### INTRODUCTION:

On October 18, 2004 the State Water Resources Control Board (State Water Board) notified responsible parties to cease storm water and nonpoint source waste discharges into Areas of Special Biological Significance (ASBS) or to request an exception per the requirements of the California Ocean Plan (COP). The exception provisions of the COP require that such discharges will not compromise protection of ocean waters for beneficial uses, and the public interest will be served. Several responsible parties submitted requests, or conditional requests, for exceptions. Subsequently, the State Water Board provided general instructions for exception application packages via its website. The State Water Board sent letters on (in a few cases later in 2005) to responsible parties, providing specific instructions and a deadline for submission of the application package by May 31, 2006.

Senate Bill 512 (Chapter 854, Statues of 2004) amended the marine managed areas portion of the Public Resources Code (PRC), effective January 1, 2005, to clarify (in PRC section 36700 (f)) that ASBS are a subset of State Water Quality Protection Areas (SWQPAs) and require **special protection** as determined by the State Water Board pursuant to the COP. Section 36710(f) of the PRC was also amended to require that in SWQPAs waste discharges shall be prohibited **or limited by the imposition of special conditions** in accordance with the California Water Code and implementing regulations, including, but not limited to, the COP. In other words, the absolute discharge prohibition in the COP stands, unless of course an exception is granted. The COP, Section III.1.1, allows the State Water Board to grant exceptions to this prohibition, provided that the exception "will not compromise protection of ocean waters for beneficial uses, and, [t]he public interest will be served." Prior to granting an exception, the State Water Board must hold a public hearing, and there must be compliance with the California Environmental Quality Act (CEQA). The U.S. EPA must also concur.

The following is an initial staff proposal for the "Special Protections" to generally address storm water and nonpoint source discharges into ASBS statewide, which would be considered for adoption by the Board under the exception provisions of the California Ocean Plan. The proposed special conditions in these Special Protections would limit waste discharges to protect beneficial uses, including marine aquatic life and the maintenance of natural water quality within ASBS.

This first draft largely modeled after State Water Board Resolutions 2004-0052 and 2006-0013, individual exceptions/Special Protections for the Scripps Institution of Oceanography and Wrigley Marine Science Center discharges, respectively. It is also based on staff's review of the information available prior to May 31, 2006, and considering the public comments received at the January 13, August 31, and October 24, 2006 stakeholder workshops. Information received on or before May 31, 2006 (deadline for pre-Exception Process Application Package submittals), and public comments at the stakeholder meetings (being planned for the summer of 2006), may result in additional modifications to this draft.

# Special Protections - Areas of Special Biological Significance Storm water and Nonpoint Source Discharges

# GENERAL

The purpose of these Special Protections is to define the conditions that limit storm water and nonpoint source waste discharges to Areas of Special Biological Significance (ASBS). The intent is to ensure that such discharges will be controlled both to protect beneficial uses within ASBS and to protect and maintain the natural hydrological cycle and coastal ecology (.e.g., the flow of clean precipitation runoff into the ocean, by preserving coastal slope stability, and by avoiding landslides and anthropogenic erosion).

The conditions in these Special Protections limit storm water and nonpoint source waste discharges and include three basic requirements. These are:

- 1. Cessation of non-storm water runoff
- 2. Maintenance of natural water quality within ASBS, including during precipitation events, by limiting wastes in storm water runoff and other activities that would otherwise cause a degradation of water quality.
- 3. Monitoring water quality and marine aquatic life in ASBS to ensure the protection of beneficial uses over time.

These conditions are designed to address waste discharges in a practical framework, concentrating on controls for higher threat discharges, such as those from urban, suburban, transportation, agricultural, and industrial land uses, and commercial activities within ASBS (e.g., piers, launch ramps, mooring fields, and associated vessel support activities).

Discharges into ASBS are authorized only under the following special terms and conditions:

## **APPLICABILITY**

These special protections for beneficial uses apply to the following waste discharges into an ASBS:

- 1. Permitted storm water discharges, and
- 2. Nonpoint source discharges, including discharges resulting from habitat modification.

Any person<sup>\*</sup> discharging waste into an ASBS, who submitted a complete application, including representative monitoring data, on or before May 31, 2006 is covered. The State Water Board, Division of Water Quality, may approve other persons discharging waste into an ASBS for coverage, if they submit a complete application that includes a justification for not submitting a timely application.

It is not the intent of these Special Protections to restrict flows from naturally occurring streams that drain into ASBS. The return of clean fresh water into the ocean via naturally occurring streams is an essential component of coastal ecology that must be maintained.

Upstream discharges to streams tributary to ASBS are not subject to these Special Protections but are instead regulated by Regional Water Boards under the Basin Plan or other applicable statewide water quality control plans. The Regional Water Boards must regulate these upstream discharges to ensure that downstream water quality standards are met. Downstream water quality standards include the Ocean Plan prohibition on wastes being discharged to ASBS. Upstream discharges must be controlled to maintain natural water quality conditions in the ASBS.

## **ENFORCEMENT**

The Regional Water Boards should issue appropriate enforcement orders to implement the Ocean Plan prohibition against waste discharges to an ASBS for those storm water and nonpoint source waste discharges into an ASBS that are not covered by these Special Protections.

## NPDES PERMITTED STORM WATER POINT SOURCES

Existing storm water discharges are allowed to discharge to an ASBS, if:

- 1. Such discharges are authorized by an NPDES storm water permit issued by the State Water Board or Regional Water Board, and;
- 2. If those existing storm water discharges are also in compliance with the conditions in these Special Protections.

Discharges are allowable only if they: (1) are essential for flood control or slope stability, including roof, landscape, road, and parking lot drainage; (2) occur only during wet weather; (3) are composed of natural precipitation runoff; and (4) are designed to prevent soil erosion. Discharges "composed of natural precipitation runoff" are discharges that do not cause a statistically significant increase (in pollutant concentrations in the receiving water adjacent to the storm water runoff as compared to the reference stream. Such discharges must not cause or contribute to a violation of the

<sup>&</sup>quot;Person" is defined in Water Code section 13050(c) to include any city, county, district, the state, and the United States, to the extent authorized by federal law.

Water Quality Objectives in Chapter II of the California Ocean Plan, and must not alter natural water quality in an ASBS

Only existing storm water outfalls are allowed. Any proposed or new storm water runoff must be routed to existing storm water discharge outfalls and must not result in any new contribution of waste to an ASBS. "Existing storm water outfalls" are those that were constructed prior to January 1, 2005. "New contribution of waste" is defined as any addition of waste beyond what would have occurred as of January 1, 2005.

### NON-STORM WATER POINT SOURCES

Other point source discharges of waste to an ASBS, except permitted storm water point sources, are prohibited, unless covered under Special Protections approved in an individual exception to the Ocean Plan. A "point source" is any discernable, confined and discrete conveyance, including, but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, or concentrated animal feeding operation, from which pollutants are or may be discharged. This term does not include agricultural storm water discharges and return flows from irrigated agriculture.

### NONPOINT SOURCES

"Nonpoint source waste discharges" are any sources of pollutants that are not point sources. The term includes, but is not limited to, storm water discharges not subject to regulation under an NPDES permit, and other land runoff, drainage, or seepage. "Existing nonpoint source waste discharges" are discharges that were ongoing as of (one day before the effective date of this resolution). "New nonpoint source discharges " are defined as discharges that commenced on or after the effective date of this resolution.

Existing nonpoint source waste discharges, including storm water discharges not subject to regulation under an NPDES permit, are allowed to drain into an ASBS, if:

- 1. The discharges are authorized under waste discharge requirements, or a conditional waiver of waste discharge requirements, issued by the State Water Board or a Regional Water Board, and
- 2. The discharges are also in compliance with the conditions in these Special Protections.

Only existing nonpoint source waste discharges are allowed, subject to the conditions in these Special Protections. Any new nonpoint source pollutant discharge is prohibited.

Allowable nonpoint source waste discharges into or adjacent to ASBS under this resolution must :

- 1. Be essential for flood control or slope stability, such as roof, landscape, road and parking lot drainage;
- 2. Occur only during wet weather;
- 3. Be composed of natural precipitation runoff; and

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4. Be designed in such a way so as to prevent soil erosion.

Such discharges must not cause or contribute to a violation of the water quality objectives in Chapter II of the California Ocean Plan, and must not alter natural water quality in an ASBS.

### NON-STORM WATER RUNOFF

"Discharges of non-storm water runoff" means any discharge of wastewater to an ASBS that is not composed of storm water. Discharges of non-storm water runoff to an ASBS are prohibited except:

- 1. Discharges associated with emergency fire fighting operations,
- 2. Foundation and footing drains,
- 3. Water from crawl space or basement pumps, or
- 4. Hillside dewatering

These allowable discharges must: (1) be essential for emergency response purposes, structural stability or slope stability, (2) not cause or contribute to a violation of the water quality objectives in Chapter II of the California Ocean Plan, and (3) not alter natural water quality in an ASBS.

## DISCHARGES VIA SEEPS OR SPRINGS THAT DISCHARGE INTO AN ASBS

Discharges of wastes from irrigation activities, on-site sewage or gray water disposal systems, or other anthropogenic activities to an ASBS through seeps or springs are prohibited. These discharges must be eliminated within five years of the effective date of these Special Protections.

## ASBS NATURAL WATER QUALITY

The discharges authorized under these Special Protections must comply with all other applicable provisions, including water quality standards, of the California Ocean Plan. Compliance with these provisions will be determined in the ASBS receiving water. Natural water quality conditions in the receiving water, seaward of the surf zone, must not be altered as a result of the discharge. The surf zone is defined as the area between the breaking waves and the shoreline at any one time. Natural water quality will be defined, based on a review of the monitoring data, by Regional Water Board staff in consultation with the Division of Water Quality of the State Water Board. For constituents other than indicator bacteria, natural water quality will be determined using the approved reference monitoring station. For indicator bacteria, the Ocean Plan bacteria objectives will be used.

## MONITORING

Monitoring must include the following components, at a minimum. (Site locations and adjustments to the monitoring program must be authorized by the State and Regional Water Boards):

1. All monitoring must be comparable<sup>\*</sup> with the Water Boards' Surface Water Ambient Monitoring Program (SWAMP).

2. For municipal/industrial storm water outfalls that, as of May 31, 2006, were 0.5 meter or greater in diameter/width (including multiple outfall pipes in combination having a width of 0.5 meter or greater), runoff flows for each storm event (that results in measurable runoff) must be measured or calculated, using a method acceptable to the Regional Water Board, and must be reported quarterly to the Regional Water Board.

3. Representative visual observations for trash must be performed along the coast of the ASBS.

4.a. A quantitative survey of benthic marine life must be performed near the discharge and at a reference site. The survey must be performed at least once every permit cycle (or five year period for non-NPDES permitted discharges).

4.b. A bioaccumulation study using mussels (*Mytilus californianus*) and/or sand crabs (*Emerita analoga* or *Blepharipoda occidentalis*) must be conducted to determine the concentrations of metals and synthetic organic pollutants within immediate proximity to representative discharge sites and at reference stations located a reasonable distance from discharges. The study must be performed at least once every permit cycle (or five year period for non-NPDES permitted discharges). Based on the initial results the study design may be adjusted, including changes to specified test organisms, for subsequent test periods.

5.a. Samples must be collected from reference streams (at a minimum, one stream per Region) located within a watershed with minimal anthropogenic impacts. Samples collected from the reference streams will represent natural background for runoff. These reference streams must be sampled during wet weather (storm events), for three storms per year (using flow weighted sampling), in at least two out of every five year permit cycle. Samples at the reference stream may be collected immediately following a storm event, but in no case more than 24 hours after, if sampling conditions are unsafe during the storm. All of these samples must be analyzed for all Ocean Plan Table A constituents, Table B constituents for marine aquatic life, DDT, PCBs, PAHs, OP pesticides, pyrethroids, dissolved oxygen, salinity, temperature, and Ocean Plan indicator bacteria.

5.b. Reference samples must be collected in the ocean at an established monitoring station near the mouth of a reference stream described in 5.b. (at a minimum, one site per Region), located a reasonable distance from the discharge. Samples collected at the reference monitoring station will represent natural water quality for all Ocean Plan

<sup>&</sup>lt;sup>\*</sup> must meet or exceed SWAMP QAMP Measurement Quality Objectives and the data is formatted to match the database requirements of the SWAMP Information Management System

constituents except indicator bacteria. These reference stations must be sampled during wet weather (storm events), for three storms per year, in at least two out of every five year permit cycle. Samples at the reference station may be collected immediately following a storm event, but in no case more than 24 hours after, if sampling conditions are unsafe during the storm. All of these samples must be analyzed for all Table A constituents, Table B constituents for marine aquatic life, PAHs, OP pesticides, pyrethroids, dissolved oxygen, salinity, temperature, and Ocean Plan indicator bacteria.

5.c. The subtidal sediment (sand or finer, if present), at or near the mouths of the reference streams described in 5 a and 5 b above, must be sampled and analyzed for Ocean Plan Table B constituents for marine aquatic life, DDT, PCBs, PAHs, pyrethroids, and OP pesticides. For sediment toxicity testing, only an acute toxicity test using the amphipod *Eohaustorius estuarius* must be performed. This sampling must occur at least three times during a permit (five year) period.

6.a. Storm water runoff effluent must be sampled at all outfalls equal to or greater than 0.5 meter in diameter or width, and analyzed for all Table A constituents and Ocean Plan indicator bacteria. This must occur once annually, during wet weather (storm events).

6.b. In addition to 6.a., during wet weather (storm events), samples of storm water runoff effluent must be analyzed for Ocean Plan Table B acute toxicity. This must occur once annually for a minimum of one out of every five outfalls, equal to or greater than 0.5 meter in diameter/width. This sampling may be performed on a rotating basis to insure that each representative outfall is measured once per five-year period.

6.c. In addition to 6.a. and 6.b., for representative agricultural runoff, representative industrial storm water outfalls, and for all municipal storm water outfalls equal to or greater than one meter in diameter or width, samples must be further analyzed <u>at least</u> <u>once annually</u> during wet weather (storm events) Table B constituents for marine aquatic life, PAHs, pyrethroids, and OP pesticides.

6.d. For a responsible party with more than ten outfalls in an ASBS, the single largest outfall equal to or greater than one meter in diameter or width (at a minimum, one in each Region), samples must be analyzed three times annually (using flow weighted composites) during wet weather (storm events) All of these samples must be analyzed for all Ocean Plan Table A constituents, Table B constituents for marine aquatic life, DDT, PCBs, PAHs, OP pesticides, pyrethroids, dissolved oxygen, salinity, temperature, and Ocean Plan indicator bacteria.

6.e. Three times annually, during wet weather (storm events), the receiving water adjacent to the outfalls described in 6.d., at least one per discharger and at a minimum, one in each Region, must be sampled and analyzed for Ocean Plan Table A constituents, Table B constituents for marine aquatic life, PAHs, OP pesticides, pyrethroids, dissolved oxygen, salinity, temperature, and Ocean Plan indicator bacteria.

The sample location for the receiving water will be immediately seaward of the surf zone adjacent to the discharge. Storm water effluent runoff and receiving water must be sampled at approximately the same time (same storm).

6.f. The subtidal sediment (sand or finer, if present) near the outfalls described in 6.d. must be sampled and analyzed for Ocean Plan Table B constituents for marine aquatic life, DDT, PCBs, PAHs, pyrethroids, and OP pesticides. For sediment toxicity testing, only an acute toxicity test using the amphipod *Eohaustorius estuarius* must be performed. This sampling must occur at least three times during a permit (five year) period.

7. Runoff and receiving water samples must be collected, if possible, during a storm event that is greater than 0.1 inch and at least 72 hours from the previously measurable storm event . Regional Boards may opt to choose a 2 year / 6 hour storm event relevant to the individual region. Where feasible, the variance in the duration of the event and the total rainfall of the event should not exceed 50 percent from the average or median rainfall event in that area. Alternatively, storm water samples must be collected during the first hour of discharge from the first storm event of the wet season, and for 5(a), 5(b), 6(d), and 6(e) above at least two other storm events in the wet season.

8.a. In mooring fields with more than ten moorings, Ocean Plan indicator bacteria, grease and oil, Methylene Blue Active Substances (MBAS), and ammonia nitrogen must be tested monthly: i) during\_high-use weekends by recreational boaters (e.g. Independence Day, Memorial Day and Labor Day weekends), or ii) if occupancy is not significantly different on weekends, then when occupancy of vessels is greater that 50% of the mooring field capacity during the month.

8.b. Also, the subtidal sediment within mooring fields described above in 8.a. must be sampled and analyzed for Ocean Plan Table B constituents for marine aquatic life, PAHs and tributyltin. For sediment toxicity testing, only an acute toxicity test using the amphipod *Eohaustorius estuarius* must be performed. This sampling must occur at least three times during a five-year period.

9. All constituents must be analyzed to the lowest minimum detection limits comparable to the Ocean Plan water quality objectives. Metals for all samples must be analyzed by the approved analytical method with the lowest minimum detection limits (currently Inductively Coupled Plasma/Mass Spectrometry) described in the Ocean Plan.

10. The above-listed monitoring requirements are minimum requirements. Regional Water Boards may also require additional monitoring. If after a minimum of one year of sampling there the list of constituents may be adjusted if there is good cause to do so.

11. The dischargers may be allowed to meet the above requirements in total or in part, by opting to participate in regional integrated monitoring programs. This regional

approach must still characterize the discharge or loading of pollutants to the ASBS, and should include components of flow, sediment, benthic marine aquatic life, bioaccumulation, toxicity and trash. The design of the ASBS stratum of a regional integrated monitoring program may deviate from the otherwise prescribed monitoring approach (in these Special Protections) if approved by the Division of Water Quality of the State Water Board and the Regional Water Boards.

12. If funded from permit fees through the Water Boards' Surface Water Ambient Monitoring Program (SWAMP), certain aspects of the above minimum requirements may be met through a Statewide ASBS monitoring program.

13. Discharger self monitoring – safety concerns: Sample locations and sampling periods must be determined considering safety issues. Sampling may be postponed upon notification to the Regional Water Board if hazardous conditions prevail.

## TIME SCHEDULE ORDER

Storm water effluent runoff must be controlled to protect natural water quality in the ASBS receiving water, and to be comparable to background levels, as determined in each Region by comparison to reference streams. In no event shall natural water quality in the ASBS receiving water, during storm events, exceed the instantaneous maximum for Table B constituents. In no event, during the dry season, shall water quality in the ASBS exceed the six month median for Table B constituents, as a result of the discharges subject to these Special Protections.

These requirements shall be met in accordance with the following schedule:

- 1. Within two years of the effective date of these Special Protections, all nonauthorized non-storm runoff must be eliminated.
- 2. Starting after one year of the effective date of these Special Protections, storm runoff waste discharges having concentrations of measured constituents in excess of Table B, and in excess of the applicable reference stream, must be controlled to achieve a 25% reduction in concentration each subsequent year, with a goal of achieving natural background levels (as measured at reference streams) within five years of the effective date of these Special Protections.

The means of achieving these reductions will be described in Storm Water Management Plans and Storm Water Pollution Prevention Plans.

## STORM WATER MANAGEMENT PLANS (SWMP) AND STORM WATER POLLUTION PREVENTION PLANS (SWPPP)

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The discharger must specifically address the prohibition of non-storm water runoff and the reduction of pollutants in storm water discharges draining to the Area of Special Biological Significance (ASBS) in a SWMP or a SWPPP as appropriate to permit type. The discharger is required to submit its final SWMP or SWPPP to the Regional Water Board. The Regional Water Board will require these special conditions to be included and addressed in the SWMP/SWPPP.

The SWMP/ SWPPP must include a map of surface drainage of storm water runoff, showing areas of sheet runoff, and any structural Best Management Practices (BMPs) employed. The map must also show the storm water conveyances in relation to other features such as service areas, sewage conveyances and treatment facilities, and waste and hazardous materials storage areas. The SWMP/ SWPPP must also include a procedure for updating the map and plan when other changes are made to the storm water conveyance facilities.

The SWMP/ SWPPP must describe the measures by which non-storm water discharges (e.g., dry weather flows) will be or have been eliminated, how these measures will be maintained over time, and how these measures are monitored and documented.

For MS4s, the SWMP must address minimum inspection frequencies:

- 1. The minimum inspection frequencies for construction sites will be weekly during rainy season.
- 2. The minimum inspection frequencies for industrial facilities will be monthly per rainy season, and
- 3. The minimum inspection frequencies for commercial (e.g. restaurants) will be twice per rainy season.
- 4. Storm drains equal to or greater than 0.5 meter in diameter/width must be inspected at least twice annually during the rainy season and maintained to remove trash and other anthropogenic debris.

The SWMP/ SWPPP must also address storm water discharges (wet weather flows), and how pollutants have been and will be reduced in storm water runoff into the ASBS through the implementation of BMPs. The SWMP/ SWPPP must describe the BMPs currently employed and BMPs planned (including those for construction activities), and an implementation schedule. The BMPs and implementation schedule must be designed to ensure natural water quality conditions in the receiving water due to either a reduction in flows from impervious surfaces or reduction in pollutants, or some combination thereof. The implementation schedule must be developed to ensure that the BMPs are implemented within one year of the approval date of the SWMP/ SWPPP by the Regional Water Board.

**Small storm water discharges from individual properties:** The MS4 SWMP must describe how the permittee will work with individual property owners, with direct storm water discharges to the ASBS, to prevent pollution.

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If the results of receiving water monitoring indicate that the storm runoff is causing or contributing to an alteration of natural water quality in the ASBS, as measured at the reference monitoring station, the discharger is required to submit a report to the Regional Water Board within 30 days of receiving the results. Those constituents in storm runoff that alter natural water quality or receiving water objectives must be identified in that report. The report must describe BMPs that are currently being implemented, BMPs that are planned for in the SWMP/ SWPPP, and additional BMPs that may be added to the SWMP/ SWPPP. The report shall include a new or modified implementation schedule. The Regional Water Board may require modifications to the report. Within 30 days following approval of the report by the Regional Water Board, the discharger must revise its SWMP/ SWPPP to incorporate any new or modified BMPs that have been and will be implemented, the implementation schedule, and any additional monitoring required. As long as the discharger has complied with the procedures described above and is implementing the revised SWMP/ SWPPP, then the discharger does not have to repeat the same procedure for continuing or recurring exceedances of the same constituent.

## WATERFRONT AND MARINE OPERATIONS NONPOINT SOURCE MANAGEMENT PLAN

For discharges related to waterfront and marine operations and where otherwise applicable, the discharger must prepare a waterfront and marine operations non-point source management plan containing appropriate management practices to address non-point source pollutant discharges. Appropriate management practices need to achieve the goals of the Management Measures described in the State's Non-point Source Program Implementation Plan for marinas and recreational boating, as applicable.

The required Plan must also address protection of beneficial uses and natural water quality from waste discharges associated with the operation and maintenance of vessels and moorings. There shall be no discharge of chlorine, soaps, petroleum, other chemical contaminants or human sewage associated with launch ramps, boat cleaning stations, or mooring fields. Anthropogenic accumulations of discarded fouling organisms or fish offal must be prevented. Habitat modification as a result of operation of the mooring fields must be avoided.

The Regional Water Board, in consultation with the State Water Board's Division of Water Quality, will review the plan. The Regional Water Board shall appropriately regulate non-point source discharges in accordance with the State Water Board's Policy for Implementation and Enforcement of the Non-point Source Pollution Control Program. The plan must be implemented within six months of its approval.

The discharger will notify the Regional Water Board within 180 days prior to any construction activity that could result in any discharge or habitat modification in the ASBS. Furthermore, the discharger must receive approval and appropriate terms and conditions from the Regional Water Board prior to performing any significant

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modification, re-building, or renovation of any water front facilities, including but not limited to piers, docks, moorings, and breakwaters, according to the requirements of Section III.E.2 of the Ocean Plan.