

Final 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
STATE WATER QUALITY
PROTECTION AREAS AND STATE MARINE
PROTECTED AREAS**

**STATE WATER RESOURCES CONTROL BOARD
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY**



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List of Abbreviations

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
GP	General Protection
GFNMS	Gulf of Farallones National Marine Sanctuary
MBNMS	Monterey Bay National Marine Sanctuary
MGD	Million Gallons per Day
MIS Act	Marine Invasive Species Act
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
SAT	Science Advisory Team
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 addresses 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. A public hearing was held May 1, 2012, for the February 23, 2012 version of the draft amendment and Staff Report/SED. The written comment period on that version ended on April 18, 2012. Twenty four comment letters were received and reviewed. A public workshop was held on August 22, 2012 for the July 25, 2012 version of the draft amendment and Staff Report/SED. The written comment period ended on August 31, 2012, and eleven comments were received and reviewed.

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), which are subject to the General Exception and Special Protections adopted on March 20, 2012. 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 rationale 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, and alternatives considered in the development of the proposed amendments. Section 7 shows the draft text of the proposed amendments in single strikeout/underline format. Changes to the proposed amendment since the August 22, 2012 public workshop are shown in blue font and double-strikeout/double-underline.

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 bypassing. 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 the chronic toxicity objective. The list 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).

The Ocean Plan prohibits the discharge of waste to designated Areas of Special Biological Significance (ASBS), but the State Water Boards may grant exceptions if beneficial uses are protected and the public interest is served. On March 20, 2012, the State Water Board adopted Resolution No. 2012-002, approving exceptions for selected storm water and nonpoint source discharges into ASBS. Three points to the exception are: 1) mandated prohibitions on dry weather flow, 2) clean wet weather flow maintaining natural water quality, and 3) monitoring is required.

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 section 13241 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 which are 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 Public Process

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 draft Staff Report and SED was initially released on January 6, 2012. A revised draft Staff Report and SED was released on February 23, 2012 to reflect the current designation of MPAs, specifically in the South Coast. A revised public hearing notice was circulated on February 28, 2012. For the public hearing, written public comments were solicited until April 18, 2012, and a total of 24 public comment letters were received. A public hearing was held on May 1, 2012 for the proposed amendments. An updated draft Staff Report and SED was released on July 25, 2012. A public workshop was held on August 22, 2012. Written public comments were solicited, limited to the changes present in the July 25, 2012 draft Staff Report/SED. The deadline for comment letters was August 31, 2012 and a total of 11 public comment letters were received and reviewed.

It should be noted that other amendments to the Ocean Plan are currently in progress. Proposed amendments to address Model Monitoring, Vessel Discharges, and Non-substantive changes have been released to the public and a public hearing has been held. Staff is also working on proposed amendments for desalination and trash. The trash amendments will address trash discharges into State Water Quality Protection Areas.

3.3 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. 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). 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.

3.4 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 (one of the MPAs is estuarine), nine MPAs in Sonoma County, and one estuarine MPA in Napa 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 (GNFMS), designated in 1981, is located in the North Coast, San Francisco Bay, and Central Coast Regions (Regions 1, 2, and 3). GNFMS 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 GNFMS. See Figure 3)

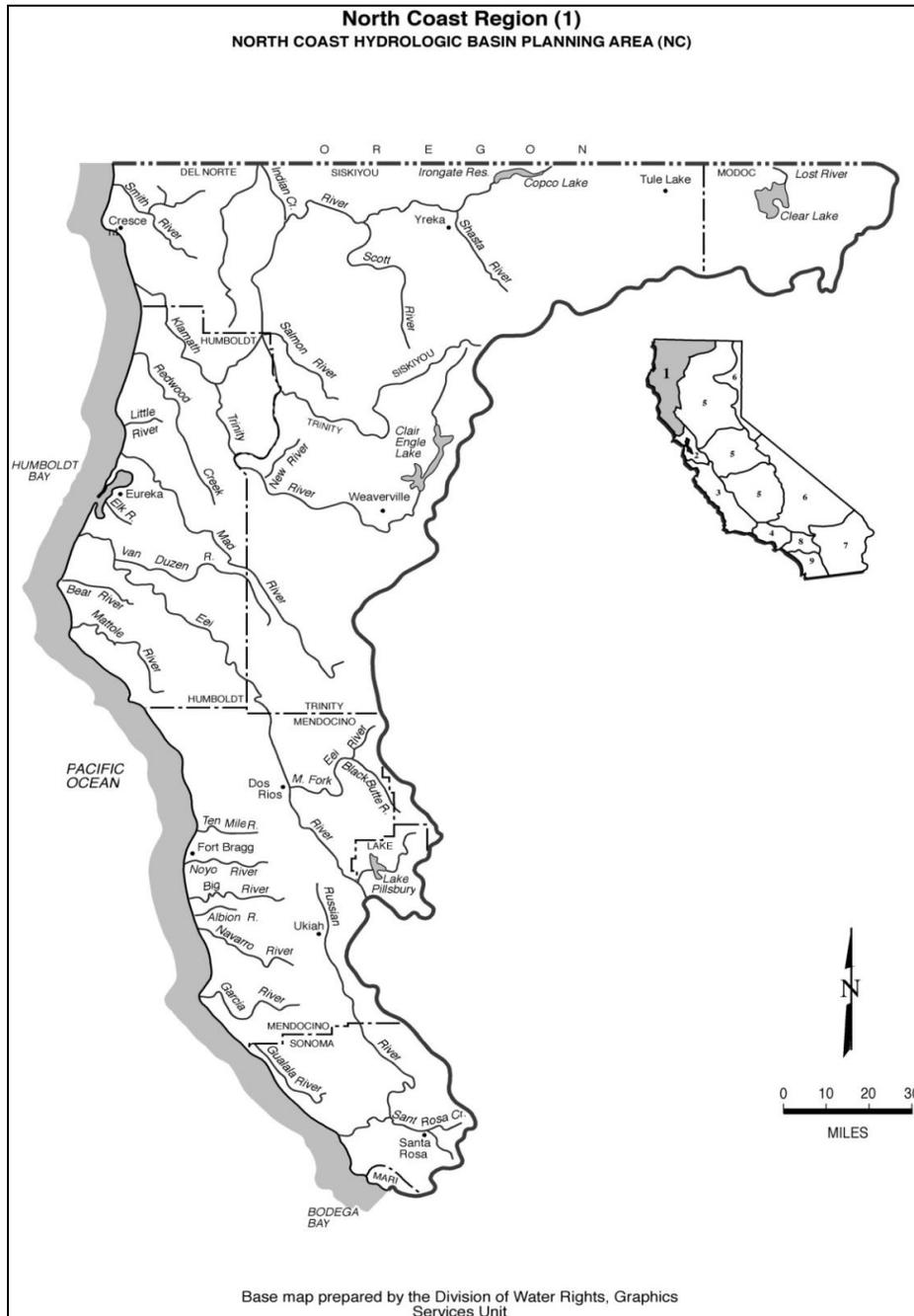


Figure 1. Hydrology of Region 1.

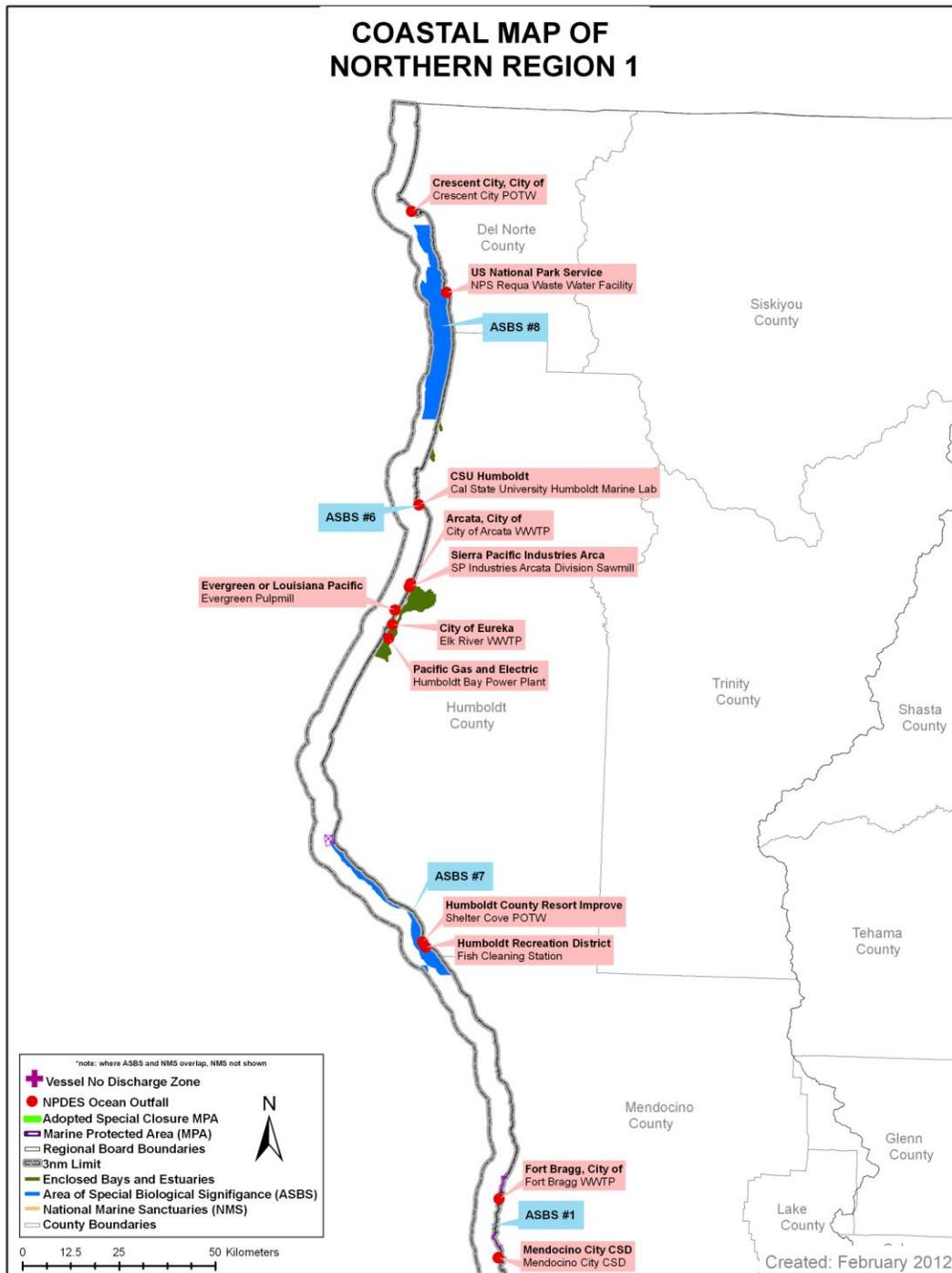


Figure 2. Coastal and ocean features of the North Coast Region.

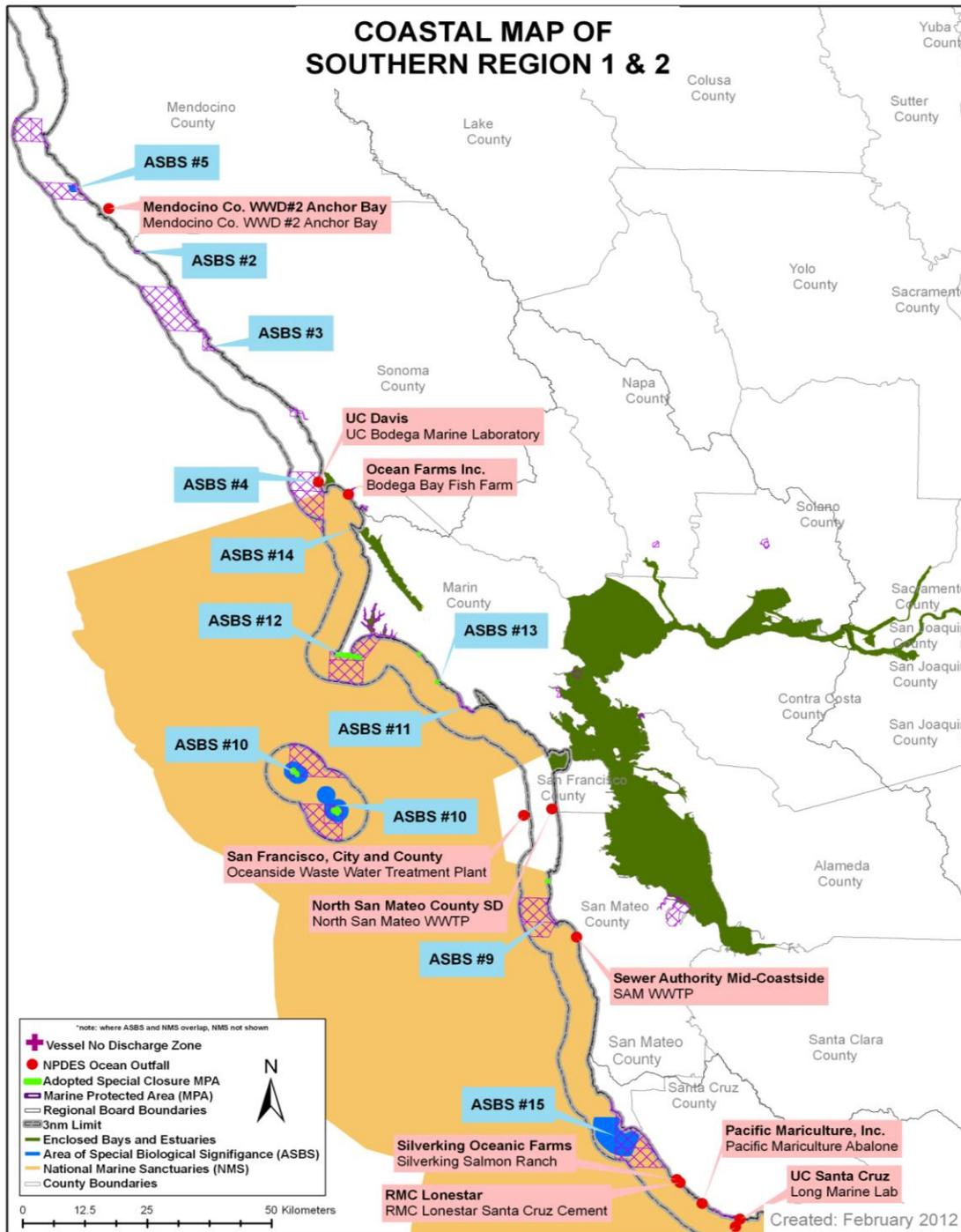


Figure 3. Coastal features of southern North Coast Region and San Francisco Bay Region

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.

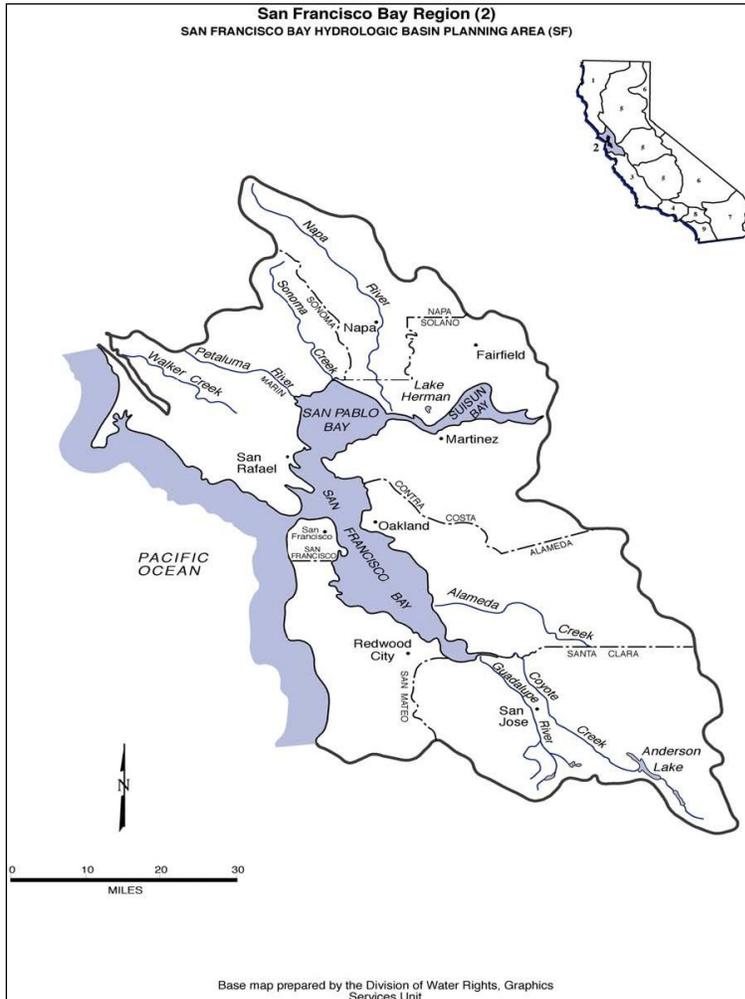


Figure 4. Hydrology of San Francisco Bay Region.

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 Marine 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 Marine 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.

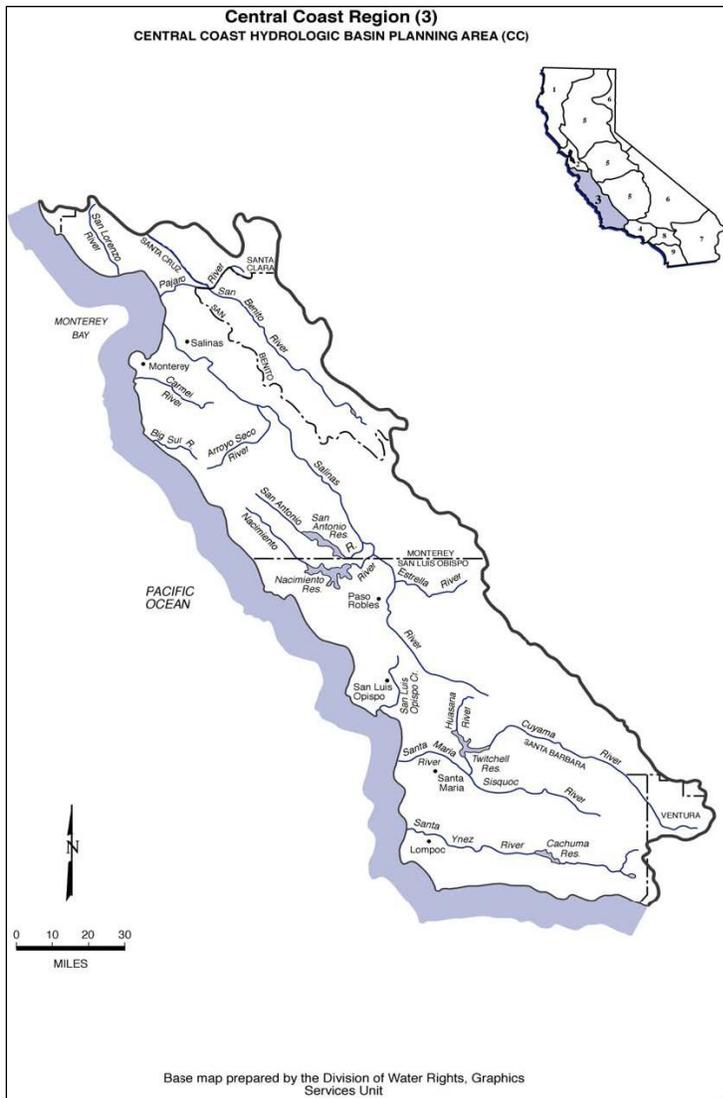


Figure 5. Hydrology of the Central Coast Region.

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.

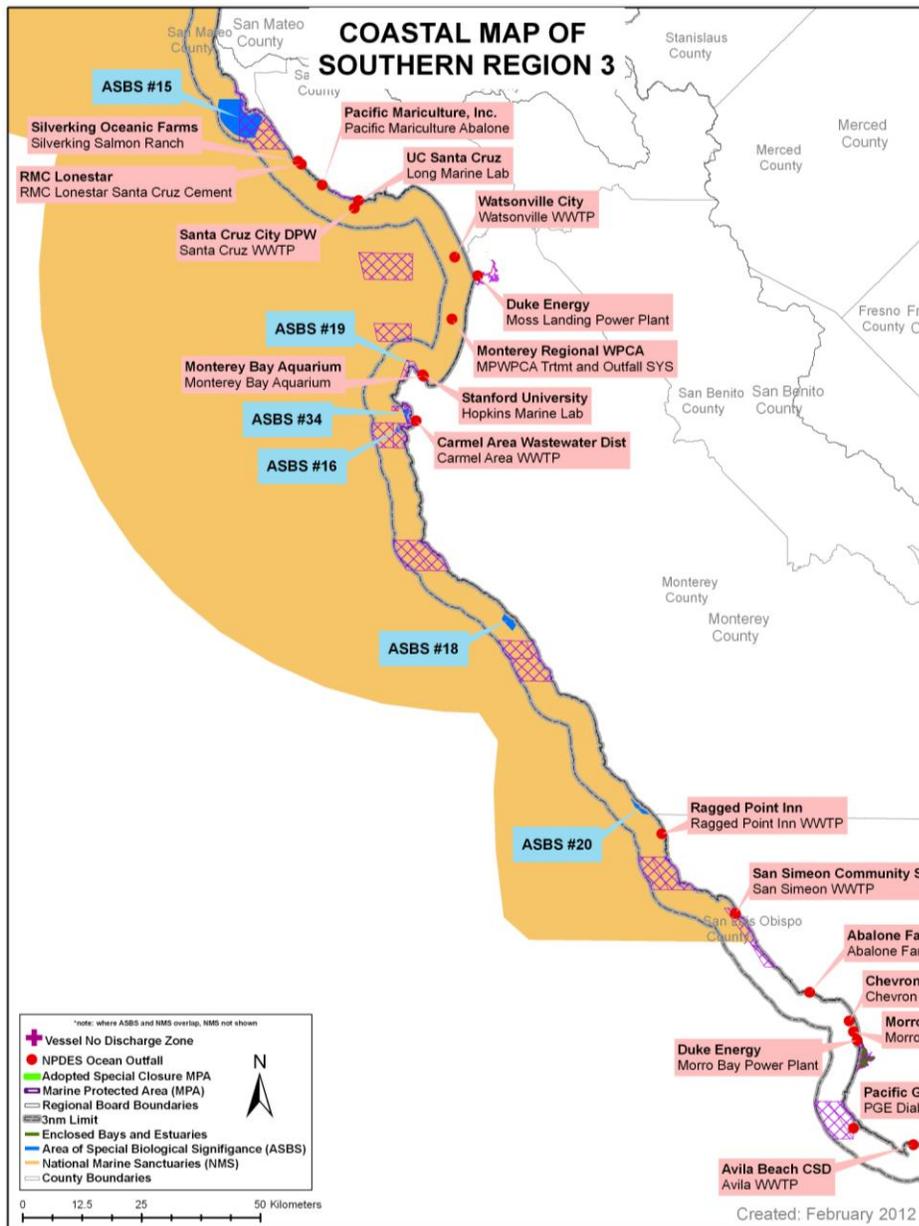


Figure 6. Coastal features of the northern Central Coast Region.

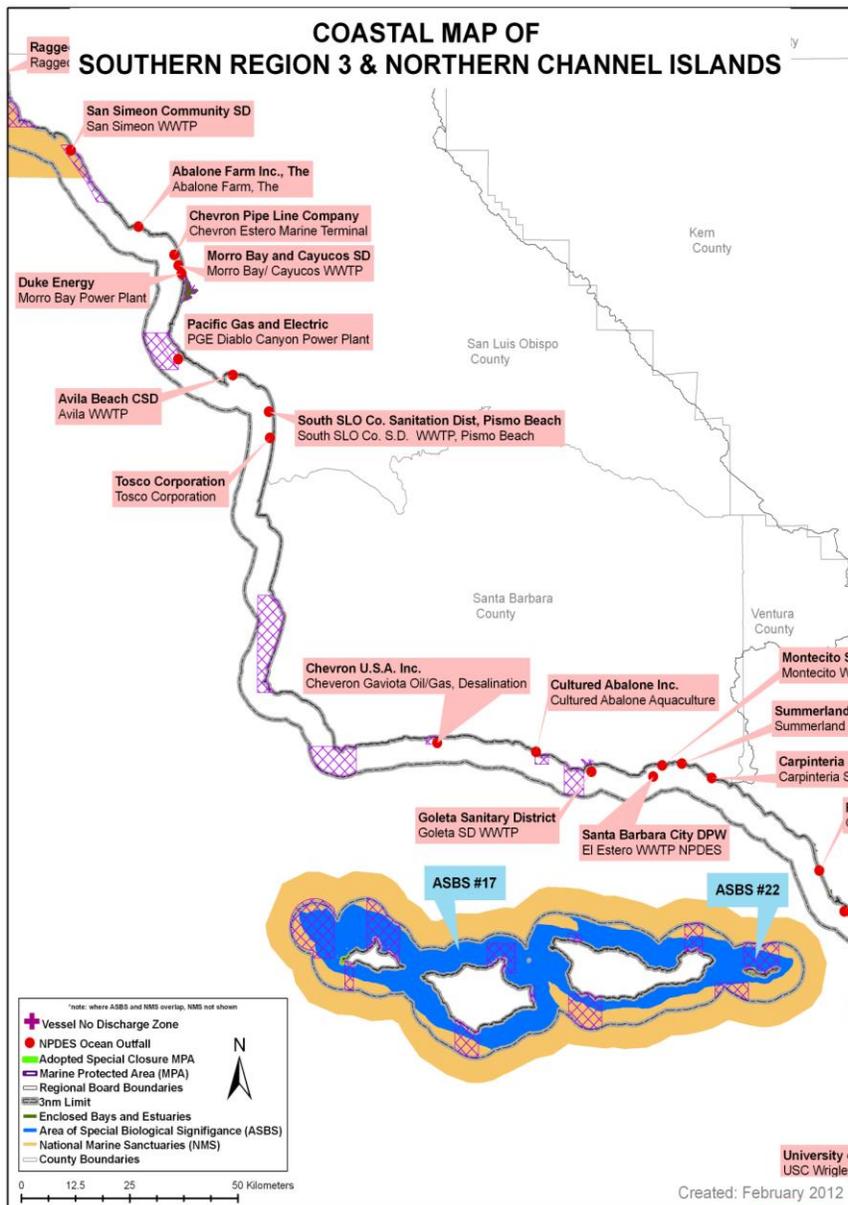


Figure 7. Coastal features of the southern Central Coast Region and the Northern Channel Islands.

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 County, three MPAs in Santa Cruz County, 17 MPAs in Monterey County (three of the MPAs are estuarine), eight MPAs in San Luis Obispo County (two of the MPAs are estuarine), and 17 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 (POTWs) 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.

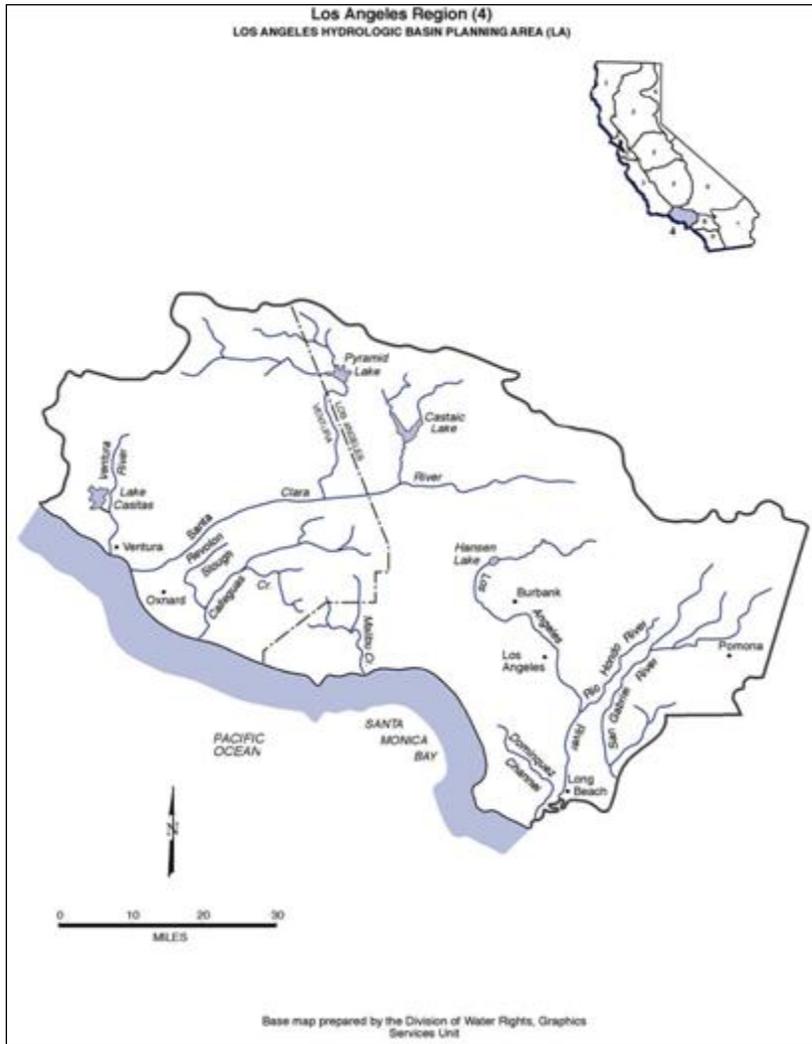


Figure 8. Hydrology of the Los Angeles Region.

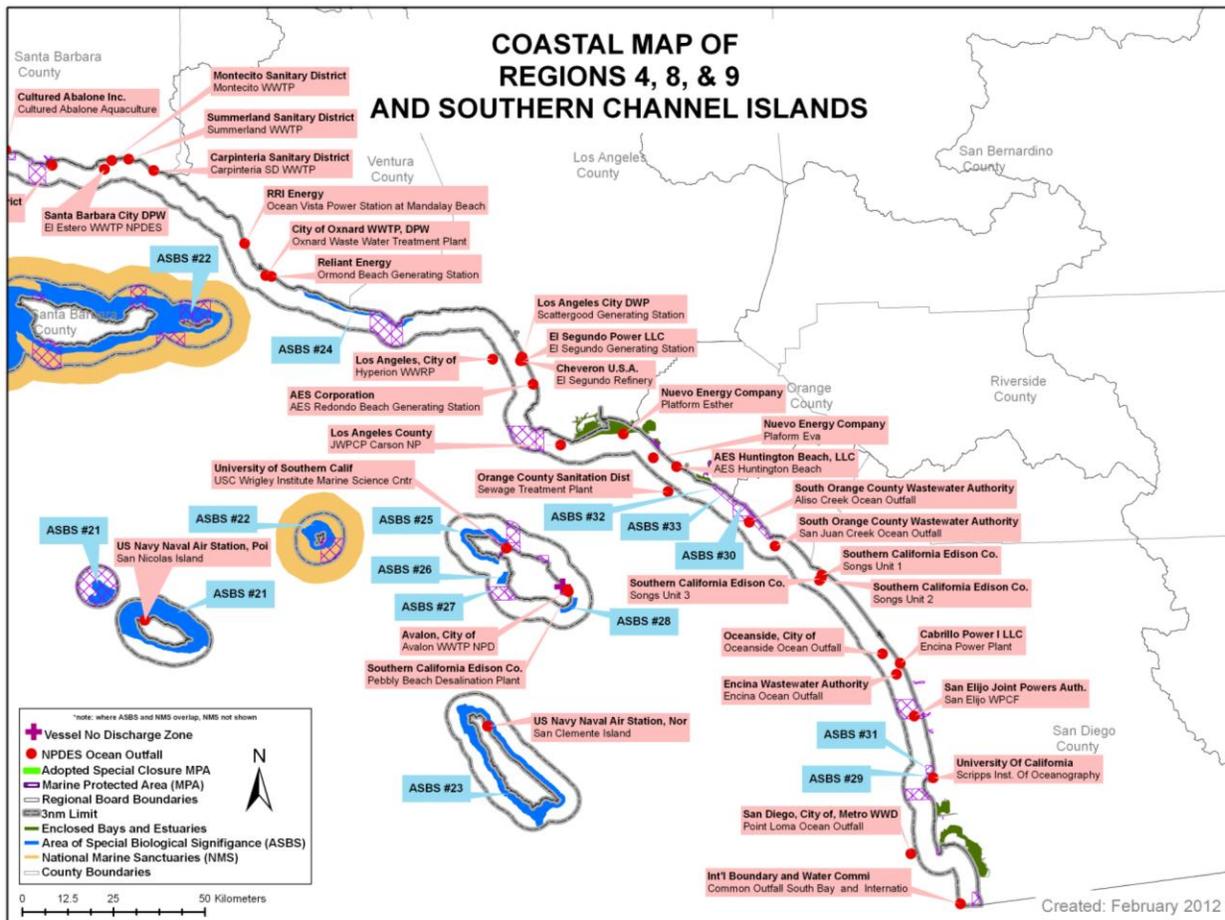


Figure 9. Coastal features of the Southern Channel Islands and Los Angeles, Santa Ana and San Diego Regions.

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 9 miles

(14.5 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 13 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.

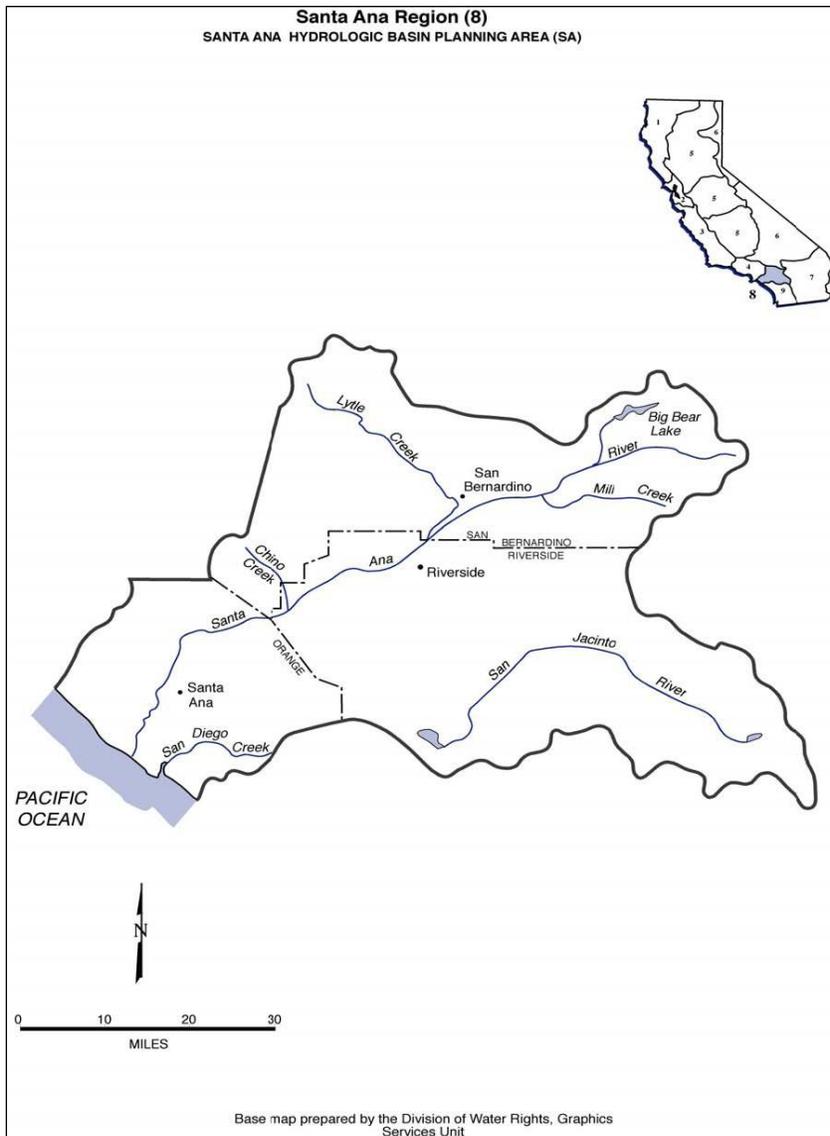


Figure 10. Hydrology of the Santa Ana Region.

Seven MPAs are located in Orange County, three 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.

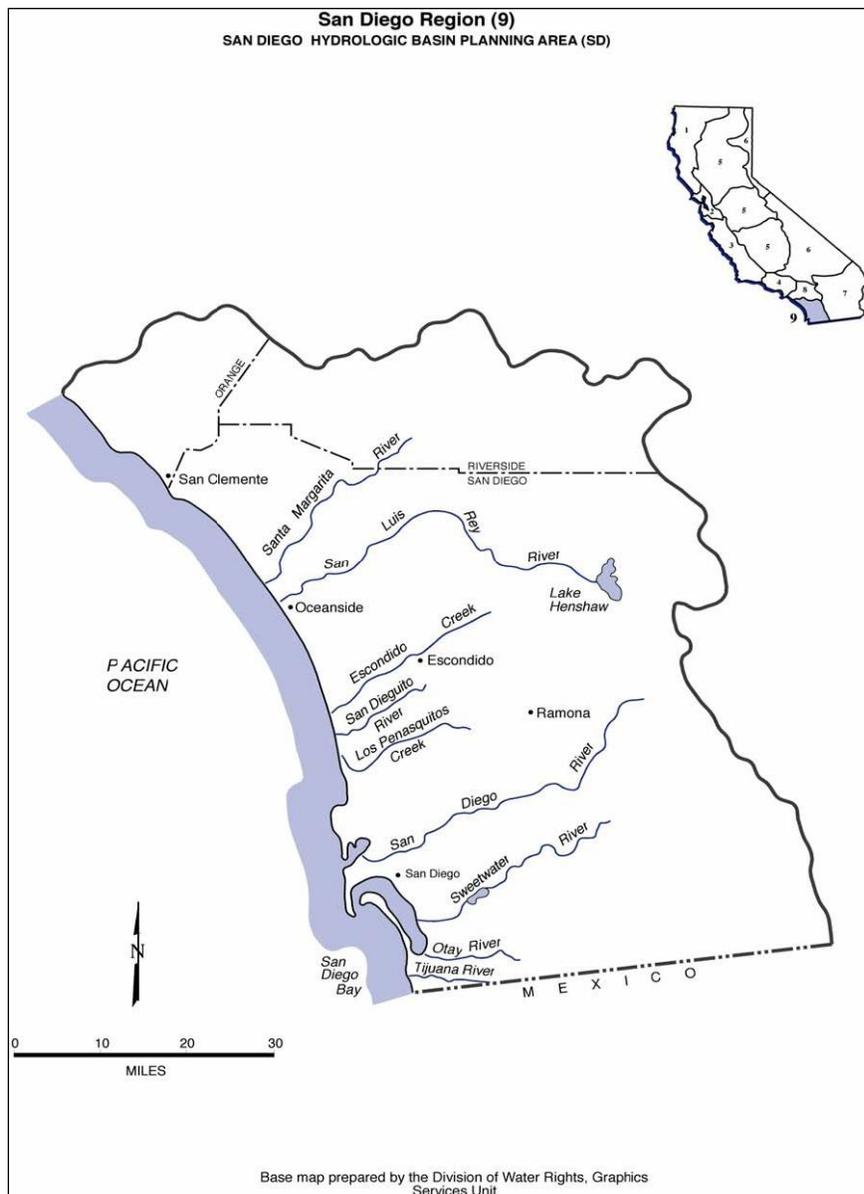


Figure 11. Hydrology of the San Diego Region.

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.

Seven MPAs are located in Orange County, three of which are estuarine. Orange County is located within both the Santa Ana and San Diego Regional boundaries. Eleven 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 (#30), 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 <i>Haliotis sorenseni</i>	California clapper rail <i>Rallus longirostris obsoletus</i>
Black abalone <i>Haliotis cracherodii</i>	Light-footed clapper rail <i>Rallus longirostris levipes</i>
California black rail <i>Laterallus jamaicensis coturniculus</i>	Western snowy plover <i>Charadrius alexandrinus nivosus</i>
Chinook salmon <i>Oncorhynchus tshawytscha</i>	Marbled murrelet <i>Brachyramphus marmoratus</i>
Coho salmon <i>Oncorhynchus kisutch</i>	California least tern <i>Sterna antillarum browni</i>
Steelhead <i>Oncorhynchus mykiss</i>	Southern sea otter <i>Enhydra lutris nereis</i>
Eulachon <i>Thaleichthys pacificus</i>	Guadalupe fur seal <i>Arctocephalus townsendi</i>
Tidewater goby <i>Eucyclogobius newberryi</i>	Stellar sea lion <i>Eumetopias jubatus</i>
Green sea turtle <i>Chelonia mydas</i>	Sei whale <i>Balaenoptera borealis</i>
Loggerhead sea turtle <i>Caretta caretta</i>	Blue whale <i>Balaenoptera musculus</i>
Olive Ridley sea turtle <i>Lepidochelys olivacea</i>	Fin whale <i>Balaenoptera physalus</i>
Leatherback sea turtle <i>Dermochelys coriacea</i>	Humpback whale <i>Megaptera novaeangliae</i>
Short-tailed albatross <i>Phoebastria albatrus</i>	Right whale <i>Eubalaena japonica</i>
California condor <i>Gymnogyps californianus</i>	Sperm whale <i>Physeter macrocephalus</i>
Green sturgeon <i>Acipenser medirostris</i>	Killer whale <i>Orcinus orca</i>

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, marine parks 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 66 NPDES wastewater discharges along the California coast. Of these discharges, approximately 29 discharge more than 10 million gallons per day (MGD) and 37 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 the 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 the 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 State Water Board adopts an Ocean Plan amendment under the State Water Board's certified regulatory program (California Public Resources Code § 15251[g]). The State Water Board is the Lead Agency responsible for evaluating the potential environmental impacts of Ocean 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 Ocean 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 July 8, 2011.

5.1 Project Title

The title of this project is: *Implementation of State Water Board Resolutions 2010-0057 and 2011-0013 State Water Quality Protection Areas and 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's. 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. 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 provided 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:

Johanna Weston, California Sea Grant Fellow
State Water Resources Control Board - Division of Water Quality
1001 I Street Sacramento, California 95814
Office Phone – 916.341.5577
Email - JWeston@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 or 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 administering agencies. The Marine Managed Areas Improvement Act was intended to more effectively organize, designate and manage the state's 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:

“In 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, which 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 use 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	
Marin	Estero de San Antonio SMRMA	
	Point Reyes SMR	Point Reyes Headlands ASBS
	Point Reyes SMCA	
	Estero de Limantour SMR	
	Drake's Estero SMCA	
	Duxbury Reef SMCA	Duxbury Reef ASBS
	Marine Islands SMP	
San Francisco	North Farallon Islands SMR	Farallon Islands ASBS
	Southeast Farallon Island SMR	Farallon Islands ASBS
	Southeast Farallon Island SMCA	Farallon Islands ASBS
San Mateo	Montara SMR	James V. Fitzgerald ASBS
	Pillar Point SMCA	
	Año Nuevo SMCA	Año Nuevo ASBS
Santa Cruz	Año Nuevo SMCA	Año Nuevo ASBS
	Greyhound Rock SMCA	
	Natural Bridges SMR	
Monterey	Soquel Canyon SMCA	
	Portuguese Ledge SMCA	
	Edward F. Ricketts SMCA	
	Lovers Point SMR	
	Pacific Grove Marine Gardens SMCA	Pacific Grove ASBS
	Asilomar SMR	
	Carmel Pinnacles SMR	
	Carmel Bay SMCA	Carmel Bay ASBS
	Point Lobos SMR	Point Lobos ASBS
	Point Lobos SMCA	
	Point Sur SMR	
	Point Sur SMCA	
	Big Creek SMR	
Big Creek SMCA		
San Luis Obispo	Piedras Blancas SMR	
	Piedras Blancas SMCA	
	White Rock (Cambria) SMCA	
	Cambria SMCA	
	Point Buchon SMR	
	Point Buchon SMCA	
Santa Barbara	Vandenberg SMR	
	Point Conception SMR	

	Kashtayit SMCA	
	Naples SMCA	
	Campus Point SMCA	
	Richardson Rock SMR (San Miguel Island)	San Miguel Santa Rosa Santa Cruz Island ASBS
	Harris Point SMR (San Miguel Island)	San Miguel Santa Rosa Santa Cruz Island ASBS
	Judith Rock SMR (San Miguel Island)	San Miguel Santa Rosa Santa Cruz Island ASBS
	Carrington Point SMR (Santa Rosa Island)	San Miguel Santa Rosa Santa Cruz Island ASBS
	Skunk Point SMR (Santa Rosa Island)	San Miguel Santa Rosa Santa Cruz Island ASBS
	South Point SMR (Santa Rosa Island)	San Miguel Santa Rosa Santa Cruz Island ASBS
	Painted Cave SMCA (Santa Cruz Island)	San Miguel Santa Rosa Santa Cruz Island ASBS
	Gull Island SMR (Santa Cruz Island)	San Miguel Santa Rosa Santa Cruz Island ASBS
	Scorpion SMR (Santa Cruz Island)	San Miguel Santa Rosa Santa Cruz Island ASBS
	Santa Barbara Island SMR	Santa Barbara/Anacapa Island ASBS
Ventura	Anacapa Island SMCA	Santa Barbara/Anacapa Island ASBS
	Anacapa Island SMR	Santa Barbara/Anacapa Island ASBS
	Footprint (Anacapa Channel) SMR	Santa Barbara/Anacapa Island ASBS
	Begg Rock SMR	San Nicolas Island and Begg Rock ASBS
Los Angeles	Abalone Cove SMCA	
	Point Dume SMR	Laguna Point to Latigo Point ASBS
	Point Dume SMCA	Laguna Point to Latigo Point ASBS
	Point Vicente SMCA	
	Abalone Cover SMCA	
	Arrow Point to Lion Head SMCA (Catalina Island)	Northwest Santa Catalina Island ASBS
	Blue Cavern SMCA (Catalina Island)	Northwest Santa Catalina Island ASBS
	Bird Rock SMCA (Catalina Island)	Northwest Santa Catalina Island ASBS
	Long Point SMR (Catalina Island)	
	Casino Point SMCA (Catalina Island)	
	Lover's Cove SMCA (Catalina Island)	
	Farnsworth Offshore SMCA (Catalina Island)	Farnsworth Bank ASBS
	Farnsworth Onshore SMCA (Catalina Island)	
	Cat Harbor SMCA (Catalina Island)	
Orange	Crystal Cove SMCA	Robert E. Badham ASBS, Irvine Coast ASBS
	Laguna Beach SMR	Heisler Park ASBS
	Laguna Beach SMCA	
	Dana Point SMCA	
San Diego	Swami's SMCA	
	San Diego-Scripps Coastal SMCA	San Diego-Scripps ASBS
	Matlahuayl SMR	La Jolla ASBS
	South La Jolla SMR	
	Cabrillo SMR	
	Tijuana River Mouth SMCA	

5.6.3 Protecting Water Quality within MPAs

The Ocean Plan prohibits the discharge of waste into the ASBS, but the State Water Board grants exceptions if beneficial uses are protected and the public interest is served. Therefore, on March 20, 2012 Resolution 2012-0012 was adopted by State Water Board, approving exceptions for selected storm water and nonpoint source discharges into ASBS. However, the exceptions require that dischargers comply with strict special protections that have special conditions, limitations, and prohibitions.

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 intakes, 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 due 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 limitations potentially imposed to protect an 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 through new construction. In addition, those efforts by municipal waste water permittees to implement the State Water Boards Recycled Water Policy approved through the adoption 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 discharges 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 the 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 Conservation 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 5.7.3.

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 statewide 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 MPAs

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 waste 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 5.7.3 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.

The concurrent designation of an MPA and SWQPA-GP may lead to environmental and economic benefits, including: increased fishery health and productivity, increased tourism value in MPA areas, and the cost-saving efficiency of adopting modern pollution control technology. Together this will strengthen the objectives of the MLPA and the MMAIA through the establishment of a marine managed areas network across California.

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 cause 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 0.5 million 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 through 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 golf 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.

It is important to note that the proposed amendments do not address trash discharges to SWQPA-GPs. Prohibition of trash discharge will be addressed with new proposed amendments to statewide water quality control plans, including the Ocean Plan, for trash.

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 alteration 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 practicable. 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 designation will occur. 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 Marine Managed Areas*

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

(a) State Water Quality Protection Areas (SWQPAs)* consisting 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) 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. The designation of State Marine Parks and State Marine Conservation Areas may not serve as the sole basis for new or modified limitations, substantive conditions, or prohibitions upon existing municipal point source wastewater discharge outfalls. 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*

4-(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 (NPDES)

- (1) An SWQPA-GP shall not be designated over existing permitted point source wastewater outfalls 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.
- (3) Where a new SWQPA-GP is established in the vicinity of existing municipal wastewater outfalls, there shall be no new or modified limiting condition or prohibitions for the SWQPA-GP relative to those wastewater outfalls.
- (4) Regulatory requirements for discharges from existing treated municipal wastewater outfalls shall be derived from the Chapter II – Water Quality Objectives and Chapter III – Program of Implementation.

(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 permitted seawater intakes with a capacity less than one million gallons per day are excluded from this requirement.

(c) Implementation provisions for permitted separate storm sewer system (MS4) discharges and nonpoint source discharges.

- (1) Existing waste discharges are allowed, but shall not cause an undesirable alteration in natural water quality. For purposes of SWQPA-GP, an undesirable alteration in natural water quality means that for intermittent (e.g. wet weather) 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) An NPDES permitting authority may authorize NPDES-permitted non-storm water discharges to an MS4 with a direct discharge to an SWQPA-GP only to the extent the NPDES permitting authority finds that the discharge does not cause an undesirable alteration in natural water quality in an SWQPA-GP.
- (3) Non-storm water (dry weather) flows are effectively prohibited as required by the applicable permit. Where capacity and infrastructure exists, all dry weather flows shall be diverted to municipal sanitary sewer systems. The permitting authority may allow discharges essential for emergency response purposes, structural stability, and slope stability, which may include but are not limited the following:

- a. Discharges associated with emergency fire fighting operations.
- b. Foundation and footing drains
- c. Water from crawl space or basement pumps.
- d. Hillside dewatering.

(4) The following naturally occurring discharges are allowed:

- a. Naturally occurring groundwater seepage via a storm drain
- b. Non-anthropogenic flows from a naturally occurring stream via a culvert or storm drain, as long as there are no contributions of anthropogenic runoff.

(5) Existing storm water discharges into an 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:

- 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.

(6) An initial analysis shall be performed for pre- and post-storm receiving water quality of Table 1 constituents and chronic toxicity. 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.

(7) 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.

(8) 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 an SWQPA-GP.

(2) Seawater intakes

No new surface water seawater intakes shall be established within an SWQPA-GP. This does not apply to sub-seafloor intakes where studies are prepared showing there is no predictable entrainment or impingement of marine life.

(3) All Other New Discharges

There shall be no increase in nonpoint sources or permitted storm drains directly into an SWQPA-GP.

6. Impaired Tributaries to MPAs, SWQPA-ASBS and SWQPA-GP

All water bodies draining to, or that are designated as, 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.

I. Discharge Prohibitions

1. Hazardous Substances

a. The discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste* into the ocean* is prohibited.

2. Areas Designated for Special Water Quality Protection

a. Waste* shall not be discharged to designated Areas* of Special Biological Significance except as provided in Chapter III. E. Implementation Provisions for Marine Managed Areas*.

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-maintenance of natural water quality is undesirable-assured. 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 (SWQPA-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.

PERMITTING AUTHORITY means the State Water Board or Regional Water Board, whichever issues the permit.

STATE WATER QUALITY PROTECTION AREAS – GENERAL PROTECTION (SWQPA-GP) designated by the State Water Board to protect marine species and biological communities from an undesirable alteration in natural water quality 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
STATE WATER QUALITY PROTECTION AREAS.**

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 U.S. 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.

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APPENDIX A – 2012 Ocean Plan

**WATER QUALITY CONTROL PLAN
OCEAN WATERS OF CALIFORNIA**



2012

**STATE WATER RESOURCES CONTROL BOARD
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY**



State of California

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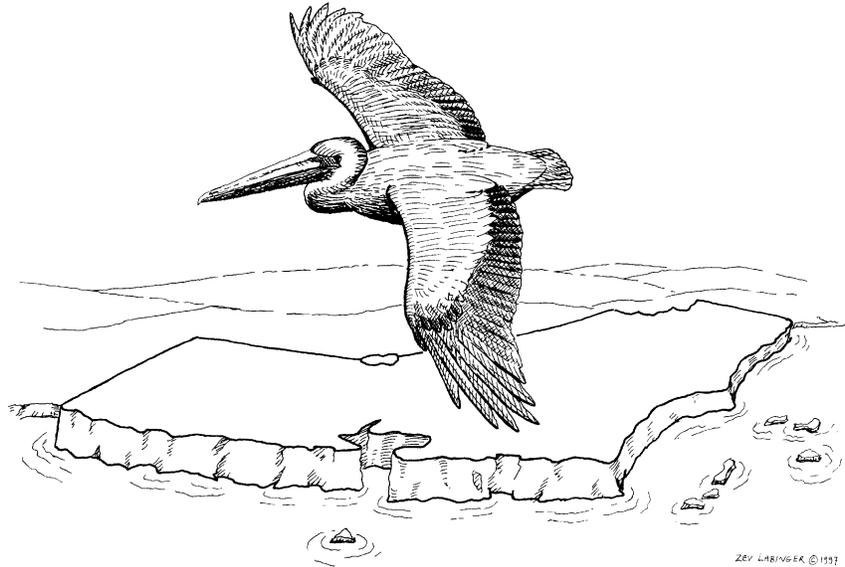
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State of California
STATE WATER RESOURCES CONTROL BOARD



2012

CALIFORNIA OCEAN PLAN

WATER QUALITY CONTROL PLAN

OCEAN WATERS OF CALIFORNIA

Effective **XXXXXXX**

Adopted October 16, 2012

Approved by the Office of Administrative Law on **XXXXXXX**

CALIFORNIA OCEAN PLAN

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CALIFORNIA OCEAN PLAN
WATER QUALITY CONTROL PLAN FOR
OCEAN WATERS OF CALIFORNIA

INTRODUCTION

A. Purpose and Authority

1. In furtherance of legislative policy set forth in Section 13000 of Division 7 of the California Water Code (CWC) (Stats. 1969, Chap. 482) pursuant to the authority contained in Section 13170 and 13170.2 (Stats. 1971, Chap. 1288) the State Water Resources Control Board (State Water Board) hereby finds and declares that protection of the quality of the ocean* waters for use and enjoyment by the people of the State requires control of the discharge of waste* to ocean* waters in accordance with the provisions contained herein. The Board finds further that this plan shall be reviewed at least every three years to guarantee that the current standards are adequate and are not allowing degradation* to marine species or posing a threat to public health.

B. Principles

1. Harmony Among Water Quality Control Plans and Policies.
 - a. In the adoption and amendment of water quality control plans, it is the intent of this Board that each plan will provide for the attainment and maintenance of the water quality standards of downstream waters.
 - b. To the extent there is a conflict between a provision of this plan and a provision of another statewide plan or policy, or a regional water quality control plan (basin plan), the more stringent provision shall apply except where pursuant to Chap. III.J of this Plan, the State Water Board has approved an exception to the Plan requirements.

C. Applicability

1. This plan is applicable, in its entirety, to point source discharges to the ocean*. Nonpoint sources of waste* discharges to the ocean* are subject to Chapter I Beneficial Uses, Chapter II - WATER QUALITY OBJECTIVES (wherein compliance with water quality objectives shall, in all cases, be determined by direct measurements in the receiving waters*) and Chapter III - PROGRAM OF IMPLEMENTATION Parts A.2, D, E, and I.
2. This plan is not applicable to discharges to enclosed* bays and estuaries* or inland waters or the control of dredged* material.

* See Appendix I for definition of terms.

3. Provisions regulating the thermal aspects of waste* discharged to the ocean* are set forth in the Water Quality Control Plan for the Control of Temperature in the Coastal and Interstate Waters and Enclosed* Bays and Estuaries* of California.

4. Within this Plan, references to the State Board or State Water Board shall mean the State Water Resources Control Board. References to a Regional Board or Regional Water Board shall mean a California Regional Water Quality Control Board. References to the Environmental Protection Agency, U.S. EPA, or EPA shall mean the federal Environmental Protection Agency.

* See Appendix I for definition of terms.

I. BENEFICIAL USES

- A. The beneficial uses of the ocean* waters of the State that shall be protected include industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture*; preservation and enhancement of designated Areas* of Special Biological Significance (ASBS); rare and endangered species; marine habitat; fish migration; fish spawning and shellfish* harvesting.

* See Appendix I for definition of terms.

II. WATER QUALITY OBJECTIVES

A. General Provisions

1. This chapter sets forth limits or levels of water quality characteristics for ocean* waters to ensure the reasonable protection of beneficial uses and the prevention of nuisance. The discharge of waste* shall not cause violation of these objectives.
2. The Water Quality Objectives and Effluent Limitations are defined by a statistical distribution when appropriate. This method recognizes the normally occurring variations in treatment efficiency and sampling and analytical techniques and does not condone poor operating practices.
3. Compliance with the water quality objectives of this chapter shall be determined from samples collected at stations representative of the area within the waste field where initial* dilution is completed.

B. Bacterial Characteristics

1. Water-Contact Standards

Both the State Water Board and the California Department of Public Health (CDPH) have established standards to protect water contact recreation in coastal waters from bacterial contamination. Subsection a of this section contains bacterial objectives adopted by the State Water Board for ocean waters used for water contact recreation. Subsection b describes the bacteriological standards adopted by CDPH for coastal waters adjacent to public beaches and public water contact sports areas in ocean waters.

a. State Water Board Water-Contact Standards

- (1) Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water contact sports, as determined by the Regional Board (i.e., waters designated as REC-1), but including all kelp* beds, the following bacterial objectives shall be maintained throughout the water column:

30-day Geometric Mean – The following standards are based on the geometric mean of the five most recent samples from each site:

- i. Total coliform density shall not exceed 1,000 per 100 mL;
- ii. Fecal coliform density shall not exceed 200 per 100 mL; and
- iii. Enterococcus density shall not exceed 35 per 100 mL.

Single Sample Maximum:

- i. Total coliform density shall not exceed 10,000 per 100 mL;
- ii. Fecal coliform density shall not exceed 400 per 100 mL;

* See Appendix I for definition of terms.

- iii. Enterococcus density shall not exceed 104 per 100 mL; and
- iv. Total coliform density shall not exceed 1,000 per 100 mL when the fecal coliform/total coliform ratio exceeds 0.1.

(2) The “Initial* Dilution Zone” of wastewater outfalls shall be excluded from designation as “kelp* beds” for purposes of bacterial standards, and Regional Boards should recommend extension of such exclusion zone where warranted to the State Water Board (for consideration under Chapter III. J.). Adventitious assemblages of kelp plants on waste discharge structures (e.g., outfall pipes and diffusers) do not constitute kelp* beds for purposes of bacterial standards.

b. CDPH Standards

CDPH has established minimum protective bacteriological standards for coastal waters adjacent to public beaches and for public water-contact sports areas in ocean waters. These standards are found in the California Code of Regulations, title 17, section 7958, and they are identical to the objectives contained in subsection a. above. When a public beach or public water-contact sports area fails to meet these standards, CDPH or the local public health officer may post with warning signs or otherwise restrict use of the public beach or public water-contact sports area until the standards are met. The CDPH regulations impose more frequent monitoring and more stringent posting and closure requirements on certain high-use public beaches that are located adjacent to a storm drain that flows in the summer.

For beaches not covered under AB 411 regulations, CDPH imposes the same standards as contained in Title 17 and requires weekly sampling but allows the county health officer more discretion in making posting and closure decisions.

2. Shellfish* Harvesting Standards

a. At all areas where shellfish* may be harvested for human consumption, as determined by the Regional Board, the following bacterial objectives shall be maintained throughout the water column:

- (1) The median total coliform density shall not exceed 70 per 100 mL, and not more than 10 percent of the samples shall exceed 230 per 100 mL.

C. Physical Characteristics

- 1. Floating particulates and grease and oil shall not be visible.
- 2. The discharge of waste* shall not cause aesthetically undesirable discoloration of the ocean* surface.
- 3. Natural* light shall not be significantly* reduced at any point outside the initial* dilution zone as the result of the discharge of waste*.

* See Appendix I for definition of terms.

4. The rate of deposition of inert solids and the characteristics of inert solids in ocean* sediments shall not be changed such that benthic communities are degraded*.

D. Chemical Characteristics

1. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as the result of the discharge of oxygen demanding waste* materials.
2. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
3. The dissolved sulfide concentration of waters in and near sediments shall not be significantly* increased above that present under natural conditions.
4. The concentration of substances set forth in Chapter II, Table 1, in marine sediments shall not be increased to levels which would degrade* indigenous biota.
5. The concentration of organic materials in marine sediments shall not be increased to levels that would degrade* marine life.
6. Nutrient materials shall not cause objectionable aquatic growths or degrade* indigenous biota.
7. Numerical Water Quality Objectives
 - a. Table 1 water quality objectives apply to all discharges within the jurisdiction of this Plan. Unless otherwise specified, all metal concentrations are expressed as total recoverable concentrations.
 - b. Table 1 Water Quality Objectives

* See Appendix I for definition of terms.

**TABLE 1 (formerly TABLE B)
WATER QUALITY OBJECTIVES**

	<u>Units of Measurement</u>	<u>Limiting Concentrations</u>		
		<u>6-Month Median</u>	<u>Daily Maximum</u>	<u>Instantaneous Maximum</u>
OBJECTIVES FOR PROTECTION OF MARINE AQUATIC LIFE				
Arsenic	µg/L	8.	32.	80.
Cadmium	µg/L	1.	4.	10.
Chromium (Hexavalent) (see below, a)	µg/L	2.	8.	20.
Copper	µg/L	3.	12.	30.
Lead	µg/L	2.	8.	20.
Mercury	µg/L	0.04	0.16	0.4
Nickel	µg/L	5.	20.	50.
Selenium	µg/L	15.	60.	150.
Silver	µg/L	0.7	2.8	7.
Zinc	µg/L	20.	80.	200.
Cyanide (see below, b)	µg/L	1.	4.	10.
Total Chlorine Residual (For intermittent chlorine sources see below, c)	µg/L	2.	8.	60.
Ammonia (expressed as nitrogen)	µg/L	600.	2400.	6000.
Acute* Toxicity	TUa	N/A	0.3	N/A
Chronic* Toxicity	TUc	N/A	1.	N/A
Phenolic Compounds (non-chlorinated)	µg/L	30.	120.	300.
Chlorinated Phenolics	µg/L	1.	4.	10.
Endosulfan	µg/L	0.009	0.018	0.027
Endrin	µg/L	0.002	0.004	0.006
HCH*	µg/L	0.004	0.008	0.012
Radioactivity	Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 3, Section 30253 of the California Code of Regulations. Reference to Section 30253 is prospective, including future changes to any incorporated provisions of federal law, as the changes take effect.			

* See Appendix I for definition of terms.

TABLE 1 (formerly TABLE B) Continued

<u>Chemical</u>	<u>30-day Average (µg/L)</u>	
	<u>Decimal Notation</u>	<u>Scientific Notation</u>
OBJECTIVES FOR PROTECTION OF HUMAN HEALTH – NONCARCINOGENS		
acrolein	220.	2.2×10^2
antimony	1,200.	1.2×10^3
bis(2-chloroethoxy) methane	4.4	4.4×10^0
bis(2-chloroisopropyl) ether	1,200.	1.2×10^3
chlorobenzene	570.	5.7×10^2
chromium (III)	190,000.	1.9×10^5
di-n-butyl phthalate	3,500.	3.5×10^3
dichlorobenzenes*	5,100.	5.1×10^3
diethyl phthalate	33,000.	3.3×10^4
dimethyl phthalate	820,000.	8.2×10^5
4,6-dinitro-2-methylphenol	220.	2.2×10^2
2,4-dinitrophenol	4.0	4.0×10^0
ethylbenzene	4,100.	4.1×10^3
fluoranthene	15.	1.5×10^1
hexachlorocyclopentadiene	58.	5.8×10^1
nitrobenzene	4.9	4.9×10^0
thallium	2.	$2. \times 10^0$
toluene	85,000.	8.5×10^4
tributyltin	0.0014	1.4×10^{-3}
1,1,1-trichloroethane	540,000.	5.4×10^5
OBJECTIVES FOR PROTECTION OF HUMAN HEALTH – CARCINOGENS		
acrylonitrile	0.10	1.0×10^{-1}
aldrin	0.000022	2.2×10^{-5}
benzene	5.9	5.9×10^0
benzidine	0.000069	6.9×10^{-5}
beryllium	0.033	3.3×10^{-2}
bis(2-chloroethyl) ether	0.045	4.5×10^{-2}
bis(2-ethylhexyl) phthalate	3.5	3.5×10^0
carbon tetrachloride	0.90	9.0×10^{-1}
chlordane*	0.000023	2.3×10^{-5}
chlorodibromomethane	8.6	8.6×10^0

* See Appendix I for definition of terms.

TABLE 1 (formerly TABLE B) Continued

Chemical	30-day Average (µg/L)	
	Decimal Notation	Scientific Notation
OBJECTIVES FOR PROTECTION OF HUMAN HEALTH – CARCINOGENS		
chloroform	130.	1.3×10^2
DDT*	0.00017	1.7×10^{-4}
1,4-dichlorobenzene	18.	1.8×10^1
3,3'-dichlorobenzidine	0.0081	8.1×10^{-3}
1,2-dichloroethane	28.	2.8×10^1
1,1-dichloroethylene	0.9	9×10^{-1}
dichlorobromomethane	6.2	6.2×10^0
dichloromethane	450.	4.5×10^2
1,3-dichloropropene	8.9	8.9×10^0
dieldrin	0.00004	4.0×10^{-5}
2,4-dinitrotoluene	2.6	2.6×10^0
1,2-diphenylhydrazine	0.16	1.6×10^{-1}
halomethanes*	130.	1.3×10^2
heptachlor	0.00005	5×10^{-5}
heptachlor epoxide	0.00002	2×10^{-5}
hexachlorobenzene	0.00021	2.1×10^{-4}
hexachlorobutadiene	14.	1.4×10^1
hexachloroethane	2.5	2.5×10^0
isophorone	730.	7.3×10^2
N-nitrosodimethylamine	7.3	7.3×10^0
N-nitrosodi-N-propylamine	0.38	3.8×10^{-1}
N-nitrosodiphenylamine	2.5	2.5×10^0
PAHs*	0.0088	8.8×10^{-3}
PCBs*	0.000019	1.9×10^{-5}
TCDD equivalents*	0.0000000039	3.9×10^{-9}
1,1,2,2-tetrachloroethane	2.3	2.3×10^0
tetrachloroethylene	2.0	2.0×10^0
toxaphene	0.00021	2.1×10^{-4}
trichloroethylene	27.	2.7×10^1
1,1,2-trichloroethane	9.4	9.4×10^0
2,4,6-trichlorophenol	0.29	2.9×10^{-1}
vinyl chloride	36.	3.6×10^1

* See Appendix I for definition of terms.

Table 1 Notes:

- a) Dischargers may at their option meet this objective as a total chromium objective.
- b) If a discharger can demonstrate to the satisfaction of the Regional Water Board (subject to EPA approval) that an analytical method is available to reliably distinguish between strongly and weakly complexed cyanide, effluent limitations for cyanide may be met by the combined measurement of free cyanide, simple alkali metal cyanides, and weakly complexed organometallic cyanide complexes. In order for the analytical method to be acceptable, the recovery of free cyanide from metal complexes must be comparable to that achieved by the approved method in 40 CFR PART 136, as revised May 14, 1999.
- c) Water quality objectives for total chlorine residual applying to intermittent discharges not exceeding two hours, shall be determined through the use of the following equation:

$$\log y = -0.43 (\log x) + 1.8$$

where: y = the water quality objective (in µg/L) to apply when chlorine is being discharged;
x = the duration of uninterrupted chlorine discharge in minutes.

E. Biological Characteristics

- 1. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded*.
- 2. The natural taste, odor, and color of fish, shellfish*, or other marine resources used for human consumption shall not be altered.
- 3. The concentration of organic materials in fish, shellfish* or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

F. Radioactivity

- 1. Discharge of radioactive waste* shall not degrade* marine life.

* See Appendix I for definition of terms.

III. PROGRAM OF IMPLEMENTATION

A. General Provisions

1. Effective Date
 - a. The *Water Quality Control Plan, Ocean Waters of California, California Ocean Plan* was adopted and has been effective since 1972. There have been multiple amendments of the Ocean Plan since its adoption.
2. General Requirements For Management Of Waste Discharge To The Ocean*
 - a. Waste* management systems that discharge to the ocean* must be designed and operated in a manner that will maintain the indigenous marine life and a healthy and diverse marine community.
 - b. Waste discharged* to the ocean* must be essentially free of:
 - (1) Material that is floatable or will become floatable upon discharge.
 - (2) Settleable material or substances that may form sediments which will degrade* benthic communities or other aquatic life.
 - (3) Substances which will accumulate to toxic levels in marine waters, sediments or biota.
 - (4) Substances that significantly* decrease the natural* light to benthic communities and other marine life.
 - (5) Materials that result in aesthetically undesirable discoloration of the ocean* surface.
 - c. Waste* effluents shall be discharged in a manner which provides sufficient initial* dilution to minimize the concentrations of substances not removed in the treatment.
 - d. Location of waste* discharges must be determined after a detailed assessment of the oceanographic characteristics and current patterns to assure that:
 - (1) Pathogenic organisms and viruses are not present in areas where shellfish* are harvested for human consumption or in areas used for swimming or other body-contact sports.
 - (2) Natural water quality conditions are not altered in areas designated as being of special biological significance or areas that existing marine laboratories use as a source of seawater.
 - (3) Maximum protection is provided to the marine environment.

* See Appendix I for definition of terms.

- e. Waste* that contains pathogenic organisms or viruses should be discharged a sufficient distance from shellfishing* and water-contact sports areas to maintain applicable bacterial standards without disinfection. Where conditions are such that an adequate distance cannot be attained, reliable disinfection in conjunction with a reasonable separation of the discharge point from the area of use must be provided. Disinfection procedures that do not increase effluent toxicity and that constitute the least environmental and human hazard should be used.

3. Areas of Special Biological Significance

- a. ASBS* shall be designated by the State Water Board following the procedures provided in Appendix IV. A list of ASBS* is available in Appendix V.

- 4. Combined Sewer Overflow: Notwithstanding any other provisions in this plan, discharges from the City of San Francisco’s combined sewer system are subject to the US EPA’s Combined Sewer Overflow Policy.

B. Table 2 Effluent Limitations

**TABLE 2 (formerly TABLE A)
EFFLUENT LIMITATIONS**

	Unit of Measurement	Limiting Concentrations		
		Monthly (30-day Average)	Weekly (7-day Average)	Maximum at any time
Grease and Oil	mL	25.	40.	75.
Suspended Solids			See below +	
Settleable Solids	mL/L	1.0	1.5	3.0
Turbidity	NTU	75.	100.	225.
pH	Units		Within limit of 6.0 to 9.0 at all times	

Table 2 Notes:

- + Suspended Solids: Dischargers shall, as a 30-day average, remove 75% of suspended solids from the influent stream before discharging wastewaters to the ocean*, except that the effluent limitation to be met shall not be lower than 60 mg/l. Regional Boards may recommend that the State Water Board (Chapter III.J), with the concurrence of the Environmental Protection Agency, adjust the lower effluent concentration limit (the 60 mg/l above) to suit the environmental and effluent characteristics of the discharge. As a further consideration in making such recommendation for adjustment, Regional Water Boards should evaluate effects on existing and potential water* reclamation projects.

If the lower effluent concentration limit is adjusted, the discharger shall remove 75% of suspended solids from the influent stream at any time the influent concentration exceeds four times such adjusted effluent limit.

- 1. Table 2 effluent limitations apply only to publicly owned treatment works and industrial discharges for which Effluent Limitations Guidelines have not been established pursuant to Sections 301, 302, 304, or 306 of the Federal Clean Water Act.

* See Appendix I for definition of terms.

2. Table 2 effluent limitations shall apply to a discharger's total effluent, of whatever origin (i.e., gross, not net, discharge), except where otherwise specified in this Plan.
3. The State Water Board is authorized to administer and enforce effluent limitations established pursuant to the Federal Clean Water Act. Effluent limitations established under Sections 301, 302, 306, 307, 316, 403, and 405 of the aforementioned Federal Act and administrative procedures pertaining thereto are included in this plan by reference. Compliance with Table 2 effluent limitations, or Environmental Protection Agency Effluent Limitations Guidelines for industrial discharges, based on Best Practicable Control Technology, shall be the minimum level of treatment acceptable under this plan, and shall define reasonable treatment and waste control technology.

C. Implementation Provisions for Table 1

1. Effluent concentrations calculated from Table 1 water quality objectives shall apply to a discharger's total effluent, of whatever origin (i.e., gross, not net, discharge), except where otherwise specified in this Plan.
2. If the Regional Water Board determines, using the procedures in Appendix VI, that a pollutant is discharged into ocean* waters at levels which will cause, have the reasonable potential to cause, or contribute to an excursion above a Table 1 water quality objective, the Regional Water Board shall incorporate a water quality-based effluent limitation in the Waste Discharge Requirement for the discharge of that pollutant.
3. Effluent limitations shall be imposed in a manner prescribed by the State Water Board such that the concentrations set forth below as water quality objectives shall not be exceeded in the receiving water* upon completion of initial* dilution, except that objectives indicated for radioactivity shall apply directly to the undiluted waste* effluent.
4. Calculation of Effluent Limitations
 - a. Effluent limitations for water quality objectives listed in Table 1, with the exception of acute* toxicity and radioactivity, shall be determined through the use of the following equation:

Equation 1: $C_e = C_o + D_m (C_o - C_s)$

where:

C_e = the effluent concentration limit, $\mu\text{g/L}$

C_o = the concentration (water quality objective) to be met at the completion of initial* dilution, $\mu\text{g/L}$

C_s = background seawater concentration (see Table 3 below, with all metals expressed as total recoverable concentrations), $\mu\text{g/L}$

D_m = minimum probable initial* dilution expressed as parts seawater per part wastewater.

* See Appendix I for definition of terms.

**TABLE 3 (formerly TABLE C)
BACKGROUND SEAWATER CONCENTRATIONS (Cs)**

Waste Constituent	Cs (µg/L)
Arsenic	3.
Copper	2.
Mercury	0.0005
Silver	0.16
Zinc	8.
For all other Table 1 parameters, Cs = 0.	

b. Determining a Mixing Zone for the Acute* Toxicity Objective

The mixing zone for the acute* toxicity objective shall be ten percent (10%) of the distance from the edge of the outfall structure to the edge of the chronic mixing zone (zone of initial dilution). There is no vertical limitation on this zone. The effluent limitation for the acute* toxicity objective listed in Table 1 shall be determined through the use of the following equation:

Equation 2: $C_e = C_a + (0.1) D_m (C_a)$

where:

C_a = the concentration (water quality objective) to be met at the edge of the acute mixing zone.

D_m = minimum probable initial* dilution expressed as parts seawater per part wastewater (This equation applies only when $D_m > 24$).

c. Toxicity Testing Requirements based on the Minimum Initial* Dilution Factor for Ocean Waste Discharges

- (1) Dischargers shall conduct acute* toxicity testing if the minimum initial* dilution of the effluent is greater than 1,000:1 at the edge of the mixing zone.
- (2) Dischargers shall conduct either acute* or chronic* toxicity testing if the minimum initial* dilution ranges from 350:1 to 1,000:1 depending on the specific discharge conditions. The Regional Water Board shall make this determination.
- (3) Dischargers shall conduct chronic* toxicity testing for ocean waste discharges with minimum initial* dilution factors ranging from 100:1 to 350:1. The Regional Water Board may require that acute toxicity testing be conducted in addition to chronic as necessary for the protection of beneficial uses of ocean waters.
- (4) Dischargers shall conduct chronic toxicity testing if the minimum initial* dilution of the effluent falls below 100:1 at the edge of the mixing zone.

* See Appendix I for definition of terms.

- d. For the purpose of this Plan, minimum initial* dilution is the lowest average initial* dilution within any single month of the year. Dilution estimates shall be based on observed waste flow characteristics, observed receiving water* density structure, and the assumption that no currents, of sufficient strength to influence the initial* dilution process, flow across the discharge structure.
- e. The Executive Director of the State Water Board shall identify standard dilution models for use in determining Dm, and shall assist the Regional Board in evaluating Dm for specific waste discharges. Dischargers may propose alternative methods of calculating Dm, and the Regional Board may accept such methods upon verification of its accuracy and applicability.
- f. The six-month median shall apply as a moving median of daily values for any 180-day period in which daily values represent flow weighted average concentrations within a 24-hour period. For intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred.
- g. The daily maximum shall apply to flow weighted 24 hour composite samples.
- h. The instantaneous maximum shall apply to grab sample determinations.
- i. If only one sample is collected during the time period associated with the water quality objective (e.g., 30-day average or 6-month median), the single measurement shall be used to determine compliance with the effluent limitation for the entire time period.
- j. Discharge requirements shall also specify effluent limitations in terms of mass emission rate limits utilizing the general formula:

$$\text{Equation 3: lbs/day} = 0.00834 \times C_e \times Q$$

where:

C_e = the effluent concentration limit, $\mu\text{g/L}$

Q = flow rate, million gallons per day (MGD)

- k. The six-month median limit on daily mass emissions shall be determined using the six-month median effluent concentration as C_e and the observed flow rate Q in millions of gallons per day. The daily maximum mass emission shall be determined using the daily maximum effluent concentration limit as C_e and the observed flow rate Q in millions of gallons per day.
 - l. Any significant change in waste* flow shall be cause for reevaluating effluent limitations.
5. Minimum* Levels

For each numeric effluent limitation, the Regional Board must select one or more Minimum* Levels (and their associated analytical methods) for inclusion in the permit. The "reported" Minimum* Level is the Minimum* Level (and its associated analytical

* See Appendix I for definition of terms.

method) chosen by the discharger for reporting and compliance determination from the Minimum* Levels included in their permit.

a. Selection of Minimum* Levels from Appendix II

The Regional Water Board must select all Minimum* Levels from Appendix II that are below the effluent limitation. If the effluent limitation is lower than all the Minimum* Levels in Appendix II, the Regional Board must select the lowest Minimum* Level from Appendix II.

b. Deviations from Minimum* Levels in Appendix II

The Regional Board, in consultation with the State Water Board's Quality Assurance Program, must establish a Minimum* Level to be included in the permit in any of the following situations:

1. A pollutant is not listed in Appendix II.
2. The discharger agrees to use a test method that is more sensitive than those described in 40 CFR 136 (revised May 14, 1999).
3. The discharger agrees to use a Minimum* Level lower than those listed in Appendix II.
4. The discharger demonstrates that their calibration standard matrix is sufficiently different from that used to establish the Minimum* Level in Appendix II and proposes an appropriate Minimum* Level for their matrix.
5. A discharger uses an analytical method having a quantification practice that is not consistent with the definition of Minimum* Level (e.g., U.S. EPA methods 1613, 1624, 1625).

6. Use of Minimum* Levels

- a. Minimum* Levels in Appendix II represent the lowest quantifiable concentration in a sample based on the proper application of method-specific analytical procedures and the absence of matrix interferences. Minimum* Levels also represent the lowest standard concentration in the calibration curve for a specific analytical technique after the application of appropriate method-specific factors.

Common analytical practices may require different treatment of the sample relative to the calibration standard. Some examples are given below:

<u>Substance or Grouping</u>	<u>Method-Specific Treatment</u>	<u>Most Common Factor</u>
Volatile Organics	No differential treatment	1
Semi-Volatile Organics	Samples concentrated by extraction	1000
Metals	Samples diluted or concentrated	½, 2, and 4
Pesticides	Samples concentrated by extraction	100

- b. Other factors may be applied to the Minimum* Level depending on the specific sample preparation steps employed. For example, the treatment typically applied when there are matrix effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied during the

* See Appendix I for definition of terms.

computation of the reporting limit. Application of such factors will alter the reported Minimum* Level.

- c. Dischargers are to instruct their laboratories to establish calibration standards so that the Minimum* Level (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the discharger to use analytical data derived from *extrapolation* beyond the lowest point of the calibration curve. In accordance with Section 4b, above, the discharger's laboratory may employ a calibration standard lower than the Minimum* Level in Appendix II.

7. Sample Reporting Protocols

- a. Dischargers must report with each sample result the reported Minimum* Level (selected in accordance with Section 4, above) and the laboratory's current MDL*.
- b. Dischargers must also report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:
 - (1) Sample results greater than or equal to the reported Minimum* Level must be reported "as measured" by the laboratory (i.e., the measured chemical concentration in the sample).
 - (2) Sample results less than the reported Minimum* Level, but greater than or equal to the laboratory's MDL*, must be reported as "Detected, but Not Quantified", or DNQ. The laboratory must write the estimated chemical concentration of the sample next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc.").
 - (3) Sample results less than the laboratory's MDL* must be reported as "Not Detected", or ND.

8. Compliance Determination

Sufficient sampling and analysis shall be required to determine compliance with the effluent limitation.

a. Compliance with Single-Constituent Effluent Limitations

Dischargers are out of compliance with the effluent limitation if the concentration of the pollutant (see Section 7c, below) in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum* Level.

b. Compliance with Effluent Limitations expressed as a Sum of Several Constituents

Dischargers are out of compliance with an effluent limitation which applies to the sum of a group of chemicals (e.g., PCB's) if the sum of the individual pollutant concentrations is greater than the effluent limitation. Individual pollutants of the group will be considered to have a concentration of zero if the constituent is reported as ND or DNQ.

* See Appendix I for definition of terms.

c. Multiple Sample Data Reduction

The concentration of the pollutant in the effluent may be estimated from the result of a single sample analysis or by a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses when all sample results are quantifiable (i.e., greater than or equal to the reported Minimum* Level). When one or more sample results are reported as ND or DNQ, the central tendency concentration of the pollutant shall be the median (middle) value of the multiple samples. If, in an even number of samples, one or both of the middle values is ND or DNQ, the median will be the lower of the two middle values.

d. Powerplants and Heat Exchange Dischargers

Due to the large total volume of powerplant and other heat exchange discharges, special procedures must be applied for determining compliance with Table 1 objectives on a routine basis. Effluent concentration values (C_e) shall be determined through the use of equation 1 considering the minimal probable initial* dilution of the combined effluent (in-plant waste streams plus cooling water flow). These concentration values shall then be converted to mass emission limitations as indicated in equation 3. The mass emission limits will then serve as requirements applied to all inplant waste* streams taken together which discharge into the cooling water flow, except that limits for total chlorine residual, acute* (if applicable per Section (3)(c)) and chronic* toxicity and instantaneous maximum concentrations in Table 1 shall apply to, and be measured in, the combined final effluent, as adjusted for dilution with ocean water. The Table 1 objective for radioactivity shall apply to the undiluted combined final effluent.

9. Pollutant Minimization Program

a. Pollutant Minimization Program Goal

The goal of the Pollutant Minimization Program is to reduce all potential sources of a pollutant through pollutant minimization (control) strategies, including pollution prevention measures, in order to maintain the effluent concentration at or below the effluent limitation.

Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The completion and implementation of a Pollution Prevention Plan, required in accordance with CA Water Code Section 13263.3 (d) will fulfill the Pollution Minimization Program requirements in this section.

b. Determining the need for a Pollutant Minimization Program

1. The discharger must develop and conduct a Pollutant Minimization Program if all of the following conditions are true:
 - (a) The calculated effluent limitation is less than the reported Minimum* Level
 - (b) The concentration of the pollutant is reported as DNQ

* See Appendix I for definition of terms.

- (c) There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation.
 2. Alternatively, the discharger must develop and conduct a Pollutant Minimization Program if all of the following conditions are true:
 - (a) The calculated effluent limitation is less than the Method Detection Limit*.
 - (b) The concentration of the pollutant is reported as ND.
 - (c) There is evidence showing that the pollutant is present in the effluent above the calculated effluent limitation.
- c. Regional Water Boards may include special provisions in the discharge requirements to require the gathering of evidence to determine whether the pollutant is present in the effluent at levels above the calculated effluent limitation. Examples of evidence may include:
 1. health advisories for fish consumption,
 2. presence of whole effluent toxicity,
 3. results of benthic or aquatic organism tissue sampling,
 4. sample results from analytical methods more sensitive than methods included in the permit (in accordance with Section 4b, above).
 5. the concentration of the pollutant is reported as DNQ and the effluent limitation is less than the MDL
- d. Elements of a Pollutant Minimization Program
The Regional Board may consider cost-effectiveness when establishing the requirements of a Pollutant Minimization Program. The program shall include actions and submittals acceptable to the Regional Board including, but not limited to, the following:
 1. An annual review and semi-annual monitoring of potential sources of the reportable pollutant, which may include fish tissue monitoring and other bio-uptake sampling;
 2. Quarterly monitoring for the reportable pollutant in the influent to the wastewater treatment system;
 3. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable pollutant in the effluent at or below the calculated effluent limitation;
 4. Implementation of appropriate cost-effective control measures for the pollutant, consistent with the control strategy; and,
 5. An annual status report that shall be sent to the Regional Board including:
 - (a) All Pollutant Minimization Program monitoring results for the previous year;
 - (b) A list of potential sources of the reportable pollutant;

* See Appendix I for definition of terms.

- (c) A summary of all action taken in accordance with the control strategy;
and,
- (d) A description of actions to be taken in the following year.

10. Toxicity Reduction Requirements

- a. If a discharge consistently exceeds an effluent limitation based on a toxicity objective in Table 1, a toxicity reduction evaluation (TRE) is required. The TRE shall include all reasonable steps to identify the source of toxicity. Once the source(s) of toxicity is identified, the discharger shall take all reasonable steps necessary to reduce toxicity to the required level.
- b. The following shall be incorporated into waste discharge requirements: (1) a requirement to conduct a TRE if the discharge consistently exceeds its toxicity effluent limitation, and (2) a provision requiring a discharger to take all reasonable steps to reduce toxicity once the source of toxicity is identified.

D. Implementation Provisions for Bacterial Characteristics

1. Water-Contact Monitoring

- a. Weekly samples shall be collected from each site. The geometric mean shall be calculated using the five most recent sample results.
- b. If a single sample exceeds any of the single sample maximum (SSM) standards, repeat sampling at that location shall be conducted to determine the extent and persistence of the exceedance. Repeat sampling shall be conducted within 24 hours of receiving analytical results and continued until the sample result is less than the SSM standard or until a sanitary survey is conducted to determine the source of the high bacterial densities.
 - i) Total coliform density will not exceed 10,000 per 100 mL; or
 - ii) Fecal coliform density will not exceed 400 per 100 mL; or
 - iii) Total coliform density will not exceed 1,000 per 100 mL when the ratio of fecal/total coliform exceeds 0.1;
 - iv) enterococcus density will not exceed 104 per 100 mL.

When repeat sampling is required because of an exceedance of any one single sample density, values from all samples collected during that 30-day period will be used to calculate the geometric mean.

- c. It is state policy that the geometric mean bacterial objectives are strongly preferred for use in water body assessment decisions, for example, in developing the Clean Water Act section 303(d) list of impaired waters, because the geometric mean objectives are a more reliable measure of long-term water body conditions. In making assessment decisions on bacterial quality, single sample maximum data must be considered together with any available geometric mean data. The use of only single sample maximum bacterial data is generally inappropriate unless there is a limited data set, the water is subject to short-term spikes in bacterial

* See Appendix I for definition of terms.

concentrations, or other circumstances justify the use of only single sample maximum data.

- d. For monitoring stations outside of the defined water-contact recreation zone (REC-1), samples will be analyzed for total coliform only.

E. Implementation Provisions for Marine Managed Areas*

1. Section E addresses the following Marine Managed Areas*:
 - (a) State Water Quality Protection Areas (SWQPAs)* consisting 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) 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. The designation of State Marine Parks and State Marine Conservation Areas may not serve as the sole basis for new or modified limitations, substantive conditions, or prohibitions upon existing municipal point source wastewater discharge outfalls. 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*
 - (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.
 - (b) Regional Water 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-

* See Appendix I for definition of terms.

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 (NPDES)
 - (1) An SWQPA-GP shall not be designated over existing permitted point source wastewater outfalls 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.
 - (3) Where a new SWQPA-GP is established in the vicinity of existing municipal wastewater outfalls, there shall be no new or modified limiting condition or prohibitions for the SWQPA-GP relative to those wastewater outfalls.
 - (4) Regulatory requirements for discharges from existing treated municipal wastewater outfalls shall be derived from the Chapter II – Water Quality Objectives and Chapter III – Program of Implementation.
- (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 permitted seawater intakes with a capacity less than one million gallons per day are excluded from this requirement.
- (c) Implementation provisions for permitted separate storm sewer system (MS4) discharges and nonpoint source discharges.
 - (1) Existing waste discharges are allowed, but shall not cause an undesirable alteration in natural water quality. For purposes of SWQPA-GP, an undesirable alteration in natural water quality means that for intermittent (e.g. wet weather) 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) An NPDES permitting authority may authorize NPDES-permitted non-storm water discharges to an MS4 with a direct discharge to an SWQPA-GP only to the extent the NPDES permitting authority finds that the discharge does not cause an undesirable alteration in natural water quality in an SWQPA-GP.

* See Appendix I for definition of terms.

- (3) Non-storm water (dry weather) flows are effectively prohibited as required by the applicable permit. Where capacity and infrastructure exists, all dry weather flows shall be diverted to municipal sanitary sewer systems. The permitting authority may allow discharges essential for emergency response purposes, structural stability, and slope stability, which may include but are not limited the following:
 - a. Discharges associated with emergency fire fighting operations.
 - b. Foundation and footing drains
 - c. Water from crawl space or basement pumps.
 - d. Hillside dewatering.
- (4) The following naturally occurring discharges are allowed:
 - a. Naturally occurring groundwater seepage via a storm drain
 - b. Non-anthropogenic flows from a naturally occurring stream via a culvert or storm drain, as long as there are no contributions of anthropogenic runoff.
- (5) Existing storm water discharges into an 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:
 - 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.

- (6) An initial analysis shall be performed for pre- and post-storm receiving water quality of Table 1 constituents and chronic toxicity. 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.
- (7) 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.

* See Appendix I for definition of terms.

- (8) 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 an SWQPA-GP.
- (2) Seawater intakes
No new surface water seawater intakes shall be established within an SWQPA-GP. This does not apply to sub-seafloor intakes where studies are prepared showing there is no predictable entrainment or impingement of marine life.
- (3) All Other New Discharges
There shall be no increase in nonpoint sources or permitted storm drains directly into an SWQPA-GP.

6. Impaired Tributaries to MPAs, SWQPA-ASBS and SWQPA-GP

All water bodies draining to, or that are designated as, 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.

F. Revision of Waste* Discharge Requirements

1. The Regional Water Boards may establish more restrictive water quality objectives and effluent limitations than those set forth in this Plan as necessary for the protection of beneficial uses of ocean* waters.
2. Regional Water Boards may impose alternative less restrictive provisions than those contained within Table 1 of the Plan, provided an applicant can demonstrate that:
 - a. Reasonable control technologies (including source control, material substitution, treatment and dispersion) will not provide for complete compliance; or
 - b. Any less stringent provisions would encourage water* reclamation;
3. Provided further that:
 - a. Any alternative water quality objectives shall be below the conservative estimate of chronic* toxicity, as given in Table 4 (with all metal concentrations expressed as total recoverable concentrations), and such alternative will provide for adequate protection of the marine environment;
 - b. A receiving water* quality toxicity objective of 1 TUC is not exceeded; and

* See Appendix I for definition of terms.

- c. The State Water Board grants an exception (Chapter III.J.) to the Table 1 limits as established in the Regional Board findings and alternative limits.

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

- 1. Compliance schedules in NPDES permits are authorized in accordance with the provisions of the State Water Board’s Policy for Compliance Schedules in [NPDES] Permits (2008).

**TABLE 4 (formerly TABLE D)
CONSERVATIVE ESTIMATES OF CHRONIC TOXICITY**

Constituent	Estimate of Chronic Toxicity (µg/L)
Arsenic	19.
Cadmium	8.
Hexavalent Chromium	18.
Copper	5.
Lead	22.
Mercury	0.4
Nickel	48.
Silver	3.
Zinc	51.
Cyanide	10.
Total Chlorine Residual	10.0
Ammonia	4000.0
Phenolic Compounds (non-chlorinated)	a) (see below)
Chlorinated Phenolics	a)
Chlorinated Pesticides and PCB’s	b)

Table 4 Notes:

- a) There are insufficient data for phenolics to estimate chronic toxicity levels. Requests for modification of water quality objectives for these waste* constituents must be supported by chronic toxicity data for representative sensitive species. In such cases, applicants seeking modification of water quality objectives should consult the Regional Water Quality Control Board to determine the species and test conditions necessary to evaluate chronic effects.
 - b) Limitations on chlorinated pesticides and PCB’s shall not be modified so that the total of these compounds is increased above the objectives in Table 1.
-

H. Monitoring Program

- 1. The Regional Water Boards shall require dischargers to conduct self-monitoring programs and submit reports necessary to determine compliance with the waste* discharge requirements, and may require dischargers to contract with agencies or

* See Appendix I for definition of terms.

persons acceptable to the Regional Water Board to provide monitoring reports. Monitoring provisions contained in waste discharge requirements shall be in accordance with the Monitoring Procedures provided in Appendices III and VI.

2. The Regional Water Board may require monitoring of bioaccumulation of toxicants in the discharge zone. Organisms and techniques for such monitoring shall be chosen by the Regional Water Board on the basis of demonstrated value in waste* discharge monitoring.

I. Discharge Prohibitions

1. Hazardous Substances

- a. The discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste* into the ocean* is prohibited.

2. Areas Designated for Special Water Quality Protection

- a. Waste* shall not be discharged to designated Areas* of Special Biological Significance except as provided in Chapter III. E. Implementation Provisions for Marine Managed Areas*.

3. Sludge

- a. Pipeline discharge of sludge to the ocean* is prohibited by federal law; the discharge of municipal and industrial waste* sludge directly to the ocean*, or into a waste* stream that discharges to the ocean*, is prohibited by this Plan. The discharge of sludge digester supernatant directly to the ocean*, or to a waste* stream that discharges to the ocean* without further treatment, is prohibited.
- b. It is the policy of the State Water Board that the treatment, use and disposal of sewage sludge shall be carried out in the manner found to have the least adverse impact on the total natural and human environment. Therefore, if federal law is amended to permit such discharge, which could affect California waters, the State Water Board may consider requests for exceptions to this section under Chapter III. J of this Plan, provided further that an Environmental Impact Report on the proposed project shows clearly that any available alternative disposal method will have a greater adverse environmental impact than the proposed project.

4. By-Passing

- a. The by-passing of untreated wastes* containing concentrations of pollutants in excess of those of Table 2 or Table 1 to the ocean* is prohibited.

5. Vessels

- a. Discharges of hazardous waste (as defined in California Health and Safety Code section 25117 et seq. [but not including sewage]), oily bilgewater, medical waste (as defined in section 117600 et seq. of the California Health and Safety Code)

* See Appendix I for definition of terms.

dry-cleaning waste, and film-processing waste from large passenger vessels and oceangoing vessels are prohibited.

- b. Discharges of graywater* and sewage* from large passenger vessels are prohibited.
- c. Discharges of sewage and sewage sludge from vessels are prohibited in No Discharge Zones promulgated by U.S. EPA.

J. State Board Exceptions to Plan Requirements

- 1. The State Water Board may, in compliance with the California Environmental Quality Act, subsequent to a public hearing, and with the concurrence of the Environmental Protection Agency, grant exceptions where the Board determines:
 - a. The exception will not compromise protection of ocean* waters for beneficial uses, and,
 - b. The public interest will be served.
- 2. All exceptions issued by the State Water Board and in effect at the time of the Triennial Review will be reviewed at that time. If there is sufficient cause to re-open or revoke any exception, the State Water Board may direct staff to prepare a report and to schedule a public hearing. If after the public hearing the State Water Board decides to re-open, revoke, or re-issue a particular exception, it may do so at that time.

K. Implementation Provisions for Vessel Discharges

- 1. Vessel discharges must comply with State Lands Commission (SLC) requirements for ballast water discharges and hull fouling to control and prevent the introduction of non-indigenous species, found in the Public Resources Code sections 71200 et seq. and title 2, California Code of Regulations, section 22700 et. seq.
- 2. Discharges incidental to the normal operation large passenger vessels and ocean-going vessels must be covered and comply with an individual or general NPDES permit.
- 3. Vessel discharges must not result in violations of water quality objectives in this plan.
- 4. Vessels subject to the federal NPDES Vessel General Permit (VGP) which are not large passenger vessels must follow the best management practices for graywater* as required in the VGP, including the use of only those cleaning agents (e.g., soaps and detergents) that are phosphate-free, non-toxic, and non-bioaccumulative.

* See Appendix I for definition of terms.

APPENDIX I
DEFINITION OF TERMS

ACUTE TOXICITY

a. Acute Toxicity (TUa)

Expressed in Toxic Units Acute (TUa)

$$TUa = \frac{100}{96\text{-hr LC } 50\%}$$

b. Lethal Concentration 50% (LC 50)

LC 50 (percent waste giving 50% survival of test organisms) shall be determined by static or continuous flow bioassay techniques using standard marine test species as specified in Appendix III. If specific identifiable substances in wastewater can be demonstrated by the discharger as being rapidly rendered harmless upon discharge to the marine environment, but not as a result of dilution, the LC 50 may be determined after the test samples are adjusted to remove the influence of those substances.

When it is not possible to measure the 96-hour LC 50 due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

$$TUa = \frac{\log (100 - S)}{1.7}$$

where:

S = percentage survival in 100% waste. If S > 99, TUa shall be reported as zero.

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 maintenance of natural water quality is assured. 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 (SWQPA-ASBS).

CHLORDANE shall mean the sum of chlordane-alpha, chlordane-gamma, chlordene-alpha, chlordene-gamma, nonachlor-alpha, nonachlor-gamma, and oxychlordane.

CHRONIC TOXICITY: This parameter shall be used to measure the acceptability of waters for supporting a healthy marine biota until improved methods are developed to evaluate biological response.

a. Chronic Toxicity (TUc)

Expressed as Toxic Units Chronic (TUc)

* See Appendix I for definition of terms.

$$TUc = \frac{100}{NOEL}$$

b. No Observed Effect Level (NOEL)

The NOEL is expressed as the maximum percent effluent or receiving water* that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test listed in Appendix III, Table III-1.

DDT shall mean the sum of 4,4'DDT, 2,4'DDT, 4,4'DDE, 2,4'DDE, 4,4'DDD, and 2,4'DDD.

DEGRADE: Degradation shall be determined by comparison of the waste field and reference site(s) for characteristic species diversity, population density, contamination, growth anomalies, debility, or supplanting of normal species by undesirable plant and animal species. Degradation occurs if there are significant differences in any of three major biotic groups, namely, demersal fish, benthic invertebrates, or attached algae. Other groups may be evaluated where benthic species are not affected, or are not the only ones affected.

DICHLOROBENZENES shall mean the sum of 1,2- and 1,3-dichlorobenzene.

DOWNSTREAM OCEAN WATERS shall mean waters downstream with respect to ocean currents.

DREDGED MATERIAL: Any material excavated or dredged from the navigable waters of the United States, including material otherwise referred to as "spoil".

ENCLOSED BAYS are indentations along the coast which enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. This definition includes but is not limited to: Humboldt Bay, Bodega Harbor, Tomales Bay, Drakes Estero, San Francisco Bay, Morro Bay, Los Angeles Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay.

ENDOSULFAN shall mean the sum of endosulfan-alpha and -beta and endosulfan sulfate.

ESTUARIES AND COASTAL LAGOONS are waters at the mouths of streams that serve as mixing zones for fresh and ocean waters during a major portion of the year. Mouths of streams that are temporarily separated from the ocean by sandbars shall be considered as estuaries. Estuarine waters will generally be considered to extend from a bay or the open ocean to the upstream limit of tidal action but may be considered to extend seaward if significant mixing of fresh and salt water occurs in the open coastal waters. The waters described by this definition include but are not limited to the Sacramento-San Joaquin Delta as defined by Section 12220 of the California Water Code, Suisun Bay, Carquinez Strait downstream to Carquinez Bridge, and appropriate areas of the Smith, Klamath, Mad, Eel, Noyo, and Russian Rivers.

* See Appendix I for definition of terms.

GRAYWATER is drainage from galley, dishwasher, shower, laundry, bath, and lavatory wash basin sinks, and water fountains, but does not include drainage from toilets, urinals, hospitals, or cargo spaces.

HALOMETHANES shall mean the sum of bromoform, bromomethane (methyl bromide) and chloromethane (methyl chloride).

HCH shall mean the sum of the alpha, beta, gamma (lindane) and delta isomers of hexachlorocyclohexane.

INDICATOR BACTERIA includes total coliform bacteria, fecal coliform bacteria (or *E. coli*), and/or Enterococcus bacteria.

INITIAL DILUTION is the process which results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge.

For a submerged buoyant discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally.

For shallow water submerged discharges, surface discharges, and nonbuoyant discharges, characteristic of cooling water wastes and some individual discharges, turbulent mixing results primarily from the momentum of discharge. Initial dilution, in these cases, is considered to be completed when the momentum induced velocity of the discharge ceases to produce significant mixing of the waste, or the diluting plume reaches a fixed distance from the discharge to be specified by the Regional Board, whichever results in the lower estimate for initial dilution.

KELP BEDS, for purposes of the bacteriological standards of this plan, are significant aggregations of marine algae of the genera Macrocystis and Nereocystis. Kelp beds include the total foliage canopy of Macrocystis and Nereocystis plants throughout the water column.

LARGE PASSENGER VESSELS are vessels of 300 gross registered tons or greater engaged in carrying passengers for hire. The following vessels are not large passenger vessels:

- (1) Vessels without berths or overnight accommodations for passengers;
- (2) Noncommercial vessels, warships, vessels operated by nonprofit entities as determined by the Internal Revenue Service, and vessels operated by the state, the United States, or a foreign government;
- (3) Oceangoing vessels, as defined below (e.g. those used to transport cargo).

MARICULTURE is the culture of plants and animals in marine waters independent of any pollution source.

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

* See Appendix I for definition of terms.

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.

MATERIAL: (a) In common usage: (1) the substance or substances of which a thing is made or composed (2) substantial; (b) For purposes of this Ocean Plan relating to waste disposal, dredging and the disposal of dredged material and fill, MATERIAL means matter of any kind or description which is subject to regulation as waste, or any material dredged from the navigable waters of the United States. See also, DREDGED MATERIAL.

MDL (Method Detection Limit) is the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero, as defined in 40 CFR PART 136 Appendix B.

MINIMUM LEVEL (ML) is the concentrations at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method-specified sample weights, volumes and processing steps have been followed.

NATURAL LIGHT: Reduction of natural light may be determined by the Regional Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the Regional Board.

NO DISCHARGE ZONE (NDZ) is an area in which both treated and untreated sewage discharges from vessels are prohibited. Within NDZ boundaries, vessel operators are required to retain their sewage discharges onboard for disposal at sea (beyond three miles from shore) or onshore at a pump-out facility.

NON-STORM WATER DISCHARGE is any runoff that is not the result of a precipitation event. This is often referred to as “dry weather flow.”

OCEAN WATERS are the territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. If a discharge outside the territorial waters of the State could affect the quality of the waters of the State, the discharge may be regulated to assure no violation of the Ocean Plan will occur in ocean waters.

OCEANGOING VESSELS (i.e., oceangoing ships) means commercial vessels of 300 gross registered tons or more calling on California ports or places, excluding active military vessels.

OILY BILGE WATER includes bilge water that contains used lubrication oils, oil sludge and slops, fuel and oil sludge, used oil, used fuel and fuel filters, and oily waste.

PAHs (polynuclear aromatic hydrocarbons) shall mean the sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene and pyrene.

* See Appendix I for definition of terms.

PCBs (polychlorinated biphenyls) shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254 and Aroclor-1260.

PERMITTING AUTHORITY means the State Water Board or Regional Water Board, whichever issues the permit.

RECEIVING WATER, for permitted storm water discharges and nonpoint sources, should be measured at the point of discharge(s), in the surf zone immediately where runoff from an outfall meets the ocean water (a.k.a., at point zero).

SHELLFISH are organisms identified by the California Department of Public Health as shellfish for public health purposes (i.e., mussels, clams and oysters).

SIGNIFICANT difference is defined as a statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level.

STATE WATER QUALITY PROTECTION AREAS (SWQPAs) are nonterrestrial marine or estuarine areas designated to protect marine species or biological communities from an undesirable alteration in natural water quality. All Areas of Special Biological Significance (ASBS) that were previously designated by the State Water Board in Resolutions 74-28, 74-32, and 75-61 are now also classified as a subset of State Water Quality Protection Areas and require special protections afforded by this Plan.

STATE WATER QUALITY PROTECTION AREAS – GENERAL PROTECTION (SWQPA-GP) designated by the State Water Board to protect marine species and biological communities from an undesirable alteration in natural water quality within State Marine Parks and State Marine Conservation Areas.

TCDD EQUIVALENTS shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown in the table below.

* See Appendix I for definition of terms.

Isomer Group	Toxicity Equivalence Factor
	1.0
2,3,7,8-tetra CDD	
2,3,7,8-penta CDD	0.5
2,3,7,8-hexa CDDs	0.1
2,3,7,8-hepta CDD	0.01
octa CDD	0.001
2,3,7,8 tetra CDF	0.1
1,2,3,7,8 penta CDF	0.05
2,3,4,7,8 penta CDF	0.5
2,3,7,8 hexa CDFs	0.1
2,3,7,8 hepta CDFs	0.01
octa CDF	0.001

WASTE: As used in this Plan, waste includes a discharger's total discharge, of whatever origin, i.e., gross, not net, discharge.

WATER RECLAMATION: The treatment of wastewater to render it suitable for reuse, the transportation of treated wastewater to the place of use, and the actual use of treated wastewater for a direct beneficial use or controlled use that would not otherwise occur.

* See Appendix I for definition of terms.

APPENDIX II MINIMUM* LEVELS

The Minimum* Levels identified in this appendix represent the lowest concentration of a pollutant that can be quantitatively measured in a sample given the current state of performance in analytical chemistry methods in California. These Minimum* Levels were derived from data provided by state-certified analytical laboratories in 1997 and 1998 for pollutants regulated by the California Ocean Plan and shall be used until new values are adopted by the State Water Board. There are four major chemical groupings: volatile chemicals, semi-volatile chemicals, inorganics, pesticides & PCB's. "No Data" is indicated by "--".

**TABLE II-1
MINIMUM* LEVELS – VOLATILE CHEMICALS**

Volatile Chemicals	CAS Number	Minimum* Level (µg/L)	
		GC Method ^a	GCMS Method ^b
Acrolein	107028	2.	5
Acrylonitrile	107131	2.	2
Benzene	71432	0.5	2
Bromoform	75252	0.5	2
Carbon Tetrachloride	56235	0.5	2
Chlorobenzene	108907	0.5	2
Chlorodibromomethane	124481	0.5	2
Chloroform	67663	0.5	2
1,2-Dichlorobenzene (volatile)	95501	0.5	2
1,3-Dichlorobenzene (volatile)	541731	0.5	2
1,4-Dichlorobenzene (volatile)	106467	0.5	2
Dichlorobromomethane	75274	0.5	2
1,1-Dichloroethane	75343	0.5	1
1,2-Dichloroethane	107062	0.5	2
1,1-Dichloroethylene	75354	0.5	2
Dichloromethane	75092	0.5	2
1,3-Dichloropropene (volatile)	542756	0.5	2
Ethyl benzene	100414	0.5	2
Methyl Bromide	74839	1.	2
Methyl Chloride	74873	0.5	2
1,1,2,2-Tetrachloroethane	79345	0.5	2
Tetrachloroethylene	127184	0.5	2
Toluene	108883	0.5	2
1,1,1-Trichloroethane	71556	0.5	2
1,1,2-Trichloroethane	79005	0.5	2
Trichloroethylene	79016	0.5	2
Vinyl Chloride	75014	0.5	2

Table II-1 Notes

a) GC Method = Gas Chromatography

b) GCMS Method = Gas Chromatography / Mass Spectrometry

* To determine the lowest standard concentration in an instrument calibration curve for these techniques, use the given ML (see Chapter III, "Use of Minimum* Levels").

* See Appendix I for definition of terms.

**TABLE II-2
MINIMUM* LEVELS – SEMI VOLATILE CHEMICALS**

Semi-Volatile Chemicals	CAS Number	Minimum* Level (µg/L)			
		GC Method ^{a,*}	GCMS Method ^{b,*}	HPLC Method ^{c,*}	COLOR Method ^d
Acenaphthylene	208968	--	10	0.2	--
Anthracene	120127	--	10	2	--
Benidine	92875	--	5	--	--
Benzo(a)anthracene	56553	--	10	2	--
Benzo(a)pyrene	50328	--	10	2	--
Benzo(b)fluoranthene	205992	--	10	10	--
Benzo(g,h,i)perylene	191242	--	5	0.1	--
Benzo(k)floranthene	207089	--	10	2	--
Bis 2-(1-Chloroethoxy) methane	111911	--	5	--	--
Bis(2-Chloroethyl)ether	111444	10	1	--	--
Bis(2-Chloroisopropyl)ether	39638329	10	2	--	--
Bis(2-Ethylhexyl) phthalate	117817	10	5	--	--
2-Chlorophenol	95578	2	5	--	--
Chrysene	218019	--	10	5	--
Di-n-butyl phthalate	84742	--	10	--	--
Dibenzo(a,h)anthracene	53703	--	10	0.1	--
1,2-Dichlorobenzene (semivolatile)	95504	2	2	--	--
1,3-Dichlorobenzene (semivolatile)	541731	2	1	--	--
1,4-Dichlorobenzene (semivolatile)	106467	2	1	--	--
3,3-Dichlorobenzidine	91941	--	5	--	--
2,4-Dichlorophenol	120832	1	5	--	--
1,3-Dichloropropene	542756	--	5	--	--
Diethyl phthalate	84662	10	2	--	--
Dimethyl phthalate	131113	10	2	--	--
2,4-Dimethylphenol	105679	1	2	--	--
2,4-Dinitrophenol	51285	5	5	--	--
2,4-Dinitrotoluene	121142	10	5	--	--
1,2-Diphenylhydrazine	122667	--	1	--	--
Fluoranthene	206440	10	1	0.05	--
Fluorene	86737	--	10	0.1	--
Hexachlorobenzene	118741	5	1	--	--
Hexachlorobutadiene	87683	5	1	--	--
Hexachlorocyclopentadiene	77474	5	5	--	--

Table II-2 continued on next page...

* See Appendix I for definition of terms.

Table II-2 (Continued)
Minimum* Levels – Semi Volatile Chemicals

Semi-Volatile Chemicals	CAS Number	Minimum* Level (µg/L)			
		GC Method ^{a,*}	GCMS Method ^{b,*}	HPLC Method ^{c,*}	COLOR Method ^d
Hexachloroethane	67721	5	1	--	--
Indeno(1,2,3-cd)pyrene	193395	--	10	0.05	--
Isophorone	78591	10	1	--	--
2-methyl-4,6-dinitrophenol	534521	10	5	--	--
3-methyl-4-chlorophenol	59507	5	1	--	--
N-nitrosodi-n-propylamine	621647	10	5	--	--
N-nitrosodimethylamine	62759	10	5	--	--
N-nitrosodiphenylamine	86306	10	1	--	--
Nitrobenzene	98953	10	1	--	--
2-Nitrophenol	88755	--	10	--	--
4-Nitrophenol	100027	5	10	--	--
Pentachlorophenol	87865	1	5	--	--
Phenanthrene	85018	--	5	0.05	--
Phenol	108952	1	1	--	50
Pyrene	129000	--	10	0.05	--
2,4,6-Trichlorophenol	88062	10	10	--	--

Table II-2 Notes:

- a) GC Method = Gas Chromatography
- b) GCMS Method = Gas Chromatography / Mass Spectrometry
- c) HPLC Method = High Pressure Liquid Chromatography
- d) COLOR Method= Colorimetric

* To determine the lowest standard concentration in an instrument calibration curve for this technique, multiply the given ML by 1000 (see Chapter III, "Use of Minimum* Levels").

* See Appendix I for definition of terms.

**TABLE II-3
MINIMUM* LEVELS - INORGANICS**

Inorganic Substances	CAS Number	Minimum* Level (µg/L)								
		COLOR Method ^a	DCP Method ^b	FAA Method ^c	GFAA Method ^d	HYDRIDE Method ^e	ICP Method ^f	ICPMS Method ^g	SPGFAA Method ^h	CVAA Method ⁱ
Antimony	7440360	--	1000.	10.	5.	0.5	50.	0.5	5.	--
Arsenic	7440382	20.	1000.	--	2.	1.	10.	2.	2.	--
Beryllium	7440417	--	1000.	20.	0.5	--	2.	0.5	1.	--
Cadmium	7440439	--	1000.	10.	0.5	--	10.	0.2	0.5	--
Chromium (total)	--	--	1000.	50.	2.	--	10.	0.5	1.	--
Chromium (VI)	18540299	10.	--	5.	--	--	--	--	--	--
Copper	7440508	--	1000.	20.	5.	--	10.	0.5	2.	--
Cyanide	57125	5.	--	--	--	--	--	--	--	--
Lead	7439921	--	10000.	20.	5.	--	5.	0.5	2.	--
Mercury	7439976	--	--	--	--	--	--	0.5	--	0.2
Nickel	7440020	--	1000.	50.	5.	--	20.	1.	5.	--
Selenium	7782492	--	1000.	--	5.	1.	10.	2.	5.	--
Silver	7440224	--	1000.	10.	1.	--	10.	0.2	2.	--
Thallium	7440280	--	1000.	10.	2.	--	10.	1.	5.	--
Zinc	7440666	--	1000.	20.	--	--	20.	1.	10.	--

Table II-3 Notes

- a) COLOR Method = Colorimetric
- b) DCP Method = Direct Current Plasma
- c) FAA Method = Flame Atomic Absorption
- d) GFAA Method = Graphite Furnace Atomic Absorption
- e) HYDRIDE Method = Gaseous Hydride Atomic Absorption
- f) ICP Method = Inductively Coupled Plasma
- g) ICPMS Method = Inductively Coupled Plasma / Mass Spectrometry
- h) SPGFAA Method = Stabilized Platform Graphite Furnace Atomic Absorption (i.e., US EPA 200.9)
- i) CVAA Method = Cold Vapor Atomic Absorption

* To determine the lowest standard concentration in an instrument calibration curve for these techniques, use the given ML (see Chapter III, "Use of Minimum* Levels").

* See Appendix I for definition of terms.

**TABLE II-4
MINIMUM* LEVELS – PESTICIDES AND PCBs***

Pesticides – PCB's	CAS Number	Minimum* Level (µg/L)
		GC Method ^{a,*}
Aldrin	309002	0.005
Chlordane	57749	0.1
4,4'-DDD	72548	0.05
4,4'-DDE	72559	0.05
4,4'-DDT	50293	0.01
Dieldrin	60571	0.01
a-Endosulfan	959988	0.02
b-Endosulfan	33213659	0.01
Endosulfan Sulfate	1031078	0.05
Endrin	72208	0.01
Heptachlor	76448	0.01
Heptachlor Epoxide	1024573	0.01
a-Hexachlorocyclohexane	319846	0.01
b-Hexachlorocyclohexane	319857	0.005
d-Hexachlorocyclohexane	319868	0.005
g-Hexachlorocyclohexane (Lindane)	58899	0.02
PCB 1016	--	0.5
PCB 1221	--	0.5
PCB 1232	--	0.5
PCB 1242	--	0.5
PCB 1248	--	0.5
PCB 1254	--	0.5
PCB 1260	--	0.5
Toxaphene	8001352	0.5

Table II-4 Notes

a) GC Method = Gas Chromatography

* To determine the lowest standard concentration in an instrument calibration curve for this technique, multiply the given ML by 100 (see Chapter III, "Use of Minimum* Levels").

* See Appendix I for definition of terms.

APPENDIX III

STANDARD MONITORING PROCEDURES

1. INTRODUCTION

The purpose of this appendix is to provide guidance to the Regional Water Boards on implementing the Ocean Plan and to ensure the reporting of useful information. Monitoring should be question driven rather than just gathering data and should be focused on assuring compliance with narrative and numeric water quality standards, the status and attainment of beneficial uses, and identifying sources of pollution.

It is not feasible to prescribe requirements in the Ocean Plan that encompass all circumstances and conditions that could be encountered by all dischargers, nor is it desirable to limit the flexibility of the Regional Water Boards in the monitoring of ocean waters. This appendix should therefore be considered the basic framework for the design of an ocean discharger monitoring program. The Regional Water Boards are responsible for issuing monitoring and reporting programs (MRPs) that will implement this monitoring guidance. Regional Water Boards can deviate from the procedures required in the appendix only with the approval of the State Water Resources Control Board.

This monitoring guidance utilizes a model monitoring framework. The model monitoring framework has three components that comprise a range of spatial and temporal scales: (1) core monitoring, (2) regional monitoring, and (3) special studies.

1) Core monitoring consists of the basic site-specific monitoring necessary to measure compliance with individual effluent limits and/or impacts to receiving water* quality. Core monitoring is typically conducted in the immediate vicinity of the discharge by examining local scale spatial effects.

2) Regional monitoring provides information necessary to make assessments over large areas and serves to evaluate cumulative effects of all anthropogenic inputs. Regional monitoring data also assists in the interpretation of core monitoring studies. It is recommended that the Regional Water Boards require participation by the discharger in an approved regional monitoring program, if available, for the receiving water*. In the event that a regional monitoring effort takes place during a permit cycle in which the MRP does not specifically address regional monitoring, a Regional Water Board may allow relief from aspects of core monitoring components in order to encourage participation.

3) Special studies are directed monitoring efforts designed in response to specific management or research questions identified through either core or regional monitoring programs. Often they are used to help understand core or regional monitoring results, where a specific environmental process is not well understood, or to address unique issues of local importance. Regional Water Boards may require special studies as appropriate. Special studies are not addressed further in this guidance because they are beyond its scope.

The Ocean Plan does not address all site-specific monitoring issues and allows the Regional Water Boards to select alternative protocols with the approval of the State Water Board. If no direction is given in this appendix for a specific provision of the Ocean Plan, it is within the

* See Appendix I for definition of terms.

discretion of the Regional Water Boards to establish the monitoring requirements for that provision.

2. QUALITY ASSURANCE

All receiving and ambient water monitoring conducted in compliance with MRPs must be comparable with the Quality Assurance requirements of the Surface Water Ambient Monitoring Program (SWAMP).

SWAMP comparable means all sample collection and analyses shall meet or exceed the measurement quality objectives (MQOs) – including all sample types, frequencies, control limits and holding time requirements – as specified in the SWAMP Quality Assurance Project Plan (QAPrP)

The SWAMP QAPrP is located at:

http://www.waterboards.ca.gov/water_issues/programs/swamp/tools.shtml#qa.

For those measurements that do not have SWAMP MQOs available, then MQOs shall be at the discretion of the Regional Water Board. Refer to the U.S. EPA guidance document (EPA QA/G-4) for selecting data quality objectives, located at <http://www.epa.gov/quality/qs-docs/g4-final.pdf>.

Water Quality data must be reported according to the California Environmental Data Exchange Network (CEDEN) “Data Template” format for all constituents that are monitored in receiving and ambient water. CEDEN Data Template are available at: <http://ceden.org>.

3. TYPE OF WASTE DISCHARGE SOURCES

Discharges to ocean waters are highly diverse and variable, exhibiting a wide range of constituents, effluent quality and quantity, location and frequency of discharge. Different types of discharges will require different approaches. This Appendix provides specific direction for three broad types of discharges: (1) Point Sources, (2) Storm Water Point Sources and (3) Non-point Sources.

3.1. Point Sources

Industrial, municipal, marine laboratory and other traditional point sources of pollution that discharge wastewater directly to surface waters and are required to obtain NPDES permits.

3.2. Storm Water Point Sources

Storm Water Point Sources, hereafter referred to as Storm Water Sources, are those NPDES permitted discharges regulated by Construction or Industrial Storm Water General Permits or municipal separate storm sewer system (MS4s) Permits. MS4 Permits are further divided into Phase I and II Permits. A Phase I MS4 Permit is issued by a Regional Water Board for medium (serving between 100,000 and 250,000 people) and large (serving 250,000 or more people) municipalities. A Phase II MS4 General Permit is issued by the State Water Resources Control Board for the discharge of storm water for smaller municipalities, and includes nontraditional

* See Appendix I for definition of terms.

Small MS4s, which are governmental facilities such as military bases, public campuses, prison and hospital complexes.

3.3. Non-point Sources

A Non-point Source is any source of pollutants that is not a Point Source described in Section 3.1 or a Storm Water Source as described in Section 3.2. Land use categories contributing to non-point sources include but are not limited to:

- a. Agriculture
- b. Grazing
- c. Forestry/timber harvest
- d. Urban not covered under an NPDES permit
- e. Marinas and mooring fields
- f. Golf Courses not covered under an NPDES Permit

Only agricultural and golf course related non-point source discharge monitoring is addressed in this Appendix, but Regional Water Boards may issue MRPs for other non-point sources at their discretion. Agriculture includes irrigated lands. Irrigated lands are where water is applied for the purpose of producing crops, including, but not limited to, row and field crop, orchards, vineyard, rice production, nurseries, irrigated pastures, and managed wetlands.

4. INDICATOR BACTERIA*

4.1. Point Sources

Primary questions to be addressed:

1. Does the effluent comply with the water quality standards in the receiving water*?
2. Does the sewage effluent reach water contact zones or commercial shellfish beds?

To answer these questions, core monitoring shall be conducted in receiving water* on the shoreline for the indicator bacteria* at a minimum weekly for any point sources discharging treated sewage effluent:

- a. within one nautical mile of shore, or
- b. within one nautical mile of a commercial shellfish bed, or
- c. if the discharge is in excess of 10 million gallons per day (MGD).

Alternatively, these requirements may be met through participation in a regional monitoring program to assess the status of marine contact recreation water quality. If the permittee participates in a regional monitoring program, in conjunction with local health organization(s), core monitoring may be suspended for that period at the discretion of the Regional Water Board. Regional monitoring should be used to answer the above questions, and may be used to answer additional questions. These additional questions may include, but are not limited to, questions regarding the extent and magnitude of current or potential receiving water* indicator bacteria* problems, or the sources of indicator bacteria.

* See Appendix I for definition of terms.

4.2. Storm Water

Primary questions to be addressed:

1. Does the receiving water* comply with water quality standards?
2. Is the condition of the receiving water* protective of contact recreation and shellfish harvesting beneficial uses?
3. Are the indicator bacteria levels in receiving water* getting better or worse?
4. What is the relative contribution of indicator bacteria to the receiving water* from storm water runoff?

To answer these questions, core monitoring for indicator bacteria* shall be required periodically for storm water discharges representative of the area of concern. At a minimum, for municipal storm water discharges, all receiving water* at outfalls greater than 36 inches in diameter or width must be monitored (ankle depth, point zero) at the following frequencies:

- a. During wet weather with a minimum of three storms per year, and
- b. When non-storm water discharges* occur (flowing during dry weather), and if located at an AB 411 beach, at least weekly. (An AB 411 Beach is defined as a beach visited by more than 50,000 people annually and located on an area adjacent to a storm drain that flows in the summer. (Health & Saf. Code § 115880).)

Regional Water Boards may waive monitoring once structural best management practices have been installed, evaluated and determined to have successfully controlled indicator bacteria.

Alternatively, these requirements may be met through participation in a regional monitoring program to assess the status of marine contact recreation water quality. If the permittee participates in a regional monitoring program, in conjunction with local health organization(s), core monitoring may be suspended for that period at the discretion of the Regional Water Board. Regional monitoring should be used to answer the above questions, and may be used to answer additional questions. These additional questions may include, but are not limited to, questions regarding the extent and magnitude of current or potential receiving water* indicator bacteria problems, or the sources of indicator bacteria*.

4.3. Non-point Sources

Primary questions to be addressed:

1. Does the receiving water* comply with water quality standards?
2. Do agricultural and golf course non-point source discharges reach water contact or shellfish harvesting zones?
3. Are the indicator bacteria levels in receiving water* getting better or worse?
4. What is the relative contribution of indicator bacteria* to the receiving water* from agricultural and golf course non-point sources?

To answer these questions, core monitoring of representative agricultural irrigation tail water and storm water runoff, at a minimum, will be conducted in receiving water* (ankle depth, point zero) for indicator bacteria:

* See Appendix I for definition of terms.

- a. During wet weather, at a minimum of two storm events per year, and
- b. When non-storm water discharges* occur (flowing during dry weather), and if located at an AB 411 beach or within one nautical mile of shellfish bed, at least weekly.

Alternatively, these requirements may be met through participation in a regional monitoring program to assess the status of marine contact recreation water quality. If the discharger participates in a regional monitoring program, in conjunction with local health organization(s), core monitoring may be suspended for that period at the discretion of the Regional Water Board. Regional monitoring should be used to answer the above questions, and may be used to answer additional questions. These additional questions may include, but are not limited to, questions regarding the extent and magnitude of current or potential receiving water* indicator bacteria problems, or the sources of indicator bacteria*.

5. CHEMICAL CONSTITUENTS

5.1. Point Sources

Primary questions addressed:

1. Does the effluent meet permit effluent limits thereby ensuring that water quality standards are achieved in the receiving water*?
2. What is the mass of the constituents that are discharged annually?
3. Is the effluent concentration or mass changing over time?

Consistent with Appendix VI, the core monitoring for the substances in Table 1 and Table 2 shall be required periodically. For discharges less than 10 MGD, the monitoring frequency shall be at least one complete scan of the Table 1 substances annually. Discharges greater than 10 MGD shall be required to monitor at least semiannually.

5.2. Storm Water

Primary questions addressed:

1. Does the receiving water* meet the water quality standards?
2. Are the conditions in receiving water* getting better or worse?
3. What is the relative runoff contribution to pollution in the receiving water*?

For Phase I and Phase II MS4 dischargers, core receiving water* monitoring will be required at a minimum for 10 percent of all outfalls greater than 36 inches in diameter or width once per year. If a discharger has less than five outfalls exceeding 36 inches in diameter or width, they shall conduct monitoring at a minimum of only once per outfall during a five year period. Monitoring shall be for total suspended solids, oil & grease, total organic carbon, pH, temperature, biochemical oxygen demand, turbidity, Table 1 metals, PAHs*, and pesticides determined by the Regional Water Boards. Regional Water Boards may waive monitoring once structural best management practices have been installed, evaluated and determined to have successfully controlled pollutants.

For industrial storm water discharges, runoff monitoring must be conducted at all outfalls at least two storm events per year. In addition, at least one representative receiving water*

* See Appendix I for definition of terms.

sample must be collected per industrial storm water permittee during two storm events per year. Monitoring shall be conducted for total suspended solids, oil & grease, total organic carbon, pH, temperature, biochemical oxygen demand, turbidity, and Table 1 metals and PAHs*.

The requirements for individual core monitoring for Table 1 metals, PAHs* and pesticides may be waived at the discretion of the Regional Water Board, if the permittee participates in a regional program for monitoring runoff and/or receiving water* to answer the above questions as well as additional questions. Additional questions may include, but are not limited to, questions regarding the extent and magnitude of current or potential receiving water* problems from storm water runoff, or sources of any runoff pollutants.

5.3. Non-point Sources

The primary questions are:

1. Does the agricultural or golf course runoff meet water quality standards in the receiving water*?
2. Are nutrients present that would contribute to objectionable aquatic algal blooms or degrade indigenous biota?
3. Are the conditions in receiving water* getting better or worse?
4. What is the relative agricultural runoff or golf course contribution to pollution in the receiving water*?

To answer these questions, a statistically representative sample (determined by the Regional Water Board) of receiving water at the sites of agricultural irrigation tail water and storm water runoff, and golf course runoff in each watershed will be monitored for Ocean Plan Table 1 metals, ammonia as N, nitrate as N, phosphate as P, and pesticides determined by the Regional Board:

- a. During wet weather, at a minimum of two storm events per year, and
- b. During dry weather, when flowing, at a frequency determined by the Regional Boards.

This requirement may be satisfied by core monitoring individually, or through participation in a regional program for monitoring runoff and receiving water* at the discretion of the Regional Water Board to answer the above questions as well as additional questions. Additional questions may include, but are not limited to, questions regarding the sources of agricultural pollutants.

6. SEDIMENT MONITORING

All Sources:

1. Is the dissolved sulfide concentration of waters in sediments significantly increased above that present under natural conditions?
2. Is the concentration of substances set forth in Table 1, for protection of marine aquatic life, in marine sediments at levels which would degrade the benthic community?
3. Is the concentration of organic pollutants in marine sediments at levels that would degrade the benthic community?

* See Appendix I for definition of terms.

6.1. Point Sources

For discharges greater than 10 MGD, acid volatile sulfides, OP Pesticides, Table 1 metals, ammonia N, PAHs*, and chlorinated hydrocarbons will be measured in sediments annually in a core monitoring program approved by the Regional Water Board. Sediment sample locations will be determined by the Regional Water Board. If sufficient data exists from previous water column monitoring for these parameters, the Regional Water Board at its discretion may reduce the frequency of monitoring, or may allow this requirement to be satisfied through participation in a regional monitoring program.

6.2. Storm Water

For Phase I MS4 permittees, discharges greater than 72 inches in diameter or width discharging to low energy coastal environments with the likelihood of sediment deposition, acid volatile sulfides, OP Pesticides, Ocean Plan Table 1 metals, ammonia N, PAHs*, and chlorinated hydrocarbons will be measured in sediments once per permit cycle.

Regional Water Boards may waive monitoring once structural best management practices have been installed, evaluated and determined to have successfully controlled pollutants.

This requirement may be satisfied by core monitoring individually or through participation in a regional monitoring program at the discretion of the Regional Water Board. Sediment sample locations will be determined by the Regional Water Board.

7. AQUATIC LIFE TOXICITY

Toxicity tests are another method used to assess risk to aquatic life. These tests assess the overall toxicity of the effluent, including the toxicity of unmeasured constituents and/or synergistic effects of multiple constituents.

7.1. Point Sources

1. Does the effluent meet permit effluent limits for toxicity thereby ensuring that water quality standards are achieved in the receiving water*?
2. If not:
 - a. Are unmeasured pollutants causing risk to aquatic life?
 - b. Are pollutants in combinations causing risk to aquatic life?

Core monitoring for Table 1 effluent toxicity shall be required periodically. For discharges less than 0.1 MGD the monitoring frequency for acute and/or chronic toxicity shall be twice per permit cycle. For discharges between 0.1 and 10 MGD, the monitoring frequency for acute and/or chronic toxicity of the effluent should be at least annually. For discharges greater than 10 MGD, the monitoring frequency for acute and/or chronic toxicity of the effluent should be at least semiannually.

For discharges greater than 10 MGD in a low energy coastal environment with the likelihood of sediment deposition, Core monitoring for acute sediment toxicity is required and will utilize alternative amphipod species (*Eohaustorius estuarius*, *Leptocheirus plumulosus*, *Rhepoxynius abronius*).

* See Appendix I for definition of terms.

If an exceedance is detected, six additional toxicity tests are required within a 12-week period. If an additional exceedance is detected within the 12-week period, a toxicity reduction evaluation (TRE) is required, consistent with Section III.C.10. which requires a TRE if a discharge consistently exceeds an effluent limitation based on a toxicity objective in Table 1.

7.2. Storm Water

1. Does the runoff meet objectives for toxicity in the receiving water*?
2. Are the conditions in receiving water* getting better or worse with regard to toxicity?
3. What is the relative runoff contribution to the receiving water* toxicity?
4. What are the causes of the toxicity and the sources of the constituents responsible?

For Phase I MS4, Phase II MS4, and industrial storm water discharges, core toxicity monitoring will be required at a minimum for 10 percent of all outfalls greater than 36 inches in diameter or width at a minimum of once per year. Receiving water* monitoring shall be for Table 1 critical life stage chronic toxicity for a minimum of one invertebrate species.

For storm water discharges greater than 72 inches in diameter or width in a low energy coastal environment with the likelihood of sediment deposition, core sediment monitoring for acute sediment toxicity is required and will utilize alternative amphipod species (*Eohaustorius estuarius*, *Leptocheirus plumulosus*, *Rhepoxynius abronius*).

Regional Water Boards may waive monitoring once structural best management practices have been installed, evaluated and determined to have successfully controlled toxicity.

If an exceedance is detected, an additional toxicity test is required during the subsequent storm event. If an additional exceedance is detected at that time, a TRE is required, consistent with Section III.C.10. which requires a TRE if a discharge consistently exceeds an effluent limitation based on a toxicity objective in Table 1. A sufficient volume must be collected to conduct a TIE, if necessary, as a part of a TRE.

The requirement for core toxicity monitoring may be waived at the discretion of the Regional Water Board, if the permittee participates in a regional monitoring program to answer the above questions, as well as any other additional questions that may be developed by the regional monitoring program.

7.3. Non-point Sources

1. Does the agricultural and golf course runoff meet water quality standards for toxicity in the receiving water*?
2. Are the conditions in receiving water* getting better or worse with regard to toxicity?
3. What is the relative agricultural and golf course runoff contribution to receiving water* toxicity?
4. What are the causes of the toxicity, and the sources of the constituents responsible?

To answer these questions, a statistically representative sample (determined by the Regional Water Board) of receiving water* at the sites of agricultural irrigation tail water and storm water runoff, and golf course runoff, in each watershed will be monitored:

* See Appendix I for definition of terms.

- a. During wet weather, at a minimum of two storm events per year, and
- b. During dry weather, when flowing, at a frequency determined by the Regional Boards.

Core receiving water* monitoring shall include Table 1 critical life stage chronic toxicity for a minimum of one invertebrate species.

For runoff in a low energy coastal environment with the likelihood of sediment deposition, core sediment monitoring shall include acute sediment toxicity utilizing alternative amphipod species (*Eohaustorius estuarius*, *Leptocheirus plumulosus*, *Rhepoxynius abronius*) at a minimum once per year.

If an exceedance is detected, an additional toxicity test is required during the subsequent storm event. If an additional exceedance is detected, a TRE is required, consistent with Section III.C.10. which requires a TRE if a discharge consistently exceeds an effluent limitation based on a toxicity objective in Table 1. A sufficient volume must be collected to conduct a TIE, if necessary, as a part of a TRE.

The requirement for core monitoring may be waived at the discretion of the Regional Water Board, if the permittee participates in a regional monitoring program to answer the above questions, as well as any other additional questions that may be developed by the regional monitoring program.

8. BENTHIC COMMUNITY HEALTH

8.1. Point Sources

1. Are benthic communities degraded as a result of the discharge?

To answer this question, benthic community monitoring shall be conducted

- a. for all discharges greater than 10 MGD, or
- b. those discharges greater than 0.1 MGD and one nautical mile or less from shore, or
- c. discharges greater than 0.1 MGD and one nautical mile or less from a State Water Quality Protection Area or a State Marine Reserve.

The minimum frequency shall be once per permit cycle, except for discharges greater than 100 MGD the minimum frequency shall be at least twice per permit cycle.

This requirement may be satisfied by core monitoring individually or through participation in a regional monitoring program at the discretion of the Regional Board.

9. BIOACCUMULATION

9.1. Point Sources

1. Does the concentration of pollutants in fish, shellfish*, or other marine resources used for human consumption bioaccumulate to levels that are harmful to human health?
2. Does the concentration of pollutants in marine life bioaccumulate to levels that degrade marine communities?

* See Appendix I for definition of terms.

To answer these questions, bioaccumulation monitoring shall be conducted, at a minimum, once per permit cycle for:

- a. discharges greater than 10 MGD, or
- b. those discharges greater than 0.1 MGD and one nautical mile or less from shore, or
- c. discharges greater than 0.1 MGD and one nautical mile or less from a State Water Quality Protection Area or a State Marine Reserve, Park or Conservation Area.

Constituents to be monitored must include pesticides (at the discretion of the Regional Board), Table 1 metals, and PAHs*. Bioaccumulation may be monitored by a mussel watch program or a fish tissue program. Resident mussels are preferred over transplanted mussels. Sand crabs and/or fish may be added or substituted for mussels at the discretion of the Regional Water Board.

This requirement may be satisfied individually as core monitoring or through participation in a regional monitoring program at the discretion of the Regional Water Board.

9.2. Storm Water

1. Does the concentration of pollutants in fish, shellfish*, or other marine resources used for human consumption bioaccumulate to levels that are harmful to human health?
2. Does the concentration of pollutants in marine life bioaccumulate to levels that degrade marine communities?

For Phase I MS4 dischargers, bioaccumulation monitoring shall be conducted, at a minimum, once per permit cycle. Constituents to be monitored must include OP Pesticides, Ocean Plan Table 1 metals, Table 1 PAHs*, Table 1 chlorinated hydrocarbons, and pyrethroids. Bioaccumulation may be monitored by a mussel watch program or a fish tissue program. Sand crabs, fish, and/or Solid Phase Microextraction may be added or substituted for mussels at the discretion of the Regional Water Board.

This requirement may be satisfied individually as core monitoring or through participation in a regional monitoring program at the discretion of the Regional Water Board.

10. RECEIVING WATER* CHARACTERISTICS

All Sources:

1. Is natural light significantly reduced at any point outside the zone of initial dilution as the result of the discharge of waste?
2. Does the discharge of waste cause a discoloration of the ocean surface?
3. Does the discharge of oxygen demanding waste cause the dissolved oxygen concentration to be depressed at any time more than 10 percent from that which occurs naturally, as the result of the discharge of oxygen demanding* waste materials?
4. Does the discharge of waste cause the pH to change at any time more than 0.2 units from that which occurs naturally?
5. Does the discharge of waste cause the salinity to become elevated in the receiving water*?
6. Do nutrients cause objectionable aquatic growth or degrade indigenous biota?

* See Appendix I for definition of terms.

10.1. Point Sources

For discharges greater than 10 MGD, turbidity (alternatively light transmissivity or surface water transparency), color [Chlorophyll-A and/or color dissolved organic matter (CDOM)], dissolved oxygen and pH shall be measured in the receiving water* seasonally, at a minimum, in a core monitoring program approved by the Regional Water Board. If sufficient data exists from previous water column monitoring for these parameters, the Regional Water Board, at its discretion, may reduce the frequency of water column monitoring, or may allow this requirement to be satisfied through participation in a regional monitoring program. Use of regional ocean observing programs, such as the Southern California Coastal Ocean Observing System (SCCOOS) and the Central and Northern California Ocean Observing System (CeNCCOOS) is encouraged.

Salinity must also be monitored by all point sources discharging desalination brine as part of their core monitoring program.

10.2. Storm Water

At a minimum, 10 percent of Phase I MS4 discharges greater than 36 inches, receiving water* turbidity, color, dissolved oxygen, pH, nitrate, phosphate, and ammonia shall be measured annually in a core monitoring program approved by the Regional Water Board.

Regional Water Boards may waive monitoring once structural best management practices have been installed, evaluated and determined to have successfully controlled pollutants. The Regional Water Board, at its discretion, may also allow this requirement to be satisfied through participation in a regional monitoring program.

10.3. Non-point Sources

Representative agricultural and golf course discharges shall be measured, at a minimum twice annually (during two storm season and irrigation season) for receiving water* turbidity, color, dissolved oxygen, pH, nitrate, phosphate, ammonia in a core monitoring program approved by the Regional Water Board. The Regional Water Board, at its discretion, may allow this requirement to be satisfied through participation in a regional monitoring program.

11. ANALYTICAL REQUIREMENTS

Procedures, calibration techniques, and instrument/reagent specifications shall conform to the requirements of 40 CFR PART 136. Compliance monitoring shall be determined using an U.S. EPA approved protocol as provided in 40 CFR PART 136. All methods shall be specified in the monitoring requirement section of waste discharge requirements.

Where methods are not available in 40 CFR PART 136, the Regional Water Boards shall specify suitable analytical methods in waste discharge requirements. Acceptance of data should be predicated on demonstrated laboratory performance.

Laboratories analyzing monitoring data shall be certified by the California Department of Public Health, in accordance with the provisions of Water Code section 13176, and must include quality assurance quality control data with their reports.

* See Appendix I for definition of terms.

Sample dilutions for total and fecal coliform bacterial analyses shall range from 2 to 16,000. Sample dilutions for enterococcus bacterial analyses shall range from 1 to 10,000 per 100 mL. Each test method number or name (e.g., EPA 600/4-85/076, Test Methods for *Escherichia coli* and *Enterococci* in Water by Membrane Filter Procedure) used for each analysis shall be specified and reported with the results.

Test methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 CFR PART 136, unless alternate methods have been approved in advance by U.S. EPA pursuant to 40 CFR PART 136.

Test methods used for enterococcus shall be those presented in U.S. EPA publication EPA 600/4-85/076, Test Methods for *Escherichia coli* and *Enterococci* in Water by Membrane Filter Procedure or any improved method determined by the Regional Board to be appropriate. The Regional Water Board may allow analysis for *Escherichia coli* (*E. coli*) by approved test methods to be substituted for fecal coliforms if sufficient information exists to support comparability with approved methods and substitute the existing methods.

The State or Regional Water Board may, subject to U.S. EPA approval, specify test methods which are more sensitive than those specified in 40 CFR PART 136. Because storm water and non-point sources are not assigned a dilution factor, sufficient sampling and analysis shall be required to determine compliance with Table 1 Water Quality Objectives. Total chlorine residual is likely to be a method detection limit effluent limitation in many cases. The limit of detection of total chlorine residual in standard test methods is less than or equal to 20 µg/L.

Toxicity monitoring requirements in permits prepared by the Regional Water Boards shall use marine test species instead of freshwater species when measuring compliance. The Regional Water Board shall require the use of critical life stage toxicity tests specified in this Appendix to measure TUc. For Point Sources, a minimum of three test species with approved test protocols shall be used to measure compliance with the toxicity objective. If possible, the test species shall include a fish, an invertebrate, and an aquatic plant. After a screening period, monitoring can be reduced to the most sensitive species.

Dilution and control water should be obtained from an unaffected area of the receiving waters*. The sensitivity of the test organisms to a reference toxicant shall be determined concurrently with each bioassay test and reported with the test results.

Use of critical life stage bioassay testing shall be included in waste discharge requirements as a monitoring requirement for all Point Source discharges greater than 100 MGD

Procedures and methods used to determine compliance with benthic monitoring should use the following federal guidelines when applicable: Macroinvertebrate Field and Laboratory Methods for Evaluating the Biological Integrity of Surface Waters (1990) -- EPA/600/4-90/030 (PB91-171363). This manual describes guidelines and standardized procedures for the use of macroinvertebrates in evaluating the biological integrity of surface waters.

Procedures used to determine compliance with bioaccumulation monitoring should use the U.S. EPA. Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories (November 2000, EPA 823-B-00-007), NOAA Technical Memorandum NOS ORCA 130, Sampling and Analytical Methods of the National Status and Trends Program Mussel Watch Project (1998 update), and/or State Mussel Watch Program, 1987-1993 Data Report, State Water Resources Control Board 94-1WQ.

* See Appendix I for definition of terms.

**TABLE III-1
APPROVED TESTS – CHRONIC TOXICITY (TUc)**

<u>Species</u>	<u>Effect</u>	<u>Tier</u>	<u>Reference</u>
giant kelp, <i>Macrocystis pyrifera</i>	percent germination; germ tube length	1	1,3
red abalone, <i>Haliotis rufescens</i>	Abnormal shell development	1	1,3
oyster, <i>Crassostrea gigas</i> ; mussels, <i>Mytilus spp.</i>	Abnormal shell development; percent survival	1	1,3
urchin, <i>Strongylocentrotus purpuratus</i> ; sand dollar, <i>Dendraster excentricus</i>	Percent normal development	1	1,3
urchin, <i>Strongylocentrotus purpuratus</i> ; sand dollar, <i>Dendraster excentricus</i>	Percent fertilization	1	1,3
shrimp, <i>Holmesimysis costata</i>	Percent survival; growth	1	1,3
shrimp, <i>Mysidopsis bahia</i>	Percent survival; growth; fecundity	2	2,4
topsmelt, <i>Atherinops affinis</i>	Larval growth rate; percent survival	1	1,3
Silversides, <i>Menidia beryllina</i>	Larval growth rate; percent survival	2	2,4

Table III-1 Notes

The first tier test methods are the preferred toxicity tests for compliance monitoring. A Regional Water Board can approve the use of a second tier test method for waste discharges if first tier organisms are not available.

* See Appendix I for definition of terms.

Protocol References

1. Chapman, G.A., D.L. Denton, and J.M. Lazorchak. 1995. Short-term methods for estimating the chronic toxicity of effluents and receiving waters to west coast marine and estuarine organisms. U.S. EPA Report No. EPA/600/R-95/136.
2. Klemm, D.J., G.E. Morrison, T.J. Norberg-King, W.J. Peltier, and M.A. Heber. 1994. Short-term methods for estimating the chronic toxicity of effluents and receiving water to marine and estuarine organisms. U.S. EPA Report No. EPA-600-4-91-003.
3. SWRCB 1996. Procedures Manual for Conducting Toxicity Tests Developed by the Marine Bioassay Project. 96-1WQ.
4. Weber, C.I., W.B. Horning, I.I., D.J. Klemm, T.W. Nieheisel, P.A. Lewis, E.L. Robinson, J. Menkedick and F. Kessler (eds). 1988. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms. EPA/600/4-87/028. National Information Service, Springfield, VA.

* See Appendix I for definition of terms.

**APPENDIX IV
PROCEDURES FOR THE NOMINATION AND DESIGNATION OF
STATE WATER QUALITY PROTECTION AREAS*.**

1. Any person may nominate areas of ocean waters for designation as SWQPA-ASBS or SWQPA-GP by the State Water Board. Nominations shall be made to the appropriate Regional Water Board 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 State Water Board or a Regional Water Board may also nominate areas for designation as SWQPA-ASBS or SWQPA-GP on their own motion.
3. A Regional Water Board 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 Regional Water Board 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.

* See Appendix I for definition of terms.

- (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 State Water Board, 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 Regional Water Board itself.
 7. The Regional Water Board 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 Regional Water Board 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 Regional Water Board shall consider the nomination after completing the required public review processes required by CEQA.

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

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

* See Appendix I for definition of terms.

10. After considering the Regional Water Board recommendation and hearing record, the State Water Board may approve or deny the recommendation, refer the matter to the Regional Water Board for appropriate action, or conduct further hearing itself. If the State Water Board acts to approve a recommended designation, the State Water Board 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 U.S. EPA. In addition, after the effective date of a designation, the affected Regional Water Board shall revise its water quality control plan in the next triennial review to include the designation.

12. The State Water Board 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.

* See Appendix I for definition of terms.

APPENDIX V
STATE WATER QUALITY PROTECTION AREAS
AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE

TABLE V-1
STATE WATER QUALITY PROTECTION AREAS
AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE
(DESIGNATED OR APPROVED BY THE STATE WATER RESOURCES CONTROL BOARD)

No.	ASBS Name	Date Designated	State Water Board Resolution No.	Region No.
1.	Jughandle Cove	March 21, 1974,	74-28	1
2.	Del Mar Landing	March 21, 1974,	74-28	1
3.	Gerstle Cove	March 21, 1974,	74-28	1
4.	Bodega	March 21, 1974,	74-28	1
5.	Saunders Reef	March 21, 1974,	74-28	1
6.	Trinidad Head	March 21, 1974,	74-28	1
7.	King Range	March 21, 1974,	74-28	1
8.	Redwoods National Park	March 21, 1974,	74-28	1
9.	James V. Fitzgerald	March 21, 1974,	74-28	2
10.	Farallon Islands	March 21, 1974,	74-28	2
11.	Duxbury Reef	March 21, 1974,	74-28	2
12.	Point Reyes Headlands	March 21, 1974,	74-28	2
13.	Double Point	March 21, 1974,	74-28	2
14.	Bird Rock	March 21, 1974,	74-28	2
15.	Año Nuevo	March 21, 1974,	74-28	3
16.	Point Lobos	March 21, 1974,	74-28	3
17.	San Miguel, Santa Rosa, and Santa Cruz Islands	March 21, 1974,	74-28	3
18.	Julia Pfeiffer Burns	March 21, 1974,	74-28	3
19.	Pacific Grove	March 21, 1974,	74-28	3
20.	Salmon Creek Coast	March 21, 1974,	74-28	3
21.	San Nicolas Island and Begg Rock	March 21, 1974,	74-28	4
22.	Santa Barbara and Anacapa Islands	March 21, 1974,	74-28	4
23.	San Clemente Island	March 21, 1974,	74-28	4

Table V-1 Continued on next page...

* See Appendix I for definition of terms.

Table V-1 (Continued)
Areas of Special Biological Significance
(Designated or Approved by the State Water Resources Control Board)

No.	ASBS Name	Date Designated	State Water Board Resolution No.	Region No.
24.	Laguna Point to Latigo Point	March 21, 1974,	74-28	4
25.	Northwest Santa Catalina Island	March 21, 1974,	74-28	4
26.	Western Santa Catalina Island	March 21, 1974,	74-28	4
27.	Farnsworth Bank	March 21, 1974,	74-28	4
28.	Southeast Santa Catalina	March 21, 1974,	74-28	4
29.	La Jolla	March 21, 1974,	74-28	9
30.	Heisler Park	March 21, 1974,	74-28	9
31.	San Diego-Scripps	March 21, 1974,	74-28	9
32.	Robert E. Badham	April 18, 1974	74-32	8
33.	Irvine Coast	April 18, 1974	74-32	8,9
34.	Carmel Bay	June 19, 1975	75-61	3

* See Appendix I for definition of terms.

APPENDIX VI

REASONABLE POTENTIAL ANALYSIS PROCEDURE FOR DETERMINING WHICH TABLE 1 OBJECTIVES REQUIRE EFFLUENT LIMITATIONS

In determining the need for an effluent limitation, the Regional Water Board shall use all representative information to characterize the pollutant discharge using a scientifically defensible statistical method that accounts for the averaging period of the water quality objective, accounts for and captures the long-term variability of the pollutant in the effluent, accounts for limitations associated with sparse data sets, accounts for uncertainty associated with censored data sets, and (unless otherwise demonstrated) assumes a lognormal distribution of the facility-specific effluent data.

The purpose of the following procedure (see also Figure VI-1) is to provide direction to the Regional Water Boards for determining if a pollutant discharge causes, has the reasonable potential to cause, or contributes to an excursion above Table 1 water quality objectives in accordance with 40 CFR 122.44 (d)(1)(iii). The Regional Water Board may use an alternative approach for assessing reasonable potential such as an appropriate stochastic dilution model that incorporates both ambient and effluent variability. The permit fact sheet or statement of basis will document the justification or basis for the conclusions of the reasonable potential assessment. This appendix does not apply to permits or any portion of a permit where the discharge is regulated through best management practices (BMP) unless such discharge is also subject to numeric effluent limitations.

Step 1: Identify C_o , the applicable water quality objective from Table 1 for the pollutant.

Step 2: Does information about the receiving water* body or the discharge support a reasonable potential assessment (RPA) without characterizing facility-specific effluent monitoring data? If yes, go to *Step 13* to conduct an RPA based on best professional judgment (BPJ). Otherwise, proceed to *Step 3*.

Step 3: Is facility-specific effluent monitoring data available? If yes, proceed to *Step 4*. Otherwise, go to *Step 13*.

Step 4: Adjust all effluent monitoring data C_e , including censored (ND or DNQ) values to the concentration X expected after complete mixing. For Table 1 pollutants use $X = (C_e + D_m C_s) / (D_m + 1)$; for acute toxicity use $X = C_e / (0.1 D_m + 1)$; where D_m is the minimum probable initial dilution expressed as parts seawater per part wastewater and C_s is the background seawater concentration from Table G3. For ND values, C_e is replaced with "<MDL;" for DNQ values C_e is replaced with "<ML." Go to *Step 5*.

Step 5: Count the total number of samples n , the number of censored (ND or DNQ) values, c and the number of detected values, d , such that $n = c + d$.

Is any *detected* pollutant concentration after complete mixing greater than C_o ? If yes, the discharge causes an excursion of C_o ; go to *Endpoint 1*. Otherwise, proceed to *Step 6*.

* See Appendix I for definition of terms.

Step 6: Does the effluent monitoring data contain three or more detected observations ($d \geq 3$)? If yes, proceed to *Step 7* to conduct a parametric RPA. Otherwise, go to *Step 11* to conduct a nonparametric RPA.

Step 7: Conduct a parametric RPA. Assume data are lognormally distributed, unless otherwise demonstrated. Does the data consist entirely of detected values ($c/n = 0$)? If yes,

- calculate summary statistics M_L and S_L , the mean and standard deviation of the natural logarithm transformed effluent data expected after complete mixing, $\ln(X)$,
- go to *Step 9*.

Otherwise, proceed to *Step 8*.

Step 8: Is the data censored by 80% or less ($c/n \leq 0.8$)? If yes,

- calculate summary statistics M_L and S_L using the censored data analysis method of Helsel and Cohn (1988),
- go to *Step 9*.

Otherwise, go to *Step 11*.

Step 9: Calculate the UCB i.e., the one-sided, upper 95 percent confidence bound for the 95th percentile of the effluent distribution after complete mixing. For lognormal distributions, use $UCBL_{(.95,.95)} = \exp(M_L + S_L g'_{(.95,.95,n)})$, where g' is a normal tolerance factor obtained from the table below (Table VI-1). Proceed to *Step 10*.

Step 10: Is the UCB greater than C_o ? If yes, the discharge has a reasonable potential to cause an excursion of C_o ; go to *Endpoint 1*. Otherwise, the discharge has no reasonable potential to cause an excursion of C_o ; go to *Endpoint 2*.

Step 11: Conduct a non-parametric RPA. Compare each data value X to C_o . Reduce the sample size n by 1 for each tie (i.e., inconclusive censored value result) present. An adjusted ND value having $C_o < MDL$ is a tie. An adjusted DNQ value having $C_o < ML$ is also a tie.

Step 12: Is the adjusted $n > 15$? If yes, the discharge has no reasonable potential to cause an excursion of C_o ; go to *Endpoint 2*. Otherwise, go to *Endpoint 3*.

Step 13: Conduct an RPA based on BPJ. Review all available information to determine if a water quality-based effluent limitation is required, notwithstanding the above analysis in *Steps 1* through *12*, to protect beneficial uses. Information that may be used includes: the facility type, the discharge type, solids loading analysis, lack of dilution, history of compliance problems, potential toxic impact of discharge, fish tissue residue data, water quality and beneficial uses of the receiving water*, CWA 303(d) listing for the pollutant, the presence of endangered or threatened species or critical habitat, and other information.

Is data or other information unavailable or insufficient to determine if a water quality-based effluent limitation is required? If yes, go to *Endpoint 3*. Otherwise, go to either *Endpoint 1* or *Endpoint 2* based on BPJ.

Endpoint 1: An effluent limitation must be developed for the pollutant. Effluent monitoring for the pollutant, consistent with the monitoring frequency in Appendix III, is required.

* See Appendix I for definition of terms.

Endpoint 2: An effluent limitation is not required for the pollutant. Appendix III effluent monitoring is not required for the pollutant; the Regional Board, however, may require occasional monitoring for the pollutant or for whole effluent toxicity as appropriate.

Endpoint 3: The RPA is inconclusive. Monitoring for the pollutant or whole effluent toxicity testing, consistent with the monitoring frequency in Appendix III, is required. An existing effluent limitation for the pollutant shall remain in the permit, otherwise the permit shall include a reopener clause to allow for subsequent modification of the permit to include an effluent limitation if the monitoring establishes that the discharge causes, has the reasonable potential to cause, or contributes to an excursion above a Table 1 water quality objective.

Appendix VI References:

Helsel D. R. and T. A. Cohn. 1988. Estimation of descriptive statistics for multiply censored water quality data. Water Resources Research, Vol 24(12):1977-2004.

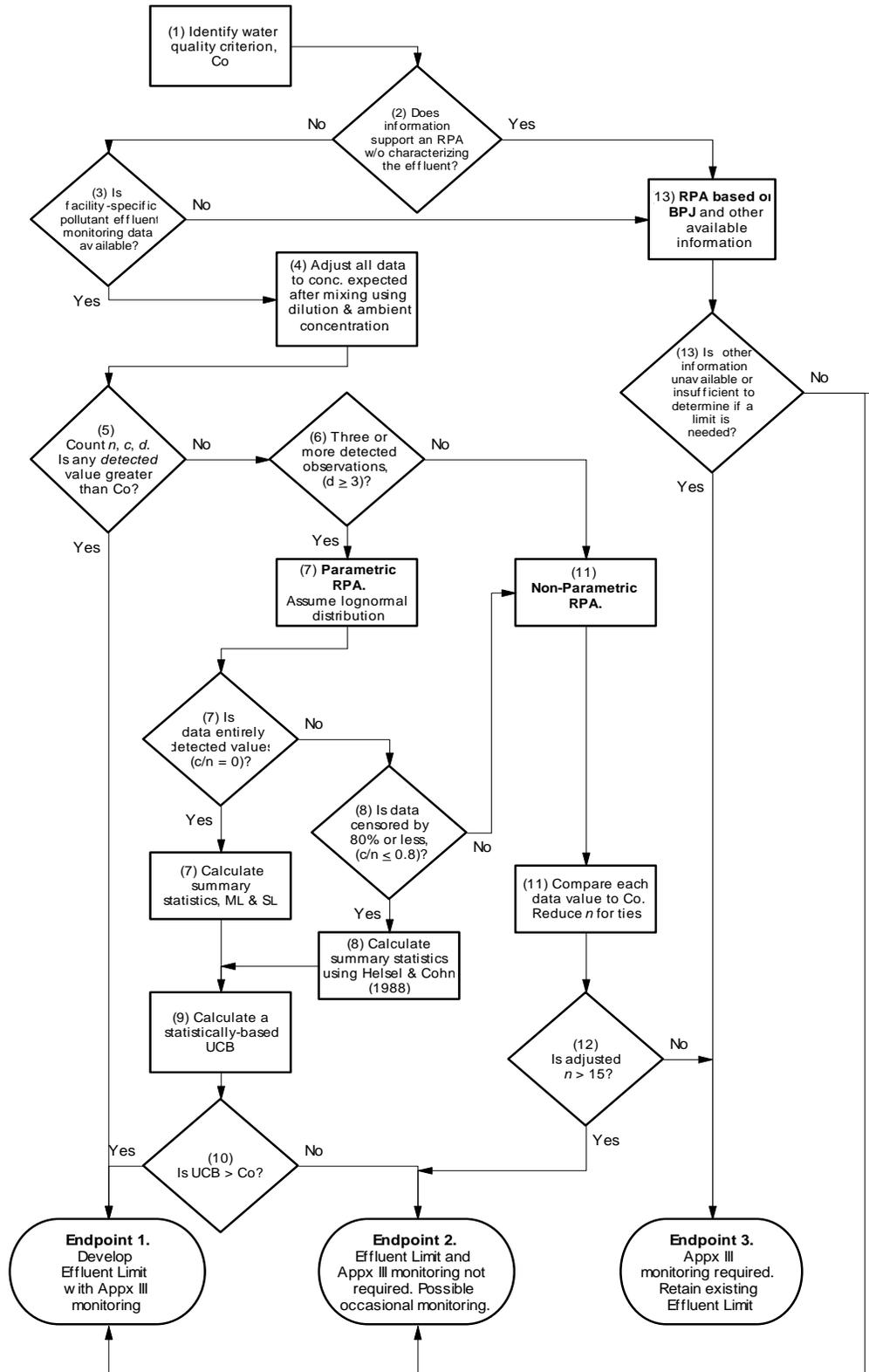
Hahn J. H. and W. Q. Meeker. 1991. Statistical Intervals, A guide for practitioners. J. Wiley & Sons, NY.

Table VI-1: Tolerance factors $g'_{(.95,.95,n)}$ for calculating normal distribution one-sided upper 95 percent tolerance bounds for the 95th percentile (Hahn & Meeker 1991)

<i>n</i>	$g'_{(.95,.95,n)}$	<i>n</i>	$g'_{(.95,.95,n)}$
2	26.260	21	2.371
3	7.656	22	2.349
4	5.144	23	2.328
5	4.203	24	2.309
6	3.708	25	2.292
7	3.399	26	2.275
8	3.187	27	2.260
9	3.031	28	2.246
10	2.911	29	2.232
11	2.815	30	2.220
12	2.736	35	2.167
13	2.671	40	2.125
14	2.614	50	2.065
15	2.566	60	2.022
16	2.524	120	1.899
17	2.486	240	1.819
18	2.453	480	1.766
19	2.423	∞	1.645
20	2.396		

* See Appendix I for definition of terms.

Figure VI-1. Reasonable potential analysis flow chart



* See Appendix I for definition of terms.

APPENDIX VII

EXCEPTIONS TO THE CALIFORNIA OCEAN PLAN

**TABLE VII-1
EXCEPTIONS TO THE OCEAN PLAN**

(GRANTED BY THE STATE WATER RESOURCES CONTROL BOARD)

Year	Resolution	Applicable Provision	Discharger
1977	77-11	Discharge Prohibition, ASBS #23	US Navy San Clemente Island
1979	79-16	Discharge Prohibition for wet weather discharges from combined storm and wastewater collection system.	The City and County of San Francisco
1983	83-78	Discharge Prohibition, ASBS #7	Humboldt County Resort Improvement District No.1
1984	84-78	Discharge Prohibition, ASBS #34	Carmel Sanitary District
1988	88-80	Total Chlorine Residual Limitation	Haynes Power Plant Harbor Power Plant Scattergood Power Plant Alamitos Power Plant El Segundo Power Plant Long Beach Power Plant Mandalay Power Plant Ormond Beach Power Plant Redondo Power Plant
1990	90-105	Discharge Prohibition, ASBS #21	US Navy San Nicolas Island
2004	2004-0052	Discharge Prohibition, ASBS #31	UC Scripps Institution of Oceanography
2006	2006-0013	Discharge Prohibition, ASBS #25	USC Wrigley Marine Science Center
2007	2007-0058	Discharge Prohibition, ASBS #4	UC Davis Bodega Marine Laboratory
2011	2011-0049	Discharge Prohibition, ASBS #6	HSU Telonicher Marine lab
2011	2011-0050	Discharge Prohibition, ASBS #19	Monterey Bay Aquarium
2011	2011-0051	Discharge Prohibition, ASBS #19	Stanford Hopkins Marine Station
2012	2012-0012, as amended on June 19 2012; in 2012-0031	ASBS Discharge Prohibition, General Exception for Storm Water and Nonpoint Sources	27 applicants for the General Exception

* See Appendix I for definition of terms.

APPENDIX VIII MAPS OF THE OCEAN, COAST, AND ISLANDS

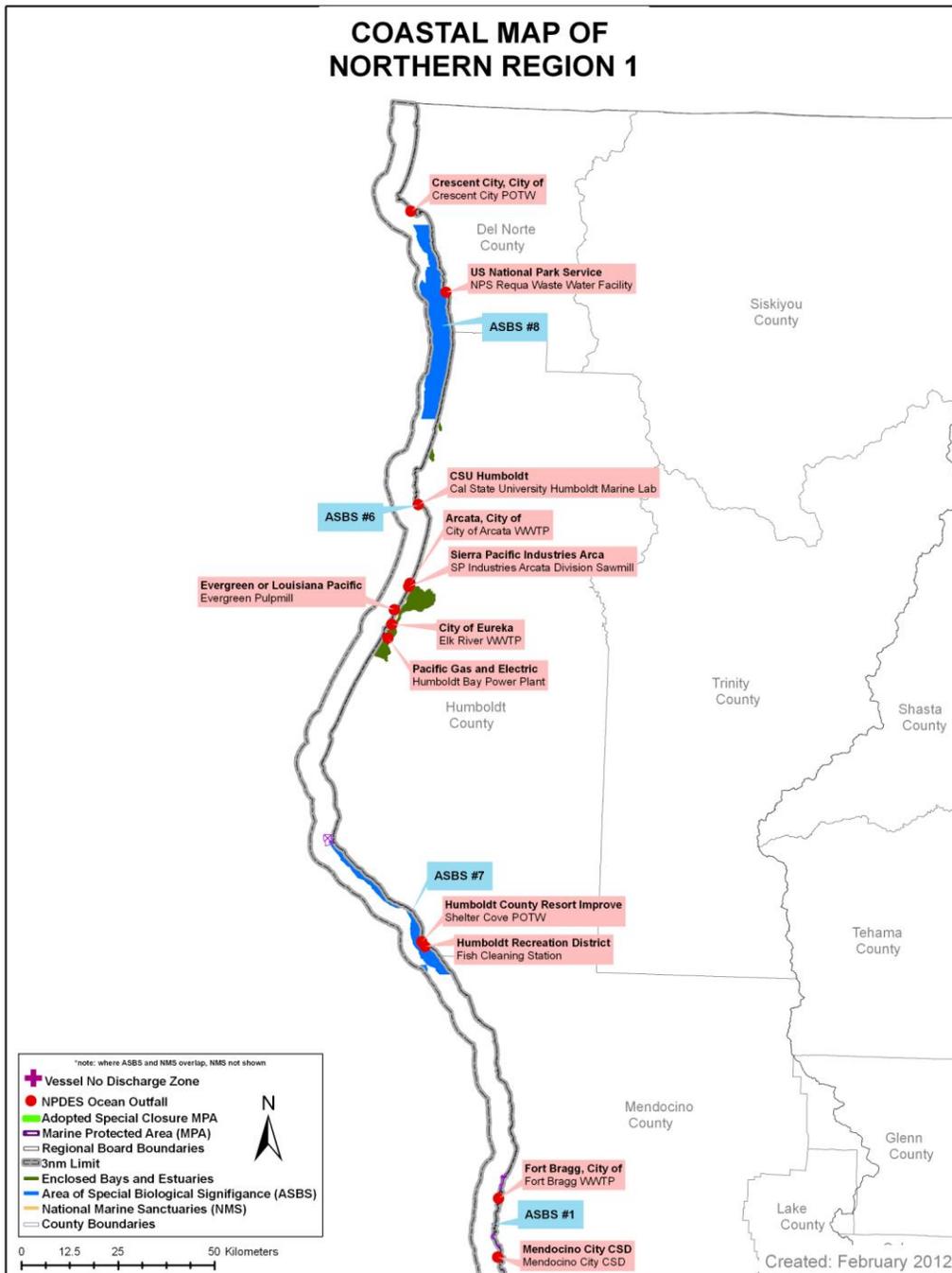


Figure VIII-1. ASBS Boundaries, MPA Boundaries, Wastewater Outfall Points, Marine Sanctuary Boundaries, and Enclosed Bays in northern Region 1.

* See Appendix I for definition of terms.

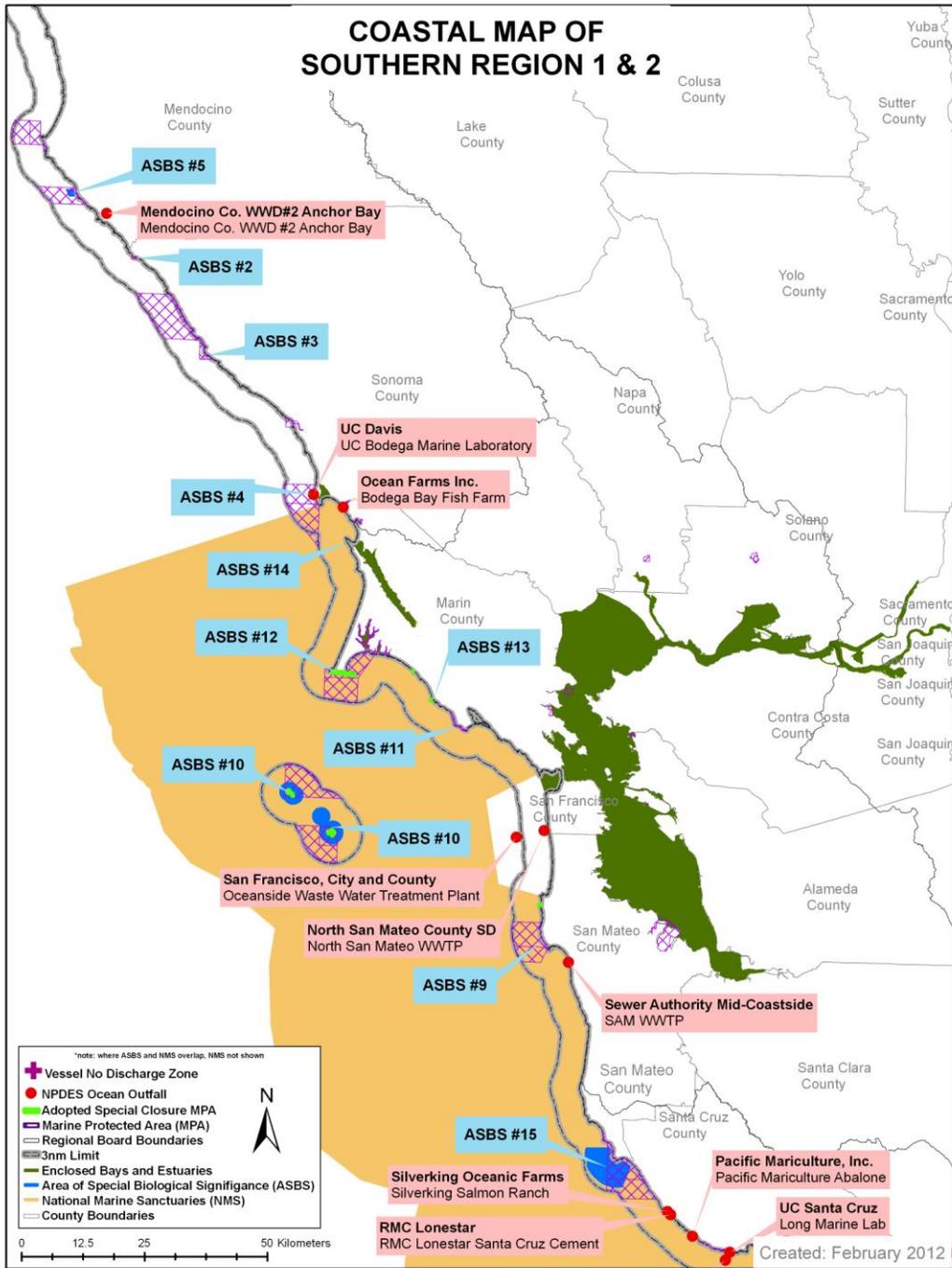


Figure VIII-2. ASBS Boundaries, MPA Boundaries, Wastewater Outfall Points, Marine Sanctuary Boundaries, and Enclosed Bays in southern Region 1 and Region 2.

* See Appendix I for definition of terms.

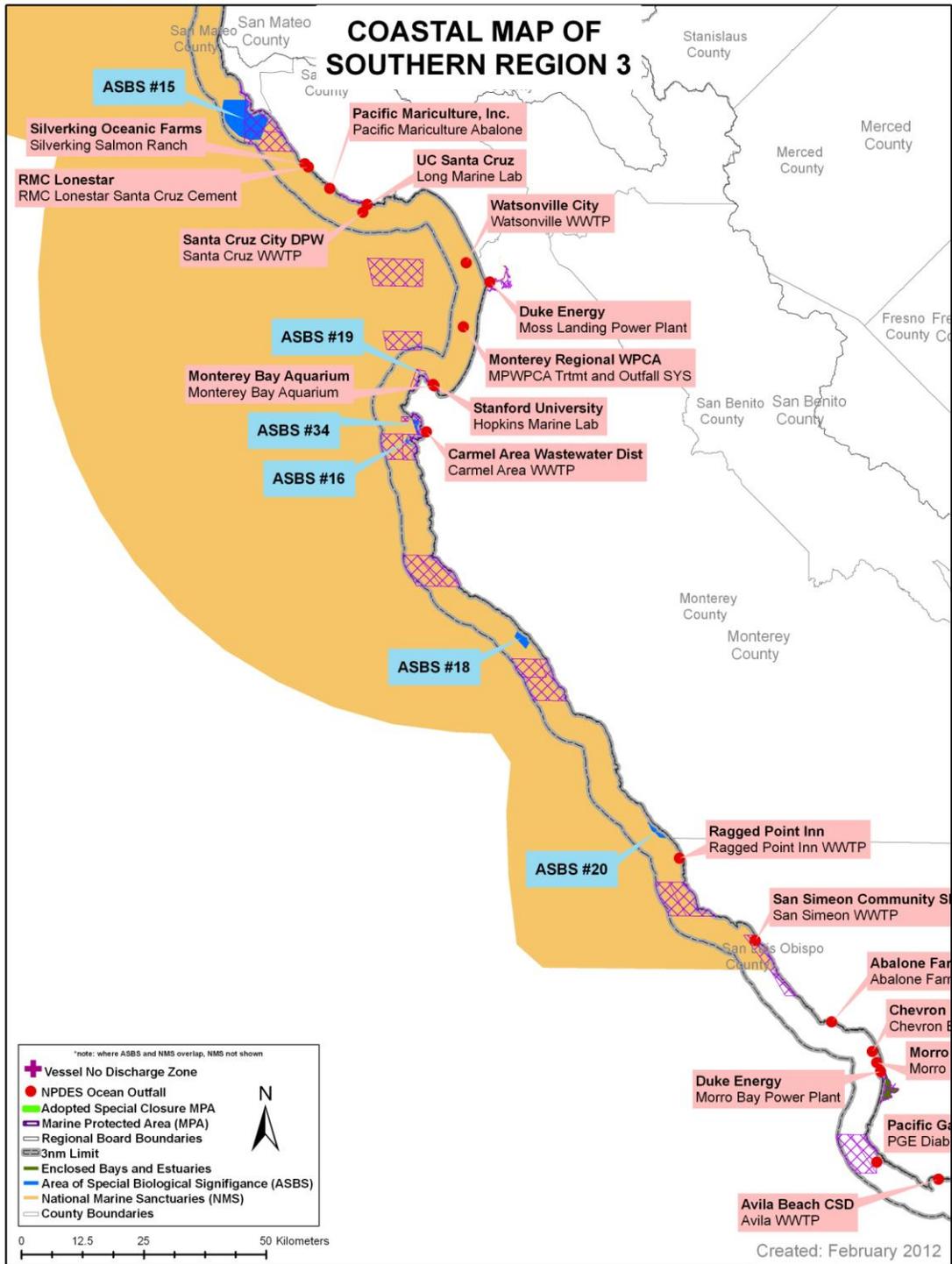


Figure VIII-3. ASBS Boundaries, MPA Boundaries, Wastewater Outfall Points, Marine Sanctuary Boundaries, and Enclosed Bays in northern Region 3.

* See Appendix I for definition of terms.

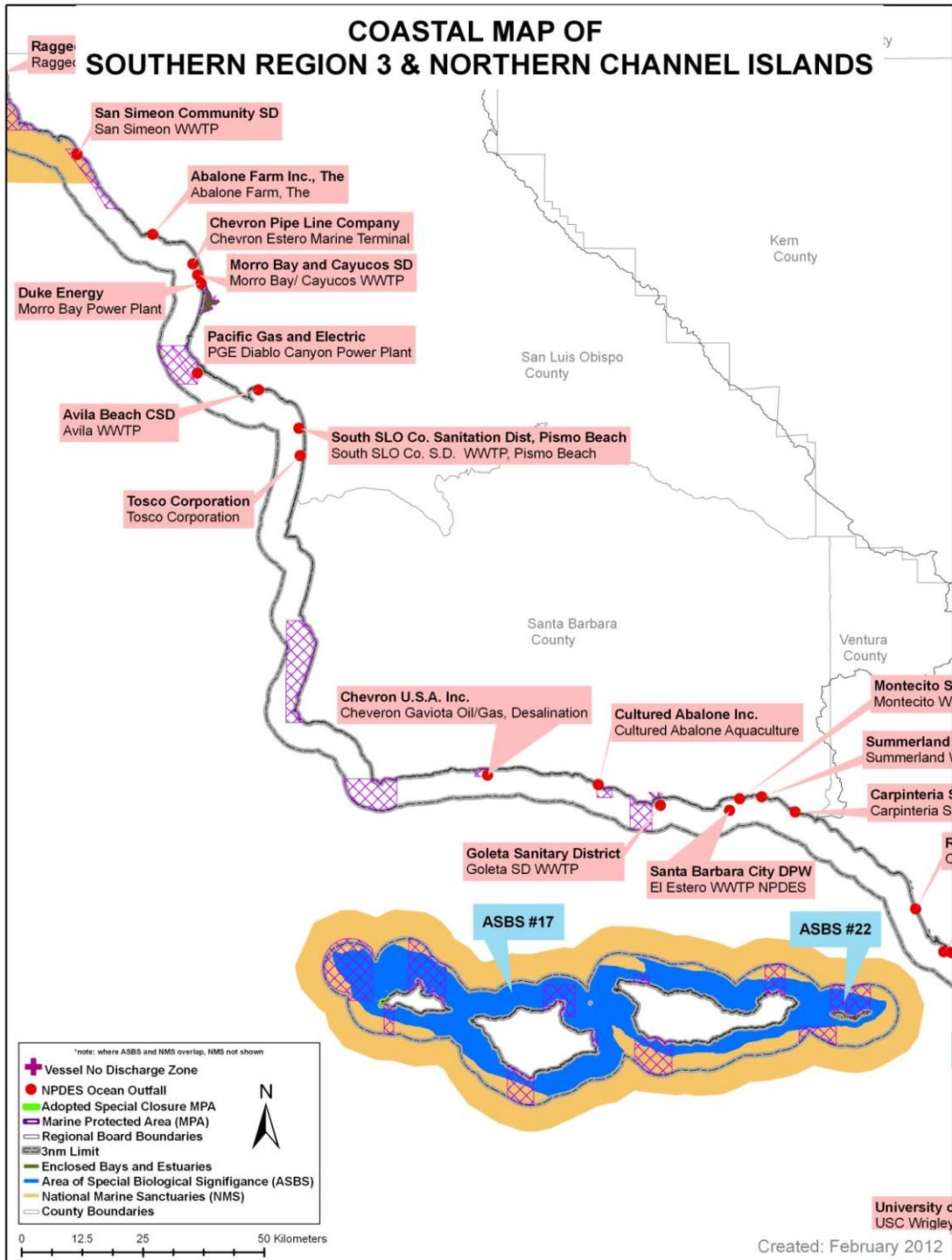


Figure VIII-4. ASBS Boundaries, MPA Boundaries, Wastewater Outfall Points, Marine Sanctuary Boundaries, and Enclosed Bays in southern Region 3 and northern Channel Islands.

* See Appendix I for definition of terms.

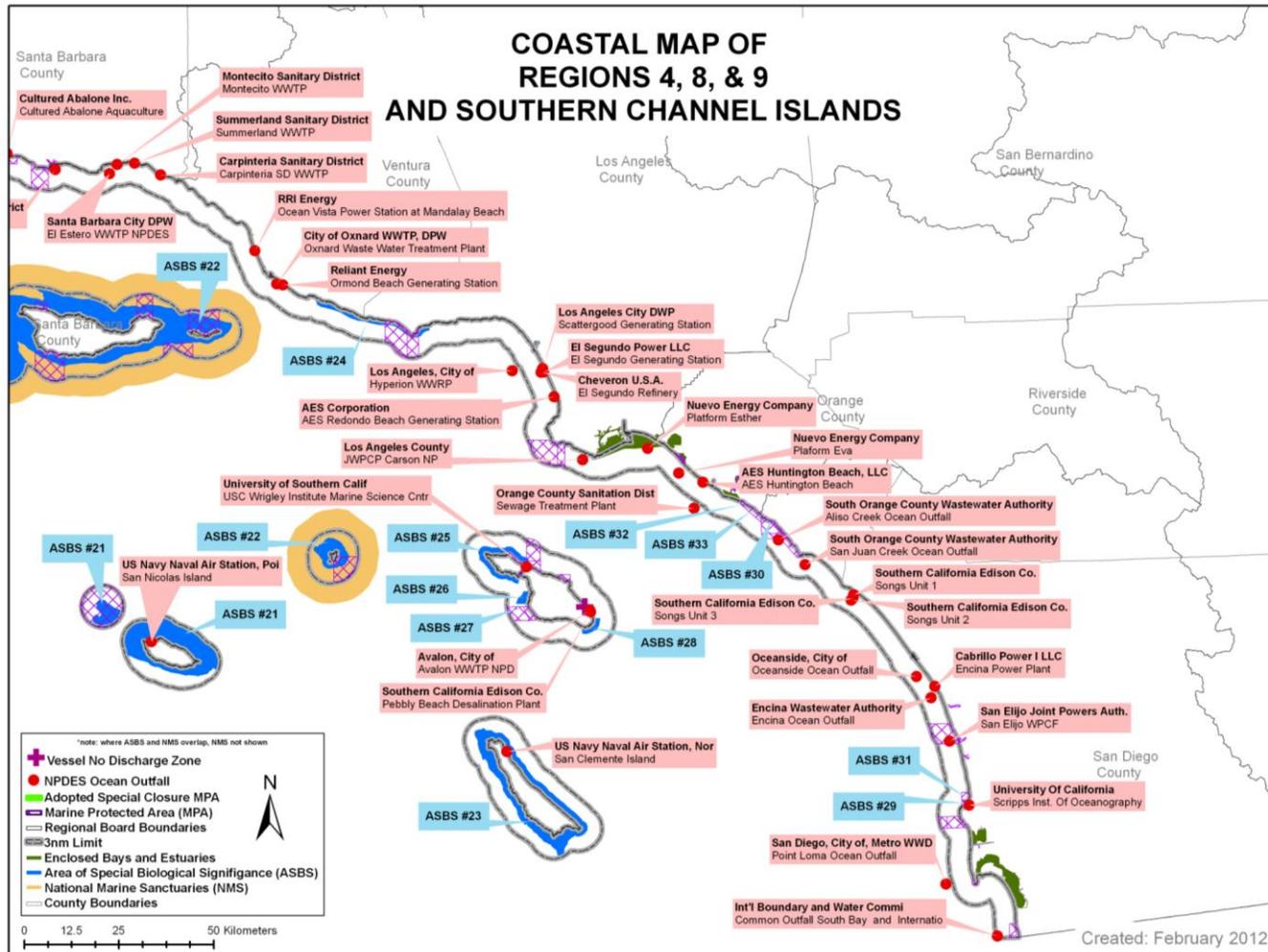


Figure VIII-5. ASBS Boundaries, MPA Boundaries, Wastewater Outfall Points, Marine Sanctuary Boundaries, and Enclosed Bays in southern Channel Islands and Regions 4, 8 and 9.

* See Appendix I for definition of terms.

Appendix B - CEQA Checklist

THE PROJECT

1. PROJECT TITLE:

Implementation of State Water Recourses Control Board (State Water Board) Resolutions 2010-0057 and 2011-0013 State Water Quality Protection Areas and State Marine Protected Areas.

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:

Ms. Johanna Weston 916.327.8117/jweston@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 State
 Water Quality Protection Areas and State Marine Protected Areas

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

VI. GEOLOGY AND SOILS

Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The proposed project will not generate hazardous materials or increase the risk of exposure or loss injury or death.				

IX. HYDROLOGY AND WATER QUALITY

Would the project:

a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
vi) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The proposed project will not have a substantial impact on recreation or recreational opportunities.				

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

XVII. UTILITIES AND SERVICE SYSTEMS

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issue	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

Appendix C – Response to Comments

**Proposed Amendment to the
2009 California Ocean Plan**

**Implementation of State Water Board Resolutions 2010-0057
and 2011-0013 State Water Quality Protection Areas and
Marine Protected Areas**

State Water Resources Control Board

Public Hearing – May 1, 2012

Comment Letters Received by noon on April 18, 2012

Letter No.	Association	Representative
1	California Association of Sanitation Agencies Tri-TAC Southern California Alliance of POTWs	Roberta Larson Terri Mitchell John Pastore
2	California Council for Environmental and Economic Balance	Robert Lucas Gerald Secundy
3	California Farm Bureau Federation	Kari Fisher
4	California Stormwater Quality Association	Richard Boon
5	The Center for Biological Diversity	Miyoko Sakashita
6	City of Dana Point	Brad Fowler
7	City of Huntington Beach	Travis Hopkins
8	City of Laguna Beach	Jane Egly
9	City of Laguna Niguel	Tim Casey
10	City of Orange	Frank Sun
11	City of Rancho Palos Verdes	Tom Odom
12	City of San Diego	Kris McFadden
13	Construction Industry Coalition on Water Quality	Mark Grey
14	County of Los Angeles Department of Public Works on behalf of Los Angeles County Flood Control District	Gary Hilderbrand
15	County Sanitation Districts of Los Angeles County	Grace Chan
16	General Public	Christine Heinrichs
17	General Public	Jim Webb
18	Greenspace	Richard Hawley

Public Hearing – May 1, 2012

Comment Letters Received by noon on April 18, 2012

Letter No.	Association	Representative
19	Heal the Bay California Coastkeeper Alliance Surfrider Foundation NRDC Santa Barbara Channelkeeper Orange County Coastkeeper	Sarah Sikich Sara Aminzadeh Joe Geever Karen Garrison Kira Redmond Garry Brown
20	Irvine Company	Dean Kirk
21	Monterey Regional Storm Water Permit Participants Group	Sarah Hardgrave
22	Municipal Water District of Orange County	Richard Bell
23	Orange County Public Works	Mary Anne Skorpanich
24	Orange County Sanitation District	James Colston

Letter 1: From Roberta Larson of California Association of Sanitation Agencies, Terri Mitchell of Tri-TAC, and John Pastore Southern California Alliance of POTWs

Comment 1.1

The definition of State Water Quality Protection Areas - General Protection (SWQPA-GP) in Appendix I should be consistent with the language in Provision E.3 of the Draft Amendment.

“State Water Quality Protection Areas – General Protection (SWQPAGP) designated by the State Water Board to ~~maintain~~ protect marine species or biological communities from an undesirable alteration in natural water quality ~~in order to protect or conserve marine life and habit~~ within State Marine Parks and State Marine Conservation Areas.”

Response 1.1

Staff agrees with the proposed modified definition. Since the intention of the proposed amendment is to provide improved coordination and protection of California’s marine managed areas (MMAs) with the Marine Managed Areas Improvement Act (MMAIA), the definition of SWQPA-GP was modified in the proposed amendment to be more consistent with the Public Resources Code definition.

Comment 1.2

They ask to remove the phrase “or other unique and sensitive areas” from Provision E.1.(a)(2) prior to adoption.

Response 1.2

Staff agrees with the proposed revision to Provision E.1.(a)(2). The SWQPA-GPs are intended to only be designated within State Marine Parks and State Marine Conservation Areas. The proposed amendment was revised in Provision E.1.(a)(2) with the removal of the phrase “or other unique and sensitive areas”.

Comment 1.3

Appendix IV should be renamed and amended to clarify the criteria for SWQPA-GP designation.

Response 1.3

The title for Appendix IV was revised in the Staff Report and draft Substitute Environmental Document (SED) to provide more clarity for the procedures for the nomination and designation of SWQPA-GP.

Comment 1.4

Language in the Resolution 2010-0057, specifically Resolved 3.b and 3.c, expressing the intent of the State Water Boards with regard to regulation of municipal wastewater facilities has been omitted from the draft amendment.

Resolved 3.b: “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 outfall.”

Resolved 3.c: “Regulatory requirements for discharges from existing treated municipal wastewater outfalls shall be derived from the California Ocean Plan.”

Response 1.4

Staff agrees this language should be included in the amendment in order to align with Resolution 2010 – 0057. The proposed amendment was revised to include language similar to Resolved 3.b and 3.c in Provision E.5.(a)(3-4).

Comment 1.5

Clarification of Provision E.2 by removing the phrase “beyond those in existing law, regulations, and water quality control plans” should be removed to avoid regulatory confusion.

Response 1.5

Staff agrees with the removal the phrase “beyond those in existing law, regulations, and water quality control plans” to reduce ambiguity and regulatory confusion. In addition to removing the phrase, staff decided to modify Provision E.2 based on suggested language in Comment Letter 19.

The modified provision reads:

“The designation of State Marine Parks and State Marine Conservation Areas may not serve as the sole basis for new or modified limitations, substantive conditions, or prohibitions existing municipal point source wastewater discharge outfalls. This provision does not apply to State Marine Reserves.”

The modification of the provision provides for increased clarity and protection of the beneficial uses in State Marine Parks and State Marine Conservation Areas. MPAs are designated to protect or conserve marine life and habitat. The water quality has a critical role in the survival and health of the marine life in these areas. While MPA designation should not be the sole trigger for additional regulation, if there is degradation of marine life, habitat, and/or water quality then additional regulation may be necessary to protect the beneficial uses regardless of whether SWQPA-GP are designated or not.

Comment 1.6

Dry weather diversions of non-storm water (dry weather) flows to municipal sewer system must not be mandated.

Response 1.6

The proposed amendment does not mandate a universal dry weather diversion of non-storm water flows to municipal sewer systems. Non-storm water discharges would be prohibited as required by the applicable permit. Thus, if the applicable permit does not require dry weather flow diversion, then diversion of dry weather flows will not be mandated by this proposed amendment.

Comment 1.7

The potential environmental impacts associated with designation of new State Water Quality Protection Areas – Areas of Special Biological Significance (SWQPA-ASBS) in the vicinity of State Marine Reserves (SMR) should be analyzed and disclosed in the California Environmental Quality Act (CEQA) checklist.

Response 1.7

This proposed amendment does not designate new SWQPA-ASBS. This proposed amendment provides the framework for SWQPA to protect MPAs through the proposal of a new subset named SWQPA-GP. As described in Appendix IV of the proposed amendment, the designation

of SWQPAs-ASBS and SWQPAs-GPS must follow the public process and comply with CEQA documentation requirements. Thus in the public process for designation, potential environmental impacts associated with designation will be analyzed and disclosed pursuant to CEQA.

Comment 1.8

The draft amendment contains several typographical errors in Section 5.6.2 Table 2 that should be corrected prior to finalizing the document.

Response 1.8

Staff appreciates the typographical comments regarding Table 2 in Section 5.6.2. These typographical errors were corrected in the Staff Report and draft SED to reflect the South Coast MPAs effective on January 1, 2012.

Letter 2: From Robert Lucas and Gerald Secundy of California Council for Environmental and Economic Balance

Comment 2.1

Dewater discharges pursuant to Waste Discharge Requirement (WDRs) or National Pollution Discharge Elimination System (NPDES) permits from linear system facilities that provide gas, electric and communication services should be explicitly authorized by the proposed amendments to the California Ocean Plan (Ocean Plan).

Response 2.1

Staff agrees. The proposed amendment was revised to authorize dewater discharges with the inclusion of the following provision:

“An NPDES permitting authority may authorize non-storm water discharges to an MS4 with a direct discharge to an SWQPA-GP only to the extent the NPDES permitting authority finds that the discharge does not cause an undesirable alteration in natural water quality in an SWQPA-GP.”

[Editorial Note: In the Draft Final SED, the provision language was removed from Provision E.5.(a) and moved to Provision E.5.(c)(2). See Comment/Response 3.1 in August 31, 2012 Response to Comments].

Comment 2.2

The Marine Managed Areas Improvement Act does not classify State Marine Reserves, State Marine Parks and State Marine Conservation Areas as SWQPAs and they should therefore not be managed to achieve “natural water quality”.

Response 2.2

The Marine Managed Areas Improvement Act was intended to more effectively organize, designate, and manage California’s assortment of different marine managed areas and provide consistency among the state agencies that administer, manage, and designate the areas. The Marine Managed Areas Improvement Act further defines SWQPA as areas “designated to protect marine species or biological communities from an undesirable alteration in natural water quality”. If designated MMAs require additional protection from potential impacts associated with degraded water quality, the State and Regional Water Boards under the authority of the Clean Water Act (CWA) and the Porter-Cologne Water Quality Control Act (Porter-Cologne) would be

responsible for developing and adopting new SWQPAs and more stringent permits or discharge conditions, including prohibitions within these areas.

Comment 2.3

Implementation of additional requirements for SWQPAs should incorporate the approach described in State Water Resources Control Board's (SWRCB) Resolution 2010-0057 through incorporation of suggested language for the following two Provisions.

Provision E.5.(a)(3): "Where new SWQPA established in the vicinity of existing municipal wastewater outfalls, there shall be no new or modified limiting condition or prohibitions for the SWQPA relative to those wastewater outfalls."

Provision E.5.(a)(4): "Regulatory requirements for discharges from existing treated municipal wastewater outfalls shall be derived from the California Ocean Plan"

Response 2.3

Staff agrees. The proposed amendment was modified to include the suggested language for Provisions E.5.(a)(3) and E.5.(a)(4). This provides consistency established with Resolution 2010-0057. Please see Response 1.4.

[Editorial Note: Provision E.5.(a)(3) was present in draft final SED. Provision E.5.(a)(3) was modified in draft final SED – see Comment/Response 2.4 in August 31, 2012 Response to Comments].

Comment 2.4

The Ocean Plan Amendment should clarify that it establishes the process for nominating and approving new SWQPAs, but does not in itself approve any new SWQPAs.

Response 2.4

The proposed amendment does not designate new SWQPAs. This proposed amendment provides the framework for SWQPAs to protect MPAs through the proposal of a new subset named SWQPA-GP. As described in Appendix IV of the proposed amendment, each nomination for new designation of an SWQPA-ASBS and/or an SWQPAs-GPS must follow the public process and comply with CEQA documentation requirements. Because the process for designation is set forth extensively in Appendix IV, further clarification is unnecessary.

Comment 2.5

The language for ASBSs should specify that discharges from linear system facilities that provide gas, electric and communication services are not prohibited to Municipal Separate Storm Sewer System (MS4) or other man-made or natural conveyance systems that eventually discharges to ASBS.

Response 2.5

The recent adoption of a General Exception to the California Ocean Plan waste discharge prohibition for selected discharge into ASBS on March 20, 2012 occurred after the release of this Staff Report and draft SED on February 23, 2012. The discussion of the adopted General Exceptions was included in the draft Staff Report. The Special Protections adopted as part of the General Exception for Selected Discharges into Areas of Special Biological Significance include provisions that address authorization of non-storm water discharges to an MS4 with a direct discharge to an ASBS.

Letter 3: From Kari Fisher of California Farm Bureau Federation

Comment 3.1

Section 5.7.4.3 in the Staff Report recommends an “approach that assesses all existing storm water and nonpoint sources discharges categorized and use this information to determine what controls and prohibitions are needed to maintain natural water quality”. The California Farm Bureau Federation is concerned that the first alternative, “prohibit all existing stormwater and nonpoint discharges”, is not appropriately described.

Response 3.1

In the proposed amendment, staff is not recommending an approach that would “prohibit all existing storm water and nonpoint discharges” in MPAs. This approach would be no different than the existing special protections provided by the designation of ASBS. The proposed amendment provides a framework for SWQPA-GP, which will instead provide an intermediate level of protection between the baseline provisions of the Ocean Plan and an ASBS. For SWQPA-GP, staff recommends the adoption of 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. The discharges that will be prohibited into an SWQPA-GP will only include the following: new point source wastewater outfalls, new seawater intakes, and increases in nonpoint sources or permitted storm drains. Existing point sources wastewater discharges and seawater intakes will be continued to be allowed into SWQPA-GPs. Existing permitted MS4 discharges and nonpoint source discharge will allowed into SWQPA-GPs but shall not cause undesirable alteration in natural water quality.

Letter 4: From Richard Boon of California Stormwater Quality Association

Comment 4.1

The Staff Report and associated environmental documentation do not provide examples of where the proposed amendment is needed to benefit MPAs.

Response 4.1

The purpose of the proposed amendment is to create a framework for SWQPA-GP that in the future could be co-located with designated MPAs, specifically State Marine Parks and State Marine Conservation Areas. SWQPA-GP will provide an intermediate level of water quality protection, between the baseline Ocean Plan and ASBS designation, to maintain natural water quality to protect the beneficial uses of the unique and valuable marine fauna and flora and associated communities for this and future generations. The proposed amendment is an extension of the Marine Managed Areas Improvement Act, which aims to promote greater coordination between the agencies managing the different MMAs. Thus the coupling of the protection of beneficial uses on the unique and valuable marine fauna and flora and the Marine Managed Areas Improvement Act provides an explanation for how the SWQPA-GP will benefit MPAs.

Since the proposed amendment does not propose specific new designations of SWQPAs, examples of specific areas where the designation might be needed to benefit MPAs or where specific water quality problems must be addressed are neither necessary nor appropriate at this time. In addition, there will be no change in permitted storm water and wastewater discharges with the proposed amendment. Compliance and permit modification will only occur following a designation of SWQPA-GPs at a possible future time period.

Comment 4.2

The rationale for the approach of ignoring Publicly Owned Treatment Works (POTWs) discharges and restricting MS4 discharges is not described or justified.

Response 4.2

The SWQPA-GPs are intended to provide intermediate water quality protection between the baseline Ocean Plan and ASBS designation. These proposed amendments do not ignore POTWs discharges, as new outfalls cannot be established and POTWs must continue to comply with the Ocean Plan. The proposed amendment does provide conditions for SWQPA-GPs to not be co-located with existing outfalls and for existing outfalls to not be moved. The Ocean Plan, through the narrative and numeric objectives, already strictly controls wastewater discharges to meet effluent limits in order to protect the beneficial uses of the state's ocean waters. In contrast, the Ocean Plan currently is less strict for permitted MS4 discharges and nonpoint source discharges. These discharges are sources of pollution and negatively impact water quality. Reduction of the negative impacts of these discharges is an important priority to the State Water Board. Thus for SWQPA-GPs, permitted MS4 discharges and nonpoint source discharges to an SWQPA-GP require elevated restrictions to be similar to current Ocean Plan requirements for POTW discharges. In addition, under federal and state law, MS4 discharges must meet water quality objectives contained in the relevant water quality control plan, the Ocean Plan.

Comment 4.3

The proposed requirements specified in the proposed amendment E.5(c) appear contrary to the intent of the legislature (Marine Life Protection Act) in establishing MPAs.

Response 4.3

Staff disagrees. The designation of a MPA, in itself, does not lead to new requirements on water quality. The Clean Water Act and the Porter-Cologne provide the State Water Board with the jurisdiction to protect the beneficial uses of California's waters. To provide protection of the beneficial uses of the unique and valuable marine fauna and flora in MPAs, SWQPA-GP can be designated after a full public process with CEQA, as described in Appendix IV.

Additionally, as discussed in Response 4.2, in the Ocean Plan wastewater discharges are strictly regulated in contrast to ocean storm water discharges. The purpose for SWQPA-GPs is to have protection from an undesirable alternation in natural water quality. Since storm water discharges in the Ocean Plan have minimal restrictions, this proposed amendment has implementation provisions for permitted MS4 discharges and nonpoint source discharge to achieve the objectives of SWQPA-GPs.

Comment 4.4

The scope of the possible future SWQPA-GP designations needs to be clearly described, as it is unclear as to what areas will be designated as SWQPA-GPs.

Response 4.4

Please see Response 1.2. Future designation of SWQPA-GPs is limited to co-location with State Marine Parks and State Marine Conservation Areas in California's ocean waters.

Comment 4.5

To identify problems in MPAs, these proposed SWQPA criteria should utilize a multiple lines of evidence approach similar to that used by the State Water Board for establishing sediment quality objectives: chemistry, toxicity, and biological community impacts.

Response 4.5

The designation of the MPAs was conducted with an extensive public-private partnership, which used the best readily available science and the advice and assistance of scientists, resource managers, experts, stakeholders and members of the public. The designation of an SWQPA-GP will occur after a public process and compliance with CEQA documentation requirements for a water quality control plan amendment. Those monitoring requirements will incorporate a multiple lines of evidence approach. In addition, the State Water Board staff is proposing a Model Monitoring Amendment to the Ocean Plan, which will be a question-driven monitoring approach that is focused on assuring compliance with narrative and numeric water quality standards, the status and attainment of beneficial uses, and identifying sources of pollution.

Comment 4.6

The current approach in the Staff Report and proposed amendment of establishing statewide requirements is contrary to California's Water Code and marine protections acts. More flexibility is needed to more effectively address specific regional and local conditions.

Response 4.6

Staff disagrees. The Marine Managed Areas Improvement Act was intended to more effectively organize, designate, and manage the state's many different marine managed areas and provide consistency among the state agencies that administer, manage, and designate the areas. While the MPAs, through the Marine Life Protection Act, are established on a regional basis, together the MMAs are a statewide system. The proposed amendment will aid the State Water Boards' flexibility to tailor the designation of SWQPAs in a manner consistent with the goals and objectives of establishing the MPAs. The proposed amendment will also provide the coastal Regional Water Boards with a cohesive or consistent statewide framework to address water quality protection within MPAs. For existing and future permittees and respective rate payers situated near MPAs, these proposed amendments will create greater regulatory certainty to plan and budget future repairs or replacement projects for possible future SWQPA-GP designations.

Comment 4.7

The Staff Report lacks information or examples of how representative MS4 dischargers will comply with the requirements as currently structured.

Response 4.7

The proposed amendment only provides the framework for an SWQPA-GP. The proposed amendment does not designate any areas as an SWQPA-GP. Implementation and compliance will occur on an SWQPA-GP by SWQPA-GP basis, and thus the draft SED is unable to provide specific examples of compliance. For designated SWQPA-GPs, under federal and state law, MS4 dischargers will comply with water quality objectives that are stated within the water quality control plan, and will not cause undesirable alteration in natural water quality.

Comment 4.8

Clarify the dual compliance goals described Provisions E.5.(c)(1) and E.5.(c)(5-7).

Response 4.8

Staff disagrees that there are dual compliance goals present. Meeting the Ocean Plan instantaneous and daily maximum objectives is an attainable metric toward measuring whether an intermittent discharge causes a problem. Provision E.5.(c)(1) simply defines what is entailed in preventing undesirable alteration in natural water quality. The provisions in E.5.(c)(5-7) simply provide an assessment and iterative approach to prevent undesirable alteration in natural water quality.

Comment 4.9

CASQA thinks that dry weather discharges are banned with no exceptions.

Response 4.9

Please see Response 1.6.

Comment 4.10

CASQA thinks the costs and impacts of corrective measures, such as dry weather diversions and end-of-pipe treatment, need to be evaluated.

Response 4.10

Please see Response 1.6. Corrective measures such as dry weather diversions are not mandated, and thus there are no required costs and impacts to be evaluated in the Staff Report and draft SED.

Comment 4.11

The SWQPA-GP implementation provisions are intended to be less, rather than more stringent, than SWQPA-ASBS provisions. However, the proposed SWQPA-GP implementation provisions appear to allow no exceptions or alternatives to compliance.

Response 4.11

Staff disagrees. The proposed framework for SWQPAs-GP is intended to be an intermediate level between the baseline Ocean Plan provisions and the ASBS. Exceptions are not needed since the only discharges banned into SWQPA-GPs are new point source discharges, new seawater intakes, and increases of nonpoint sources or permitted storm drains.

Comment 4.12

The Staff Report needs to address the absence – except for limited topics – of identified impacts of this Regulatory Action in the SED and CEQA checklist.

Response 4.12

The proposed amendment provides the framework for SWQPA to protect MPAs through the proposal of a new subset named SWQPA-GP. As described in Appendix IV of the proposed amendment, the designation of SWQPAs-ASBS and SWQPAs-GP must follow the public process and compliance with CEQA documentation requirements for a water quality control plan amendment. Thus in the public process for designation, potential environmental impacts associated with designation will be analyzed and disclosed in compliance with CEQA.

Comment 4.13

The significance of the State Marine Reserves needs to be clarified. The intent of the amendment are apparently to ban discharges into State Marine Reserves that are not ASBS;

however, no information is presented on how many discharges currently enter these reserves, the effects of these discharges, or the need for the prohibition.

Response 4.13

This significance of the State Marine Reserves can be found through the Marine Managed Areas Improvement Act and the Marine Life Protection Act (MLPA). This is specifically found with Section 5.6.2 in the Staff Report. In the MPA hierarchy, State Marine Reserves have the strictest restrictions on take of marine life.

The proposed amendment provides the framework for the SWQPA-GP, which designated “to protect or conserve marine life and habitat within State Marine Parks and State Marine Conservation Areas”. Thus SWQPA-GPs will not be designated over State Marine Reserves. Since State Marine Reserves have the strictest restrictions out of the three MPA categories, only an ASBS and not an SWQPA-GP can be co-located with a State Marine Reserve.

Comment 4.14

The SWQPA-GP nomination and designation process needs to be explained. The amendment to Appendix IV, which sets forth the nomination designation process, is unclear.

Response 4.14

The title for Appendix IV has been updated in the Staff Report and draft SED to provide more clarity for the procedures for the nomination and designation of SWQPA-GP. Within Appendix IV the procedures address both SWQPA-ASBS and SWQPA-GP, the nomination criteria are spelled out in Provisions 1.(a)(1) through (3) to specify information necessary to determine the need for designation as either category of SWQPA.

Comment 4.15

The compliance schedule for regulated dischargers needs to provide a transition period. As currently structured, the compliance requirements including the ban on dry weather flow must occur immediately.

Response 4.15

Please see Response 1.6. The compliance schedule for a ban on dry weather flow would be included in the applicable permit, which will be reopened following SWQPA-GP designation.

Comment 4.16

Source Control alternatives need to be recognized. The Staff Report and SED do not address pollution prevention or source control as methods for addressing pollutants that may present a risk to MPAs.

Response 4.16

Staff agrees that pollution prevention and source control are methods to address pollutants. For the proposed framework for SWQPA-GPs, pollution prevention and source control will be part of the implementation and compliance options for meeting water quality objectives. However, such efforts will not be necessary until the SWQPAs are designated, which is a separate public process in the future.

Comment 4.17

Flow reduction/loading reduction approaches need to be viable compliance options.

Response 4.17

Flow reduction and loading reduction approaches can address pollutants as long as the discharges still meet the water quality objectives. For the proposed framework for SWQPA-GPs, flow reduction may be part of the implementation and compliance. These approaches should be addressed in specific and future permits after the designation of a new SWQPA.

Comment 4.18

The Staff Report should identify the costs and rationale for monitoring, which is very extensive and appears to go beyond the monitoring required for compliance.

Response 4.18

The rationale for monitoring is to understand what is being discharged to the SWQPA-GPs and to determine if the discharges are impacting beneficial uses. The required monitoring is necessary for compliance. These monitoring measures will be coordinated with the proposed amendments to the Ocean Plan for Model Monitoring, which includes an analysis of costs associated with the different types of monitoring. The Model Monitoring amendment is a question-driven monitoring framework to include regional monitoring, specific storm water monitoring, and specific non-point source monitoring and to focus on assuring compliance with narrative and numeric water quality standards, the status and attainment of beneficial uses, and identifying sources of pollution.

Letter 5: From Miyoko Sakashita of the Center for Biological Diversity**Comment 5.1**

The proposed amendments to the Ocean Plan, while regulating some current and potential future emissions in MPA areas, do precious little to address so-called “low threat” forms of water pollution. Center for Biological Diversity does not believe that dischargers should be grandfathered and allowed to continue to pollute.

Response 5.1

Staff agrees that the focus of the proposed amendments is to address “high threat” forms of water pollution. Staff thinks the proposed amendments, combined with the very strict water quality objectives in the Ocean Plan, will provide substantial and adequate protection in most cases for the beneficial uses that will be present in designed SWQPA-GP and overlapping Marine State Parks or Marine State Conservation Areas.

Comment 5.2

Center for Biological Diversity is concerned that the draft SED analysis of the costs of regulating existing sources of water pollution that affect MPAs is limited. It pays almost no attention to the potential economic benefits of mitigation, including: increased fishery health and productivity, increased tourism value in MPA areas, and the cost-saving efficiency of adopting modern pollution control technology.

Response 5.2

There is a growing body of international evidence of the environmental and economic benefits from the designation of MPAs. The National Oceanic and Atmospheric Administration (NOAA) clearly recognizes that MPAs provide natural resource protection, historical and cultural resource protection, and social and economic benefits. These benefits are directly applicable to California's network of MMAs.

These potential benefits are part of the purpose of the proposed amendment to strengthen the objectives of the MPA network being established along the California coastline. These benefits have been added to the draft SED in Project Issues Alternatives: SWQPA Categorizes section (5.7.3). However, under state law staff does not perform a cost benefit assessment.

Letter 6: From Brad Fowler of City of Dana Point

Comment 6.1

The proposed amendment does not appear to recognize the fact that MS4s are also already regulated by NPDES permits and in many instances, a higher level of protection via Total Maximum Daily Loads (TMDL).

Response 6.1

Staff disagrees. The proposed amendment does recognize that MS4s are regulated by NPDES permits. NPDES permits are written to implement the requirements of the Ocean Plan and other water quality control plans and policies. The purpose of the proposed amendment is to provide a statewide framework for both Regional Water Boards and State Water Board permit writers and permittees if there are discharges into SWQPA-GPs. The intention is to provide a clear and consistent permitting process for discharges into SWQPA-GPs. The proposed amendment will protect the CWA Section 303(d)-listed waterbodies that drain to MPAs and SWQPAs for high priority TMDL development.

Comment 6.2

On Page 1, the statement is made that, "Based upon the review and analysis described in this SED, the proposed amendments if adopted are not expected to result in significant impact on the environment." It is unclear if the drafter's intent in this statement is to take the position that since no SWQPAs are being designated in this document, there are no environmental impacts and that it is assumed that the Regional Boards will have to provide a CEQA analysis for each SWQPA they later may choose to designate. Please clarify if this is the case.

Response 6.2

The proposed amendment does not designate any new SWQPAs. These proposed amendments provide the framework for SWQPA to protect MPAs through the proposal of a new subset named SWQPA-GP. As described in Appendix IV of the proposed amendments, each nomination for new designation of an SWQPA-ASBS and/or an SWQPAs-GPS must follow the public process and comply with CEQA documentation requirements.

Comment 6.3

Clarify possible contradiction between the following two statements.

1. "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" on Page 1.
2. "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...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" on Page 33-34.

Response 6.3

No contradiction is present between these statements. This amendment will not result in environmental impacts. No new SWQPAs are being designated. Staff agrees that relocation of

outfall and conveyance systems may require substantial and costly construction. Stated in the proposed amendments, the “designation of SWQPA-GP shall not include conditions to move existing point source wastewater outfalls”.

Comment 6.4

Cost/benefit considerations applied to wastewater should also be applied to stormwater.

Response 6.4

The Water Boards do not conduct cost/benefit assessment when amending water quality control plans. Costs will be assessed during the process for individual designation of an SWQPA-GP through the compliance with CEQA documentation requirements for a water quality control plan amendment.

Additionally, as discussed in Response 4.3, in the Ocean Plan wastewater discharges are strictly regulated in contrast to ocean storm water discharges. The objective for SWQPA-GPs is to have protection from an undesirable alternation in natural water quality. Since storm water discharges in the Ocean Plan currently have minimal restrictions, this proposed amendment has implementation provisions for permitted MS4 discharges and nonpoint source discharge to achieve the objectives of SWQPA-GPs.

Comment 6.5

The proposed language on page 27 of the Staff Report, 5 CEQA Review and Analysis, makes several references to “Basin Plan”; however it is understood that this document is proposed amendment to the Ocean Plan. Please clarify.

Response 6.5

This is an Ocean Plan amendment, and the typographical error will be corrected in the next draft of the Staff Report and draft SED.

Comment 6.6

It appears that the provisions for SWQPAs-GP are more restrictive than those recently adopted by ASBS’s.

Response 6.6

Please see Response 4.11.

Comment 6.7

The City of Dana Point questions what scientific proof of impairment is this amendment based on.

Response 6.7

The proposed amendment is not directly based on scientific proof of impairments. The proposed amendment is based on creating a framework to protect the beneficial uses within State Marine Parks and State Marine Conservation Areas that have been designated along the California coastline through the Marine Life Protection Act. MPAs are designated to protect or conserve marine life and habitat, specifically rare, threatened, or endangered native plants, animals, or habitats in marine areas. Through the Porter-Cologne Water Quality Control Act, the State Water Board has the authority to protect the beneficial uses of the ocean water of the State. Since MPAs are designated with unique marine life, protecting the water quality for their health, survival, and propagation is a high priority. The proposed amendment aims to fulfill

the role of the State Water Board by creating a framework for State Water Quality Protection Areas that will provide an intermediate level of protection between the baseline Ocean Plan and ASBS designation to protect the beneficial uses of species or biological communities for State Marine Parks and State Marine Conservation Areas.

Comment 6.8

This amendment is not required by Federal law under the CWA. It is based upon California State's designation of MPAs. This will result in a number of new unfunded mandates on local agencies.

Response 6.8

The Ocean Plan is the federally approved water quality control plan for the State's ocean waters under the CWA. The water quality objectives in the Ocean Plan must currently be met by all dischargers (wastewater, storm water and nonpoint sources). The proposed amendment sets forth a consistent statewide framework for SWQPA-GPs to protect beneficial uses of MPAs. The Ocean Plan is not an unfunded state mandate, but rather a federally required water quality control plan.

The proposed amendment to the Ocean Plan is not designating SWQPAs and does not require any action on the part of any specific entity. Thus, the proposed amendment is not unfunded mandates subject to subvention under Article XIII B, Section (6) of the California Constitution.

Comment 6.9

Higher priority designation of SWQPA's should not be based upon CWA Section 303(d) impairments for standards currently under review by the state (for example, shellfish).

Response 6.9

Staff disagrees. The presence of CWA Section 303(d) listed waterbodies will not influence the designation priority of an SWQPA-GP. However, CWA Section 303(d) listed waterbodies that drain into an SWQPA-GP will be given higher priority for TMDL development and implementation. Furthermore, CWA Section 303(d) listing are based on water quality objectives currently in effect and not proposed amendments to the Ocean Plan or Basin Plans.

Comment 6.10

City of Dana Point requests to add the word "directly" to Provision E.5.(d)(3) "these shall be no increase in nonpoint sources or permitted storm drains into SWQPA-GP".

Response 6.10

Staff agrees. The proposed amendment was revised to include the "directly" to Provision E.5.(d)(3).

Comment 6.11

City of Dana Point requests that Natural Sources Exclusion should be mentioned in case Ocean Plan objectives are exceeded. For example, Salt Creek, which enters Dana Point's MPA, is naturally high in both salts and iron.

Response 6.11

Staff recognizes that at some local areas have high natural sources of constituents that may violate water quality objectives. Staff does not propose adding Natural Sources Exclusion to the proposed amendment for the framework of SWQPA-GPs, as it is neither present in the Ocean

Plan nor with ASBSs. Further, the Ocean Plan is the federally approved water quality control plan for the State's ocean waters under the CWA. The water quality objectives in the Ocean Plan must currently be met by all dischargers (wastewater, storm water and nonpoint sources).

Comment 6.12

No MS4 applicable drain size is indicated in the document.

Response 6.12

Staff does not propose including limits to MS4 applicable drain size for the determination of which drains pose the greatest relative threat. There is no basis to prioritize drains of greatest relative treat, and thus not specifying drain size will provide dischargers with greater flexibility in their compliance plans. It is important to state that the exclusion of drain size will not result in monitoring all drains.

Letter 7: From Travis Hopkins of City of Huntington Beach

Comment 7.1

Provide clarification that the proposed amendment references a number of MPAs that are estuaries suggesting that these may be subject to future SWQPA-GP designation.

Response 7.1

The California Ocean Plan is applicable to the territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Thus future SWQPA-GP designation, as described in these proposed amendments, is not applicable to MPAs designated in enclosed bays, estuaries, and coastal lagoons.

Comment 7.2

The requirement for universal diversion of dry weather discharges to POTWs has many constraining factors that require analysis.

Response 7.2

Please see Response 1.6.

Letter 8: From Jane Egly of City of Laguna Beach

Comment 8.1

City of Laguna Beach requests the selection of the no-action option detailed in the CEQA process.

Response 8.1

While staff considered the no-action alternative, staff do not propose recommending the no-action alternative. The proposed amendment with the establishment of the framework for SWQPA-GPs will further the State Water Board's mission to protect the beneficial uses of ocean waters, specifically within State Marine Parks and State Marine Conservation Areas. The proposed amendment will support the established MPA networks and provide a cohesive and consistent statewide regulatory framework for the State Water Board, the coastal Regional Water Boards, and existing and future permittees.

Comment 8.2

Require a data-driven designation process in which only a science committee may assign SWQPA designation to MPAs based on bacterial, physical, chemical, biological, and radioactive characteristics of the receiving waters and the protection of beneficial uses.

Response 8.2

The MPA designation has been based on scientific advice and a stakeholder process. This is being accomplished with the advice and assistance of a science advisory team (SAT), the California Department of Fish and Game (DFG), MLPA Initiative staff, the public and a policy-level blue ribbon task force (BRTF). Thus, the designation of MPAs is based on scientific evidence, as well as informed input from a variety sources with experience and expertise in water quality and protection of marine life. Future SWQPA-GP designation will follow in the extensive work of the Marine Life Protection Act (MLPA) Initiative. Designation of SWQPA, both ASBS and GP, requires a public process and CEQA compliance, which will include a data-driven process based on sound science.

Comment 8.3

City of Laguna Beach requests to exempt storm drains with existing regional storm water permits from new requirements.

Response 8.3

Staff disagrees. If an SWQPA-GP is designated at a location with existing regional storm water permits, then that permit may be modified to meet the implementation provisions of the proposed amendment. This would be applicable to each storm drain system draining into a designated SWQPA-GP. Compliance with the proposed amendment would occur in order to protect the beneficial uses under state and federal law.

Letter 9: From Tim Casey of City of Laguna Niguel**Comment 9.1**

The City of Laguna Niguel thinks it is unclear from the Staff Report as to what problem is being addressed by the proposed amendment.

Response 9.1

The Marine Managed Areas Improvement Act was intended to more effectively organize, designate, and manage the state's many different marine managed areas and provide consistency among the state agencies that administer, manage, and designate the areas. The State Water Board has designating authority for SWQPAs to protect and maintain natural water quality to support marine species and biological communities, while the California Department of Fish and Game and the Department of Parks and Recreation have designating authority for MPAs to protect or conserve marine life and habitat. The proposed amendment creates a framework for SWQPA-GPs for future possible designation at State Marine Parks and State Marine Conservation Areas in order to further protect the beneficial uses associated with the marine species, communities, and habitat in those MPAs. The proposed amendment provides an intermediate level of protection that will provide a more consistent statewide regulatory framework. The proposed amendment also provides more economically feasible option in contrast to an ASBS designation due to the level of monitoring and limited infrastructure modification.

Comment 9.2

It is unclear from the draft Staff Report whether the proposed amendment affects inland cities through storm water, dry weather runoff, and trash discharge.

Response 9.2

The proposed amendment would not affect inland cities through direct storm water and dry weather runoff to a possible future designation of SWQPA – GP in areas that are not CWA 303(d) listed. However, the amendment may affect inland cities discharging to CWA 303(d) listed waterbodies that drain to MPAs. This amendment would require prioritization of TMDLs in such areas.

The proposed amendment has been changed so that it will not address trash discharges. This will be addressed with new proposed amendments to statewide water quality control plans, including the Ocean Plan, for trash.

Comment 9.3

The proposed amendments take on the character of a new and overlapping set of municipal storm water regulations and/or TMDLs without going through the normal Regional Basin Plan Amendment and NPDES permitting processes.

Response 9.3

Staff disagrees. Under federal and state law, the NPDES permits implement the Ocean Plan and Basin Plans. The Ocean Plan establishes water quality objectives for California's ocean, provides the basis for regulation through NPDES permits of wastes discharged into the California's coastal waters, and is applicable to both point and non-point sources discharges. The State Water Board adopts the Ocean Plan and in conjunction with the six coastal Regional Water Boards, implements and interprets the Ocean Plan. The purpose of the proposed amendment is to establish a consistent statewide framework for SWPQA-GP. The intention is to not overlap existing municipal storm water regulations, NPDES permitting process, and TMDLs, but to provide implementation tools in the Ocean Plan to ensure the intermediate level of protection for areas that would be covered by the new SWQPA-GP designation.

Letter 10: From Frank Sun of City of Orange**Comment 10.1**

The proposed amendment is unclear whether Newport Bay or other enclosed bays and estuaries currently exempt from the Ocean Plan may be designated an SWQPA by the proposed amendments since it is listed as a State Marine Conservation Area.

Response 10.1

Please see Response 7.1.

Comment 10.2

Since all MPAs that may be designated as SWQPAs are known, a full analysis of factors consistent with Water Code Section 13241 should be provided.

Response 10.2

The proposed amendment in the draft SED does not designate any new SWQPAs. The proposed amendment provides the framework for SWQPA to protect MPAs through the proposal of a new subset named SWQPA-GP. The California Ocean Plan is applicable to the

territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. As described in Appendix IV of the proposed amendments, each nomination for new designation of an SWQPA-ASBS and/or an SWQPA-GPS must follow the public process and comply with CEQA documentation requirements. It is important to note that the State Water Board will have full discretion in designating SWQPAs. The fact that an MPA exists does not assume that the State Water Board will act to designate an SWQPA there. An analysis pursuant to Water Code section 13241 is not required at this time for a series of potential actions that could be undertaken by the State Water Board at a future time.

Letter 11: From Tom Odom of City of Rancho Palos Verdes

Comment 11.1

City of Rancho Palos Verdes requests for more explicit definition of the term “natural ocean water quality”.

Response 11.1

It is not practical within the available resources to identify the exact natural water quality for each potential SWQPA-GP, but it is practical and scientifically defensible to identify reference conditions that are reliable proxies for natural water quality on a regional basis.

State Water Board staff’s efforts are underway to better define natural water quality through reference sites. An ASBS natural water quality committee was established under State Water Board Resolution 2004-52. The committee concluded that it is not practical to identify a unique seawater composition as exhibiting natural water quality. However, it should be possible to define a reference area or areas that approximate natural water quality for an SWQPA and any detectable human influence on the water quality must not hinder the ability of marine life to respond to natural cycles and processes. For more information on the findings of the committee see: http://www.waterboards.ca.gov/water_issues/programs/ocean/asbs_nwqcommittee.shtml

Comment 11.2

The City of Rancho Palos Verdes hopes that SWQPA-GP activities will not duplicate or, worse, conflict with MS4, NPDES, and TMDL requirements.

Response 11.2

Staff agrees. The purpose of the proposed amendment is to create a more cohesive or consistent statewide framework to be implemented by both the State Water Board and the Regional Water Boards. Designation of an SWQPA-GP will not duplicate or conflict with MS4, NPDES, and TMDL requirements. Together, SWQPA-GP designation and respective permits will work together to protect the beneficial uses of the ocean waters of the state.

Comment 11.3

During the SWQPA designation process, the City of Rancho Palos Verdes requests that the DDT Superfund site at White’s Point and the active landslide area on the Palos Verdes Peninsula are taken into consideration.

Response 11.3

As described in Appendix IV of the proposed amendment, each nomination for new designation of an SWQPA-ASBS and/or an SWQPAs-GP must follow the public process and comply with CEQA documentation requirements. If an SWQPA-GP is nominated for the Point Vicente State

Marine Conservation Area and/or Abalone Cove State Marine Conservation Area, the DDT Superfund site near the White Point outfall and the active landslide area on the Palos Verdes Peninsula will be taken into consideration as part of the site-specific designation process.

Comment 11.4

The difference between SWQPA-ASBS and SWQPA-GP are not sufficiently defined. It appears that an SWQPA-GP designation could potentially have the same restrictions as an SWQPA-ASBS.

Response 11.4

SWQPA-GPs are proposed in order to provide an intermediate level of protection between the baseline provisions of the Ocean Plan and the strict provisions of an SWQPA-ASBS. Provision E.(5) of the proposed amendments outlines the provisions for SWQPA-GP. The primary difference between SWQPA-GP and SWQPA-ASBS is that no discharge of waste is allowed in an SWQPA-ASBS, while low levels of discharges will be allowed into SWQPA-GPs.

Comment 11.5

The City questions whether there is scientific support for the proposed designation of SWQPA-GPs when TMDLs are already in place and were found to be sufficient at protecting water quality in these areas.

Response 11.5

The proposed amendment is not directly based on scientific proof of specific impairments. The proposed amendment is based on creating a framework for State Water Quality Protection Areas that will provide an intermediate level of protection between the baseline Ocean Plan and ASBS designation to protect the beneficial uses of species or biological communities for State Marine Parks and State Marine Conservation Areas. The purpose of the proposed amendment is to create a cohesive and consistent statewide framework, in contrast to leaving the coastal Regional Water Boards to address water quality protection within MPAs on a case-by-case basis.

Comment 11.6

There is no compliance schedule or implementation period discussed in the amendment.

Response 11.6

The amendment being proposed by staff does not amend existing water quality objectives or add new water quality objectives. The proposed amendment would add a new category of SWQPAs that would protect natural water quality within MPAs. The proposed amendment also clearly defines a process for designating these areas. The proposed amendment does not include the designation of any new SWQPAs or require any action that could be subject to implementation or a compliance schedule. Therefore, since designation and implementation of an SWQPA-GP will occur on a case-by-case basis, compliance schedules and implementation periods are unable to be outlined and discussed within the proposed amendment.

Letter 12: From Kris McFadden of City of San Diego

Comment 12.1

The City of San Diego is concerned the draft Ocean Plan Amendment may constitute an unfunded mandate.

Response 12.1

The Ocean Plan is the federally approved water quality control plan for the State's ocean waters under the CWA. The objectives in the Ocean Plan must currently be met by all dischargers (wastewater, storm water and nonpoint sources). The proposed amendment sets forth a consistent statewide framework for SWQPA-GPs to protect beneficial uses of MPAs. The Ocean Plan is not an unfunded state mandate, but rather a federally required water quality control plan. The State Water Board is not required to reimburse dischargers for their monitoring programs required by permits, which are necessary components of the NPDES permit program and required by federal regulations pursuant to the Clean Water Act. See, 40 C.F.R §122.48, §122.44(h).

The proposed amendment to the Ocean Plan are not themselves designations of SWQPAs and do not require any action on the part of any specific entity. Thus, the amendments are not unfunded mandates subject to subvention under Article XIII B, Section (6) of the California Constitution.

Comment 12.2

The City is concerned that available data have not been analyzed sufficiently to justify such an extensive and costly effort.

Response 12.2

The objectives of these proposed amendments is to provide a framework for SWQPA-GP that can be designated over MPAs. Until SWQPA-GPs are designated after a public process that incorporates compliance with CEQA and other applicable laws, these proposed amendments do not have a monetary impact.

Comment 12.3

This program, as proposed, will dramatically increase costs and draw resources away from other necessary storm water quality programs and projects.

Response 12.3

The Ocean Plan is the federally approved water quality control plan for the State's ocean waters under the Clean Water Act. The objectives in the Ocean Plan must currently be met by all dischargers (wastewater, storm water and nonpoint sources). SWQPAs and MPAs are a vital resource for protection of the state's ocean waters. However, no new SWQPAs are being designated at this time. Therefore, the proposed amendment will not affect the City's resources and budget.

Comment 12.4

Economic considerations are lacking yet required under Water Code Section 13241 when adopting water quality objectives.

Response 12.4

The proposed amendment does not adopt new water quality objectives or alter existing water quality objectives; therefore, Water Code section 13241 does not apply to these proposed amendments to the Ocean Plan. An analysis pursuant to Water Code section 13241 is not required for a series of potential actions that could be undertaken by the State Water Board at a future time. In addition, Provision E.5.(c)(2), regarding the discharge of trash, has been removed from the draft of the proposed amendment. Currently, the State Water Board is developing new amendments to statewide water quality control plans, including the Ocean Plan, for trash.

Comment 12.5

A receiving water dilution zone must be considered for compliance purposes in marine receiving water environments influenced by freshwater runoff, as allowed in Ocean Plan Appendix I Definition of Terms.

Response 12.5

Marine species have varied tolerances to salinity changes, but generally are adapted to salinities that range from brackish to marine (i.e. approximately 33 ppt). Discharges such as wastewater and storm water are typically very low in salinity, similar to fresh water. For wastewater, rapid mixing is encouraged and a zone of initial dilution is allowed. Since storm water discharges are not given effluent limits, the zone of initial dilution (i.e. a dilution factor) is not relevant. Sample locations for storm water toxicity should represent worst case conditions, but the laboratory toxicity testing procedures account for the adjustment of salinity so that low salinity is not a cause for mortality or effect.

Comment 12.6

A clear “weight of evidence” approach, consistent with State Board policies, is lacking in the proposed amendment.

Response 12.6

Staff agrees that the ocean environment is complex and a multiple-lines-of-evidence approach captures the complexity in a meaningful way, in contrast to a single chemical concentration line of evidence. The proposed amendment, if adopted, will be coupled with the proposed Model Monitoring Amendment to the Ocean Plan, which will be a question-driven monitoring approach and focus on assuring compliance with narrative and numeric water quality standards, the status and attainment of beneficial uses, and identifying sources of pollution.

Comment 12.7

Proposed amendment is inconsistent with recent TMDLs, which include exemptions for sources that are not controllable by municipalities.

Response 12.7

Please see Response 6.11.

Comment 12.8

City of San Diego requests that toxicity test exposures and test duration need further consideration for current monitoring methods and compliance limits.

Response 12.8

Please see Response 12.5.

Comment 12.9

City of San Diego requests that intertidal/subtidal biological surveys be included as a line of evidence to evaluate cumulative impacts related to individual discharges.

Response 12.9

Benthic biological surveys will be included in Ocean Plan monitoring requirements with the proposed amendment to the Ocean Plan for Model Monitoring.

Comment 12.10

Golf courses are highlighted as a high threat category requiring a prohibition on discharges without justification.

Response 12.10

The draft SED does categorize golf courses as a high threat category. In general, the State Water Board considers golf courses to be a high threat for pollution due to the use of pesticides, herbicides, and overwatering.

Comment 12.11

The 'Staff Recommendation' section in the draft Staff Report and SED references Section 5.4 incorrectly; Section 5.7.3 should be referenced.

Response 12.11

Staff appreciates the typographical comments. Corrections have been included in the revised draft of the proposed amendment, draft Staff Report, and draft SED.

Comment 12.12

First paragraph, last sentence – “through” is misspelled and the 2nd bullet following the first paragraph – “golf” is misspelled in the CEQA Review and Analysis – Protecting MPA Section.

Response 12.12

Please see Response 12.11.

Comment 12.13

In the CEQA Environmental Impact Analysis Section, the second paragraph, third sentence – “alteration” is misspelled and the third paragraph, third to last sentence has a hanging sentence.

Response 12.13

Please see Response 12.11.

Letter 13: From Mark Grey of Construction Industry Coalition on Water Quality**Comment 13.1**

The Commenter is concerned the proposed amendment is far more stringent than the recent protection adopted for ASBS, even though it appears from State Board Resolution Nos. 2010-0057 and 2011-0013 that the proposed amendments are intended to provide a level of protection for MPAs that falls somewhere between ASBS and the level afforded to the ocean in general by the Ocean Plan.

Response 13.1

Please see Response 4.11. Requirements for existing storm drains would be much less stringent for SWQPA-GPs as compared to ASBS. However, in both cases, no new discharges would be allowed in either ASBS or SWQPA-GPs.

Comment 13.2

Water Code Section 13241 requires assessment of specific factors when adopting water quality objectives, including economic considerations.

Response 13.2

Please see Response 12.4

Comment 13.3

Application to storm water is excessive and will result in huge costs with little or no environmental benefit.

Response 13.3

Staff disagrees. The application to storm water for designated SWQPA-GPs will protect the beneficial uses of the unique and valuable marine fauna and flora in MPAs under the authority of the CWA and Porter-Cologne. Please see Responses 4.2 and 4.3.

Letter 14: From Gary Hilderbrand of County of Los Angeles Department of Public Works on behalf of Los Angeles County Flood Control District**Comment 14.1**

The Los Angeles County Flood Control District thinks the proposed SWQPA-GP requirements are overly restrictive and not reflective of a true two-tiered system framework.

Response 14.1

Staff disagrees. The SWQPA-GP requirements are not overly restrictive and are reflective of a two-tiered system framework. SWQPA-GP provides an intermediate level of protection between the baseline Ocean Plan and SWQPA-ASBS provisions. SWQPA-GPs may continue to allow some moderate and low threat discharges to continue, which is contrary to an SWQPA-ASBS where no discharges are allowed (except for those in compliance with the newly adopted General Exceptions). In addition, the proposed amendment does not mandate a universal dry weather diversion of non-storm water flows to municipal sewer systems. Non-storm water would be prohibited as required by the applicable permit. Thus, if the applicable permit does not require dry weather flow diversion, then diversion of dry weather flows will not be mandated through these proposed amendments.

Comment 14.2

The Los Angeles County Flood Control District thinks there is a need for an environmental impact analysis.

Response 14.2

Please see Response 4.12.

Comment 14.3

The term "natural ocean water quality" should be defined in the "definition of terms" section.

Response 14.3

Please see Response 11.1.

Comment 14.4

Revisions to Provisions E.5.(c)(2),(4), and (5) to exchange the use of Table 1 with pre-storm reference concentration as the unit of measure for an undesirable alteration in natural water quality.

Response 14.4

Staff considered the suggested language to Provisions E.5.(c)(2),(4), and (5) (as numbered in the February 23, 2012 draft), and will retain the existing language to the sections in order to maintain the intention of the proposed implementation of Resolution No. 2010-0057. The Table 1 chemical objectives are attainable metrics toward measuring whether the discharge is undesirably altering natural water quality.

[Editorial Note: The Provisions discussed in Comment/Response 14.4 are renumbered as Provisions E.5.(c)(3), (6), and (7) in the Draft Final SED.]

Letter 15: From Grace Chan of County Sanitation Districts of Los Angeles County**Comment 15.1**

The County Sanitation Districts of Los Angeles County think the draft amendment needs to be modified to include all the intended language included in the Resolution so as to fully realize the intent of the State Water Board. The omissions of greatest concern are in Resolved Paragraphs 3.b and 3.c. The Sanitation Districts request that Provision E.5.(a) be modified to include two new sections to incorporate the exact language from Resolved Paragraphs 3.b and 3.c.

Response 15.1

Please see Response 2.3.

Comment 15.2

The County Sanitation Districts of Los Angeles County requests a modification to the SWQPA-GP definition.

Response 15.2

Please see Response 1.1.

Comment 15.3

The County Sanitation Districts of Los Angeles County requests a modification to the Provision E.2 of the Draft Amendments by removing the phrase “beyond those in existing law, regulations, and water quality control plans”.

Response 15.3

Please see Response 1.5.

Comment 15.4

The Draft Amendment contains several typographical errors in Section 5.6.2 Table 2 that should be corrected prior to finalizing the document.

Response 15.4

Please see Response 1.8.

Letter 16: From Christine Heinrichs, General Public

Comment 16.1

Ms. Christine Heinrichs supports the establishment of a new category of SWQPA that would protect natural water quality within MPA and other areas designated by the State Water Board.

Response 16.1

Staff appreciates the support for the new category of SWQPA.

Letter 17: From Jim Webb, General Public

Comment 17.1

Mr. Jim Webb supports the establishment of a new category of SWQPA that would protect natural water quality within MPA and other areas designated by the State Water Board.

Response 17.1

Staff appreciates the support for the new category of SWQPA.

Comment 17.2

Requests the inclusion of the prohibition of seawater intakes under 1 million gallons per day (MGD) and offer regulatory language for intakes between MPAs that might interrupt larval transport within the network of MPAs.

Response 17.2

The proposed amendment will not prohibit the intakes under 1 MGD since these intakes represent a low threat to the marine environment and prohibition against these existing intakes would provide little benefit relative to the costs of compliance. This size of intakes generally includes two types: permitted marine laboratories and aquariums that use water to support marine life for study and observation, and permitted desalination facilities that use water to provide backup and emergency water supplies in coastal waters with limited groundwater and surface water supplies. These are considered low threat intakes.

Letter 18: From Richard Hawley of Greenspace

Comment 18.1

Greenspace supports the establishment of a new category of SWQPA that would protect natural water quality within MPA and other areas designated by the State Water Board.

Response 18.1

Staff appreciates the support for the new category of SWQPA.

Letter 19: From Sarah Sikich of Heal the Bay, Sara Aminzadeh of California Coastkeeper Alliance, Joe Geever of Surfrider Foundation, Karen Garrison of NRDC, Kira Redmond of Santa Barbara Channelkeeper, and Garry Brown of Orange County Coastkeeper

Comment 19.1

Provision 2 (municipal point source wastewater discharge outfalls) is at odds with the primary purpose of the Ocean Plan to protect" the quality of the ocean waters for use and enjoyment by

the people of the State” which “requires control of the discharge of waste to ocean waters”. Provision 2 inappropriately carves out a blanket exception for continued municipal wastewater discharge and possible water quality and marine life and habitat degradation in MPAs.

The suggested modified provision is:

“The designation of State Marine Parks and State Marine Conservation Areas cannot serve as the sole basis for new or modified limitations, substantive conditions, or prohibitions existing municipal point source wastewater discharge outfalls. This provision does not apply to State Marine Reserves.”

Response 19.1

Staff agrees with the suggested language and incorporated the language (with the exception of changing ‘cannot serve’ to ‘may not serve’). MPAs are designated to protect or conserve marine life and habitat. Water quality has a critical role to the survival and health of the marine life in these areas. While MPA designation should not be the sole trigger for additional regulation, if there is degradation in marine life, habitat, and/or water quality then beneficial uses must be protected regardless of whether a MPA is present. Under the Ocean Plan as implemented in NPDES permits, point sources are strictly controlled.

Comment 19.2

Provision 5 (implementation for SWQPAs-GP) includes several implementation provisions for SWQPAs-GP which change existing Ocean Plan requirements in an arbitrary and inconsistent way. Additionally, the provisions create different water quality standards for SWQPAs-GP and SWQPAs-ASBS. This framework will be confusing and resource-intensive to implement for both Board staff and dischargers, particularly in the many areas along the coast where MPAs and ASBSs overlap.

Response 19.2

Staff disagrees. The purpose of the proposed amendment is to create a framework for a new category of SWQPA that provides an intermediate level of protection between the baseline Ocean Plan and ASBS designation for State Marine Parks and State Marine Conservation Areas. This new category will provide a cohesive, consistent statewide framework in contrast to a case-by-case approach. Additionally, State Marine Parks and State Marine Conservation Areas that are already co-located with an ASBS will not qualify for the further designation of SWQPA-GP, as to minimize regulatory confusion. The proposed amendment does not alter water quality standards within the Ocean Plan, but rather refines implementation tools for existing water quality objectives and protection of beneficial uses.

Comment 19.3

The groups ask for identification of the scientific and legal basis for the 1 MGD threshold.

Response 19.3

Please see Response 17.2.

Comment 19.4

The groups support the inclusion of Provision E.5.(b), which designates SWQPAs-GP implementation provision for existing seawater intakes to specify not allowing new surface water seawater intake but allowing new subsurface slant/horizontal well intakes where studies show no predictable entrainment or impingement.

Response 19.4

Staff appreciates the support for the inclusion of Provision E.5.(b). Staff agree with the suggested language and revised the proposed amendment to include the suggested language for provision E.5.(d)(2)(d).

Comment 19.5

The groups request an explanation for the rationale that Provision E.5.(c)(1) defines an undesirable alteration of natural water quality as that which exceeds Table 1 instantaneous maximum concentrations for chemical constituents, and daily maximum concentration for chronic toxicity.

Response 19.5

It is not practical within the available resources to identify the exact natural water quality for each potential SWQPA-GP. Meeting the Ocean Plan objectives through Table 1 by itself did not mean that natural water quality was maintained. Table 1 is an attainable metric toward measuring whether the discharge causes a problem. Furthermore, this approach recognizes the intermittent nature of storm water discharges. Table 1 objectives are very strict and protective of the marine life beneficial use.

Comment 19.6

The groups support the prioritization of TMDL development for impaired MPAs and SWQPAs, as well as impaired tributaries that drain to impaired MPAs and SWQPAs in Provision E.5.(c)(6).

Response 19.6

Staff appreciates the support for the inclusion of Provision E.6.

Letter 20: From Dean Kirk of Irvine Company**Comment 20.1**

The proposed MPA amendment is more stringent than the recent protections adopted for ASBS with the requirement to monitor all discharges regardless of the size of pipe and no exception process.

Response 20.1

Please see Response 4.11.

Comment 20.2

The proposed MPA amendment lacks clarity in terms of the water bodies to which they would be applied.

Response 20.2

Please see Responses 1.2 and 4.4.

Comment 20.3

The State Water Board must conduct analysis under Water Code Sections 13241 and 13242.

Response 20.3

Please see Response 12.4.

Comment 20.4

The State Water Board must conduct a full and appropriate CEQA analysis prior to adoption.

Response 20.4

Please see Response 4.12.

Comment 20.5

Application to stormwater is excessive, and will result in huge costs with little or no environmental benefit.

Response 20.5

Staff disagrees. The framework for SWQPA-GP is to create an intermediate level of protection of beneficial uses in between the baseline Ocean Plan and ASBS. Storm water poses a threat to the beneficial uses of ocean water quality. The implementation provisions applied to storm water are not excessive but necessary under the Clean Water Act and the Porter-Cologne. Please see Responses 4.2 and 4.3.

Letter 21: From Sarah Hardgrave of Monterey Regional Storm Water Participants Groups**Comment 21.1**

The requirement that receiving waters at the point of discharge may not exceed Table 1 instantaneous maximum objectives of the Ocean Plan, imposed to protect the beneficial uses of Marine Managed Areas, may not be feasible for municipalities to meet without treatment controls.

Response 21.1

The Ocean Plan is a federally approved water quality control plan for the state's ocean waters under the Clean Water Act and the Porter-Cologne. The water quality objectives in the Ocean Plan must be met by all dischargers (wastewater, storm water and nonpoint sources). Best management practices are available to control storm water discharges.

Comment 21.2

According to the proposed amendment, dry weather discharges are banned with no exceptions.

Response 21.2

Please see Response 1.6.

Comment 21.3

The Monterey Regional Storm Water Participants Groups think the CEQA analysis provided is not extensive enough.

Response 21.3

Please see Response 4.12.

Comment 21.4

The Monterey Regional Storm Water Participants Groups think the State Water Board has not demonstrated the estimated costs bear a reasonable relation to benefits of the monitoring program.

Response 21.4

Please see response 4.18. Furthermore, under the Water Code, there is no requirement to perform cost/benefit analysis.

Letter 22: From Richard Bell of Municipal Water Districts of Orange County**Comment 22.1**

The Municipal Water Districts of Orange County ask for clarification on the definition in Appendix I for SWQPA-GP for consistency with Marine Manage Areas Improvement Act.

Response 22.1

Please see Response 1.1.

Comment 22.2

Revise the proposed amendment Provision E.1.(a)(2) description of SWQPA-GPs to be consistent with the SWRCB Resolution No. 2010-0057 and staff's intent, through these proposed amendments, is protect MPAs.

Response 22.2

Please see Responses 1.2 and 4.4.

Comment 22.3

The Municipal Water Districts of Orange County ask for clarification on the process for designation of future SWQPA-GPs.

Response 22.3

Please see Response 4.14.

Comment 22.4

The Municipal Water Districts of Orange County ask for a revision of the proposed amendments to allow subsurface intakes in SWQPAs.

Response 22.4

The proposed amendment and prohibition of intakes is only intended to address surface water intakes. Staff agrees that subsurface slant/horizontal intakes or other environmentally protective subsurface intake technology is allowable in SWQPA-GPs. The proposed amendment have been revised to include the suggested language for Provision E.5.(d)(2).

Comment 22.5

The Municipal Water Districts of Orange County requests revisions to the proposed amendment to allow changes in the composition of existing ocean discharges from existing outfalls may change over time.

Response 22.5

The Ocean Plan always allows for changes in the composition of existing ocean discharges through the public process. Discharge specific changes are further addressed with the respective permits. Staff does not think the proposed amendment need to be revised for this purpose.

Letter 23: From Mary Anne Skorpanich of Orange County Public Works

Comment 23.1

Provision E.5.(c) should be revised to delete references to existing MS4 discharges. The proposed Provision E.5.(c) conflicts with Provision E.5.(a) and contrary to the Marine Managed Areas Improvement Act.

Response 23.1

Staff disagrees. While wastewater is not defined within the Ocean Plan or the Water Code, staff believes that general usage of the term throughout the Porter-Cologne Water Quality Control Act clearly differentiates storm water as separate from traditional wastewater discharges. Please see Responses 4.2 and 4.3.

Additionally, the Ocean Plan is the federally approved water quality control plan for the State's ocean waters under the Clean Water Act. The objectives in the Ocean Plan must currently be met by all dischargers (wastewater, storm water and nonpoint sources). SWQPAs are a vital resource for protection of the state's ocean waters.

Comment 23.2

The Legislature intended for MPAs to be protected regionally – the State Water Board's proposed imposition of a statewide scheme for MPAs over the pre-existing regional scheme appears to be contrary to this intent.

Response 23.2

Please see Response 4.6.

Comment 23.3

The scope of the SWQPA-GP designation is unclear from the text of the Ocean Plan Amendment.

Response 23.3

Please see Responses 1.2 and 4.4.

Comment 23.4

The proposed amendment suggests that a large number of existing MPAs are being designated as SWQPA-GP.

Response 23.4

Please see Response 2.4.

Comment 23.5

Provide clarification in the proposed Appendix IV for the governing of the SWQPA nomination process and the SWQPA-GP designation process.

Response 23.5

Please see Response 4.14.

Comment 23.6

The proposed amendment references a number of MPAs that are estuaries, suggesting that these may be subject to future SWQPA-GP designation.

Response 23.6

Please see Response 7.2.

Comment 23.7

The description in Staff Report Sections 4.5 and 4.6 of the seven MPAs in Orange County is incomplete and the maps provide no meaningful information on where they are located.

Response 23.7

Descriptions provided within the Staff Report/SED are intended as background information to provide general facts on the Environmental Setting. A map of the location of the MPAs in Orange County is location in Section 4.4.

Comment 23.8

The Staff Report's "No Action Alternative" has not been given sufficient consideration.

Response 23.8

Staff disagrees. The "No Action Alternative" was given considerable consideration. The proposed amendment and the SWQPA-GP category is a necessary addition to the MMA system under the Porter-Cologne Water Quality Control Act and the Marine Managed Areas Improvement Act to protect the beneficial uses of the unique and valuable marine fauna and flora and associated communities in MPAs. Please see Response 6.7.

Comment 23.9

Clarify the definition of "future" discharges to indicate whether it pertains to new discharges pipes/drains or additional discharges into existing pipes/drains.

Response 23.9

The definition of future discharge pertains to new storm drains or replacement of existing drains to handle more flow.

Comment 23.10

A full Water Code Section 13241 and 13242 analysis should be conducted for the Ocean Plan Amendment.

Response 23.10

Please see Response 12.4.

Comment 23.11

Provision E.5.(c)(4) of the Ocean Plan Amendment requires characterization and assessment of "[e]xisting discharges in SWQPA-GP". To the extent MS4 permittees are required to conduct this monitoring, this represents a significant new (and unfunded) burden on coastal communities.

Response 23.11

Please see Response 6.8.

Comment 23.12

The requirement for universal diversion of dry weather discharges to POTWs has many constraining factors that require analysis.

Response 23.12

Please see Response 1.6.

Comment 23.13

The water quality criteria as listed in Table 1 are overly stringent and difficult to achieve.

Response 23.13

The Ocean Plan is the federally approved water quality control plan for the State's ocean waters under the Clean Water Act and the Porter-Cologne. The water quality objectives in the Ocean Plan, including Table 1, must be met by all dischargers (wastewater, storm water and nonpoint sources). These objectives are based on scientific evidence of a conservative estimate of chronic toxicity, and are essential to the protection of marine life.

Comment 23.14

A full peer review is needed because much of the basis for the proposed Ocean Plan Amendment appears to be scientific in nature.

Response 23.14

Staff disagrees. The proposed amendment does not alter existing or establish new water quality objectives. Establishing new water quality objectives require scientific studies and review. The proposed amendment is based on creating a framework for State Water Quality Protection Areas that will provide an intermediate level of protection between the baseline Ocean Plan and ASBS designation to protect the beneficial uses of species or biological communities for State Marine Parks and State Marine Conservation Areas. The decision to establish this new category of SWQPAs represents a policy decision to create additional implementation tools for protecting water quality and beneficial uses within certain categories of MPA's and is not premised upon specific scientific findings, conclusions or assumptions. No new SWQPAs are being designated at this time. Therefore, peer review is not necessary.

Comment 23.15

The Ocean Plan Amendment should include similar exemption language consistent with the approach for ASBSs.

Response 23.15

The Ocean Plan contains language to grant exemptions from Plan requirements, which is found in Provision J. The Ocean Plan states:

- “The State Water Board may, in compliance with the California Environmental Quality Act, subsequent to a public hearing, and with the concurrence of the Environmental Protection Agency, grant exceptions where the Board determines:
- a. The exception will not compromise protection of ocean* waters for beneficial uses, and,
 - b. The public interest will be served.”

This language will be applicable to future designated SWQPA-GPs, and thus specific language will not be included to this proposed amendment.

Comment 23.16

Provide clarifying language or defining “natural water quality”.

Response 23.16

Please see Response 11.1.

Comment 23.17

Diverting all stormwater from future SWQPA-GP areas, as proposed by the Ocean Plan Amendment, would certainly alter the natural hydrology and salt balance of these coastal areas and should be analyzed.

Response 23.17

The proposed amendment does not aim to divert all storm water to future SWQPA-GP areas. The proposed amendment clearly requires that there will be no increase in nonpoint sources or permitted storm drains into an SWQPA-GP. Existing permitted separate storm sewer system (MS4) discharges and nonpoint discharges may be permitted into an SWQPA, but it is required that they not cause an undesirable alteration in natural ocean water quality.

Comment 23.18

Orange County Public Works thinks the CEQA analysis provided is not extensive enough.

Response 23.18

Please see Response 4.12.

Comment 23.19

Orange County Public Works thinks the SED lacks a discussion of mitigation measures.

Response 23.19

The proposed amendment only provides the framework for an SWQPA-GP. The proposed amendment does not designate any areas as an SWQPA-GP. Mitigation measures will occur on an SWQPA-GP-by-SWQPA-GP basis, and thus the draft SED is unable to provide specific discussion of mitigation measures.

Comment 23.20

Orange County Public Works thinks the SED lacks identification or discussion of compliance methods.

Response 23.20

The proposed amendment only provides the framework for an SWQPA-GP. The proposed amendment does not designate any new SWQPA-GPs. Compliance methods will occur on an SWQPA-GP-by-SWQPA-GP basis, and thus the draft SED is unable to provide specific discussion of compliance methods.

Comment 23.21

Orange County Public Works thinks the Ocean Plan Amendment does not meet California's Administrative Procedure Act's "necessity" and "clarity" standards.

Response 23.21

Staff disagrees. The proposed amendment is both clear and necessary to fulfill the State Water Board's goals and priorities in fulfilling its statutory mandates. State Water Board Resolution 2010-0057 provided 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 proposed amendment is necessary to protect the beneficial

uses of species or biological communities for State Marine Parks and State Marine Conservation Areas with a cohesive and consistent statewide framework. To further clarity, staff is taking into consideration public comments and revising portions of the proposed amendment.

Letter 24: From James Colston of Orange County Sanitation District

Comment 24.1

The Orange County Sanitation District supports the concept of the proposed category SWQPA-GP as it provides a good compromise in meeting the water quality goals of the State and recognize that ASBS designation would cause severe financial impacts to the public in areas where public infrastructure currently exist.

Response 24.1

Staff appreciates the support from Orange County Sanitation District on the proposed category SWQPA-GP to continue to protect the beneficial uses of the ocean waters of the State.

Comments 24.2

The Orange County Sanitation District requests that an economic feasibility study be conducted as part of each future nomination of an SWQPA category.

Response 24.2

The procedures for nomination and designation process for a new SWQPA (ASBS or GP) are outlined in Appendix IV. This is a public process that includes a CEQA analysis with an economic component, as well as a public hearing to receive testimony on the designation.

Comments 24.3

The proposed amendment does not provide guidelines on how to distinguish between the two SWQPA categories. Orange County Sanitation District requests that each category to be defined and provide specific guidelines for how the categories should be applied. They recommend creating a flow diagram explaining how all the MMAs are regulated and how they can overlap.

Response 24.3

The proposed amendment and SED provide clear descriptions of differentiation between the two SWQPA categories. Staff does agree that a flow chart and public education materials may be useful. This suggestion may be further considered based on staff resource availability.

Comments 24.4

The Orange County Sanitation District is concerned that the proposed language requires all dry weather flow be diverted into the sanitary sewer system where capacity and infrastructure exist.

Response 24.4

Please see Response 1.6.

Public Workshop – August 22, 2012
 Comment Letters Received by noon on August 31, 2012

Letter No.	Association	Representative
1	California Association of Sanitation Agencies Tri-TAC Southern California Alliance of POTWs	Roberta Larsen Jacqueline Kepke John Pastore
2	California Coastkeeper Alliance Heal the Bay Natural Resources Defense Council Surfrider Foundation Ocean Conservancy Orange County Coastkeeper Santa Barbara Channelkeeper	Sara Aminzadeh Sarah Abramson Sikich Karen Garrison Joe Geever Kaitlin Gaffney Garry Brown Kira Redmond
3	California Council for Environmental and Economic Balance	Robert Lucas Gerald Secundy
4	California Stormwater Quality Association	Richard Boon
5	City of Dana Point	Brad Fowler
6	City of San Diego, Transportation & Storm Water Department	Kris McFadden
7	County Sanitation Districts of Los Angeles County	Grace Robinson Chan
8	General Public	Joyce Dillard
9	Orange County Public Works	Mary Anne Skorpanich
10	Sempra Energy San Diego Gas & Electric Company Southern California Gas Company	Tamara Rasberry
11	South Orange County Wastewater Authority	Tom Rosales

Editorial Note: As stated in the July 31, 2012 Notice of Public Workshop, written comments must be limited to only changes from the previously circulated draft SED and amendment. Staff will only respond to those comments addressing changes from the previous draft SED and amendment.

Letter 1: From Roberta Larson of California Association of Sanitation Agencies, Terri Mitchell of Tri-TAC, and John Pastore Southern California Alliance of POTWs

Comment 1.1

Commenters request the removal of the word “sole” from Provision E.2, which describes the basis of designation of SWQPA-GPs within the presence of State Marine Parks and State Marine Conservation Areas.

Response 1.1

Provision E.2, specifies that State Marine Parks and State Marine Conservation Areas cannot be the only driver for new permit conditions for existing municipal point source discharges. Section E.5.(a)(1) further states that SWQPA-GPs should not be designated over existing wastewater outfalls or encroach upon the zone of initial dilution for such existing outfalls.

Staff recognizes that MPAs are designated to protect or conserve marine life and habitat and provide natural resource protection. Water quality will play a role in the success of California’s MPA system.

The Ocean Plan is clear that there shall not be degradation of marine life, habitat, and/or water quality associated with waste discharges. This is true for all near coastal ocean waters, regardless of whether an MPA is present. The Regional Water Boards implement the Ocean Plan and its protections through NPDES permits for wastewater discharges. If sound scientific information becomes available demonstrating that discharges are causing or contributing to the degradation of marine life, then NPDES permit terms are changed to provide the necessary protections within the context of the Ocean Plan. In certain cases, based on new information, the objectives, effluent limitations and prohibitions in the Ocean Plan are also subject to amendment.

Again, it is important to keep in mind that this process is required under state and federal law to protect the entire near coastal ocean, not just in waters designated as MPAs. Marine Parks and Conservation Areas that are not also designated as ASBS are afforded the same strict protections as other ocean areas in California. The only places where waste discharges are prohibited are in ASBS, and natural water quality must be maintained there, regardless of whether those ASBS are co-located with an MPA. The ecological performance of a Marine Park and Conservation Area (not co-located with an ASBS) is not intended to be a reason for new conditions to be placed on an existing POTW waste water discharger. However, new conditions may be placed on that outfall if there is sound scientific evidence, such as routine exceedance of water quality objectives, that the discharge is degrading marine life in our near coastal ocean waters.

Comment 1.2

For clarity and consistency with Resolution 2010-0057, the commenters request the language of ‘wastewater discharge’ in Provision E.5.(a)(1) to be changed to ‘wastewater outfall’.

Response 1.2

Staff agrees and accepts the suggested language change. ‘Wastewater outfall’ aligns most closely with the intention of Resolution 2010-0057.

Comment 1.3

Commenters request a modification the definition of SWQPA-GP to be more consistent with the Marine Managed Areas Improvement Act from “protect or conserve marine life and habitat” to “protect marine species or biological communities”.

Response 1.3

Staff agrees and accepts the suggested language modification of the definition for SWQPA-GP. One purpose of this amendment is to provide consistency with the Marine Managed Areas Improvement Act, and modification of the definition will achieve that objective.

Comment 1.4

Typographical error present in Section 4.4. Publicly-owned treatment works are referred to as “POWTs” and should be “POTWs”.

Response 1.4

Staff appreciates and accepts the typographical comment.

Letter 2: From Kaitlin Gaffney of Ocean Conservancy, Sarah Sikich of Heal the Bay, Sara Aminzadeh of California Coastkeeper Alliance, Joe Geever of Surfrider Foundation, Karen Garrison of NRDC, Kira Redmond of Santa Barbara Channelkeeper, and Garry Brown of Orange County Coastkeeper**Comment 2.1**

Comments request that the amendment retains the “sole basis” language in Provision 2.

Response 2.1

Provision 2, as written, specifies that State Marine Parks and State Marine Conservation Areas cannot be the only driver for new limitations, substantive conditions or prohibitions on existing municipal point source wastewater discharge outfalls.

Staff recognizes that MPAs are designated to protect or conserve marine life and habitat and provide natural resource protection. Water quality plays a role in the success of California’s MPA system. While MPA designation should not be the sole trigger for additional regulation, if there is degradation in marine life, habitat, and/or water quality then beneficial uses must be protected regardless of whether a MPA is present. Additionally, see Response 1.1.

Comment 2.2

Commenters oppose the removal of “other unique and sensitive areas” from the definition of areas that can elicit water quality protection under the SWQPA-GP designation.

Response 2.2

While staff does acknowledge that California has many biologically and ecologically important areas that are not currently designated as MPAs, the intention is that SWQPA-GP will be co-located only with State Marine Park and State Marine Conservation Areas. Areas not designated as a State Marine Park or State Marine Conservation Areas are still protected under the Ocean Plan. Furthermore, the State Board may also designate certain Marine Reserves as ASBS if sufficient information is available to support such a designation, according to the established designation procedure in the Ocean Plan.

Comment 2.3

Commenters request that staff provided a description and definition for “in the vicinity” in Provision 5.(a)(3).

Response 2.3

Staff does not intend to prescribe a specific numeric distance for “in the vicinity”. This language was originally present in Resolution 2010-0057. Broadly, “in the vicinity” is intended to be farther than the zone of initial dilution of an outfall and within the range of detectability of wastewater constituents. Generally this must be determined on a case-by-case basis, depending on variables such as oceanographic currents and waste water characteristics.

Comment 2.4

Commenters request the removal of Provision E.5.(a)(4), which states, “Regulatory requirements for discharges from existing treated municipal wastewater outfalls shall be derived from the California Ocean Plan”. This statement is argued to be redundant since this is an Ocean Plan amendment.

Response 2.4

Staff agrees Provision E.5.(a)(4) is redundant, since discharges from existing treated municipal wastewater outfalls to the ocean are regulated under the Ocean Plan. The provision was changed to specify applicable chapters of the Ocean Plan. The Provision language was originally present in the Resolution 2010-0057, which was not an Ocean Plan amendment.

Comment 2.5

Commenters request the re-inclusion of the trash prohibition to Provision E.5.(c).

Response 2.5

Staff recognizes that the presence of trash is an impact to ocean water quality and marine life. Currently, trash is a State Water Board priority issue, and trash controls will be addressed through amendments to statewide water quality control plans.

Comment 2.6

Commenters request inclusion of a provision to address the potential cumulative impacts associated with new seawater intakes between MPAs.

Response 2.6

Staff appreciates the support for the implementation provision for seawater intakes. Staff does recognize the potential for cumulative impacts of marine life mortality associated with entrainment and impingement from seawater intakes between MPAs. However, addressing cumulative impacts is beyond the scope of this amendment.

Letter 3: From Robert Lucas and Gerald Secundy of California Council for Environmental and Economic Balance**Comment 3.1**

Commenters request that new language be included to further address intermittent, short-term dewatering discharges from underground structures pursuant NPDES permits to Provision E.3 and E.5.(c).

Response 3.1

The language provided in the July 25, 2012 version of the amendment as Provision E.5.(a)(5) already included intermittent, short-term dewatering discharges from underground structures pursuant NPDES permits. Similar language is concurrently present in the ASBS General Exception and Special Protections adopted on March 20, 2012. However, the language will be moved under Provision E.5(c), for permitted separate storm sewer system (MS4) and nonpoint source discharges, since utility vault discharges are permitted point source discharges into municipal storm drain systems.

Comment 3.2

Commenters note that “natural water quality” is not the standard set by statute for State Marine Reserves, State Marine Parks, or State Marine Conservation Areas, and thus should not be part of the definition for SWQPA-GP.

Response 3.2

Staff disagrees. The Public Resources Code defines an SWQPA as “*a nonterrestrial marine or estuarine area designated to protect marine species or biological communities from an undesirable alteration in natural water quality...*” (Pub. Res. Code sec. 36700 subd. (f))The State Water Board has the authority to designate SWQPAs anywhere in the near coastal ocean, including over MPAs. Designation of an SWQPA will occur through a separate public process.

Letter 4: From Richard Boon of California Stormwater Quality Association

Comment 4.1

Commenters request that the Public Process section of the SED indicate whether and how the previous comments were considered since no Response to Comments was circulated.

Response 4.1

Staff appreciates the participation of organizations and general public in the two comment periods. All comments received were reviewed by staff. Consideration of the comments was conducted based on whether the comments aligned with the State Water Board’s intention and objective of the amendment. Response to Comments from the April 16 and August 31, 2012 comment period deadlines were combined into one document, and are being released prior to the Adoption Hearing.

Comment 4.2

Commenters argue that MPAs provide no environmental and economic benefits.

Response 4.2

There is a growing body of international evidence of the environmental and economic benefits from MPA designation. The National Oceanic and Atmospheric Administration (NOAA) recognizes that MPAs provide natural resource protection, historical and cultural resource protection, and social and economic benefits. These benefits are directly applicable to California’s network of MMAs.

Comment 4.3

Commenters assert that for trash prohibitions new regulation requiring structural changes cannot be implemented immediately and will require a phase-in period.

Response 4.3

Staff recognizes that the presence of trash is an impact to ocean water quality and marine life. Currently, trash is a State Water Board priority issue, and trash controls will be addressed separately through amendments to statewide water quality control plans, including the Ocean Plan, in a future public process. The proposed implementation for trash controls will include compliance schedules.

Comment 4.4

Commenters are requesting clarification on the definition of “undesirable alteration” between Provision E.5.(c)(1) for intermittent (e.g. wet weather discharges) and the new language for NPDES permitted non-storm water discharges to an MS4 in Provision E.5.(a)(5). Commenters state that, “Non-stormwater discharges to MS4s are typically groundwater seepage and are often permanent discharges. The definition of “*undesirable alteration*” quoted above pertains to intermittent discharges. Consequently, it is unclear what definition of undesirable alteration will pertain to these permanent discharges of non-stormwater.” Commenters are concerned about meeting the Table 1 [Table B] instantaneous maximum concentrations for chemical constituents in the receiving water for intermittent discharges.

Response 4.4

Staff agrees that “undesirable alterations of natural water quality” is not defined for NPDES authorized non-storm water discharges to an MS4. The proposed language for NPDES permitted non-storm water discharges to an MS4 will be moved from the Provision E.5.(a) inserted under Provision E.5.(c) (implementation provisions for permitted separate storm sewer system discharges and nonpoint source discharges). This move provides clarification for the definition of “undesirable alteration” for NPDES permitted non-storm water discharges.

Additionally, the Ocean Plan is the federally approved water quality control plan for the State’s ocean waters under the Clean Water Act and the Porter-Cologne. The water quality objectives in the Ocean Plan, including Table 1, must be met by all dischargers (wastewater, storm water and nonpoint sources). These objectives are based on scientific evidence of a conservative estimate of chronic toxicity, and are essential to the protection of marine life.

Letter 5: From Brad Fowler of City of Dana Point

Comment 5.1

Commenter requests that sampling locations should be defined by reference to the existing EPA mixing zone standard per 40 CFR 125.121 to ensure consistent and uniform sampling results and provide the requisite compliance measure.

Response 5.1

The proposed amendments do specify that monitoring will occur in the receiving water, and not in the runoff. Therefore compliance will be determined in the receiving water. Designation of an SWQPA-GP will occur through a separate public process. Since each possible SWQPA-GP location is unique, site-specific sampling locations will be specified within the applicable permits. Storm water discharges do not get a dilution credit since they are not generally issued effluent limits. Under the Ocean Plan the calculation for effluent limits includes a dilution factor. However, this does not apply in this case, since samples will be collected in the ocean receiving water rather than in the runoff.

Comment 5.2

Commenter requests that language to accommodate natural source exclusion be added to amendment language.

Response 5.2

Staff agrees with the addition of language for natural source exclusion. The proposed amendment was revised to include similar language as the ASBS General Exception and Special Protections adopted on March 20, 2012 to Provision E.5.(c) to allow discharges essential for emergency response purposes, structural stability, and slope stability, and which occur naturally.

Letter 6: From Kris McFadden from City of San Diego, Transportation & Storm Water Department

The comments in the letter supplied to this amendment were directed to the Ocean Plan amendment for Model Monitoring. The comments were addressed in the Response to Comments for the Model Monitoring amendment.

Letter 7: From Grace Chan of County Sanitation Districts of Los Angeles County**Comment 7.1**

Commenters request the removal of the word “sole” from Provision E.2, which describes the basis of designation of SWQPA-GP with presence of State Marine Parks and State Marine Conservation Areas.

Response 7.1

Please see Response 1.1.

Letter 8: From Joyce Dillard, General Public**Comment 8.1**

Commenter inquires how ‘natural water quality’ is determined and monitored.

Response 8.1

State Water Board staff’s efforts are underway to better define natural water quality through reference sites. An ASBS natural water quality committee was established under State Water Board Resolution 2004-52. The committee concluded that it is not practical to identify a unique seawater composition as exhibiting natural water quality. However, it should be possible to define a reference area or areas that approximate natural water quality for an SWQPA and any detectable human influence on the water quality must not hinder the ability of marine life to respond to natural cycles and processes. For more information on the findings of the committee see: http://www.waterboards.ca.gov/water_issues/programs/ocean/asbs_nwqcommittee.shtml

Letter 9: From Mary Anne Skorpanich of Orange County Public Works**Comment 9.1**

Commenter requests that language to accommodate natural source exclusion be added to amendment language.

Response 9.1

Please see Response 5.2.

Letter 10: From Tamara Rasberry of Sempra Energy, San Diego Gas & Electric Company, and Southern California Gas Company**Comment 10.1**

Commenters request that new language be included to further address intermittent, short term dewatering discharges from underground structures pursuant NPDES permits to Provision E.3 and E.5.(c).

Response 10.1

Please see Response 3.1.

Comment 10.2

Commenters note that “natural water quality” is not the standard set by statute for State Marine, Reserves, State Marine Parks, or State Marine Conservation Areas, and thus should not be part of the definition for SWQPA-GP.

Response 10.2

Please see Response 3.2.

Letter 11: From Tom Rosales of South Orange County Wastewater Authority**Comment 11.1**

Commenters argue that economic benefits of concurrent MPA and SWQPA designation is not supported by cost benefit analysis.

Response 11.1

Please see Response 4.2. Additionally, under state law staff does not perform a cost benefit assessment.

Comment 11.2

Commenters request the removal of the word “sole” from Provision E.2, which describes the basis of designation of SWQPA-GP within the presence of State Marine Parks and State Marine Conservation Areas.

Response 11.1

Please see Response 1.1.