other small businesses, and dense residential development.

Large, primarily concrete-lined rivers (Los Angeles River, San Gabriel River) lead to unlined tidal prisms which are influenced by marine waters. Salinity may be greatly reduced following rains since these rivers drain large urban areas composed of mostly impermeable surfaces. Some of these tidal prisms receive a considerable amount of freshwater throughout the year from publicly-owned treatment works that discharge tertiary-treated effluent and industrial effluent.

Santa Monica Bay, which includes the Palos Verdes Shelf, dominates a large portion of the open coastal water bodies in the Region. The Region's coastal water bodies also include the areas along the shoreline of Ventura County and the waters surrounding the five offshore islands in the Region.

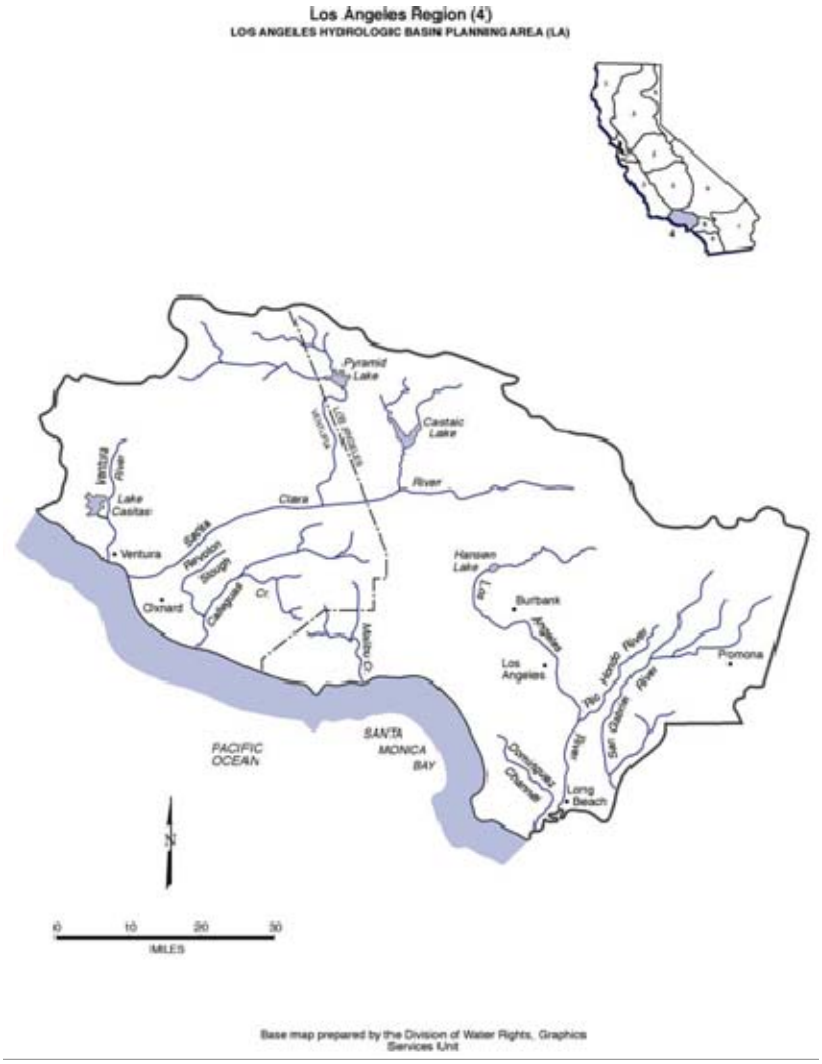

Figure 8.Hydrology of the Los Angeles Region.

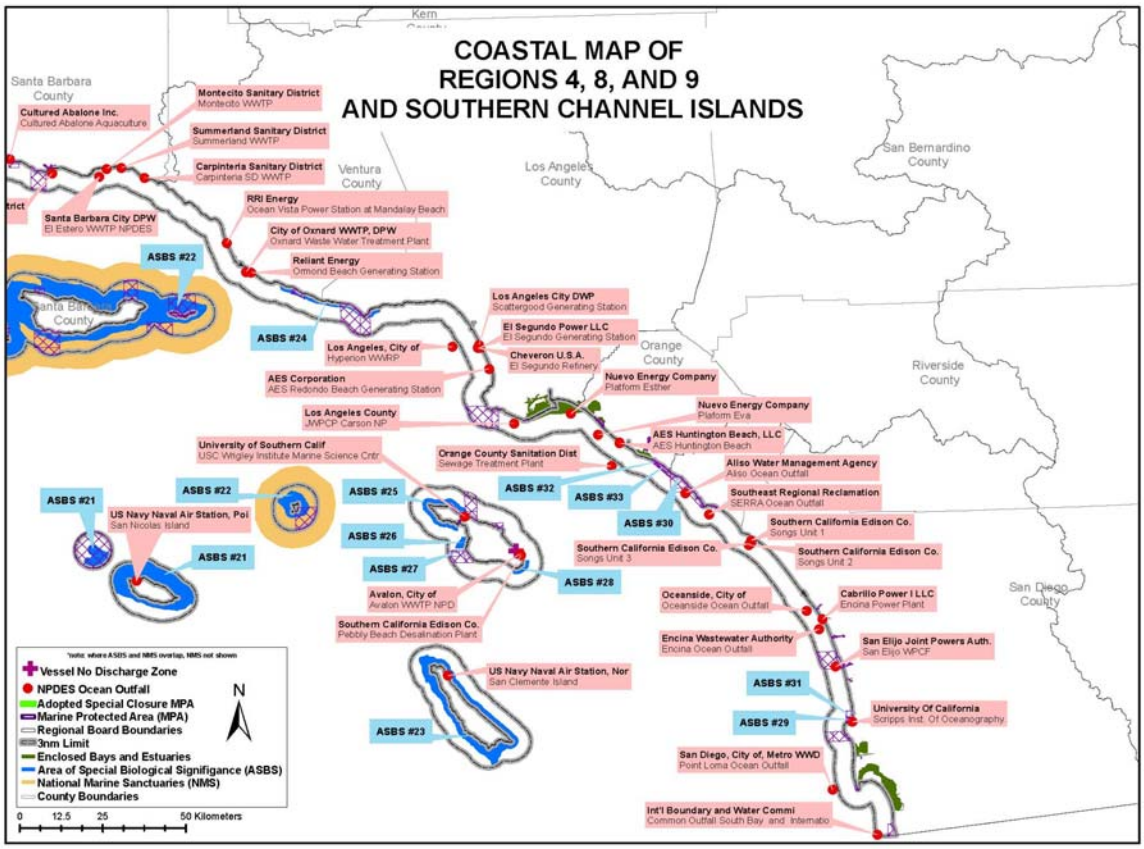

Figure 9. Coastal features of the Southern Channel Islands and Los Angeles, Santa Ana and San Diego Regions.

A total of eight islands make up the Channel Islands, and they are separated into two groups: the northern and southern Channel Islands. Anacapa, Santa Barbara, Santa Catalina, San Nicolas and San Clemente Islands all exist within the Los Angeles Regional boundaries. Anacapa and Santa Barbara Island are two of the islands that make up the Channel Islands National Park. Anacapa consists of three islets, almost five miles long and with a total land area of about one square mile (700 acres). The island includes towering sea cliffs, natural bridges, 130 sea caves, rich kelp forests and tidepools. Thousands of birds use Anacapa as a nesting area; all the islets of Anacapa host the largest breeding colony of western gulls in the world and the steep cliffs of West Anacapa are home to the largest breeding colony of California brown pelicans. California sea lions and harbor seals haul-out and breed on the shores of Anacapa. Santa Barbara Island is the smallest of the Channel Islands at one square mile (639 acres) but is an important seabird nesting site, with 11 nesting species. Thousands of western gulls nest every year on the island, as do brown pelicans, three species of cormorants, three species of storm-petrels, and one of the world's largest colonies of Xantus's murrelets. California sea

lions, harbor seals and northern elephant seals rest and breed on the shores of Santa Barbara Island, and rich kelp forests surround the island. Santa Catalina Island is located just 22 miles (35 km) south-southwest of Los Angeles and encompasses approximately 47,884 acres. Santa Catalina Island is the only Channel Island with a significant permanent civilian settlement, both in the city of Avalon and the unincorporated town of Two Harbors.

San Nicolas Island (SNI) and San Clemente Island (SCI) are both U.S. Navy Islands. SNI is located 60 miles south of Point Mugu. The 14,562 acre island is approximately 90 miles (145 km) long and 3 miles (5 km) wide, and has been owned by the Navy since 1933 as a weapons testing and training facility . The endangered black abalone and several species of pinnipeds utilize the shores and beaches of SNI. SCI, which is approximately 24 miles (39 km) in length and approximately 5 miles (8 km) at its widest point, is the southern-most of the eight California Channel Islands. It lies about 63 miles (101 km) south of Long Beach and 78 miles (126 km) west of San Diego. Since 1934, the island has been owned and operated by various naval commands. SCI and the waters surrounding the island are used and visited by a variety of organizations, including military, civilian government, contractors, environmentalists, civic organizations, fishing vessels, pleasure craft, and others.

Five MPAs are located in Ventura County, and six MPAs are located in Los Angeles county. Eight ASBS are located in the Los Angeles Region: San Nicolas Island and Begg Rock (#21), Santa Barbara and Anacapa Islands (#22), San Clemente Island (#23), Laguna Point to Latigo Point (#24), Northwest Santa Catalina Island (#25), Western Santa Catalina Island (#26), Farnsworth Bank (#27), and Southeast Santa Catalina (#28).

4.5 Santa Ana (Region 8)

The Santa Ana Region (See Figures 9 and 10), comprises all basins draining into the Pacific Ocean between the southeasterly boundary of the Los Angeles region and a line which follows the drainage divide between Muddy and Moro Canyons from the ocean to the summit of San Joaquin Hills; thence along the divide between lands draining into Newport Bay and into Laguna Canyon to Niguel Road; thence along Niguel Road and Los Aliso Avenue to the divide between Newport Bay and Aliso Creek drainages; thence along that divide and the southeasterly boundary of the Santa Ana River drainage to the divide between Baldwin Lake and Mojave Desert drainages; thence along that divide to the divide between Pacific Ocean and Mojave Desert drainages.

The Santa Ana Region is the smallest of the nine Regions in the state (2,800 square miles) and is located in southern California, roughly between Los Angeles and San Diego. Although small geographically, the Region's four-plus million residents (1993 estimate) make it one of the most densely populated Regions. The climate of the Santa Ana Region is classified as Mediterranean: generally dry in the summer with mild, wet winters. The average annual rainfall in the Region is about fifteen inches, most of it occurring between November and March. The enclosed bays in the Region include Newport Bay, Bolsa Bay (including Bolsa Chica Marsh), and Anaheim Bay. Principal rivers include Santa Ana, San Jacinto and San Diego. Lakes and reservoirs include Big Bear Lake, Hemet Lake, Lake Mathews, Canyon Lake, Lake Elsinore, Santiago Reservoir, and Perris Reservoir.

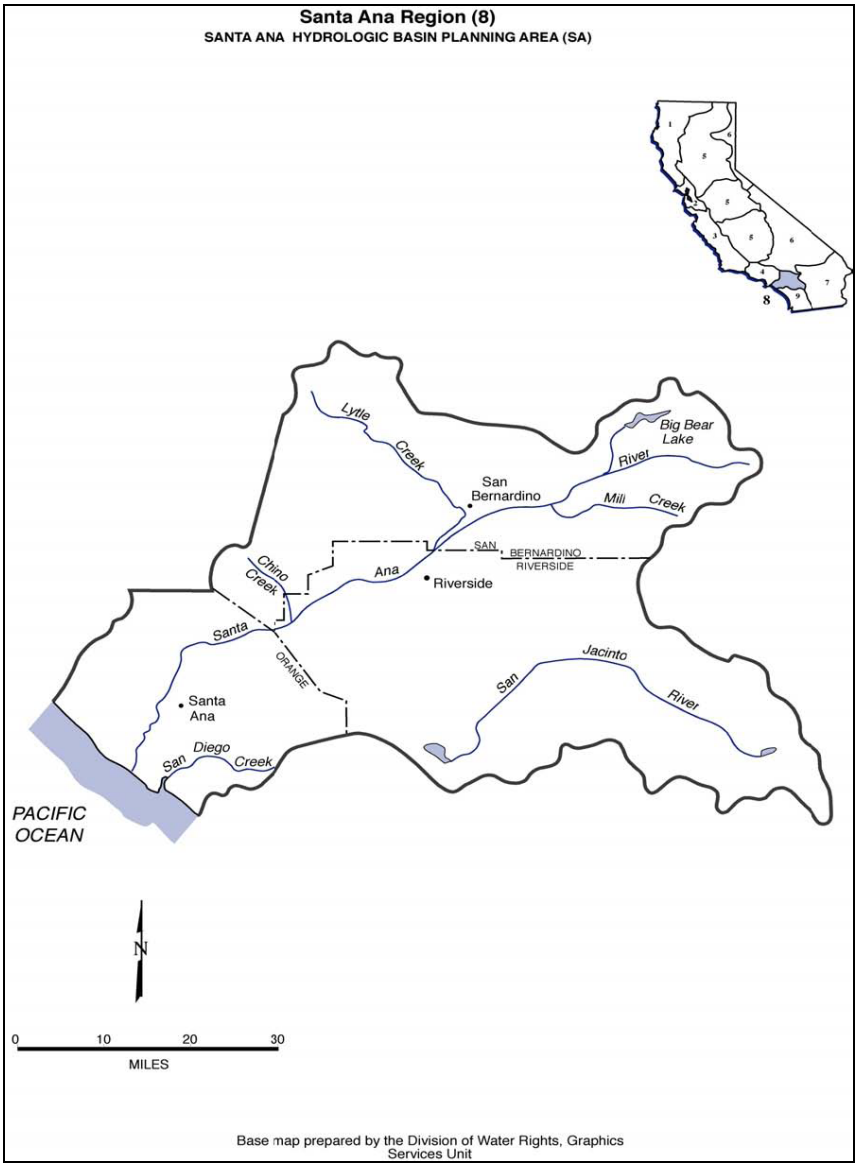

Figure 10.Hydrology of the Santa Ana Region.

Eight MPAs are located in Orange County, two of which are estuarine. Orange County is located within both the Santa Ana and San Diego Regional boundaries. Two ASBS are located in the Santa Ana Region: Robert E. Badham (#32) and Irvine Coast (also located in the San Diego Region) (#33).

4.6 San Diego (Region 9)

The San Diego Region (see Figures 9 and 11) comprises all basins draining into the Pacific Ocean between the southern boundary of the Santa Ana Region and the California-Mexico boundary.

The San Diego Region is located along the coast of the Pacific Ocean from the Mexican border to north of Laguna Beach. The Region is rectangular in shape and extends approximately 80-

miles along the coastline and 40 miles east to the crest of the mountains. The Region includes portions of San Diego, Orange, and Riverside Counties. The population of the Region is heavily concentrated along the coastal strip. Two harbors, Mission Bay and San Diego Bay, support major recreational and commercial boat traffic. Coastal lagoons are found along the San Diego County coast at the mouths of creeks and rivers.

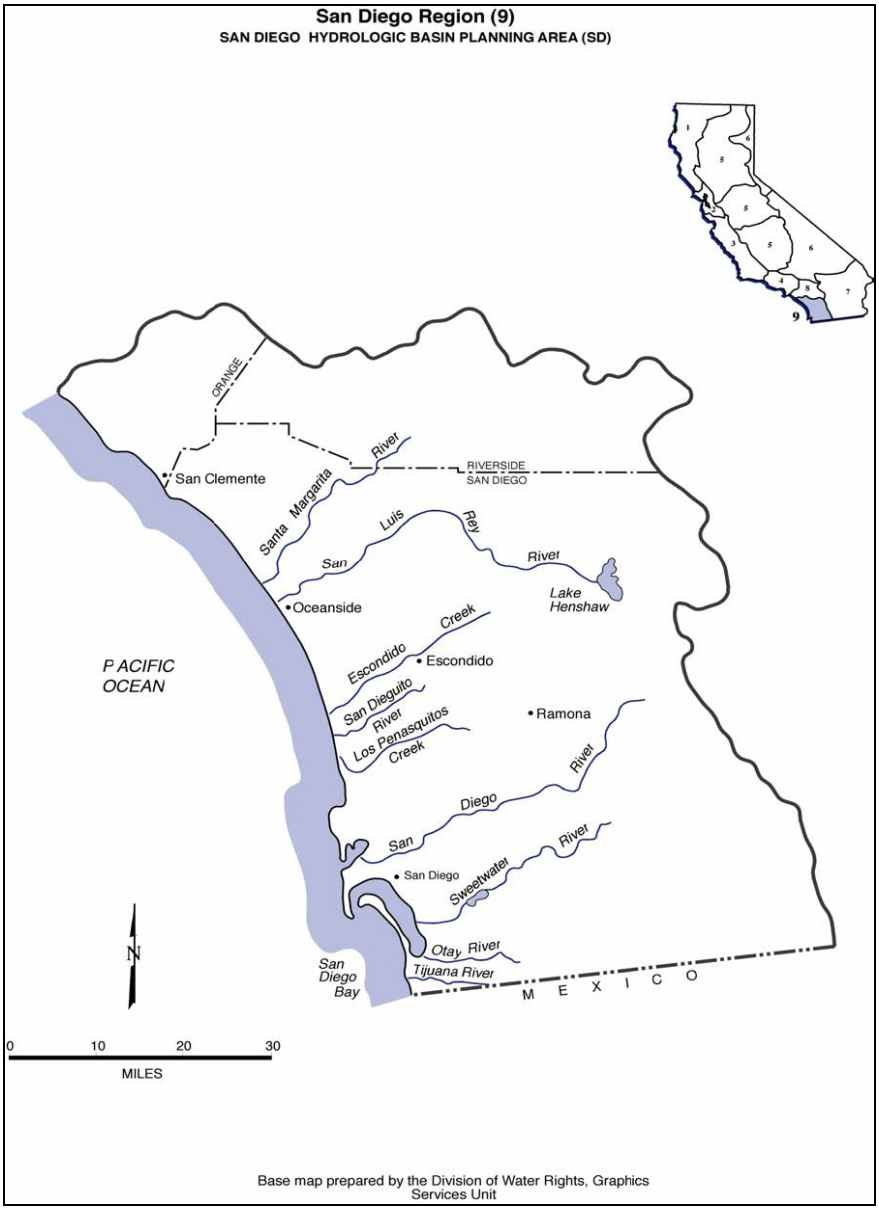

Figure 11.Hydrology of the San Diego Region.

San Diego Bay is long and narrow, 15 miles in length and approximately one mile across. A deep-water harbor, San Diego Bay has experienced waste discharge from former sewage outfalls, industries, and urban runoff. Up to 9,000 vessels may be moored there. San Diego

Bay also hosts four major U.S. Navy bases with approximately 80 surface ships and submarines. Coastal waters include bays, harbors, estuaries, beaches, and open ocean. Deep draft commercial harbors include San Diego Bay and Oceanside Harbor and shallower harbors include Mission Bay and Dana Point Harbor. Tijuana Estuary, Sweetwater Marsh, San Diego River Flood Control Channel, Kendal-Frost Wildlife Reserve, San Dieguito River Estuary, San Elijo Lagoon, Batiquitos Lagoon, Agua Hedionda Lagoon, Buena Vista Lagoon, San Luis Rey Estuary, and Santa Margarita River Estuary are the important estuaries of the Region.

Eight MPAs are located in Orange County, two of which are estuarine. Orange Country is located within both the Santa Ana and San Diego Regional boundaries. Ten MPAs are located in San Diego County, four of which are estuarine. Four ASBS are located in the San Diego Region: Irvine Coast (also located in the Santa Ana Region) (#33), La Jolla (#29), Heisler Park (#29), and San Diego-Scripps (#31).

Managed, Threatened, and Endangered Species
California's ocean waters and shore line are home to a wide variety of marine mammals, fish and birds. A variety of federal and state listed threatened and endangered species may be found in the ocean waters of California, including the following;

White abalone - *Haliotissorenseni*
Black abalone - *Haliotiscracherodii*
California black rail *Laterallusjamaicensiscoturniculus*
Chinook salmon-*Oncorhynchustshawytscha*
Coho salmon-*Oncorhynchuskisutch*
Steelhead-*Oncorhynchusmykiss*
Eulachon – *Thaleichthyspacificus*
Tidewater goby *Eucyclogobiusnewberryi*
Green sea turtle *Cheloniamydas*
Loggerhead sea turtle – *Carettacaretta*
Olive Ridley sea turtle *Lepidochelysolivacea*
Leatherback sea turtle *Dermochelyscoriacea*
Short-tailed albatross *Phoebastriaalbatrus*
California condor *Gymnogypscalifornianus*
Green sturgeon – *Acipensermedirostris*
California clapper rail *Ralluslongirostrisobsoletus*
Light-footed clapper rail *Ralluslongirostrislevipes*
Western snowy plover *Charadriusalexandrinusnivosus*
Marbled murrelet*Brachyramphus marmoratus80*
California least tern *Sterna antillarum browni79*
Southern sea otter *Enhydralutrisnereis*
Guadalupe fur seal *Arctocephalustownsendi*
Stellar sea lion *Eumetopiasjubatus*
Sei whale - *Balaenoptera borealis*
Blue whale - *Balaenopteramusculus*
Fin whale - *Balaenopteraphysalus*
Humpback whale - *Megapteranovaeangliae*
Right whale *Eubalaena japonica102*
Sperm whale - *Physetermacrocephalus*
Killer whale - *Orcinus orca*

Source - California Department of Fish and Game, *State and Federally Listed Endangered and Threatened Animals of California"* Biogeographic Data Branch, California Natural Diversity Database, January 2011

In addition there are many specially protected and/or managed species of fish such as Garibaldi, Giant Seabass, Gulf and Broomtail Grouper, White Shark, Bronze spotted rockfish, Canary rockfish, Cowcod, Yelloweye rockfish and other species that cannot be taken either for recreational or commercial fishing purposes. As described in Section XX to better protect and support the natural growth and propagation of marine fish in near shore waters, the California Fish and Game Commission has designated approximately 85 MPAs within ocean waters of California. These MPAs consist of marine reserves, marine conservation areas and special closures within the southern, central and north central coast of California. Currently, additional efforts are underway to establish MPAs for the north coast coastal waters and San Francisco Bay. Existing MPAs in each region are described above.

Environmental Baseline

There are approximately 71 NPDES wastewater discharges along the California coast. Of these discharges, approximately 35 discharge more than 10 million gallons per day (MGD) and 36 discharge less than 10 MGD. Significant discharges by flow are summarized below.

Table 1. Summary of significant wastewater discharges.

Region	No. of Discharges > 100 MGD	No. of Discharges > 10 and < 100 MGD	No. of Discharges < 10 MGD
North Coast			9
San Francisco		1	2
Central Coast	3	7	17
Los Angeles	7	1	6
Santa Ana	2		2
San Diego	3	5	1

MGD = million gallons per day

It should be noted that most of the wastewater discharges less than 10 MGD discharge within one nautical mile from shore, and many of those discharges are actually discharging on the shoreline.

Phase I MS4 (storm water) dischargers are medium and large cities or certain counties with populations of 100,000 or more. Phase II dischargers are small MS4s serving populations less than 100,000 persons and are typically located in urbanized areas. Generally, Phase I MS4s are covered by individual permits and Phase II MS4s are covered by a general permit. It is estimated that there are approximately 542 storm water ocean outfalls exceeding 36 inches, approximately 253 of which belong to Phase I MS4 permittees and approximately 198 of which belong to Phase II MS4 permittees. There are approximately one dozen (12) industrial storm water discharges to the ocean.

There are two known ocean-side golf courses in North Coast Region: Shelter Cove Golf Course in Whitehorn and Sea Ranch Golf Links in Sea Ranch Village. Approximately 44 miles of coastline in this region is used for agriculture. (Coastal agricultural land in California has been estimated by the State Water Board. A detailed summary of the estimates are described in Section 3.1 of this document.) Within the San Francisco Region, there are 5 known ocean-side golf courses: Golden Gate Park and Lincoln Park Municipal Golf Courses in San Francisco, Olympic Golf Club in Daly City, Sharp Park Golf Course in Pacifica, and Half Moon Bay Golf Links in Half Moon Bay. Approximately 17 miles of coastline in the San Francisco Region is used for agriculture. There are nine known ocean-side golf courses in the Central Coast Region: Cypress Point and Spy Glass Hill Golf Courses in Carmel, Le Sage Riviera/Pismo Beach State Golf Course in Pismo Beach; Spanish Bay Resort, Monterey Peninsula Dunes, and Pacific Grove Municipal Golf Courses in Pacific Grove; Pebble Beach Golf Course in Carmel;

San Luis Bay Golf Club in Avila Beach; and Sandpiper Golf Course in Santa Barbara. Approximately 52 miles of coastline in the Central Coast Region is used for agriculture. Within the Los Angeles Region, golf courses located on or near the coast consist of the Palos Verdes Country Club, Los Verdes Golf Course, Terranea Resort, and Trump National Golf Club all located in the Rancho Palos Verdes area. Two of these are situated on the ocean: Trump National Golf Club Los Angeles and Terranea Resort. Approximately six miles of coastline in Los Angeles Region is used for agriculture. Pelican Hill Golf Club, located in Newport, is the only ocean-side golf course in the Santa Ana Region. There are three ocean-side golf courses in the San Diego Region: Monarch Beach Golf Links in Dana Point, Torrey Pines Municipal Golf Course in Torrey Pines, and Sea N Air Golf Course on Coronado Island.

5 CEQA Review and Analysis

This section presents the analyses required under CEQA when the Water Board adopts a Basin Plan amendment under the Water Board's certified regulatory program (California Public Resources Code § 15251[g]). The Water Board is the Lead Agency responsible for evaluating the potential environmental impacts of Basin Plan amendments. Staff prepared the required environmental documents, which include an Environmental Checklist Form (Appendix A of this Staff Report) and a written report (this Staff Report) that disclose any potentially significant environmental impacts of the Basin Plan amendment. This Staff Report, including the CEQA checklist and analyses, constitute a substitute environmental document. To satisfy CEQA's recommendation to engage the public and interested parties in consultation about the scope of the environmental analysis, a scoping meeting was held on March 17, 2011.

5.1 Project Title

The title of this project is:*Implementation of State Water Board Resolutions 2010-0057 and 2011-0013 Designating State Water Quality Protection Areas to Protect State Marine Protected Areas.*

5.2 Project and Purpose

The Ocean Plan does not currently contain specific requirements for establishing SWQPAs that are not designated as ASBS nor does the Ocean Plan contain requirements that address MPA. This proposed project attempts to resolve this issue through the amendment of the Ocean Plan. The proposed amendments would if adopted:

- Establish a second category of SWQPAs that would be less restrictive than the provisions associated with existing SWQPA -ASBS while providing a higher level of protection than the California Ocean Plan provisions that apply to all ocean waters of the state. This new category would be identified as SWQPAs– General Protection;
- Establish provisions for siting and designating SWQPAs – General Protection; and
- Establish provisions and prohibitions that protect water quality in SWQPAs – General Protection from certain types of existing and future point and nonpoint discharges while allowing some low threat discharges to continue without additional conditions.

The proposed project would not affect existing Ocean Plan prohibitions protecting Areas of Special Biological Significance, a unique class of SWQPAs or designate and adopt new SWQPAs. The proposed project if adopted does not designate new SWQPAs. Designation of specific areas as SWQPAs could be taken under future consideration by the State Water Board would only after the proposed process for designating these areas is completed.

5.3 Necessity and Need for Project

As described below, State Water Board Resolution 2010-0057 specific direction to staff for developing a strategy for designating SWQPAs. The proposed project was identified as a very high priority issue in the 2011-2013 Triennial Review Work Plan. The draft proposed amendments are presented in Section 7.

5.4 Lead Agency

The State Water Board is the lead agency on this project.

5.5 Contact Person

Primary Contact for this project is:

Chris Beegan, Engineering Geologist
State Water Resources Control Board - Division of Water Quality
1001 I Street Sacramento, California 95814
Office Phone – 916. 341. 5577
Email - cbeegan@waterboards.ca.gov

5.6 Project Background

5.6.1 Marine Managed Areas

In the past, marine managed areas (MMAs) were designated by state agencies with little or no, consistency and basis between the designating and managing agencies which includes Fish and Game Commission, State Park and Recreation Commission, State Water Resources Control Board, the Department of Fish and Game and the Department of Parks and Recreation. Nor was a systematic process in place to evaluate the effectiveness of the MMAs at multiple scales to adequately protect and maintain these unique areas and the natural resources they support. Accordingly eighteen different types of MMAs were designated by administrating agencies. The Marine Managed Areas Improvement Act was intended to more effectively organize, designate and manage the states many different marine managed areas and provide some consistency among the state agencies that administer manage and designate the areas. The Marine Managed Areas Improvement Act defines a marine managed area as a named, discrete geographic marine or estuarine area along the California coast designated by law or administrative action, and intended to protect, conserve, or otherwise manage a variety of resources and their uses. Under the Marine Managed Areas Improvement Act, MMAs were organized into six categories:

- State Marine Reserve (SMR)
- State Marine Park (SMP)
- State Marine Conservation Area (SMCA)
- State Water Quality Protection Area (SWQPA)
- State Marine Cultural Preservation Area (SMCPA)
- State Marine Recreational Management Area (SMRMA)

The State Water Boards designating authority encompasses only SWQPAs, which are intended to protect and maintain natural water quality to support unique and valuable marine fauna flora and associated communities. The Public Resources Code defines a SWQPA as

> *"a nonterrestrial marine or estuarine area designated to protect marine species or biological communities from an undesirable alteration in natural water quality, including, but not limited to, areas of special biological significance that have been designated by the State Water Resources Control Board…"*

The Public Resources Code also states that within

> *"a state water quality protection area, waste discharges shall be prohibited or limited by the imposition of special conditions in accordance with the Porter-Cologne Water Quality Control Act….".*

ASBS are SWQPAs that require special protections. The Ocean Plan requires protection of species or biological communities in ASBS, and also prohibits waste discharges in ASBS. Discharges near an ASBS shall be at a sufficient distance to assure natural water quality. Appendix IV of the 2009 Ocean Plan provides procedures for the nomination and designation of ASBS. The Ocean Plan does not contain specific requirements for SWQPAs that are not ASBS.

5.6.2 MPAs

The Marine Managed Areas Improvement Act also defines a MPA as a named, discrete geographic marine or estuarine area 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 that has been designated by law or administrative action to protect or conserve marine life and habitat. MPAs are primarily intended to protect or conserve marine life and habitat, and are therefore a subset of MMAs. MPAs include only those MMAs classified as State Marine Reserves, State Marine Parks and State Marine Conservation Areas. These MPAs are defined within California Public Resources Code Section 36700 as:

A "state marine reserve" is a nonterrestrial marine or estuarine area that is designated so the managing agency may achieve one or more of the following:

1. *Protect or restore rare, threatened, or endangered native plants, animals, or habitats in marine areas.*
2. *Protect or restore outstanding, representative, or imperiled marine species, communities, habitats, and ecosystems.*
3. *Protect or restore diverse marine gene pools.*
4. *Contribute to the understanding and management of marine resources and ecosystems by providing the opportunity for scientific research in outstanding, representative, or imperiled marine habitats or ecosystems.*

A "state marine park" is a nonterrestrial marine or estuarine area that is designated so the managing agency may provide opportunities for spiritual, scientific, educational, and recreational opportunities, as well as one or more of the following:

1. *Protect or restore outstanding, representative, or imperiled marine species, communities, habitats, and ecosystems.*
2. *Contribute to the understanding and management of marine resources and ecosystems by providing the opportunity for scientific research in outstanding representative or imperiled marine habitats or ecosystems.*
3. *Preserve cultural objects of historical, archaeological, and scientific interest in marine areas.*
4. *Preserve outstanding or unique geological features.*

A "state marine conservation area" is a nonterrestrial marine or estuarine area that is designated so the managing agency may achieve one or more of the following:

1. *Protect or restore rare, threatened, or endangered native plants, animals, or habitats in marine areas.*
2. *Protect or restore outstanding, representative, or imperiled marine species, communities, habitats, and ecosystems.*
3. *Protect or restore diverse marine gene pools.*
4. *Contribute to the understanding and management of marine resources and ecosystems by providing the opportunity for scientific research in outstanding, representative, or imperiled marine habitats or ecosystems.*
5. *Preserve outstanding or unique geological features.*

6. *Provide for sustainable living marine resource harvest.*

State Marine Reserves are the most stringently protected as described in Public Resources Code Section 36710 that states in part:

> *In a state marine reserve, it is unlawful to injure, damage, take, or possess any living geological, or cultural marine resource, except under a permit or specific authorization from the managing agency for research, restoration, or monitoring purposes. While, to the extent feasible, the area shall be open to the public for managed enjoyment and study, the area shall be maintained to the extent practicable in an undisturbed and unpolluted state. Access and use for activities including, but not limited to, walking, swimming, boating, and diving may be restricted to protect marine resources. Research, restoration, and monitoring may be permitted by the managing agency……..*

Within State Marine Parks and Conservation Areas, consumptive and nonconsumptive may be allowed as described in Public Resources Code Section 36710:

> *In a state marine park, it is unlawful to injure, damage, take, or possess any living or nonliving 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 are allowed, including scientific collection with a permit, research, monitoring, and public recreation, including recreational harvest, unless otherwise restricted. Public use, enjoyment, and education are encouraged, in a manner consistent with protecting resource values.*
>
> *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, 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.*

The Marine Life Protection Act requires State agencies responsible for designating and managing MMAs redesign California's system of MPAs to function as a network for improving the protection of marine life, habitats, and marine ecosystems. The California Fish & Game Commission has adopted many MPAs in the Central Coast, North Central Coast, and the South Coast. Additional MPAs are under consideration for the North Coast.

In densely populated areas such as the Southern California Bight the development of candidate sites for consideration as MPA is especially challenging due to the number of highly populated areas along the coast line and the diverse uses currently allowed including existing recreational and commercial fishing, and other regulated and beneficial actions such as beach replenishment, dredging and disposal, cooling water intakes and waste water discharges. The MPA designation process was not intended to interfere with existing permitted activities except those under the direct authority of the Fish and Game Commission, primarily commercial and recreational fishing. Those activities permitted by other agencies would be unaffected by the MPA designation and as a result planned around or avoided in general (September 25, 2009 letter from Deputy Attorney General Hayley Petersen to Assistant Secretary for Ocean and Coastal Policy Brian Baird, MLPA I Team memo to MLPA Blue Ribbon Task Force, 2009.)

Those MPAs established in ocean waters are identified in Table 2. Also included in Table 2 are SWQPAs designated as ASBS to protect natural water quality that encompass MPAs.

Table 2. Marine Protected Areas and State Water Quality Protection Areas designated within Ocean Waters of California. Note – Special closures and estuarine MPAs are not included.

County	MPA	SWQPA
Humboldt	Punta Gorda SMR	
Mendocino	MacKerricher SMCA	
	Point Cabrillo SMCA	
	Van Damme SMCA	
	Point Arena SMR	
	Point Arena SMCA	
	Sea Lion Cove SMCA	
	Saunders Reef SMCA	Saunders Reef ASBS
Sonoma	Del Mar Landing SMR	Del Mar Landing ASBS
	Stewarts Point SMR	
	Stewarts Point SMCA	
	Salt Point SMCA	
	Gerstle Cove SMR	Gerstle Cove ASBS
	Russian River SMRMA	
	Russian River SMCA	
	Bodega Head SMR	Bodega Head ASBS
	Bodega Head SMCA	
	Estero de San Antonio State Marine Recreational Management Area	
	Point Reyes SMR	Point Reyes Headlands ASBS
	Point Reyes SMCA	
	Estero Americano SMRMA	
Napa	Estero de Limantour SMR	
	Drake's Estero State Marine Conservation Area	
	Duxbury Reef State Marine Conservation Area	Duxbury Reef ASBS
San Francisco	North Farallon Islands State Marine Reserve	Farallon Islands ASBS
	Southeast Farallon Island State Marine Reserve	Farallon Islands ASBS
	Southeast Farallon Island State Marine Conservation	Farallon Islands ASBS
San Mateo	Montara State Marine Reserve	James V. Fitzgerald ASBS
	Pillar Point State Marine Conservation Area	
	Año Nuevo State Marine Conservation Area	Ana Nuevo ASBS
Santa Cruz	Greyhound Rock State Marine Conservation Area	
	Natural Bridges State Marine Reserve	
Monterey	Soquel Canyon State Marine Conservation Area	
	Portuguese Ledge State Marine Conservation Area	
	Edward F. Ricketts State Marine Conservation Area	
	Lovers Point State Marine Reserve	
	Pacific Grove Marine Gardens State Marine Conservation Area	Pacific Grove ASBS
	Asilomar State Marine Reserve	
	Carmel Pinnacles State Marine Reserve	
	Carmel Bay State Marine Conservation Area	Carmel Bay ASBS
	Point Lobos State Marine Reserve	Point Lobos ASBS
	Point Lobos State Marine Conservation Area	
	Point Sur State Marine Reserve	
	Point Sur State Marine Conservation Area	
	Big Creek State Marine Reserve	
	Big Creek State Marine Conservation Area	

San Luis Obispo	Piedras Blancas State Marine Reserve	
	Piedras Blancas State Marine Conservation Area	
	White Rock (Cambria) State Marine Conservation Area	
	Cambria State Marine Conservation Area	
	Morro Bay State Marine Recreational Management Area	
	Morro Bay State Marine Reserve	
	Point Buchon State Marine Reserve	
	Point Buchon State Marine Conservation Area	
Santa Barbara	Vandenberg State Marine Reserve	
	Refugio State Marine Conservation Area	
	Richardson Rock State Marine Reserve (San Miguel Island)	San Miguel Santa Rosa Santa Cruz Island ASBS
	Harris Point State Marine Reserve (San Miguel Island)	San Miguel Santa Rosa Santa Cruz Island ASBS
	Judith Rock State Marine Reserve (San Miguel Island)	San Miguel Santa Rosa Santa Cruz Island ASBS
	Carrington Point State Marine Reserve (Santa Rosa Island)	San Miguel Santa Rosa Santa Cruz Island ASBS
	Skunk Point State Marine Reserve (Santa Rosa Island)	San Miguel Santa Rosa Santa Cruz Island ASBS
	South Point State Marine Reserve (Santa Rosa Island)	San Miguel Santa Rosa Santa Cruz Island ASBS
	Painted Cave State Marine Conservation Area (Santa Cruz Island)	San Miguel Santa Rosa Santa Cruz Island ASBS
	Gull Island State Marine Reserve (Santa Cruz Island)	San Miguel Santa Rosa Santa Cruz Island ASBS
	Scorpion State Marine Reserve (Santa Cruz Island)	San Miguel Santa Rosa Santa Cruz Island ASBS
	Santa Barbara Island State Marine Reserve	Santa Barbara/Anacapa Island ASBS
Ventura	Anacapa Island State Marine Conservation Area	Santa Barbara/Anacapa Island ASBS
	Anacapa Island State Marine Reserve	Santa Barbara/Anacapa Island ASBS
	Footprint (Anacapa Channel) State Marine Reserve	Santa Barbara/Anacapa Island ASBS
	Big Sycamore Canyon State Marine Reserve	Laguna Point to Latigo Point ASBS
Los Angeles	Abalone Cove State Marine Park	
	Point Dume SMR	Laguna Point to Latigo Point ASBS
	Point Dume SMCA	Laguna Point to Latigo Point ASBS
	Point Fermin State Marine Park	
	Catalina Marine Science Center State Marine Reserve (Catalina Island)	
	Farnsworth Bank State Marine Conservation Area	Farnsworth Bank ASBS
	Lover's Cove State Marine Conservation Area	
Orange	Robert E. Badham State Marine Conservation Area	Robert E. Badham ASBS
	Crystal Cove State Marine Conservation Area	
	Irvine Coast State Marine Conservation Area	Irvine Coast ASBS
	Laguna Beach State Marine Conservation Area	
	Heisler Park State Marine Reserve	Heisler Park ASBS
	South Laguna Beach State Marine Conservation Area	
	Niguel State Marine Conservation Area	
	Dana Point State Marine Conservation Area	
	Doheny State Marine Conservation Area	
	Doheny Beach State Marine Conservation Area	
San Diego	Encinitas State Marine Conservation Area	
	Cardiff-San Elijo State Marine Conservation Area	
	San Diego-Scripps State Marine Conservation Area	San Diego - Scripps ASBS
	La Jolla State Marine Conservation Area	San Diego - LaJolla ASBS
	Mia J. Tegner State Marine Conservation Area	

5.6.3 Protecting Water Quality within MPAs

State Water Board staff and other scientists appointed by the Director of the Department of Fish and Game participated in the Marine Life Protection Act Master Plan Science Advisory Team (SAT). The SAT provided guidance to the Marine Life Protection Act Blue Ribbon Task Force on a variety of scientific issues associated with the selection and siting of MPAs including those relating to water quality. The SAT acknowledged that marine water quality would play a role in the success of MPAs and provide a series of recommendations. The SAT has recommended that MPAs be sited so as to avoid areas of poor or threatened water quality, such as areas near power plant intake, areas receiving storm runoff from developed watersheds, and areas near municipal sewage or industrial wastewater outfalls.

Of these three water quality threats, the SAT identified effluent from municipal sewage and industrial wastewater outfalls as the least concern. Nevertheless, effluent may still pose a risk. To address this risk, the SAT has suggested that the Regional Water Quality Control Boards (Regional Water Boards) could recommend to the State Water Board the designation of additional SWQPAs over existing MPAs, or identify as a priority and complete the identification and allocation of total maximum daily loads that could restore water quality in MPAs.

Currently the State and Regional Boards have only limited flexibility for protecting water quality in sensitive or unique areas within ocean waters. The alternatives available include:

- State Water Board designating the MPA as an ASBS;
- State and Regional Water Boards relying upon existing Ocean Plan objectives and requirements that apply to all ocean waters of the State;
- Regional Boards adopting permit limits and conditions that are more stringent than those contained in the Ocean Plan on a permit by permit basis

Designating an MPA as an ASBS provides a very high level of protection do to special provisions that prohibit the discharge of all waste in or near these areas. The State Water Board has designated many ASBS over State Marine Reserves to provide greater protection from discharges and to a lesser extent other MPAs as well. Establishing ASBS with the associated discharge prohibition in densely populated areas poses significant challenges and may not be warranted for all MPAs. Where large wastewater and storm water outfalls are situated, implementing discharge prohibitions could cause significant environmental and socioeconomic impacts. Existing municipal sewage and industrial wastewater outfalls regulated under NPDES permits represent an important public service and substantial infrastructure. Prohibitions or limitations that would require the relocation or expansion of this infrastructure including treatment works, outfall, conveyance system and land to comply with discharge prohibitions or other limitation potentially imposed to protect a MPA could result in significant disruption of sewer services and require substantial rate increases to offset in part the large costs associated with relocation with potentially low cost benefit. Construction associated with these efforts could pose significant impacts to air, water quality and biological resources and jeopardize habitat in other areas along the coast thru new construction. In addition, those efforts by municipal waste water permittees to implement the State Water Boards Recycled Water Policy approved thru the adopted of Resolution 2009-0011 could be jeopardized by the new and unanticipated permit conditions

Storm water conveyance systems minimize flooding in built up areas. Relocation of these outfalls and conveyance systems may require substantial and costly construction as well.

Another option is to rely on the Ocean Plan requirements that regulate dischargers into ocean waters of the State. Discharges that meet existing narrative and numeric objectives are protective of a variety of beneficial uses designated for ocean waters including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture, rare and endangered species; marine habitat; fish migration; fish spawning and shellfish harvesting. Though the objectives and conditions contained in Ocean Plan are protective of water quality this option provides no additional level of protection for ecologically sensitive habitats beyond the status quo.

The coastal Regional Water Boards also have the authority to derive more stringent permit limits than water quality based effluent limits based upon the Ocean Plan. The coastal Regional Water Boards could also adopt prohibitions or other special protections to provide a higher level of protection for areas impacted by discharges on a permit by permit basis. However these actions may also require existing facilities construct new treatment works or relocate outfalls or conveyance systems and best management practices to meet the revised limits. Much like the discharge prohibition associated with ASBS this option could result in significant expenditures by public agencies and potentially cause significant impacts to air, water quality and biological resources and jeopardize habitat in other areas along the coast through new construction.

Recognizing the limitations associated with the options described above, a solution is to develop a second category of SWQPAs (in addition to those designated as ASBS) that would provide an intermediate level of protection appropriate for State Marine Conversation Areas, State Marine Parks and other areas, where recreational and or commercial take is allowed and where a discharge prohibition is unnecessary and or not feasible. This option could allow some existing uses to continue and discourage new high risk discharges.

The State Water Board directed staff in Resolution No. 2010-0057 and Resolution No. 2011-0013 to present a proposed amendment to the Ocean Plan to include criteria to be considered when establishing SWQPAs at existing MPAs. The resolution included among other points, specific direction stating:

- For SWQPAs, that are not ASBS, the Board directs staff to consider the following approach in developing new SWQPAs. The Board further directs staff to propose amendments to the Ocean Plan consistent with this approach, as appropriate:
- SWQPAs should not be established over existing wastewater outfalls or the zone of initial dilution (ZID) of such existing wastewater outfalls;
- Where new SWQPAs are established in the vicinity of existing municipal wastewater outfalls, there shall be no new or modified limiting conditions or prohibitions for the SWQPAs relative to those wastewater outfalls;
- Regulatory requirements for discharges from existing treated municipal wastewater outfalls shall be derived from the California Ocean Plan;
- No new wastewater outfalls may be established within SWQPAs;
- Conditions to protect water quality in SWQPAs would be required to address storm water and nonpoint sources; and
- Assure that the designation of any new SWQPA would not include a condition to move existing wastewater outfalls, which represent an important public service and substantial infrastructure.

- Directs staff to propose an amendment to the Ocean Plan clarifying that no new or modified limitations, substantive conditions, or prohibitions will be imposed upon existing municipal wastewater discharge outfalls based on the designation of MPAs other than State Marine Reserves.
- Directs staff to include issues described in this resolution in the current Ocean Plan Triennial Review, and further directs staff to prepare amendments consistent with resolved paragraphs 3 and 4 for State Water Board consideration within 18 months.

The direction provided by the State Board in Resolution 2010-57 serves as the basis for the proposed amendments described in Section 5.4.

5.7 Project Issues and Alternatives

This section describes the key policy related issues identified and alternatives that have been considered by staff during the development of the proposed amendments. The key issues evaluated are:

1. No Action
2. Protecting MPAs
3. SWQPAs Classification
4. SWQPAs Designation
5. Existing Discharges
6. New Discharges

For each issue, at least two alternatives were evaluated for consideration. Each alternative is evaluated with respect to the program needs and the appropriate sections within Division 7 of the California Water Code (CWC).

5.7.1 No Action Alternative

The “no action” alternative would maintain the existing 2009 California Ocean Plan that does not address MPAs, leaving the Water Boards with only one avenue for protecting MPAs, the designation of ASBS. Although the ASBS designation has been used to protect State Marine Reserves in the past, the special protections associated with the ASBS designation may not be necessary, appropriate or even feasible for State Marine Parks and State Marine Conservation Areas due to the provisions protecting ASBS that prohibit all discharges within these areas. The “no action” alternative severely limits the Water Boards’ flexibility to tailor the designation of SWQPAs in a manner consistent with the goals and objectives of establishing the MPAs.

In addition, adopting the “no action” alternative, the coastal Regional Water Boards would be compelled to address water quality protection within MPAs on a case-by-case basis, without the benefit of a cohesive or consistent state wide framework. For existing and future permittees and respective rate payers situated near MPAs, the “no action” alternative would create significant regulatory uncertainty limiting their abilities to plan and budget future repairs or replacement projects without the proposed provisions in place.

Staff Recommendation: Staff does not recommend the “no action” alternative.

5.7.2 Protecting MPA

As described in Section 5.6, the State has recently initiated efforts to redesign MMAs in accordance with the Marine Life Protection Act. The agencies mandated by the Marine Life Protection Act to designate new MPAs (California Fish and Game Commission and the California Parks and Recreation Commission) can establish regulations governing natural

resources protection, but have limited authority to protect water quality and regulate discharge into waters of the state.

If these newly designated MPAs require additional protection from potential impacts associated with degraded water quality, the State and Regional Water Boards under the authority of Porter-Cologne would be responsible for developing and adopting more stringent permits or discharge conditions, including prohibitions within these areas. Within MPAs or other unique areas where greater water quality protection is desirable, the State and Regional Water Boards have few options available for setting aside areas that require special protections from discharges. The options are: 1) designating these areas as ASBS, which prohibits the discharge of wastes in these areas; 2) continued reliance upon the Ocean Plan water quality objectives and discharge requirements applicable to all ocean water of the State; or 3) amending individual permits to accord a greater level of protection through termination of permit, or modification of permit conditions and effluent limits.

As discussed in Section 5.6.3, options 1 and 3 may result in significant environmental and socioeconomic impacts through construction of new conveyance systems, treatment works and outfalls. The costs to relocate a major ocean outfall have been estimated at one billion dollars or more (Maguin, 2010). In addition, those ongoing efforts by existing municipal wastewater permittees to meet future water recycling needs may be jeopardized if further upgrades or relocation of critical infrastructure is required. Option 2 represents the “no action” alternative or status quo and does not provide greater protection for MPAs.

Another option is to propose a new category of SWQPAs that would provide a higher level of water quality protection for State Marine Conservation Areas and State Marine Parks over the baseline or existing regulation applicable to ocean waters of the state that would allow some discharges to continue. These new areas would be designated State Water Quality Protection Areas – General Protection (SWQPA-GP).

Staff Recommendation: Adopt a new category of SWQPAs that would be designated as SWQPA-GP, as described in the draft amendments presented in Section 5.4 below.

5.7.3 SWQPAs Categories

State Marine Reserves represent the highest level of resource protection where injuring, collecting or taking (either recreational or commercial) of flora and fauna is prohibited. A lower level of resource protection is afforded State Marine Conservation Areas and State Marine Parks where “take” for either recreational or commercial purposes may be allowed. Following this model the State Water Board has designated many State Marine Reserves as SWQPA – ASBS, where the discharge of waste is prohibited. However there is no lower category of SWQPA that provides an intermediate level of water quality protection similar to those designated for resource protection. To provide greater flexibility for the protection of unique areas including MPAs, staff is proposing a new category of SWQPAs creating a two-tiered system. This tiered system would consist of the existing SWQPAs designated ASBS (SWQPA-ASBS or simply ASBS) representing the highest level of water quality protection and strictly regulated by discharge prohibition and SWQPA-GP. Within the SWQPA- GPs certain types of low risk discharges are allowed; however, future discharges would be prohibited. This category could provide general protection for those MPAs classified as State Marine Parks and State Marine Conservation Areas. Alternatives considered by staff include the need for additional categories of SWQPAs to address area or regional specific conditions. However development of

additional categories would require additional information and data to develop adequate provisions that address the unique conditions.

Staff Recommendation: Adopt the two-tiered system consisting of the existing SWQPA-ASBS and the proposed SWQPA-GP.

5.7.4 Implementation of SWQPA-GPs

5.7.4.1 Municipal Wastewater Discharges

The design and designation of MPAs was not intended to affect existing permitted actions granted by other agencies including the State and Regional Water Boards and U.S. EPA. As a result the MPAs were located so as to avoid major ocean outfalls. However some municipal wastewater plumes though highly dilute may encroach upon existing MPAs. Although the SAT indicated these plumes present a minor threat to ecosystems within MPAs, the Water Boards could rescind these permits, develop more stringent limits or require the discharger to relocate the outfall. Because the potential benefit of such actions is limited and the costs associated with additional controls or prohibitions are significant, staff proposed language that excludes the presence or proximity of an MPA as justification to reopen and amend a municipal wastewater treatment plan permit to better protect water quality within the MPA. The proposed provisions would not limit the Water Boards authority to amend or modify a permit based upon any other reason. To ensure that MPAs are not inundated by plumes from future outfalls, staff proposed a prohibition against the construction of new wastewater outfalls.

Alternatively, staff considered including a prohibition against all existing and future discharges. However, this approach would not afford more protection than existing special protections for ASBS.

5.7.4.2 Intake Structures

Cooling water intake structures for power plants causes impingement and entrainment of marine life to the detriment of the marine environment. Impingement occurs when larger aquatic organisms are trapped against a facility's intake screen, resulting in injury or death to the animal. Entrainment occurs when smaller aquatic organisms are drawn into a plant's cooling system and killed. In 2010 The State Water Board adopted Resolution 2010-0020 approving the Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (OTC Policy). The OTC Policy requires permittees to reduce flow velocities and impingement and entrainment equivalent to that of a plant using wet cooling towers. Staff could rely on this policy to protect water quality within the SWQPA-GP from cooling water intakes, or develop more stringent requirements for these structures. However developing more stringent requirements would pose a significant challenge to permittees planning upgrades and changes to comply with the OTC Policy while maintaining adequate power throughout the state.

Other types of intakes include marine laboratories and aquariums that use water to support marine life for study and observation, and desalination plants that convert seawater into potable water. Marine laboratories and aquariums represent relatively minor threats to water quality. They typically withdraw less than 1 million gallons a days from the ocean for use maintaining aquatic life in tanks for study and observation. Existing permitted desalination facilities were constructed to provide backup and emergency water supplies in coastal areas with limited groundwater and surface water supplies, and frequently operate on an as-needed basis. These small plants typically produce less than 0.5million gallons per day and represent a critical service for the communities in these areas. Because both types of intakes serve critical roles

while representing a low threat to the marine environment and water quality, a prohibition against these existing intakes would provide little benefit.

To address future intake structures, the State Board could develop specific criteria allowing some intake structures that meet a minimum performance standard level, develop a prohibition against all new intake structures, or allow new intakes within these SWQPA - GPs. Since a goal for establishing these SWQPA – GP is to provide greater water quality protection to MPAs, the simplest solution would be to prohibit new intake structures consistent with the staff recommendations for other types of discharges.

5.7.4.3 Other Discharges

Other types of discharges, such as storm water runoff and nonpoint sources, frequently represent the greatest threat to water quality in the nearshore environment. However given the many different types of discharges and sources, there is significant variability in the flows and pollutants present within these discharges. Providing a higher level of water quality protection for the SWQPA-GPs could be satisfied thru several alternatives, including:

- Prohibit all existing storm water and nonpoint discharges;
- Prohibit specific high threat categories of discharges such as industrial storm water or runoff from gulf courses; or
- Prohibit those discharges that have a significant and deleterious effect on natural water quality by assessment of effluent and receiving water

Adopting a discharge prohibition for these types of discharges would provide the highest level of protection. However, that approach would be no different than the existing special protections provided by the designation of ASBS. Prohibiting some high threat discharges is a disincentive for those discharges that could be classified as high threat, but are in reality a low threat to natural water quality. By assessing all these dischargers, the Water Boards can focus on only those discharges that represent a significant threat, regardless of the type of discharge.

In consideration of future discharges, the same alternatives are applicable. For consistency with the provisions recommended for waste water and intake structures, a prohibition to prevent future discharges would provide the greatest level of protection

Staff Recommendation: Adopt an approach that assesses all existing storm water and nonpoint source discharges categorized and use this information to determine what controls and prohibitions are needed to maintain natural water quality. Future discharges would be prohibited consistent with the provisions addressing wastewater and intake structures.

5.7.4.4 Siting and Designation

The designation of SWQPAs-GP would require formal approval by the State Water Board of an amendment of the Ocean Plan to identify the newly recognized area(s). This process would follow the State Water Board's formal planning process in accordance with CEQA, CWC and CWA. However the specific process for nominating an area for consideration by the State Water Board as a SWQPAs-GP would need to be defined within the Ocean Plan to be transparent and effective. Appendix IV of the Ocean Plan contains a process for designating ASBS that could also be amended to apply to SWQPAs-GPs as well.

The process described in Appendix IV allows individuals or the Water Boards to nominate an area, and provides opportunity for the public and affected agencies to review and comment on

the proposed designation. This process would include an assessment of environmental impacts associated with each individual area nominated for designation. Alternatives include developing a more streamlined approach for designating these areas or leaving the process undefined (no action). While a more streamlined approach could be more efficient and reduce the time required to complete the process, adopting a separate and unique process for SWQPAs-GPs would be confusing when an adequate process is already in place for SWQPAs-ASBS.

Staff Recommendation: Amend the existing process described in Appendix IV of the Ocean Plan for designating ASBS to include SWQPAs-GPs.

5.8 Environmental Impact Analysis

The State Water Board's regulations require a substitute environmental document to include 1) a brief project description; 2) an identification of any significant or potentially significant adverse impacts of the proposed project; 3) an analysis of reasonable alternatives to the project and mitigation measures to avoid or reduce any significant or potentially significant adverse environmental impacts; and 4) an analysis of the reasonably foreseeable methods of compliance. Tit. 23, Cal. Code Regs. § 3777(b). Where there is no fair argument that the project could result in any reasonable foreseeable environmental impacts, the substitute environmental document need not contain an analysis of reasonably foreseeable alternatives. Similarly where there is no fair argument that the reasonably foreseeable methods of compliance with the project could result in any reasonably foreseeable significant adverse environmental impacts, the substitute environmental document need not contain an analyses of reasonably foreseeable alternative methods of compliance or mitigation measures. Tit. 23, Cal. Code Regs., § 3777(e) and (f).

As previously stated, the State Water Board is not designating new SWQPAs through these proposed amendments. The State Water Board is adopting criteria and provisions for citing and designating SWQPA-GPs. Permittees discharging storm water or wastewater into ocean waters would not be regulated any differently by this action. Because no alternation of the environment will occur either as a direct result or indirectly from this action, the proposed project will not have any significant adverse impacts to the environment. In addition, as no additional controls or treatment would be needed to comply with these measures, there are no adverse environmental impacts associated with compliance actions.

If, in the future, the State Water Board designates SWQPAs to provide additional water quality protections to MPA or other unique areas, permittees in those specific areas will be required to comply with the new provisions. Permitted wastewater treatment plants that meet Ocean Plan requirements would not be affected by the designation of a SWQPA -GP on or in the vicinity of the outfall. Other existing dischargers would be required to perform additional monitoring activities. If impacts were identified, dischargers would be required to develop and implement control strategies and best management practices to restore water quality to the maximum extent practical. New discharges would be prohibited in SWQPA-GPs. Those proposing a new discharge would need to identify alternative approaches that comply with this prohibition. However, staff cannot foresee which MPAs will be selected for designation as SWQPAs or when. In the process proposed for designating SWQPAs, environmental impacts associated with specific areas and potentially affected discharges will be evaluated in accordance with CEQA at that time. To assess the environmental impacts of those future State Board actions at this time would be speculative, and difficult to assess accurately on a statewide basis.

6 Water Code Section 13241 and 13242

Water Code section 13241 requires assessment of specific factors when adopting water quality objectives. These factors consist of:

- Past present and future beneficial uses of water
- Environmental characteristics and water quality of the hydrographic unit under consideration
- Water quality conditions that could reasonable be attained through coordinated control of all factors affecting water quality
- Economic considerations
- The need for developing new housing
- The need to develop and use recycled water

The amendments being proposed by staff would not alter existing water quality objectives or result in new water quality objective for ocean waters; therefore, Water Code section 13241 does not apply to these proposed amendments to the California Ocean Plan.

Water Code section 13242 requires that the program of implementation include a description of the nature of the actions which are necessary to achieve the objectives, time schedules for management actions and required surveillance actions. As stated above, the amendments being proposed by staff do not amend existing water quality objective or add new water quality objectives. The proposed amendments would add a new category of SWQPAs that would protect natural water quality within MPA and other areas designated by the State Water Board. These proposed amendments would also establish a process for designating these areas. The proposed amendments do not include the designation of any new SWQPAs.

7 Proposed Amendments

7.1 Draft text of the amendments proposed by Staff to Chapter III - Program of Implementation

E. Implementation Provisions For ~~Areas* of Special Biological Significance (ASBS)~~Marine Managed Areas*

1. Section E addresses the following Marine Managed Areas*:

(a) State Water Quality Protection Areas (SWQPAs)* consist of :

(1) SWQPA – Areas of Special Biological Significance (ASBS) designated by the State Water Board that require special protections as defined under section 4 below.

(2) SWQPA – General Protection (GP) designated by the State Water Board to protect water quality within Marine Protected Areas (MPAs), or other unique and sensitive areas, that require protection under the provisions described under section 5 below.

(b) Marine Protected Areas as defined in the California Public Resources Code as State Marine Reserves, State Marine Parks and State Marine Conservation Areas, established by the Fish and Game Commission, or the Parks and Recreation Commission.

2. No new or modified limitations, substantive conditions, or prohibitions (beyond those in existing law, regulations and water quality control plans) will be imposed upon existing municipal point source wastewater discharge outfalls based on any MPAs designated as State Marine Parks and State Marine Conservation Areas. This provision does not apply to State Marine Reserves.

3. The State Water Board may designate SWQPAs* to prevent the undesirable alteration of natural water quality within MPAs. These designations may include either SWQPA-ASBS or SWQPA-GP or in combination. In considering the designation of SWQPAs over MPAs, the State Water Board will consult with the affected Regional Water Quality Control Board, the Department of Fish and Game and the Department of Parks and Recreation, in accordance with the requirements of Appendix IV.

4. Implementation Provisions For SWQPA-ASBS*

~~1~~(a) Waste* shall not be discharged to areas designated as being of special biological significance. Discharges shall be located a sufficient distance from such designated areas to assure maintenance of natural water quality conditions in these areas.

~~2~~(b) Regional Boards may approve waste discharge requirements or recommend certification for limited-term (i.e. weeks or months) activities in ASBS*. Limited-term activities include, but are not limited to, activities such as maintenance/repair of existing boat facilities, restoration of sea walls, repair of existing storm water pipes, and replacement/repair of existing bridges. Limited-term activities may result in

temporary and short-term changes in existing water quality. Water quality degradation shall be limited to the shortest possible time. The activities must not permanently degrade water quality or result in water quality lower than that necessary to protect existing uses, and all practical means of minimizing such degradation shall be implemented.

5. Implementation Provisions for SWQPAs-GP*

(a) Implementation provisions for existing point source wastewater discharges

(1) An SWQPA-GP shall not be designated over existing permitted point source wastewater discharges or encroach upon the zone of initial dilution associated with an existing discharge. This requirement does not apply to discharges less than one million gallons per day.

(2) Designation of an SWQPA-GP shall not include conditions to move existing point source wastewater outfalls.

(b) Implementation provisions for existing seawater intakes

(1) Existing permitted seawater intakes must be controlled to minimize entrainment and impingement by using best technology available. Existing seawater intakes less than one million gallons per day are excluded from this requirement.

(c) Implementation provisions for wet weather storm water[1] and non-storm water (dry weather flow) from storm drains, and nonpoint source discharges.

(1) Existing waste discharges are allowed, but shall not cause an undesirable alteration in natural ocean water quality. For purposes of SWQPA-GP, an undesirable alteration in natural ocean water quality means that for intermittent (e.g. storm runoff) discharges, Table 1 instantaneous maximum concentrations for chemical constituents, and daily maximum concentrations for chronic toxicity, must not be exceeded in the receiving water.

(2) The discharge of trash is prohibited.

(3) Non-storm water flows are effectively prohibited as required by the applicable permit. Where capacity and infrastructure exists, all dry weather flows shall be diverted to municipal sewer systems.

(4) Existing discharges into SWQPA-GP shall be characterized and assessed to determine what effect if any these inputs are having on natural water quality in the State Water Quality Protection Area. Such assessments shall include an evaluation of cumulative impacts as well as impacts stemming from individual discharges. Information to be considered shall include:

[1] Permitted point source storm drain discharges are synonymous with storm water drains.

a. Water quality;
b. Flow;
c. Watershed pollutant sources; and
d. Intertidal and/or subtidal biological surveys.

Within each SWQPA-GP the assessment shall be used to rank these existing discharges into low, medium and high threat impact categories. Cumulative impacts will be ranked similarly as well.

(5) An initial analysis shall be performed of pre- and post-storm receiving water quality during a storm event for Table 1 constituents. If post-storm receiving water quality has larger concentrations of constituents relative to pre-storm, and Table 1 instantaneous maximum concentrations for chemical constituents, and daily maximum concentrations for chronic toxicity, are exceeded, then receiving water shall be re-analyzed along with storm runoff (end of pipe) for the constituents that are exceeded.

(6) If undesirable alterations of natural water quality and/or biological communities are identified, control strategies/measures shall be implemented for those dischargers characterized as a high threat or those contributing to higher threat cumulative impacts first.

(7) If those strategies fail, additional control strategies/measures will be implemented for dischargers characterized as medium impact dischargers. If these strategies do not result in improvement of water quality, those discharges classified as low threat shall also implement control strategies/measures.

(d) Implementation Provisions for New Discharges

(1) Point Source Wastewater Outfalls
No new point source wastewater outfalls shall be established within SWQPA-GP.

(2) Seawater intakes
No new seawater intakes shall be established within SWQPA-GP.

(3) All Other New Discharges
There shall be no increase in nonpoint sources or permitted storm drains into SWQPA-GP.

6. Impaired Tributaries to MPAs, SWQPA ASBS and SWQPA GP
(a) All water bodies draining to MPAs and SWQPAs that appear on the State's CWA Section 303(d) list shall be given a high priority to have a TMDL developed and implemented.

7.2 Draft text of the amendments proposed by Staff to Appendix I of the Ocean Plan

APPENDIX I
DEFINITION OF TERMS

AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE (ASBS) are those areas designated by the State Water Board as ocean areas requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable. All Areas of Special Biological Significance are also classified as a subset of STATE WATER QUALITY PROTECTION AREAS. ASBS are also referred to as State Water Quality Protection Areas – Areas of Special Biological Significance (SWQCA-ASBS).

Marine Managed Areas are named, discrete geographic marine or estuarine areas along the California coast designated by law or administrative action, and intended to protect, conserve, or otherwise manage a variety of resources and their uses. According to the California Public Resources Code (sections 36600 et. seq.) there are six classifications of marine managed areas, including State Marine Reserves, State Marine Parks and State Marine Conservation Areas, State Marine Cultural Preservation Areas, State Marine Recreational Management Areas, and State Water Quality Protection Areas.

State Water Quality Protection Areas – General Protection (SWQPA-GP) designated by the State Water Board to maintain natural water quality in order to protect or conserve marine life and habit within State Marine Parks and State Marine Conservation Areas.

7.3 Draft text of the amendments proposed by Staff to Appendix IV of the Ocean Plan

APPENDIX IV

PROCEDURES FOR THE NOMINATION AND DESIGNATION OF

AREAS* OF SPECIAL BIOLOGICAL SIGNIFICANCE (ASBS).

1. Any person may nominate areas of ocean waters for designation as SWQPA-ASBS or SWQPA-GP by the SWRCB. Nominations shall be made to the appropriate RWQCB and shall include:

   (a) Information such as maps, reports, data, statements, and photographs to show that:
   (1) Candidate areas are located in ocean waters as defined in the “Ocean Plan”.

   (2) Candidate areas are intrinsically valuable or have recognized value to man for scientific study, commercial use, recreational use, or esthetic reasons.

   (3) Candidate areas need protection beyond that offered by waste discharge restrictions or other administrative and statutory mechanisms.

   (b) Data and information to indicate whether the proposed designation may have a significant effect on the environment.

(1) If the data or information indicate that the proposed designation will have a significant effect on the environment, the nominee must submit sufficient information and data to identify feasible changes in the designation that will mitigate or avoid the significant environmental effects.

2. The SWRCB or a RWQCB may also nominate areas for designation as SWQPA-ASBS or SWQPA-GP on their own motion.

3. A RWQCB may decide to (a) consider individual SWQPA-ASBS or SWQPA-GP nominations upon receipt, (b) consider several nominations in a consolidated proceeding, or (c) consider nominations in the triennial review of its water quality control plan (basin plan). A nomination that meets the requirements of 1. above may be considered at any time but not later than the next scheduled triennial review of the appropriate basin plan or Ocean Plan.

4. After determining that a nomination meets the requirements of paragraph 1. above, the Executive Officer of the affected RWQCB shall prepare a Draft Nomination Report containing the following:

   (a) The area or areas nominated for designation as SWQPA-ASBS or SWQPA-GP.

   (b) A description of each area including a map delineating the boundaries of each proposed area.

   (c) A recommendation for action on the nomination(s) and the rationale for the recommendation. If the Draft Nomination Report recommends approval of the proposed designation, the Draft Nomination Report shall comply with the CEQA documentation requirements for a water quality control plan amendment in Section 3777, Title 23, California Code of Regulations.

5. The Executive Officer shall, at a minimum, seek informal comment on the Draft Nomination Report from the SWRCB, Department of Fish and Game, other interested state and federal agencies, conservation groups, affected waste dischargers, and other interested parties. Upon incorporation of responses from the consulted agencies, the Draft Nomination Report shall become the Final Nomination Report.

6. (a) If the Final Nomination Report recommends approval of the proposed designation, the Executive Officer shall ensure that processing of the nomination complies with the CEQA consultation requirements in Section 3778, Title 23, California Code of Regulations and proceed to step 7 below.

   (b) If the Final Nomination Report recommends against approval of the proposed designation, the Executive Officer shall notify interested parties of the decision. No further action need be taken. The nominating party may seek reconsideration of the decision by the RWQCB itself.

7. The RWQCB shall conduct a public hearing to receive testimony on the proposed designation. Notice of the hearing shall be published three times in a newspaper of general circulation in the vicinity of the proposed area or areas and shall be distributed to all known interested parties 45 days in advance of the hearing. The notice shall describe the location,

boundaries, and extent of the area or areas under consideration, as well as proposed restrictions on waste discharges within the area.

8. The RWQCB shall respond to comments as required in Section 3779, Title 23, California Code of Regulations, and 40 C.F.R. Part 25 (July 1, 1999).

9. The RWQCB shall consider the nomination after completing the required public review processes required by CEQA.

   (a) If the RWQCB supports the recommendation for designation, the board shall forward to the SWRCB its recommendation for approving designation of the proposed area or areas and the supporting rationale. The RWQCB submittal shall include a copy of the staff report, hearing transcript, comments, and responses to comments.

   (b) If the RWQCB does not support the recommendation for designation, the Executive Officer shall notify interested parties of the decision, and no further action need be taken.

10. After considering the RWQCB recommendation and hearing record, the SWRCB may approve or deny the recommendation, refer the matter to the RWQCB for appropriate action, or conduct further hearing itself. If the SWRCB acts to approve a recommended designation, the SWRCB shall amend Appendix V, Table V-1, of this Plan. The amendment will go into effect after approval by the Office of Administrative Law and US EPA. In addition, after the effective date of a designation, the affected RWQCB shall revise its water quality control plan in the next triennial review to include the designation.

11. The SWRCB Executive Director shall advise other agencies to whom the list of designated areas is to be provided that the basis for an SWQPA-ASBS or SWQPA-GP designation is limited to protection of marine life from waste discharges.

8 References

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State Water Resources Control Board. 2011b. Draft Staff Report Substitute Environmental Documentation - Amendment of the Water Quality Control Plan Ocean Waters of California.
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Appendix A - CEQA Checklist

THE PROJECT

1. PROJECT TITLE:

Implementation of State Water Recourses Control Board (State Water Board) Resolutions 2010-0057 and 2011-0013 designating State Water Quality Areas to protect State Marine Conservation Areas and State Marine Parks.

2. LEAD AGENCY NAME AND ADDRESS:

California Environmental Protection Agency
State Water Recourses Control Board – Division of Water Quality
1001 I Street Sacramento California 95814

3. CONTACT PERSON AND PHONE NUMBER:

Mr. Chris Beegan 916.341.5577/cbeegan@waterboards.ca.gov

4. PROJECT LOCATION:

Ocean waters of California

5. DESCRIPTION OF PROJECT:

The California Ocean Plan does not currently contain specific requirements for establishing State Water Quality Protection Areas that are not designated as Areas of Special Biological Significance nor does the California Ocean Plan contain requirements that address Marine Protected Areas. This proposed project attempts to resolve this issue through the amendment of the California Ocean Plan. The proposed amendments would :

- Establish a second category of State Water Quality Protection Areas that would be less restrictive than the provisions associated with existing State Water Quality Protection Areas– Areas of Special Biological Significance while providing a higher level of protection than the California Ocean Plan objectives and provision that apply to all ocean waters of the state. This new category would be identified as State Water Quality Protection Areas – General Protection
- Establish provisions for siting and designating State Water Quality Protection Areas – General Protection
- Establish provisions and prohibitions that protect water quality in State Water Quality Protection Areas – General Protection from certain types of existing and future point and nonpoint discharges while allowing some low threat discharges to continue without additional conditions

The proposed project would not affect existing California Ocean Plan prohibitions protecting Areas of Special Biological Significance, a unique class of State Water Quality Protection Areas. Nor would the proposed project establish new State Water Quality Protection Areas.

EVALUATION OF THE ENVIRONMENTAL IMPACTS IN THE CHECKLIST

1. The State Water Board must complete an environmental checklist prior to the adoption of plans or policies for the Basin/208 Planning program as certified by the Secretary for Natural Resources. The checklist becomes a part of the Substitute Environmental Documentation (SED).
2. For each environmental category in the checklist, the State Water Board must determine whether the project will cause any adverse impact. If there are potential impacts that are not included in the sample checklist, those impacts should be added to the checklist.
3. If the State Water Board determines that a particular adverse impact may occur as a result of the project, then the checklist boxes must indicate whether the impact is “Potentially Significant,” “Less than Significant with Mitigation Incorporated,” or “Less than Significant.”

a. "Potentially Significant Impact" applies if there is substantial evidence that an impact may be significant. If there are one or more "Potentially Significant Impact" entries on the checklist, the SED must include an examination of feasible alternatives and mitigation measures for each such impact, similar to the requirements for preparing an environmental impact report.

b. "Less than Significant with Mitigation Incorporated" applies if the State Water Board or another agency incorporates mitigation measures into the SED that will reduce an impact that is "Potentially Significant" to a "Less than Significant Impact." If the State Water Board does not require the specific mitigation measures itself, then the State Water Board must be certain that the other agency will in fact incorporate those measures.

c. "Less than Significant" applies if the impact will not be significant, and mitigation is therefore not required.

d. If there will be no impact, check the box under "No Impact."

4. The State Water Board must provide a brief explanation for each "Potentially Significant," "Less than Significant with Mitigation Incorporated," "Less than Significant," or "No Impact" determination in the checklist. The explanation may be included in the written report described in section 3777(a)(1) or in the checklist itself. The explanation of each issue should identify: (a) the significance criteria or threshold, if any, used to evaluate each question; and (b) the specific mitigation measure(s) identified, if any, to reduce the impact to less than significant. The State Water Board may determine the significance of the impact by considering factual evidence, agency standards, or thresholds. If the "No Impact" box is checked, the board should briefly provide the basis for that answer. If there are types of impacts that are not listed in the checklist, those impacts should be added to the checklist.

5. The State Water Board must include mandatory findings of significance if required by CEQA Guidelines section 15065.

6. The State Water Board should provide references used to identify potential impacts, including a list of information sources and individuals contacted.

CEQA Checklist
Implementation of State Water Board Resolutions 2010-0057 and 2011-0013 designating State Water Quality Areas to protect State Marine Conservation Areas and State Marine Parks

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS				
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☑
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☑
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☑
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☑

The proposed project will not have a substantial impact aesthetics

II. AGRICULTURE AND FOREST RESOURCES				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Boards. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☑
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☑

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☑
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☑
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☑

The proposed project will not have a substantial impact on agriculture

III. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☑
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☑
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☑
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☑
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☑

The proposed project will not have a substantial impact on air quality

IV. BIOLOGICAL RESOURCES

Would the project:				
a) 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	☐	☐	☐	☑

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☑
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☑
d) 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?	☐	☐	☐	☑
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☑
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☑

The proposed project will not have a substantial impact on biological resources

V. CULTURAL RESOURCES

Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☐	☐	☐	☑
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☐	☐	☑
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☑
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☑

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The proposed project will not have a substantial impact on cultural resources

VI. GEOLOGY AND SOILS

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	☑
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☑
ii) Strong seismic ground shaking?	☐	☐	☐	☑
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☑
iv) Landslides?	☐	☐	☐	☑
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☑
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☑
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☑
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☑

The proposed project will not have a substantial impact on geology or soil stability

VII. GREENHOUSE GAS EMISSIONS

Would the project:				
a) Generate Greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☑
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☑

The proposed project will not generate greenhouse gas emissions or conflict with existing policies

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS				
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☑
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☑
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☑
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☑
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☑
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☑
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☑
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☑

The proposed project will not generate hazardous materials or increase the risk of exposure or loss injury or death.

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IX. HYDROLOGY AND WATER QUALITY				
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☑
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer	☐	☐	☐	☑

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				
c) 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 which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☑
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☑
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☑
f) Otherwise substantially degrade water quality?	☐	☐	☐	☑
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☑
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☑
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☑
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☑

The proposed project will not significantly affect ground or surface waters

X. LAND USE AND PLANNING

Would the project:				
a) Physically divide an established community?	☐	☐	☐	☑
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or	☐	☐	☐	☑

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
mitigating an environmental effect?				
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☑

The proposed project will not have a substantial impact on land use and planning

XI. MINERAL RESOURCES

Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☑
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☑

The proposed project will not impact mineral resources

XII. NOISE

Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☑
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☑
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☑
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☑
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
The proposed project will not result in increased noise pollution				

XIII. POPULATION AND HOUSING

Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☑
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

The proposed project will not impact population and housing

XIV. PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☐	☑
i) Fire protection?	☐	☐	☐	☑
ii) Police protection?	☐	☐	☐	☑
iii) Schools?	☐	☐	☐	☑
iv) Parks?	☐	☐	☐	☑
v) Fire protection?	☐	☐	☐	☑
vi) Other public facilities?	☐	☐	☐	☑

The proposed project will not have a substantial impact on public housing

XV. RECREATION

a) Would the project increase the use of existing neighborhood and regional parks or other	☐	☐	☐	☑

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☑

The proposed project will not have a substantial impact on recreation or recreational oppurtunities

XVI. TRANSPORTATION/TRAFFIC

Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☑
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☑
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?	☐	☐	☐	☑
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☑
e) Result in inadequate emergency access?	☐	☐	☐	☑
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☑

The proposed project will not have a substantial impact on traffic or roadways

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS				
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☑
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☑
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☑
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☑
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☑
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☑
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☑

.The proposed project will not have a substantial impact on utilities and service systems or result in the need to build or construct additional utilities and services

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☑
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the	☐	☐	☐	☑

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☑

This analysis indicates that the proposed amendments will have no significant impact on the environment nor are cumulative impacts expected.