DRAFT

California Ocean Plan

Triennial Review Workplan

2011 – 2013

California Environmental Protection Agency
State Water Resources Control Board
Division of Water Quality
Ocean Standards Unit

2011

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Introduction

The California Ocean Plan (Ocean Plan) is the State's water quality control plan for ocean waters. It lists "beneficial uses" of California's ocean waters which need to be protected; establishes "water quality objectives" necessary to achieve protection for those beneficial uses; identifies areas where discharges are prohibited, and sets forth a program of implementation (including waste discharge limitations, monitoring, and enforcement) to ensure that water quality objectives are met. The State Water Resources Control Board (State Water Board) adopted the Ocean Plan in 1972, and has since periodically revised the Plan.

Federal law (§ 303(c)(1) of the Clean Water Act) requires that ocean water quality standards be reviewed at least once every three years. State law (Wat. Code, § 13170.2(b) requires that ocean water quality standards be reviewed periodically. The purpose of the triennial review of the Ocean Plan is to guarantee the continued adequacy of water quality standards.

The triennial review of the Ocean Plan identifies issues that should be examined by the State Water Board to determine if the Ocean Plan should be amended. The triennial review process, as implemented by the State Water Board, consists of a public hearing to identify the most important issues to be addressed; followed by staff evaluation of highest priority options for Ocean Plan amendments and preparation of a Workplan; a State Water Board public meeting to adopt the Workplan; and State Water Board action to resolve identified issues, through amendments to the Ocean Plan, if needed. The triennial review public hearing was held on September 22, 2010.

Ocean Program Overview

The State Water Board's Ocean Program is primarily performed by the Ocean Unit, with additional assistance from the Storm Water Program within which it is housed. The Ocean Unit is not only responsible for ocean standards in the California Ocean Plan, but is also responsible for Sediment Quality Objectives (Enclosed Bays and Estuaries Plan), the Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling, the beach monitoring program (with assistance from a staff environmental scientist within the Storm Water Section), Areas of Special Biological Significance (ASBS), Harmful Algal Blooms, particularly Blue Green Algae, Vessel Discharges (with assistance from the NPDES Unit), mussel watch monitoring (in collaboration with Southern California Coastal Water Research Project (SCCWRP) and the National Marine Fisheries Service (NOAA) and plastic pellet and trash monitoring on beaches. Table 1 provides a summary of projected staff resources for the period 2011 – 2014. The State Water Board has allocated seven full time personnel years (PYs) for the Ocean Unit. The PYs in Table 1 are projected for a three year period (seven PYs times three years, for a total of 21 PYs).

Table 1. Ocean Unit Personnel Resources – Three Year Time Frame

Project	PYs
Ocean Plan Amendments	12.0
Ocean Plan Exceptions	2.0
Sediment Quality Objectives/Enclosed Bays and Estuaries	1.0
Power Plant Cooling Policy	1.0
Beach Monitoring Support	1.5
Harmful Algal Blooms	0.5
Vessel Discharges (other than COP amendments)	2.5
Monitoring, Assessment and Technical Support	0.5
Total	21.0

Ocean Plan Issues and Amendments

As stated in Table 1, there are 12 PYs of staff effort allocated for Ocean Plan amendments. Generally, major amendments are time consuming, as they involve California Environmental Quality Act (CEQA) scoping meetings, the development of Substitute Environmental Documents (SEDs), and in some cases scientific studies, scientific peer review and economic (costs) assessments. Since the Ocean Unit has limited staff resources, a strategic approach is recommended, focusing effort over the next three years on only the most important amendments. In making recommendations Ocean Unit staff has considered all of the following:

- Comments received for the 2010 Triennial Review, including testimony and Board Member direction at the September 22, 2010 public hearing;
- Findings of the ASBS Natural Water Quality Committee, reported to the Board on September 21, 2010, as they pertain to the Ocean Plan;
- State Water Board Resolution No. 2010-0057, which directed staff to address Marine Protected Areas and State Water Quality Protection Areas; and
- Work remaining from the 2005-2008 Triennial Review Workplan.

In addition, staff uses best professional judgment based on its working knowledge of the Ocean Plan and recent historical interactions with Regional Board staff in implementing the Ocean Plan.

A list summarizing all issues is presented in Table 2.

Table 2. Summary of Issues

No.	Issue	Source
1	State Water Quality Protection Areas and Marine Protected Areas	SWB Resolution, 2010-0057
2	Model Monitoring Amendment	Triennial Review (TR) 2005-08 Several, see issue
3	Control of Commercial Vessel Discharges and Invasive Species	TR 2005-08
4	Desalination Facilities and Brine Disposal, Water Recycling	TR 2005-08
5	Fecal Coliform Standard for Shellfish	TR 2005-08
6	Review Existing Exceptions	2009 COP Requirement
7	Suspended Solids Regulation in Table A	TR 2005-08
8	Plastic Debris and Trash	TR 2005-08
9	Review Table B Chemical WQ Objectives	TR 2005-08
10	Review of WQ Objectives Dioxins (TCDD) and Related Compounds	TR 2005-08
11	Acute Toxicity Definition	TR 2005-08
12	Biological Objectives	TR 2005-08
13	Update Biological Objectives and Chemical Characteristic Sections to Account for Climate Change/Acidification	2010 TR Comments
14	Define “Objectionable Aquatic Growth”	2010 TR Comments
15	Update Table C Background Values	ASBS NWQC 2010
16	Explicitly express conversion from *E.coli* to fecal coliform	TR 2005-08
17	Clarify Water Contact Recreation Section	2010 TR Comments
18	Eliminate Reasonable Potential Analysis	2010 TR Comments
19	Mixing Zones and Dilution	TR 2005-08
20	Compliance Schedule	2010 TR Comments
21	Remove Daily Maximum Limits for POTWs	2010 TR Comments
22	Site Specific Objectives	TR 2005-08
23	Need For Case-by-Case Exceptions	2010 TR Comments
24	Need to Address SW Discharge to ASBS	2010 TR Comments
25	Nonsubstantive changes	TR 2005-08
26	Dissolved Metals	TR 2005-08

A summary of the issues raised by specific commenting parties are presented in Table 3.

Table 3. Summary of Issues Raised by Each Commenter

Commenting Party	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Allen Matkins Gamble Malloy & Natsis, LLP						x																				
Association of California Water Agencies				x																						
Avista Technologies Inc.				x																						
CalDeseal				x																						
California Association of Sanitation Agencies (CASA, Tri-TAC)		x		x						x					x				x	x	x	x		x		
California Coastkeeper Alliance, Center for Biological Diversity			x	x				x					x													
California Stormwater Quality Association (CASQA)		x																		x				x		
California WaterReuse				x																						
City of Malibu		x																		x				x		
City of Santa Cruz Water Department				x																						
Los Angeles County Flood Control District									x			x								x		x		x	x	x
Dietrich Consulting Group, LLC				x																						
General Public/ Teressa Jordan																									x	
General Public/ Joseph Rizzi				x																						
Heal the Bay		x						x					x	x		x	x	x	x							
Latham & Watkins, LLP																								x		
Marina Coast Water District				x																						
Mesa Consolidated Water District				x																						
Municipal Water District of Orange County				x																						
North San Mateo County Sanitation District		x			x				x	x									x						x	x
Poseidon Resources				x																						
R.W. Beck, Inc.				x																						
San Diego County Water Authority				x																						
San Francisco Bay Regional Water Board										x									x							
South Orange County Wastewater Authority South Coast Water District				x																						
Toray Membrane USA Inc.				x																						
West Basin Municipal Water District				x											x				x			x	x			
ASBS Natural Water Quality Committee									x		x				x											

Explanation of the Issue Summaries

For each issue in this Workplan, State Water Board staff has listed the commenting parties, a description of the issue and a brief summary of the verbal and written comments, recommended alternatives for staff action, and a recommended priority. Each issue summary contains the following sections:

Issue:
A brief description of the issue.

Raised By:
A list of the parties that commented on the issue.

Discussion:
A description of the issue and a brief summary of the comments.

In those cases when amendments have already been adopted no further information is given beyond the Discussion.

Recommended Priority:
Staff grouped each of the issues into one of four priority categories: Very High, High, Medium, or Low. Staff arrived at each priority by evaluating the following: whether resolution of the issue would solve a significant water pollution problem, ease of implementation, relevance to the Ocean Plan, staff perception of public concern, and available staff resources. Low priority issues include those issues that should be eliminated from further study at this time. Medium priority issues may be retained for further study in the next Triennial Review or may be recommended for only minimal efforts or baseline efforts until that time, depending on the availability of staff resources. High priority issues will be recommended for action during the period of this workplan. Very high priority issues will be recommended for Ocean Plan amendments during the period of this workplan. If there is a conflict in terms of staff resources between addressing high and very high priority issues, very high priority issues will take precedence.

Alternative(s) for Staff Action:
Staff has considered four alternatives for resolution of each issue: alternatives are no effort, minimum effort, baseline effort, and augmented effort. The estimated effort covers the entire three-year period of the Triennial Review. For less complex issues, only one alternative is suggested.

No Effort
No effort will be expended on issues that staff recommends, and the Board agrees, should not be considered at this time for an Ocean Plan amendment,

Minimum Effort
The minimum time necessary to complete a preliminary evaluation of the issue based upon readily available information. For certain very simple, non-substantive amendments the minimal effort may be all that is needed. But for the more complex issues the minimal effort will only lay the groundwork for further amendment development in a future triennial review period.

Baseline Effort
This is the effort necessary to complete an evaluation of the issue based upon readily available information, prepare and propose an amendment to the Ocean Plan, and prepare the necessary

staff report and CEQA documentation. The baseline effort is performed using existing Ocean Unit personnel. The amount given would fall within the current available staff in the Ocean Unit but in some cases the baseline effort would require the re-direction of staff resources away from other projects. This alternative provides for a much more detailed analysis of issues than the minimum effort and would be used for complex amendments to the Ocean Plan.

Augmented Effort
An augmented effort would be additive to a baseline effort and would involve additional resources beyond those within the Ocean Unit. This would provide for more detailed investigations into areas that staff believes require more information and may include funding for contract services if work can not be performed in-house. An augmented budget effort is not always presented in the alternatives.

Estimated Staff Resource Allocation:
Expressed as personnel years (PYs) and year of completion.

Issue 1: State Water Quality Protection Areas and Marine Protected Areas

Raised By:
State Water Board

Discussion:
The Marine Life Protection Act requires the redesign of California's system of marine protected areas (MPAs) to function as a network for reasons that include improving the protection of marine life, habitats, and marine ecosystems. According to the Marine Managed Areas Improvement Act, a marine managed area (MMA) is 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. Three types of MMAs are MPAs, including marine reserves, marine parks and marine conservation areas. Another classification of MMA is a State Water Quality Protection Area (SWQPA), which is "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 statute further provides that in a state water quality protection area, point source waste and thermal discharges shall be prohibited or limited by special conditions. Areas of special biological significance (ASBS) are a special subset of SWQPAs.

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. The Ocean Plan contains no specific requirements for other SWQPAs that are not ASBS.

The California Fish & Game Commission has now adopted many MPAs in the Central Coast, North Central Coast, and the South Coast; additional MPAs are planned for the North Coast.

The State Water Board on November 16, 2010 adopted Resolution No. 2010-0057, providing direction to staff regarding future work associated with MPAs and on the establishment of SWQPAs. Staff has been instructed by the State Water Board to present a proposed 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.

The public will have an opportunity to review and comment on the proposed amendment. These issues are considered a high priority in the Ocean Plan Triennial Review Workplan currently being developed by staff.

Recommendations for Staff Action:

Priority: **Very High**

Level of Effort: **Baseline**

Estimated Personnel Resources: **1.0 PY**

Projected year of completion: **2012**

Issue 2: Model Monitoring Amendment

Note: This amendment addresses in whole or in part several issues from the previous Triennial Review Workplan (2005-08): Mass Emission (TR 2005-08 #5), Sediment Quality (TR 2005-08 #11), Regional Ambient Monitoring (TR 2005-08 #14), Standard Monitoring and Reporting (TR 2005-08 #15), TRE and TIE Implementation (TR 2005-08 #16), Storm Water Discharges (TR 2005-08 #17), Nonpoint Source Discharges (TR 2005-08 #18).

Raised By:

California Association of Sanitation Agencies (CASA, Tri-TAC)
California Stormwater Quality Association (CASQA)
City of Malibu
Heal the Bay
North San Mateo County Sanitation District

Discussion:

Appendix III of the Ocean Plan includes standard monitoring procedures that provide direction to the Regional Water Quality Control Boards (Regional Water Boards) in developing monitoring programs to accompany discharge permits. These standard monitoring procedures reference analytical methods required for compliance with the bacterial, chemical, and toxicity requirements. These provisions largely focus on the regulation of individual point source pollution discharges. There are no provisions in the Ocean Plan for monitoring collective pollution inputs to a marine region. During previous Triennial Review, commenters recommended an ecosystem-wide approach to water quality monitoring and the coordination of monitoring efforts among of the Regional Water Quality Control Boards, the SCCWRP, the San Francisco Estuary Institute (SFEI), and the Department of Fish and Game Marine Pollution Studies Laboratory.

Staff has held a series of public workshops to consider consistent monitoring elements for ocean discharge monitoring programs; these consistent monitoring elements will provide information to protect valuable marine resources in a cost effective manner. Regional ambient monitoring will be included in the consistent monitoring elements. The first Model Ocean Discharge Monitoring Workshop was held on May 5, 2005, and a Scoping Meeting was held in 2007.

During this most recent Triennial Review public comment period, parties have expressed support for consistent statewide monitoring guidance. However, CASQA has expressed its

concern over the economic impact that the proposed program will have on most Phase II Small Municipal Separate Storm Sewer Systems (MS4s) as the proposed amendment will require an increase in monitoring. Staff agrees that there will be an increase in monitoring required by the amendment if adopted, but believes that monitoring of discharges is essential to understanding marine water quality and protection of marine beneficial uses.

Heal the Bay has recommended that the Ocean Plan require annual benthic community monitoring for both Publicly Owned Treatment Work (POTW) and MS4 discharges, and annual monitoring for constituents of emerging concern (CECs). Heal the Bay specifically mentions pyrethroids and brominated flame retardants (PBDE) as CECs that should be included in monitoring. Regarding benthic community monitoring, staff agrees and is already proposing to include benthic community monitoring in the Model Monitoring amendment. In regard to objectives or control requirements for CECs, there is not enough scientific information about the toxicity or other effects on marine life to set objectives at this time. However, staff has been funding research and conducting NOAA Mussel Watch sampling for CECs (sampling in 2010 and analysis ongoing), and is incorporating CEC bioaccumulation monitoring into the Model Monitoring amendment in order to develop more information about the prevalence of these compounds associated with discharges.

The State Water Board is working with the David and Lucile Packard Foundation and the SCCWRP on CECs. SCCWRP, as a part of this effort, convened a panel of experts to provide the State Water Board with recommendations on how to best limit the impact of CECs on our ocean and estuarine waters. This project is anticipated to be complete by the end of 2011. Staff is currently completing the Model Monitoring Draft (SED), which will be open for public comment and presented to the Board in 2011.

Recommendations for Staff Action:

Priority: **Very High**

Level of Effort: **Baseline**

Estimated Personnel Resources: **1.0 PY**

Projected year of completion: **2011**

Issue 3: Control of Commercial Vessel Discharges and Invasive Species.

TR Workplan 2005-08 Issue 6

Raised By:
California CoastKeeper Alliance
Center for Biological Diversity

Discussion:
At present, the Ocean Plan provides general requirements for the management of waste discharge to the ocean, including: "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 health and diverse marine community." In addition, the Ocean Plan includes the following narrative water quality objective that applies to the discharge of non-indigenous species into coastal marine waters: "Marine communities, including vertebrate, invertebrate, and plant

species, shall not be degraded." However, the Ocean Plan (Introduction, Section C.2.) states that: "This plan is not applicable…to vessel wastes…"

Commenters from the environmental community recommended during the previous Triennial Review that the State Water Board take a strong role in supporting and strengthening existing federal and state management efforts and develop and implement a comprehensive management plan, in coordination with Department of Fish and Game, the State Lands Commission, and the Department of Boating and Waterways, to address non-indigenous species arriving from a variety of introduction pathways. Furthermore these parties have recommended that the Ocean Plan should be revised to provide for such an interagency effort. The regulated community recommended that no additional resources be spent on this issue, as it is addressed in the California Marine Invasive Species Act. U.S. Environmental Protection Agency (U.S.EPA) has strongly urged the State Water Board to give high priority attention to this issue, because of its ecological and economic significance, and in particular, to review the U.S. Coast Guard's proposed voluntary national guidelines for ballast water exchange to determine whether they are likely to be adequate to protect California's ocean waters.

The State Lands Commission has a very strong regulatory program to control the discharge of nonindigenous species and State Water Board staff collaborates with them on this issue.

Regarding vessel wastes other than nonindigenous species, State law already prohibits certain waste discharges from large passenger ships (cruise ships) and oceangoing commercial vessels (300 gross tons or more). Public Resources Code (Pub. Resources Code) § 72420 prohibits the discharge of hazardous waste, photography lab wastes, dry cleaning chemicals, medical waste, and oily bilge water from large passenger ships and oceangoing ships. Pub. Resources Code § 72420 also prohibits the discharge of graywater from large passenger ships, and from oceangoing ships with sufficient holding capacity. Pub. Resources Code 72440 requires the State Water Board to apply to appropriate federal agencies (determined by the State Water Board to be U.S.EPA and NOAA) to authorize the state to prohibit the discharge of sewage or sewage sludge.

In 2009 the U.S.EPA issued a vessel general permit to address all discharges from commercial vessels. In addition, as required under Pub. Resources Code 72440, the State Water Board has applied to the U.S.EPA to establish a no discharge zone in all of California's marine waters for sewage from cruise ships and commercial vessels of 300 gross tons or greater. In 2010 the U.S.EPA proposed to establish a No Discharge Zone for sewage discharges from large passenger vessels, and oceangoing vessels with two days or more sewage holding capacity, to California State marine waters.

The commenters on this issue recommended that the Ocean Plan exclusion for vessel wastes be deleted, and that new language be added to reflect current state and federal requirements.

A scoping meeting was held in 2007, and this issue was discussed. Staff plans to propose Ocean Plan amendments to align it with requirements in existing law and regulation. The amendment is in progress and expected in 2011.

Recommendations for Staff Action:

Priority: **Very High**

Level of Effort: **Minimal**

Estimated Personnel Resources: **0.5 PY**

Projected year of completion: **2011**

Issue 4: Desalination Facilities and Brine Disposal.

TR Workplan 2005-08 Issue 10

Raised By:

Association of California Water Agencies
Avista Technologies Inc.
CalDeseal
California Association of Sanitation Agencies (CASA, Tri-TAC)
California Coastkeeper Alliance
California WaterReuse
City of Santa Cruz Water Department
Dietrich Consulting Group, LLC
General Public/ Joseph Rizzi
Marina Coast Water District
Mesa Consolidated Water District
Municipal Water District of Orange County
Poseidon Resources
R.W. Beck, Inc.
San Diego County Water Authority
South Orange County Wastewater Authority South Coast Water District
Toray Membrane USA Inc.
West Basin Municipal Water District

Discussion:

Currently, there are no Ocean Plan Water Quality Objectives that apply specifically to brine waste discharges from desalination plants or groundwater desalting facilities. Untreated brine waste discharged into the ocean "behaves" differently than either waste water treatment plant freshwater effluent or the brine waste-freshwater mixture. The "brine waste" plume is denser than the receiving ocean water due to a much higher salinity and tends to settle on the ocean bottom. As a result, a brine waste plume can have an adverse effect on the bottom-dwelling marine organisms.

An amendment to the Ocean Plan is in progress, based on direction given by the State Water Board at the November 2, 2005 workshop, and was discussed at the 2007 Scoping Meeting. Delays with the amendment were associated with the unavailability of staff resources, due to the emphasis in 2008-2010 on the Once Through Cooling policy. However, this issue remains a very high priority. The amendment is currently planned by staff to have three components: 1) a narrative objective for salinity, 2) limits on impingement and entrainment from desalination intakes, and 3) an implementation policy. Specifically with regard to intake impacts, the Ocean Plan does not authorize flow augmentation for dilution purposes, and clarification of this existing constraint to the use of in-plant dilution will be included in the amendment.

Some commenters during the previous and current Triennial Review suggested that the Ocean Plan be modified to facilitate permitting of facilities that discharge brine waste. Many commenters feel that no action should be taken regarding this issue because they believe that water quality objectives for brine water are not necessary, as all brine discharges are already regulated by NPDES permits that contain conditions protective of water quality. Commenters also express concern over setting a statewide objective due to the variability of salinity along the coast, the lack of knowledge regarding natural background, and because NPDES permits are already protective of water quality by utilizing site-specific objectives. Commenters are concerned that brine disposal regulations could hinder water recycling projects, if financial impacts are not carefully considered. West Basin, CASA and SOCWA also expressed their belief that the state should address brine discharges through a separate statewide policy initiative rather than through various planning documents, such as the Ocean Plan. However, West Basin and CASA suggested that in the absence of a statewide policy initiative, the State Water Board should amend the Ocean Plan to allow brine discharge through existing outfalls. CASA suggests that the "reasonable and representative" water quality testing of these outfalls be done at the end of the ocean outfall rather than at multiple input points along the outfall, and that facilities conducting brackish groundwater treatment, desalination, and recycled water projects be regulated as municipal water supply facilities rather than industrial facilities. Several commenters also suggest that the Ocean Plan simply recognize the importance of and encourage the use of desalination and water recycling.

Two parties (California CoastKeeper Alliance and the Center for Biological Diversity, in a joint letter) expressed interest in the pursuit of an amendment to address brine discharges and a salinity objective. The Coastal Commission submitted comments as part of the 2007 scoping process in favor of the amendment.

Recommendations for Staff Action:

Priority: **Very High**

Level of Effort: **Augmented**

Estimated Personnel Resources: **1.5 PY**

Projected year of completion: **2012**

Issue 5: Beneficial Uses and Adoption of Fecal Coliform Standard for Shellfish Harvesting Area

TR Workplan 2005-08 Issue 2 and 7

Raised By:
North San Mateo County Sanitation District

Discussion:
The Ocean Plan currently provides a total coliform standard of 70 organisms per 100 mL (milliliters) for waters of all areas where shellfish may be harvested for human consumption. There is no standard for shellfish tissue currently in the Ocean Plan.

The Department of Public Health (DPH) has suggested adding a fecal coliform standard of 14 organisms per 100 mL. The addition of a fecal coliform requirement to the existing shellfish harvesting standard would make the Ocean Plan consistent with the National Shellfish Sanitation Program (NSSP) guidelines for commercial shellfish growing areas. During the 1992

Triennial Review, comments suggested that a shellfish tissue standard also be added to the Ocean Plan.

The U.S.EPA, in its 2002 Draft Implementation Guidance for Ambient Water Quality Criteria for Bacteria, continues to recommend the use of fecal coliform to protect shellfishing waters (EPA 2002). The U.S.EPA states that "If at such time, data and information are compiled that support the use of these indicators in shellfishing waters, the U.S.EPA will revisit this issue and consider the development of a revised standard for consumption of shellfish. In the meantime, U.S.EPA continues to recommend the use of fecal coliforms for protection of shellfish waters."

Comments received after the December 2004 Public Scoping meeting suggest replacement of the total coliform standard for Shellfish Harvesting Areas with fecal coliform standard recommended by DPH. Commenters recommended that State Water Board make clear that this standard is only applicable to shellfish growing areas approved by DPH and that the standard is to be applied as a geometric mean consistent with DPH practice. One commenter suggested implementing the fecal coliform standard for shellfish harvesting without use of a compliance schedule.

The State Water Board has made progress on developing this amendment, including funding work by SCCWRP to provide technical assistance, and working collaboratively with the Regional Boards.

During this Triennial Review, comments were made on Scoping Document (2007) Alternatives 2 (to add the DPH fecal coliform standard of 14 organisms per 100 ml for waters where shellfish may be harvested for human consumption and to address non-human sources of indicator bacteria for all beneficial uses) and 3 (to add the DPH fecal coliform standard of 14 organisms per 100 ml in all areas) found in the Scoping Document. The comment suggests that the State Water Board clearly apply the standard in Alternative 2 to areas where shellfish are actually being harvested for human consumption. The commenter also mentioned that in regard to Alternative 2, the statement about staff's intention to address non-human sources of indicator bacteria is not specific enough for public comment. In regard to Alternative 3, the commenter is opposed to it, as they consider the Alternative overly protective.

The proposed amendment described in the 2003 Scoping Document was tabled in 2004 and 2005 due to staff resource limitations, but staff is again in process of amending the Ocean Plan for this issue and still meeting with stakeholders and Regional Water Boards. A scoping meeting was held in 2007, and a stakeholder workshop was held in 2010. This amendment is planned to also address natural sources and alignment of Ocean Plan and Basin Plan beneficial uses related to shellfish.

Recommendations for Staff Action:

Priority: **Very High**

Level of Effort: **Augmented**

Estimated Personnel Resources: **1.0 PY**

Projected year of completion: **2012**

Issue 6: Review Existing Exceptions

Raised By:
Allen Matkins Gamble Malloy & Natsis, LLP
State Water Board Staff

Discussion:
The Ocean Plan requires that all exceptions be reviewed. If there is sufficient cause to re-open or revoke an exception the State Board may direct staff to prepare a report and schedule a public hearing.

Appendix VII of the Ocean Plan is intended to identify all exceptions approved by the State Water Board. However, the current Ocean Plan Appendix VII, while updated in 2009, does not include two old exceptions that staff was unaware of: 1) for the Samoa Pulp Mill (Resolution No. 1987-109) and 2) Western LNG (Resolution 1979-56). Western LNG was never constructed, but the Samoa Pulp Mill has recently been permitted (2010) by the North Coast Water Board under a new owner.

Staff performed a very preliminary review of these and other existing exceptions. Certain exceptions will be proposed for re-issuance (Scripps Institution) and re-opening/amendment (US Navy point source discharges at San Clemente and San Nicolas Islands). The total chlorine residual limitation exception (Resolution 1988-80) for several power plants needs further review and re-opening, since many of the plants are not ocean discharges and conditions may have changed since 1988. Staff will also provide a more complete review of the exception for San Francisco's combined sewer system.

Staff plans to address the Scripps exception and US Navy exceptions first (2011), and to delay work on the other exceptions until 2013.

Recommendations for Staff Action:

Priority: ***High***

Level of Effort: **Baseline**

Estimated Personnel Resources: **1.0 PY**

Projected year of completion: **2013**

Issue 7: Suspended Solids Regulation in Table A.
TR Workplan 2005-08 Issue 22

Raised By:
State Water Board Staff

Discussion:
During the previous Triennial Review, the Central Coast Water Quality Control Board suggested that the suspended solids effluent limitation in Table A should be amended to be consistent with the U.S.EPA promulgated minimum level of suspended solids effluent quality attainable by secondary treatment in 40 CFR 133.102. U.S.EPA echoed the fact that any effluent limitation for total suspended solids in any NPDES permit must be as stringent as total suspended solids effluent limitations that have been adopted under the Clean Water Act.

Table A effluent limitations were added to the Ocean Plan when many ocean sewage discharges were subject only to primary treatment. This is no longer the case. Plans are in

place to upgrade to secondary treatment four of the five remaining ocean sewage discharges presently subject to only primary treatment. The exception is the City of San Diego's Point Loma outfall, which discharges to federal waters. Table A should be updated so that it is more relevant to secondary treatment discharges.

This issue was discussed during the 2007 Scoping meeting and is considered a high priority issue, but work on an amendment has been delayed due to staff resource limitations. Staff is evaluating this issue and further work during this Triennial Review period is subject to staff availability.

Recommendations for Staff Action:

Staff Level of Effort: **Baseline**

Estimated Personnel Resources: **0.75 PY**

Projected date of completion: **December 2013**

Priority: **High**

Issue 8: Plastic Debris and other Trash Regulation.

TR Workplan 2005-08 Issue 23

Raised By:
State Water Board Staff
California CoastKeepers Alliance
Center for Biological Diversity
Heal the Bay

Discussion:
The Ocean Plan has water quality objectives in Table B for specific phthalate compounds that may be used as additives to plastic products. The Ocean Plan also has narrative objectives for floating particulates ("…shall not be visible.") and on inert solids ("…sediments shall not be changed such that benthic communities are degraded.") with corresponding implementation provisions. The general provisions of the Water Quality Objectives of the Ocean Plan "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." However these water quality objectives do not specifically address plastic particulates or other trash. These existing provisions, while being general in their application, may have originally been designed with waste water treatment plant discharges in mind.

The Los Angeles Regional Water Quality Control Board's Basin Plan has an objective that has been applied to trash, including plastic debris, from storm water systems: "Waters shall not contain floating materials, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses."

The Environmental representatives have expressed concerns with not only the physical debris of pre- and post-consumer plastics, but with related constituents and their effect on the marine environment. There are estimates that approximately sixty to eighty percent of marine debris in the world's oceans emanates from land-based sources. Some forms of plastic debris are ingested by marine life and other forms of debris are known to cause entanglement. Plastics in the marine environment may concentrate persistent hydrophobic pollutants and may have the potential to transport them throughout the marine food web. It is common for runoff from the

plastics manufacturing industry to discharge through storm drains, and plastic pellets, powders, and manufacturing residuals have been known to be discharged. That the Ocean Plan does not now specifically address plastic debris, and other trash, is an oversight that needs correction.

Certain commenters have suggested that a numeric water quality objective of "zero" for trash be added to the Ocean Plan. Staff believes that an objective should be included to address trash; this is a very important issue and therefore a very high priority. A public scoping meeting was held in 2007 for this Ocean plan amendment. Staff has been working SCCWRP since 2009 to obtain baseline information regarding the magnitude of trash and plastic debris along California's coast. The preparation of this amendment will be performed in conjunction with the Statewide Trash Policy for all California waters. A scoping meeting was held in 2010 for the statewide Trash Policy.

Recommendations for Staff Action:

Priority: **High**

Level of Effort: **Augmented, due to resources provided by other State Board programs.**

Estimated Personnel Resources: **0.75 PY**

Projected year of completion: **2012**

Issue 9: Review Table B Chemical Water Quality Objectives

TR Workplan 2005-08 Issue 13

Raised By:
Los Angeles County Flood Control District
ASBS Natural Water Quality Committee
North San Mateo County Sanitation District

Discussion:
Comments on this issue were also raised during the previous Triennial Review. U.S.EPA recommended that attention be given to priority toxic pollutants for which U.S.EPA criteria exist that are not currently addressed in the Ocean Plan. For example, the Ocean Plan lacks objectives for three pollutants for which U.S.EPA has recommended numeric criteria: edrin aldehyde, 1,2,4-trans-dichloroethylen, and 1,2,4-trichorobenzene. The commenter also suggested that State Water Board staff perform an evaluation of whether chemicals that are regulated as chemical groups in Table B of the Ocean Plan can be more effectively controlled by separate water quality standards.

Commenters feel that numerical water quality objectives are out-of-date and urge staff to update the current Ocean Plan objectives to reflect the most current scientific knowledge. Commenters also urge staff to ensure reasonable protection of beneficial uses related to radioactivity. Staff believes that the review, development and recommendation of Table B water quality objectives is a primary function and responsibility of the Ocean Unit. Appropriate numeric water quality standards are an essential part of any water quality regulatory program.

Radioactivity has been identified as a High Priority, per the Scoping Meeting in 2007, and is an amendment in progress. In its *Summary of Findings* (2006-2009) the Natural Water Quality Committee (NWQC) recommend that the State Water Board either change the required method for TRC and/or allow for altering the interpretation of results (i.e., total residual oxidants). Other

amendments may be considered in the future to address emerging contaminants. Staff is evaluating this issue, and further work during this Triennial Review period is subject to staff availability.

Recommendations for Staff Action:

Priority: **High**

Level of Effort: **Baseline**

Estimated Personnel Resources: **0.5 PY**

Projected year of completion: **2013**

Issue 10: Review of Water Quality Objectives for Dioxins (TCDD) and Related Compounds

TR Workplan 2005-08 Issue 8

Raised By:

California Association of Sanitation Agencies (CASA, Tri-TAC)
North San Mateo County Sanitation District
San Francisco Bay Regional Water Board

Discussion:

The Ocean Plan water quality objective for tetrachlorodibenzo-dioxin (TCDD) equivalents is 3.9 x 10^{-9} micrograms/liter (0.0000000039 micrograms/liter.) TCDD equivalents are defined as the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-TCDFs) multiplied by their respective toxicity factors. The toxicity factors are provided in Appendix I of the Ocean Plan.

Commenters from the previous Triennial Review stated that dioxins and furans are ubiquitous in urban runoff at concentrations much higher than water quality standards. Because of this, commenters suggested that staff consider a change in the application of the dioxin standard. Again during this Triennial Review, commenters suggest that the water quality objective for TCDD be updated to reflect the most current toxicity equivalence factors (TEFs) and suggest updating the current standard for 2, 3, 7, 8-TCDD, per the California Toxics Rule (CTR). Commenters also recommend that the Ocean Plan be amended to incorporate national or site-specific (if available) bioaccumulation equivalency factors (BEFs) in its method for calculating dioxin-Toxic Equivalent (TEQ), as the San Francisco Regional Water Quality Control Board did in Order R2-2010-0054, which was based on work conducted by the San Francisco Estuary Institute (SFEI).

Staff is aware that the toxicity equivalent factors in Appendix I of the Ocean Plan do not reflect the latest values used by the World Health Organization and agrees that the Ocean Plan TCDD equivalents numeric objective should be updated. Staff is evaluating this issue and considers it a high priority issue, however, further work during this Triennial Review period is subject to staff availability.

Recommendations for Staff Action:

Priority: **High**

Level of Effort: **Minimal, but may require peer review**

Estimated Personnel Resources: **0.5 PY**

Projected year of completion: **2013**

Issue 11: Acute Toxicity Definition
TR Workplan 2005-08 Issue 24

Raised By:
ASBS Natural Water Quality Committee
State Water Board Staff

Discussion:
During the past two Triennial Reviews, staff has received verbal comments about the need to revise the definition of acute toxicity in Appendix I. Two problems arise from the equation found in the acute toxicity definition, TUa = log(100-S)/1.7. First, the equation does not account for mortality in the control concentration. Most acute toxicity protocols allow all toxicity responses to be adjusted for control mortality. High control mortality will invalidate the toxicity test. Second, the equation produces a zero value when survival in undiluted effluent is greater than 99%. This zero value creates computation problems when performing a reasonable potential assessment using the newly promulgated procedures in Appendix VI. In their *Summary of Findings* (2006-2009) the Natural Water Quality Committee recommended that the acute toxicity equation be revised in cases when survival in undiluted effluent is greater than control survival. A revision of the definition may require peer review. Staff is evaluating this issue and considers it a high priority issue. Further work during this Triennial Review period is subject to staff availability.

Recommendations for Staff Action:

Priority: **High**

Level of Effort: **Minimal**

Estimated Personnel Resources: **0.5 PY**

Projected year of completion: **2013**

Issue 12: Biological Objectives
TR Workplan 2005-08 Issue 9

Raised By:
Los Angeles County Flood Control District
State Water Board Staff

Discussion:
Comments were made on this issue during the previous Triennial Review and subsequent amendments were made to the Ocean Plan.

During this Triennial review, the commenter has brought up the concern that the chemistry standards in Table B are not adequate to determine the quality of ocean water and its impact on marine life. Due to this concern, the commenter requested that provisions be added in Chapter II which require "the use of multiple lines of evidence consisting of the chemical, toxicological, physical, and biological factors for compliance determination." Staff agrees that the Ocean Plan narrative objective for biota needs to be updated and suggests providing tools and thresholds in addition to the narrative objectives already in existence. The Benthic Response Index or the AZTI Marine Biological Index (AMBI) could be incorporated with appropriate calibration and validation studies with regard to sediment quality objectives. Staff is evaluating this issue and considers it a high priority. Further work at this issue during this Triennial Review period is subject to staff availability.

Recommendations for Staff Action:

Priority: **High**

Level of Effort: **Augmented, with recommendation that funding be secured for evaluation of the AMBI**

Estimated Personnel Resources: **1.0 PY**

Projected year of completion: **2013**

Issue 13: Update Biological Objectives and Chemical Characteristics Sections to Account for Climate Change

Raised By:
Heal the Bay
California Coastkeeper Alliance
Center for Biological Diversity

Discussion:
Due to concerns over the acidification (decrease of pH) of marine waters, Heal the Bay recommended that the Biological Objectives (Ocean Plan section II.E.3) be modified as follows: "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. The concentration of constituents in the ocean shall not reach levels that are detrimental to shellfish and other calcium carbonate-dependent organisms."

Heal the Bay also recommended that the Chemical Characteristics (Ocean Plan section II.D.2) be modified as follows: "The pH shall not be changed at any time more than 0.2 units from that which occurs naturally or in amounts that negatively impact calcium carbonate-dependent organisms."

California Coastkeeper Alliance argues that a 0.2 unit change in pH is an outdated standard and will adversely impact sea water quality and ocean water properties and recommended that, at a minimum, the language be changed as follows: "The pH shall not be changed at any time more than 0.2 units from that which occurs naturally or in amounts that may negatively impact calcium carbonate-dependent organism productivity." California Coastkeeper Alliance also offers other, more protective wording, as follows: "For marine waters, pH should not deviate measurably from naturally occurring pH levels." California Coastkeeper also urged the State Water Board to update the Ocean Plan or Thermal Plan to address climate change-driven changes in water temperature, to revise sections II.C. and III of the Ocean Plan to include provisions that protect

beneficial uses against climate change-driven sea level rise, and to include in section II.A. of the Ocean Plan a provision calling for "resiliency to current and potential climate change impact."

Staff agrees that ocean acidification does pose a risk. Staff believes that the existing narrative pH objective is currently protective, and the existing narrative biological objective section II.E.3 for marine communities and species is also currently protective in relation to changes in pH from traditional sources. However, we acknowledge that more research, monitoring and assessment should take place, both in California and globally to address and understand decreases of pH (trends and effects) before further changes to the objective or program of implementation is amended. Staff is evaluating this issue and considers it a high priority. Staff intends to evaluate this issue further if resources are available during this Triennial Review period.

Recommendations for Staff Action:

Priority: **High**

Level of Effort: **Minimal**

Estimated Personnel Resources: **0.5 PY**

Projected date of completion: **next Triennial Review period**

Issue 14: Define "Questionable Aquatic Growth"

Raised By: Heal the Bay

Discussion:
Heal the Bay recommends defining "objectionable aquatic growth" in the Ocean Plan in the narrative for nutrients and algae. They suggest using a numeric threshold for algal growth, such as percent cover. Staff agrees that a clear definition would be helpful, particularly with regard to phytoplankton (harmful algal) blooms that are detrimental to human or wildlife health. Narrative objectives already exist in the Ocean Plan, however tools and thresholds are not provided. Staff does not believe that numeric objectives are appropriate for algal cover. Staff is evaluating this issue and considers it a high priority. Further work on this issue during this Triennial Review period is subject to staff availability.

Recommendations for Staff Action:

Priority: **High**

Level of Effort: **Minimal**

Estimated Personnel Resources: **0.5 PY**

Projected date of completion: ***next Triennial Review period***

Issue 15: Update Table C Background Values

Raised By:
West Basin Municipal Water District
ASBS Natural Water Quality Committee
California Association of Sanitation Agencies (CASA, Tri-TAC)

Discussion:
Table C values are used in the calculation of effluent limits, however these values do not reflect actual concentrations in receiving water, especially since some naturally occurring constituents are listed on Table C as zero. Commenters have recommended that the values in Table C be updated to reflect the most up-to-date data of constituents in California waters. Staff agrees that Table C is not accurate for many constituents, and that it should be amended to give representative concentrations for naturally occurring constituents, with synthetic constituents remaining as "zero." Staff also believes that Table C should be revised to clarify that the table applies to traditional point sources and not near-shore storm water discharges, since data suggest that near-shore receiving water concentrations of natural constituents are different than offshore conditions, especially during storm runoff and high energy wave conditions. Staff is evaluating this issue and considers it a high priority. Further work on this issue during this Triennial Review period is subject to staff availability.

Recommendations for Staff Action:

Priority: ***High***

Level of Effort: **Baseline**

Estimated Personnel Resources: **1.0 PY**

Projected date of completion: **2013**

Issue 16: Explicitly Express Conversion from E.coli to Fecal Coliform

Raised By: Heal the Bay

Discussion:
The Ocean Plan contains bacterial objectives for total coliform, fecal coliform, and Enterococcus. Many dischargers use a U.S.EPA defined substrate test (Colilert® by IDEXX Laboratories, Inc.) to measure total coliform and *E. coli*. While numbers derived for total coliform are comparable to Ocean Plan standards, numbers derived for *E. coli* are not comparable. This lack of comparability is due to the fact that there is not a standard conversion variable. *E. coli* is a single species of the fecal coliform group. While *E. coli* is a fraction of fecal coliform, it is generally the largest fraction. A historical value of 0.8 has been used to determine the amount of *E. coli* in fecal coliform in marine waters however, some dischargers use a one-to-one ratio. This leaves room for concern that fecal coliform in marine waters is underestimated, potentially putting human health and marine life at risk.

Heal the Bay has suggested one of three amendments to the Ocean Plan: 1. Require all public agencies to measure fecal coliform instead of *E. coli*; 2. Require all labs using Colilert® to determine a conversion value for converting *E. coli* to fecal coliform and provide rationale for determined conversion value; or 3. Codify and standardize the historical conversion value of 0.8 for converting *E. coli* to fecal coliform, until more studies have been conducted regarding a conversion value.

Staff sees the value in clarifying this matter, but is not a high priority at the moment. There is not enough information currently available to base a conversion factor on at this time. Nonetheless, staff is proposing to allow substitution of *E. coli* analysis for fecal coliform in the Model Monitoring amendment (expected in 2011), in order to be consistent with local health department beach monitoring.

Since much effort is currently being placed on Rapid Methods, and U.S.EPA is looking into the possibility of changing the standards to address rapid indicators, staff recommends that no extensive work be under taken to amend the current contact recreation standards.

Recommendations for Staff Action:

Priority: ***Medium***

Level of Effort: **None**

Estimated Personnel Resources: **None**

Issue 17: Clarify Water Contact Recreation Section

Raised By: Heal the Bay

Discussion: The Ocean Plan provides water-contact standards based on a rolling 30-day geometric mean. Heal the Bay comments that the Ocean Plan not clarify that it is a "rolling" 30-day geometric mean, though a later section of the Ocean Plan states the "[t]he geometric mean shall be calculated using the five most recent sample results," and comments that without clarification throughout the section that it is a rolling mean it may be assumed that the Ocean Plan is basing the standard on a calendar month average.

Heal the Bay also commented that clarification is needed in the implementation section, stating that weekly samples are a minimum requirement and that they should be collected on a year-round basis. They suggested the following language changes: "At a minimum, weekly samples shall be collected on a year-round basis from each site."

The Ocean Plan, in Section II.B.1.a(1) states that the standards are based on a "geometric mean of the five most recent samples from each site" indicating that the 30-day mean does not refer to a calendar month. Staff feels that clarification is not necessary but would be helpful.

Recommendations for Staff Action:

Priority: ***Medium***

Level of Effort: **None**

Estimated Personnel Resources: **None**

Issue 18: Eliminate Reasonable Potential Analysis

Raised By: Heal the Bay

Discussion: Heal the Bay has suggested that the Reasonable Potential Analysis found in Appendix VI should be eliminated because it believes the analysis weakens the permits and has led to decreases in water quality. The Ocean Plan Reasonable Potential (2004 amendment) provisions have an excellent statistical basis and are widely considered among the best in the nation. Staff recommends no action on this issue.

Recommendations for Staff Action:

Priority: ***Low***

Level of Effort: **None**

Estimated Personnel Resources: **None**

Issue 19: Mixing Zones and Dilution

TR Workplan 2005-08 Issue 21

Raised By:

California Association of Sanitation Agencies (CASA, TriTac)
Heal the Bay
North San Mateo County Sanitation District
San Francisco Bay Regional Water Board
West Basin Municipal Water District

Discussion:

The Ocean Plan contains specific criteria for calculating minimum initial dilution for turbulent submerged buoyant plumes. The dilution of the plume as it mixes with the receiving water is dependent upon the flow rate, the outfall specifications such as port diameter orientation and number, effluent density and receiving water characteristics including density profile and depth. This information can be inputted into a computer model such as U.S.EPA's UM3 embedded in the Visual Plumes platform that calculates the dilution as the plumes rises. For deep submerged plumes, mixing is considered complete when the plume ceases to rise vertically and begins spreading horizontally. This approach relies on the momentum of the plume to cause turbulent mixing with the receiving water. Once the plumes reaches maximum height and begins spreading laterally, turbulent mixing decreases rapidly. Due to the ever-changing receiving water characteristics, the Ocean Plan relies on conservative assumptions to ensure that beneficial uses are protected. The two limiting assumptions are: (1) that the lowest average monthly trapping level is used to calculate minimum initial dilution, and (2) that no currents are influencing the plume mixing as it exits the outfall and rises toward the surface.

The present language first appeared in the 1978 Ocean Plan. The only major amendment to this dilution and mixing zone policy was recognition of an acute regulatory mixing zone in 2001. Previously the Ocean Plan included a required technology based acute toxicity effluent limit where compliance was determined at end-of-pipe.

Several comments were raised regarding this issue during the previous Triennial Review. U.S.EPA recommended that toxicity testing guidance be developed that would cover the use of mixing zones, among other things. The San Francisco Public Utilities Commission, and Calleguas Municipal Water District commented in 2004 that the current requirements where overly conservative, outdated and recommended that the State Water Board revise the Ocean Plan mixing zone language. During this Triennial Review, similar comments were made regarding the revision of mixing zones, particularly to take into account horizontal mixing due to ocean currents.

One commenter does not agree that dilution credit should be applied toward toxicity and recommends language change to Section III.C.3 to include state that objectives for acute and chronic toxicity shall apply directly to the undiluted waste effluent.

Staff recommends no actions on this issue.

Recommendations for Staff Action:

Priority: **Low**

Level of Effort: **None**

Estimated Personnel Resources: **None**

Issue 20: Compliance Schedules

Raised By:
California Association of Sanitation Agencies (CASA, Tri-TAC)
California Stormwater Quality Association (CASQA)
City of Malibu
Los Angeles County Flood Control District

Discussion:
The 2009 Amendment to the Ocean Plan included several nonsubstantive changes. One of these changes (in Sections III.F and III.G) included the removal of "Regional Boards shall revise the waste discharge requirements for existing discharges as necessary to achieve compliance with this Plan and shall also establish a time schedule for such compliance" and new wording was included in the Ocean Plan, stating that "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)." Commenters have stated that the additional wording puts constraints on the use of compliance schedules and only applies to discharges subject to the Clean Water Act § 301(b)(1)(C). They also voiced their concern that the change may adversely impact permits, including those for discharges to ASBS. CASQA stated that non-enforcement compliance schedules will be necessary, and suggests that the Ocean Plan be revised to explicitly allow compliance schedules for storm water. The County of Los Angeles has urged the State Board to again incorporate a time schedule provision for municipal storm water discharges in the Ocean Plan, to allow municipalities that must discharge storm water into ASBS sufficient time to meet the requirements of the General Exception (for Selected Stormwater and Non point Source Discharges into ASBS) once finalized and incorporated into storm water permits. The City of Malibu has suggested employing BMPs and monitoring to demonstrate compliance and feel that a compliance schedule may hinder an agency's progress toward successful compliance. The City of Malibu also commented that the requirement to implement ASBS Special Protections on the top of the existing NPDES MS4 permit requirements and TMDL program implementation in total are potentially the most expensive elements of their annual budget. Each of the commenters have stated that they feel the changes to Sections III.F and III.G were, in fact, substantive.

Staff recommends no action on this issue.

Recommendations for Staff Action:

Priority: ***Low***

Level of Effort: **None**

Estimated Personnel Resources: **None**

Issue 21: Remove Daily Maximum Limits for POTWs

Raised By:
California Association of Sanitation Agencies (CASA, Tri-TAC)

Discussion: The Ocean Plan imposes Table A and B limitations for daily and instantaneous time intervals, which California Association of Sanitation Agencies (CASA) claims are not in accordance with federal regulations. The NPDES regulations at 40 CFR 122.45(d) require that all permit limits be expressed, unless impracticable, as average weekly limits and average monthly for publicly owned treatment works (POTWs). The only exception is for constituents for which weekly and monthly limitations are impracticable. CASA charges that the Regional Water Boards often impose daily and instantaneous limitations on POTWs and is recommending that the Ocean Plan be amended to specify that the only limitations applicable to POTWs are the weekly and monthly limitations (with the exception of those demonstrated by substantial evidence in the record to be impracticable.) Staff recommends no action on this issue.

Recommendations for Staff Action:

Priority: ***Low***

Level of Effort: **None**

Estimated Personnel Resources: **None**

Issue 22: Site Specific Objectives.
TR Workplan 2005-08 Issue 12

Raised By:
California Association of Sanitation Agencies (CASA, Tri-TAC)
Los Angeles County Flood Control District
West Basin Municipal Water District

Discussion:
Several comments were made on this issue during the previous Triennial Review, recommending that the Water Board incorporate provisions and procedures for deriving site-specific water quality objectives into the Ocean Plan. Commenters from the current Triennial Review feel that this issue is still relevant and should be considered.

The Water Boards already have general authority to allow site specific objectives where warranted, and the Ocean Plan also already has exception procedures.

Staff recommends no action on this issue.

Recommendations for Staff Action:

Priority: ***Low***

Level of Effort: **None**

Estimated Personnel Resources: **None**

Issue 23: Need for Categorical and Case-by-Case Exceptions

Raised By:
West Basin Municipal Water District

Discussion: West Basin suggests adding provisions in the Ocean Plan to allow for categorical and case-by-case exceptions similar to the language included in the Section 5.3 of the State Implementation Policy. They provide a couple examples of recycled water projects which were stopped due to water not meeting Table B limitations. Provisions already exist in the Ocean Plan for exceptions (Section III.J). Therefore, staff recommends no action on this issue.

Recommendations for Staff Action:

Priority: ***Low***

Level of Effort: **None**

Estimated Personnel Resources: **None**

Issue 24: Need to Address Storm Water Discharges to ASBS

Raised By:
California Stormwater Quality Association (CASQA)
CASA, TriTac
City of Malibu
Latham & Watkins, LLP
Los Angeles County

Discussion:
The City of Malibu has stated that they do not feel there is a functioning and consistent process for applying for and granting exceptions to the Ocean Plan, and is asking the State Water Board to establish such a process. Currently, no guidelines exist for the exception process and the City of Malibu stated that they have applied for an exception in July of 2007 but has not received one, due to a lag in the regulatory process. Los Angeles County stated that the General Exception (for selected Stormwater and Non point Source Discharges into ASBS) should be made retroactive (from the date of application) to protect dischargers who have applied and waited for nearly six years for the exception process to be completed. CASA/TriTac suggests that storm water discharges to ASBS be allowed under an amendment to the Ocean Plan. CASQA believes that the COP needs to address the infeasible prohibition on discharges to ASBS. Latham and Watkins believes that the prohibition against waste discharge entering ASBS never has been subject to appropriate legal process that would allow it to be applied to storm water, and that Tables A and B should not be applied to storm water discharges into ASBS in the exception process.

Although it is true that the ASBS exception process has been delayed due to staff resource availability, the process is now nearing completion. Regarding storm water discharges into ASBS, the Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. NPDES storm water discharges are point sources under the Clean Water Act.

Staff does not recommend amending the Ocean Plan to address this issue.

Recommendations for Staff Action:

Priority: ***Low*** (for Ocean Plan amendment, but is a very high priority for an exception)

Level of Effort: **None**

Estimated Personnel Resources: **None**

Issue 25: Non-substantive Administrative Changes

TR Workplan 2005-08 Issue 25

Raised By:
Los Angeles County Flood Control District
Teresa Jordan, General Public (comments reference Final Staff Report from September 2009 and not the 2009 Ocean Plan)
North San Mateo County Sanitation District

Discussion:
State Water Board Staff raised this issue in the previous Triennial Review. Non-substantive Administrative changes brought up by Staff became amendments to the 2005 Ocean Plan and are included in the 2009 Ocean Plan.

During this Triennial Review, commenters have suggested several updates to the 2009 Ocean Plan, including: an update to the List of Exceptions in Appendix VII to take account of exceptions which are not listed, references to Appendices VII and VIII within the Ocean Plan document, to include an "appropriate definition of natural water quality" as well as "associated objectives" based on the Natural Water Quality Committee's definition, to redefine waste, and to clarify Section III.A.2.d. by stating that the narrative only applies to new discharges and not to existing discharges. Minor editing was also recommended.

Staff evaluates potential non substantive amendments on an on-going basis, and will propose these minimal changes when appropriate along with other amendments.

Recommendations for Staff Action:

Priority: ***High***

Level of Effort: **Minimal**

Estimated Personnel Resources: **Negligible, since these minimal changes will be accomplished along with other amendments.**

Projected date of completion: **on-going with each amendment**

Issue 26: Expression of Metals in Ocean Plan

TR Workplan 2005-08 Issue 19

Raised By:
Los Angeles County Flood Control District
North San Mateo County Sanitation District

Discussion:
This issue was raised during the previous Triennial Review and was clarified in the 2009 amendment to the Ocean Plan. The metals objectives in the Ocean Plan were always intended to be total metals, not dissolved metals. However, commenters during this Triennial Review have expressed concern regarding the clarification, due to the fact that U.S.EPA based California Toxics Rule (CTR) uses dissolved metals in its criteria. Commenters feel that metal objectives expressed as total recoverable concentration are not "consistent with the National and State water-quality objectives for metals." While staff disagrees with that rationale, we acknowledge that there is a value to knowing the dissolved fraction since that is the most bioavailable fraction. Commenters stated that they believe this issue is substantive, however it was included in the 2009 non-substantive amendments and approved by the office of Administrative Law.

Staff recommends no action at this time but will continue to investigate the relationship between total and dissolved metals. This may be brought up again in a future Triennial Review

Recommendations for Staff Action:

Priority: ***Low***

Level of Effort: **Minimal**

Estimated Personnel Resources: **None**

Staff Recommendation for Issue Priority

Table 4 presents a summary of the recommended priority for each of the above issues. To give detailed attention to each issue concurrently would far outstrip available personnel resources. Resolution of many issues may also require the help of stakeholders, scientific research organizations and other agencies, such as municipal discharge authorities, the Regional Water Boards and the U.S.EPA.

Table 4. Priority of Issues and PYs assigned.

No.	Issue	Priority	PY
1	State Water Quality Protection Areas and Marine Protected Areas	Very High	1.0
2	Model Monitoring Amendment`	Very High	1.0
3	Control of Commercial Vessel Discharges and Invasive Species	Very High	0.5
4	Desalination Facilities and Brine Disposal, Water Recycling	Very High	1.5
5	Fecal Coliform Standard for Shellfish	Very High	1.0
6	Review Existing Exceptions	High	1.0
7	Suspended Solids Regulation in Table A	High	0.75
8	Plastic Debris Regulation Numeric Water Quality Objective for Trash	High	0.75
9	Review Table B Chemical WQ Objectives	High	0.5
10	Review of WQ Objectives Dioxins (TCDD) and Related Compounds	High	0.5
11	Acute Toxicity Definition	High	0.5
12	Biological Objectives	High	1.0
13	Update Biological Objectives and Chemical Characteristic Sections to Account for Climate Change/Acidification	High	0.5
14	Define "Objectionable Aquatic Growth"	High	0.5
15	Update Table C Background Values	High	1.0
16	Explicitly express conversion from *E.coli* to fecal coliform	Medium	0.0
17	Clarify Water Contact Recreation Section	Medium	0.0
18	Eliminate Reasonable Potential Analysis	Low – no action	0.0
19	Mixing Zones and Dilution	Low – no action	0.0
20	Compliance Schedule	Low – no action	0.0
21	Remove Daily Maximum Limits for POTWs	Low – no action	0.0
22	Site Specific Objectives	Low – no action	0.0
23	Need For Case-by-Case Exceptions	Low – no action	0.0
24	Need to Address SW Discharge to ASBS	Low – no action	0.0
25	Nonsubstantive changes	High – minimal effort	0.0
26	Expression of Metals in Ocean Plan	Low – no action	0.0

The higher priority issues approved for review are intended to be addressed over the next three-year period following State Water Board approval of the Workplan. As issues are resolved, the Ocean Plan will be amended as necessary in accordance with State and federal laws and regulations.

List of Acronyms

AMBI	AZTI Marine Biological Index
ASBS	Areas of Special Biological Significance
BEF	Bioaccumulation Equivalency Factors
BMP	Best Management Practice
CASA	California Association of Sanitation Agencies
CASQA	California Stormwater Quality Association
CDD	Chlorinated Dibenzodioxins
CECs	Contaminants of Emerging Concern
CEQA	California Environmental Quality Act

CTR	California Toxics Rule
DPH	California Department of Public Health
MPA	Marine Protected Area
MMA	Marine Managed Area
MS4	Phase II Small Municipal Separate Storm Sewer System
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NSSP	National Shellfish Sanitation Program
NWQC	Natural Water Quality Committee
PBDEs	Polybrominated Diphenylethers
POTW	Publicly Owned Treatment Works
PY	Personnel Years
SCCWRP	Southern California Coastal Water Research Project
SED	Substitute Environmental Document
SFEI	San Francisco Estuary Institute
SIP	State Water Board Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries
SQO	Sediment Quality Objective
SWQPA	State Water Quality Protection Area
TCDD	Tetrachlorodibenzo-dioxins
TCDF	Tetrachlorodibenzofuran
TEF	Toxicity Equivalence Factors
TEQ	Toxic Equivalent
TIE	Toxicity Identification Evaluation
TR	Triennial Review
TRE	Toxicity Reduction Evaluation
TUa	Toxicity Unit Acute
U.S.EPA	United States Environmental Protection Agency
WQ	Water Quality

List of Appendices

A. State Water Board Resolution No. 2010-057
http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2010/rs2010_0057.pdf

B. ASBS NWQ Committee Findings
http://www.waterboards.ca.gov/water_issues/programs/ocean/docs/trirev/appndx_b.pdf

C. Response to Comments
http://www.waterboards.ca.gov/water_issues/programs/ocean/docs/trirev/appndx_c.pdf