California Stormwater Quality Association
Dedicated to the Advancement of Stormwater Quality Management, Science and Regulation

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State Water Resources Control Board
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Subject: Comment Letter – California Ocean Plan

On behalf of the California Stormwater Quality Association (CASQA)[1], I am writing to offer comments regarding potential revisions to the California Ocean Plan during this triennial review cycle. These comments address the two categories listed in the public notice:

- Proposed amendments currently being considered by Board staff; and
- Other issues that should be addressed in future amendments

Many of the dischargers affected by the Ocean Plan's ASBS provisions are members of CASQA and CASQA hopes that this Triennial Review becomes an opportunity to finally address key concerns that have been raised repeatedly by CASQA since 2005. CASQA's primary concern is that most stormwater discharges to ASBS cannot be terminated without extraordinary measures, such as capturing and diverting all runoff – sometimes for many miles - around the ASBS. Facilities for pumping and piping and new outfalls will require substantial public expenditures and likely property condemnation that would render discharge termination infeasible. Environmental impacts of construction in the coastal zone and the permitting of new discharge outfalls for the diverted flows will also present significant hurdles. Although discharge termination is clearly infeasible, it is the ultimate outcome of the ASBS discharge prohibition. This situation must be recognized and addressed in any review of the Ocean Plan.

Comment 1 **– The Ocean Plan needs to address the infeasible prohibition on discharges to ASBS**

CASQA's longstanding key issue of concern is Chapter III.E.1. of the California Ocean Plan, which states:

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

CASQA has previously commented (See letter of September 1, 2006, - herein incorporated by reference) that the SWRCB can consider alternate permissible means of protecting ASBS against

[1] CASQA is comprised of stormwater quality management organizations and individuals, including cities, counties, special districts, industries, and consulting firms throughout California. Our membership provides stormwater quality management services to more than 22 million people in California. CASQA was originally formed in 1989 as the Stormwater Quality Task Force to recommend approaches for stormwater quality management to the California State Water Resources Control Board.

undesirable alterations in natural water quality; either a prohibition on waste discharges OR regulation by special conditions.

We believe the Ocean Plan should be modified to allow the continuation of existing stormwater discharges to ASBS. In many and probably most cases, urban stormwater discharges into ASBS predate the designation of the ASBS. At the time of ASBS designation, storm water runoff was considered a non-point discharge and not subject to Clean Water Act (CWA) permitting provisions. Earlier versions of the Ocean Plans required urban runoff treatment "to the extent practicable" with a high priority placed on discharges to ASBS, but no prohibition.[2] However, court decisions have clarified that storm water runoff is generally considered to be a point source and thus subject to the permitting requirements of the CWA. Although the clear wording of the Ocean Plan now specifies that stormwater discharges are prohibited, the documentation for the amendments implementing these prohibitions does not indicate consideration by the Water Board of either the costs or environmental consequences of this prohibition.[3]

As we noted above, terminating the discharges is infeasible. An alternative compliance approach identified by the Water Boards is to capture and provide treatment to the stormwater to maintain "natural water quality conditions." The State Water Board convened a committee to define "natural water quality." The Natural Water Quality Committee (NWQC) issued a draft report[4] that includes a definition stating, in part:

> Natural ocean water quality: That water quality…which is without apparent human influence, *i.e.*, an absence of significant amounts of:
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> a) man-made constituents (*e.g.*, DDT),
> b) other chemical (*e.g.*, trace metals), physical (temperature/thermal pollution, sediment burial) and biological (*e.g.*, bacteria) constituents at concentrations that have been elevated due to man's activities above those resulting from the naturally occurring processes that affect the area in question, and…

We believe the standard established by this definition is not attainable without advanced treatment, including technologies not previously applied to stormwater (e.g., thermal adjustment, removal of dissolved substances). Even capturing all runoff to ASBS and removing only particulates and bacteria to natural levels would present an insurmountable barrier to most municipalities. Stormwater runoff inevitably alters receiving water characteristics and Ocean

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[2] In 1974, the State Board in its Draft Final FED noted: "c) Discharge of waste from nonpoint sources, including but not limited to storm water runoff, silt and urban runoff, will be controlled to the extent practicable. In control programs for waste from nonpoint sources, Regional Boards will give high priority to areas tributary to ASBS."

[3] The State Water Board did not consider effects on stormwater dischargers, possibly because the intent was to control thermal dischargers (new power plants were an issue at the time). The State Water Resources Control Board's Resolution No. 74-28 states: "6. The list of Areas of Special Biological Significance will be used to identify for planning purposes, those areas where the regional water quality control boards will prohibit waste discharges **from all sources controlled within the authority of the Temperature Control Plan**, recognizing that the Ocean Plan is not applicable to vessel wastes, the control of dredging, or the disposal of dredging spoil. [*emphasis added*] In July 1976 ASBS report posted here.

[4] The draft *Summation of Findings, Natural Water Quality Committee 2006-2009* is here.

Plan should recognize this reality. The Special Conditions allowed by the legislation would mean that this highly restrictive definition would not be needed.

As an alternative to the current prohibition, we propose that the Ocean Plan require dischargers to work toward the goal that *any detectable human influence on the water quality must not hinder the ability of marine life to respond to natural cycles and processes* (this criterion is also discussed in the NWQC report). Consequently, we propose that the Ocean Plan be amended to explicitly allow the discharge of stormwater to ASBS and to establish attainable criteria for these discharges. This amendment should be a top priority in order to resolve the current regulatory uncertainty facing hundreds of stormwater discharges to ASBS. The adoption of a straightforward approach to permitting ASBS discharges would also help resolve the current near deadlock in drafting the Special Protections and issuing these permits.[5]

As we have noted in previous comments, we also propose implementation of "early action" best management practices (BMPs) while ASBS are characterized to determine if stormwater discharges are causing identifiable adverse effects. Corrective measures and additional BMPs should be directed in a prioritized manner toward ASBS and discharges where adverse effects are occurring.

A practical but protective ASBS regulatory approach is the highest triennial review priority for CASQA.

Proposed amendments currently being considered by Board staff

The following comment pertains to one of the amendments currently being drafted by Board staff that is likely to significantly impact stormwater dischargers.

***Comment 2* – Efficient and reasonable monitoring requirements for stormwater**

State Water Board staff is currently developing proposed amendments, including model ocean discharge monitoring guidance.[6] The proposed guidance states that monitoring "should be question driven rather than just gathering data." The guidance establishes a model framework that includes the monitoring requirements for stormwater for:

- Indicator bacteria
- Chemical constituents
- Sediment monitoring
- Aquatic life toxicity
- Benthic community health [*apparently not applicable to stormwater*]
- Bioaccumulation
- Water column characteristics

(*See Attachment A for details regarding each of these monitoring categories as they pertain to stormwater.*)

[5] The initial working draft of the *Special Protections* was completed in June 2006, posted here.

[6] Preliminary Draft *Appendix III Proposed Standard Monitoring Procedures*, posted here. The requirements for stormwater are excerpted and included in Attachment B.

We support the development of consistent statewide guidance for monitoring; however, we are very concerned that the proposed program would greatly increase costs and is not within the financial capability of most MS4s. The monitoring effort appears primarily oriented toward large POTW discharges.[7] If implemented as currently described in the preliminary draft, the program will require a very substantial increase in monitoring effort by MS4s. The additional costs for on-call mobilization, sampling, analysis, and reporting are beyond the capabilities of most urban stormwater programs, which are currently operating in an increasingly stressed economic environment.

Other issues that should be addressed in future amendments

Comment 3 **- Compliance schedules**

The "non-substantive" changes to the Ocean Plan in 2009 changed the requirements for compliance schedules in ways that may be substantive and should be addressed during the triennial review. The changes related to compliance schedules are the following:

> F. Revision of Waste* Discharge Requirements
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> ~~1. The Regional Board 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~~.
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> ....
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> G. Compliance Schedules in National Pollutant Discharge Elimination System (NPDES) Permits
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> 1. Compliance schedules in NPDES permits are authorized in accordance with the provisions of the State Water Board's Policy for Compliance Schedules in [NPDES] Permits (2008).

Thus, the original wording that allowed establishment of a non-enforcement compliance schedule has been replaced with a reference to the *Policy for Compliance Schedules,* which constrains the use of compliance schedules, does not apply to stormwater since it only applies to discharges subject to CWA section 301(b)(1)(C), and may adversely impact permits including those for discharges to ASBS. Compliance schedules for stormwater discharges to ASBS would consequently not be allowed. From the new Policy:

> 11. This Policy does not specifically authorize compliance schedules for prohibitions. The State Water Board finds that it is unnecessary to authorize compliance schedules for prohibitions because the Water Boards are authorized to adopt prohibitions that are not effective immediately, but rather at a specified future date.

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7 The general approach is apparently based on Schiff, et al. 2002. *Model Monitoring Program for Large Ocean Discharges in Southern California.* SCCWRP. Posted here.

In addition, the definitions for "*New, revised, or newly interpreted water quality objective or criterion in a water quality standard*" and for "*Newly interpreted water quality objective or criterion in a water quality standard*" do not appear to support compliance schedules for ASBS discharges.

The Ocean Plan has included the ASBS discharge prohibition for stormwater since 1987; however, the Board did not recognize or apply the prohibition until 2001 in a water quality order aimed at Caltrans' stormwater discharges. Even now, the Board is still developing regulatory approaches for addressing the ASBS prohibition as related to stormwater and all potential dischargers are in legal limbo in the meantime, subject to fines of up to $37,500 per day, pending adoption of exceptions to the prohibition. The necessary controls may be costly and also complex from an implementation standpoint (e.g., construction of major facilities in the coastal zone, which creates significant technical and regulatory obstacles). Non-enforcement compliance schedules will be necessary, but have apparently been precluded by the State Board's "non-substantive" 2009 amendments. The Ocean Plan should reverse its earlier decision and explicitly allow compliance schedules for stormwater, which is now precluded from using them.

Comment 4 **– Source Control: Involvement by the Water Boards**

CASQA believes the Ocean Plan should identify obligations not only for the regulated community, but also for the Water Boards. Specifically, we request that the Ocean Plan identify opportunities and provide direction for the Boards' participation in source control efforts. Municipalities cannot effectively control many of the constituents of concern in stormwater runoff. Municipalities, for example, cannot ban lead tire weights, copper brake linings, or zinc in tires. However, the Boards could address these problem constituents on a statewide basis. Several years ago, for example, copper additions to sewer systems were addressed in the Bay Area because of Board action. We propose that the Ocean Plan include directions to the State and Regional Boards to participate in efforts at statewide source control, such as participation in the Green Chemistry Initiative.

In closing, CASQA appreciates the opportunity to comment on proposed rule-making. We hope that our comments will assist you as during this triennial review. Please contact me at (760) 603-6242 or Geoff Brosseau, our Executive Director at (650) 365-8620 if you have any questions or would like to discuss our comments further.

Sincerely,

Scott Taylor, Chair
California Stormwater Quality Association

cc: Tom Howard, State Water Resources Control Board
Jonathan Bishop, SWRCB
Bruce Fujimoto, SWRCB
CASQA Executive Program Committee
CASQA Board of Directors

Attachment A* – Stormwater requirements in Draft Appendix III – *Proposed Standard Monitoring Procedures

4- INDICATOR BACTERIA

4.2 Storm Water

Primary questions to be addressed:

1. Does the receiving water comply with water quality standards?
2. Is the condition of the receiving water protective of contact recreation and shellfish harvesting beneficial uses?
3. What is the extent and magnitude of current or potential receiving water indicator bacteria problems from storm water runoff?
4. Are the indicator bacteria levels in receiving water getting better or worse?
5. What are the sources of indicator bacteria in runoff?
6. What is the relative runoff contribution to the receiving water indicator bacteria waste load?

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

a. During wet weather with a minimum of three storms per year, and

b. When flowing dry weather, and if located at an AB 411 beach, at least five times per month.

Alternatively, regional monitoring may be performed to assess the status of marine contact recreation water quality. If the permittee participates in a regional monitoring program, core monitoring may be suspended for that period at the discretion of the Regional Water Board.

5- CHEMICAL CONSTITUENTS

5.2 Storm Water

Primary questions addressed:

1. Does the receiving water meet the water quality standards?
2. Are the conditions in receiving water getting better or worse?
3. What is the extent and magnitude of current or potential receiving water problems from storm water runoff?
4. What is the relative runoff contribution to pollutants loading in the receiving water?
5. What are the sources of the runoff problem?

For Phase I and Phase II municipal storm water discharges, core monitoring will be required at a minimum for 10% of all outfalls greater than 36 inches in diameter or width once per year. Monitoring shall be for total suspended solids, oil & grease, total organic carbon, pH, temperature, biochemical oxygen demand, turbidity, Table B metals, PAHs, and pesticides determined by the Regional Boards. Near shore receiving water monitoring shall be conducted at storm drains for Table B metals, PAHs, and pesticides.

For industrial storm water discharges, all outfalls must be monitored during two storm events per year. Effluent monitoring shall be conducted for total suspended solids, oil & grease, total organic carbon, pH, temperature, biochemical oxygen demand, turbidity, and Table B metals and PAHs. Near shore receiving water monitoring shall be conducted at industrial storm drains for oil and grease, Table B metals, and PAHs.

The requirement for receiving water monitoring for Table B metals, PAHs and pesticides may be waived at the discretion of the Regional Board, if the permittee participates in a regional monitoring program.

6 - SEDIMENT MONITORING

All Sources:

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

6.2 Storm Water

For Phase I MS4 permittees, acid volatile sulfides, OP Pesticides, Ocean Plan Table B metals, ammonia N, PAHs, and chlorinated hydrocarbons will be measured in sediments in a regional monitoring program. Sediment sample locations will be determined by the Regional Board.

7- AQUATIC LIFE TOXICITY

7.2 Storm Water

1. Does the runoff meet water quality standards in the receiving water?
2. Does storm water runoff cause or contribute to aquatic toxicity?
3. What is the relative runoff contribution to the receiving water toxicity?
4. What are the causes of the toxicity and the sources of the constituents responsible?
5. Are the conditions in the receiving water getting better or worse?

For Phase I municipal, Phase II municipal, and industrial storm water discharges core toxicity monitoring will be required at a minimum for 10% of all outfalls greater than 36 inches in diameter or width once per year.

Water column monitoring shall be for Table B acute and chronic toxicity. Sediment monitoring for acute sediment toxicity will utilize alternative amphipod species (Eohaustorius estuarius, Leptocheirus plumulosus, Rhepoxynius abronius). If toxicity is consistently observed in the discharge, a toxicity reduction evaluation (TRE) shall be required at the discretion of the Regional Board.

The requirement for core monitoring may be waived at the discretion of the Regional Board, if the permittee participates in a regional monitoring program.

8 - BENTHIC COMMUNITY HEALTH [apparently not applicable to stormwater]

9 - BIOACCUMULATION

9.2 Storm Water

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

2. Does the concentration of pollutants in marine life bioaccumulate to levels that degrade marine communities?

For Phase I Municipal storm water discharges, bioaccumulation monitoring shall be conducted using a mussel watch program, at a minimum, once per permit cycle. Constituents to be monitored must include OP Pesticides, Ocean Plan Table B metals, PAHs, chlorinated hydrocarbons, and pyrethroids. Sand Crabs and/or Solid Phase Microextraction may be added or substituted for mussels at the discretion at the Regional Board.

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

10 - WATER COLUMN CHARACTERISTICS

All Sources:

1. Is natural light significantly reduced at any point outside the initial dilution zone as the result of the discharge of waste?

2. Does the discharge of waste cause a discoloration of the ocean surface?

3. Does the discharge of oxygen demanding waste cause the dissolved oxygen concentration to be depressed at any time more than 10 percent from that which occurs naturally?

4. Does the discharge of waste cause the pH to change at any time more than 0.2 units from that which occurs naturally?

5. Does the discharge of waste cause the salinity to change at any time more than 10 percent from that which occurs naturally?

6. Do nutrients cause objectionable aquatic growth or degrade indigenous biota?

10.2 Storm Water

For representative Phase I Municipal storm water discharges, receiving water turbidity, color, dissolved oxygen, pH, nitrate, phosphate, and ammonia shall be measured in a core monitoring program approved by the Regional Water Board. The Regional Water Board at its discretion may allow this requirement to be satisfied through participation in a regional monitoring program.