



April 18, 2012

Submitted via email: commentletters@waterboards.ca.gov

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814



Subject: Comments on the proposed amendment to the California Ocean Plan regarding designating State Water Quality Protection Areas to protect Marine Protected Areas, and the draft Substitute Environmental Documentation

Dear Ms. Townsend:

The Irvine Company appreciates the opportunity to provide comments on the proposed Ocean Plan Amendments related to the designation of State Water Quality Protection Areas to protect Marine Protected Areas ("MPA amendments"), and the associated Substitute Environmental Documentation (SED).

The Irvine Company agrees with the State Water Resources Control Board (State Board) that California's coastline deserves protection, and we have implemented numerous water quality control measures and diversions in our own efforts to protect our local ocean and coast. However, we have significant concerns about the proposed MPA amendments, which create a new "general protection" category, called "SWQPA-GP," and which would establish a framework for designating waters as SWQPA-GP and for regulating discharges to those waters. We urge the State Board to adopt a true No Action alternative rather than the proposed MPA amendments. As detailed below, we believe that the proposed amendments are over-reaching and lack the clarity that is required of the State's regulations.

1. ***The proposed MPA amendments are over-reaching and overbroad.*** We understand from State Board Resolution Nos. 2010-0057 and 2011-0013 and our discussions with State Board staff that the proposed amendments are intended to provide a level of protection for MPAs that falls between the protections recently adopted for Areas of Special Biological Significance (ASBS) and the level of protection afforded to the ocean in general by the Ocean Plan. However, the

proposed MPA amendments are in many respects far more stringent than the recent protections adopted for ASBS. Two examples of ways in which the proposed MPA amendments are more stringent than the requirements of the exception recently adopted for ASBS are illustrative:

- The proposed MPA amendments would require the monitoring of all discharges into SWQPA-GP areas, regardless of the size of pipe, whereas the ASBS regulations require monitoring of discharges from 18-in or 36-in and larger pipes.
- The proposed MPA amendments provide no exception process, such that the requirements and prohibitions would be applied uniformly and without exception. By contrast, although the Ocean Plan prohibits certain discharges to ASBS areas, the State Board has provided an exception process by which certain discharges could be allowed (with conditions).

As noted in our comments to the State Board's record for the ASBS exceptions (attached for your reference), The Irvine Company believes that the requirements imposed upon discharges to ASBS are too stringent, and that the "natural water quality" requirement as imposed in that regulation is scientifically inappropriate. The proposed MPA amendments would extend the reach of these inappropriate regulations even farther.

While we believe the best course for the State Board to adopt a true No Action alternative, as explained below, we strongly urge the State Board to adopt a general exception similar to the ASBS exception if it moves forward with the proposed MPA amendments.

2. **The proposed MPA amendments lack clarity in terms of the water bodies to which they would be applied.** Our discussions with State Board staff indicate that they believe that the proposed amendments would not place any waters into the "SWQPA-GP" category; rather, the State Board or Regional Boards would place waters into that category using the process outlined in the amendments. However, the language of the proposed amendments is unclear. We request that the State Board clarify in the amendment and in the language of the adopting resolution that no waters will be placed into the SWQPA-GP category as a result of the adoption of these amendments.

It is likewise unclear whether all State Marine Conservation Areas (SMCAs), which are listed in the proposed amendment as a sub-category of MPA, would be eligible for nomination as SWQPA-GP or not. Some SMCAs are properly considered enclosed bays or estuaries (e.g., Upper Newport Bay, Bolsa Bay and Bolsa Chica SMCAs) and may not be regulated by the Ocean Plan or be subject to the proposed MPA amendments. The State Board should clarify in the amendment and the language of the adopting resolution that the SWQPA-GP designation will not be

applied to those portions of SMCAs or other MPAs that are not Ocean Waters, as defined in the Ocean Plan.

3. **The State Board must conduct analyses under Porter-Cologne Sections 13241 and 13242.** Water Code Section 13241 requires assessment of specific factors when adopting water quality objectives, including economic considerations. Section 13242 requires that the program of implementation include a description of the nature of the actions that are necessary to achieve the objectives, time schedules, and required surveillance actions. State Board staff maintain that they are not required to do Section 13241 or 13242 analyses because the proposed MPA amendments would not alter existing water quality objectives or result in new water quality objectives, and because the proposed amendments do not include the designation of any new SWQPAs. The Irvine Company believes that the proposed MPA amendments would adopt new water quality objectives, as follows:
- The proposed MPA amendments would prohibit the discharge of trash, effectively establishing a water quality objective of zero (0) for trash, a requirement not currently included in the State's Ocean Plan.
 - The proposed MPA amendments would establish a number of prohibitions, including prohibitions on dry weather discharge (where diversions are feasible), and prohibitions on new discharges, intakes, and increases in nonpoint or permitted storm drain discharges that are not currently part of the Ocean Plan for non-ASBS Ocean Waters. These prohibitions have the force and function of water quality objectives and thus are effectively water quality objectives.

Under the Porter-Cologne Act, water quality objectives means "the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area." (Water Code § 13050, subd. (h).) The proposed discharge prohibitions set such limits at zero. These limits are new and do not merely implement existing narrative standards in the Ocean Plan. It is well established in such cases that amending water quality control plans to implement new limits requires compliance with Section 13241 and 13243. The record indicated that the State Board has not considered any of the factors identified in 13241, including without limitation, the fiscal and economic costs of programs or alternative conveyance and treatment facilities to ensure compliance with the discharge prohibition, nor has the State Board identified a meaningful implementation program that describes what actions are likely required to comply with the prohibitions. While it would no doubt be possible to provide a more detailed level of analysis at the time an SWQPA-GP is designated, it does not relieve the State Board of its statutory obligation to complete the required analyses at the time the objectives are established.

4. **The State Board must conduct a full and appropriate CEQA analysis prior to adoption.** The SED concludes that in adopting the proposed MPA, it is merely adopting criteria and provisions for designating SWQPA-GPs: “Permittees discharging storm water or waste waters would not be regulated any differently by this action. Because no alteration of the environment would occur either as a direct result or indirectly from this action, the proposed project will not have any significant adverse impacts to the environment.” But CEQA requires the consideration of cumulative impacts such as those that may occur as the result of diversion or treatment facilities to comply with the new discharge prohibitions. The SED contends that such actions and the resulting environmental impacts are speculative and cannot be assessed accurately on a statewide basis, implying that the time to consider such measures would be when SWQPA-GPs are designated. Moreover, the discharge prohibitions themselves could effectively encourage development in coastal areas not designated as SWQPA-GP, which may result in impacts to sensitive upland environments, including endangered species.

The SED’s approach falls short of what CEQA requires for several reasons. A programmatic review of the proposed MPA amendments is the optimal time to assess such cumulative impacts, which are defined as “consisting of an impact which is created as a result of a combination of the project evaluated in the EIR together with other projects causing related impacts.” It is improper to defer such analysis to a later date, particularly given that the timing for designation of SWQPA-GPs will occur in a piece-meal fashion. Additionally, and contrary to the SED’s assertion, such impacts can be meaningfully assessed on a state-wide basis. The range of potential SWQPA-GPs is currently known, and the potential diversion and treatment facilities that may be required can also be readily determined. At a minimum, the SED should address how the discharge prohibitions would be applied in several representative locations to determine what measures will be required for compliance and to assess the effects of those measures. These measures are reasonably foreseeable and not analyzing them does not provide the public with a meaningful review of the environmental effects of the action.

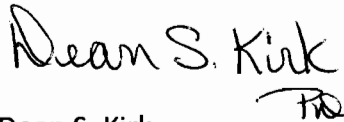
Finally, the CEQA analysis contained in the Staff Report for the proposed MPA amendments is unclear and inadequate. In some locations, as in Section 5.7.1 on page 35, the “No Action” alternative is formally defined such that the Regional Boards would designate MPAs as ASBS (i.e., the Regional Boards would apply what Staff assume would be more restrictive requirements). In other locations, such as in the first full paragraph on p. 36, the State Board appears to indicate that another option would be “continued reliance upon the Ocean Plan water quality objectives and discharge requirements applicable to all ocean water of the State;” we maintain that this definition provides the true “No Action” alternative, and should be used as such for the purposes of the required CEQA evaluation.

5. **Application to stormwater is excessive, and will result in huge costs with little or no environmental benefit.** The SED, in explaining why no peer review was performed, makes the revealing admission that “scientific analysis does not serve as the basis for any portion of these amendments.” There was no analysis of the current water quality in MPAs, much less whether the proposed measures are necessary to achieve the beneficial uses in these areas. Put simply, the amendments were proposed to fill a perceived void in the regulatory regime for Ocean Waters, not to address any specific and actual problem. This is improper.

Before a new requirement may be adopted, work needs to be done to identify water quality problems in MPAs. Once the problem, if any, is identified, a regulatory response can be proposed, if one were needed at all. Instead, the proposed MPA amendment would put in place an extraordinarily stringent regulatory framework that is likely to result in significant costs that are not proportionate to the environmental benefit. The SED rejects the No Action alternative in part because it asserts that without the proposed MPA amendments, the coastal Regional Boards lack the flexibility to tailor water quality protection needed to achieve the goals of establishing MPAs. Yet, the SED does not identify even a single instance where a Regional Board is unable to take needed action to protect water quality under the current framework. What is true is that the proposed MPA amendments would mandate and establish an inflexible program—a program for which there is no evidence that indicates there is any actual need. Until such analysis has been performed, we encourage the State Board to adopt the No Action alternative.

Thank you for the opportunity to provide comments. Please contact me at 949.720.2878 if you have any questions or need further information.

Very truly yours,

Handwritten signature of Dean S. Kirk in black ink. The signature is written in a cursive style and includes a small flourish at the end.

Dean S. Kirk
Senior Director
Environmental Permitting & Compliance

DSK/pd

Attachment



May 19, 2011

State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814

Attention: Jeanine Townsend

**Re: Comment Letter – ASBS Special Protections
FSI 017092.9**

Dear Ms. Townsend,

On behalf of the Irvine Company, Flow Science is pleased to provide comments on the *Draft General Exception to the California Ocean Plan Waste Discharge Prohibition for Selected Discharges into Areas of Special Biological Significance (ASBS), including Special Protections for Beneficial Uses and the Associated Program Environmental Impact Report*. The City of Newport Beach has reviewed this letter and concurs with the information set forth herein. We request that these comments be included in the administrative record for this matter.

These comments focus on available data describing the health of Southern California ASBS, the impact of storm water on ASBS, and the health of the Crystal Cove ASBS in particular where data are sufficient to allow such an assessment to be made. The comments also detail the history of stormwater regulation, both generally and as applicable to ASBS and the Ocean Plan.

Impacts of Storm Water on Southern California ASBS

In the 2010 SCCWRP Annual Report, Schiff et al. reported the results of a study designed to describe the range of natural water quality near southern California reference drainage locations and to assess how water quality near southern California "ASBS discharges" compares with water quality near southern California reference drainage locations.¹ As part of the study, receiving water was sampled at six southern California ASBS reference sites and at 10 southern California ASBS non-reference or discharge sites, for a total of 31 pre-storm and 35 post-storm events. All 16 sites were described as open beaches with breaking waves and storm water flows into the sites, and samples were analyzed for 93 water quality parameters.

¹ Kenneth Schiff, Brenda Luk, Dominic Gregorio, Steve Gruber (2010). "Assessing water quality conditions in southern California's areas of special biological significance," Southern California Coastal Water Research Project 2010 Annual Report, pp. 251-260.

Schiff et al. (2010) compared post-storm concentrations from the reference sites to post-storm concentrations from “ASBS discharge” sites, and results showed no statistically significant difference between these two groups. The reference sites showed larger variability than the discharge sites for most parameters (see **Figure 1**, reproduced from Schiff et al. 2010). Schiff et al. (2010) concluded that “the reference and discharge data were similar in their distribution” (Schiff et al. 2010, at p. 258).

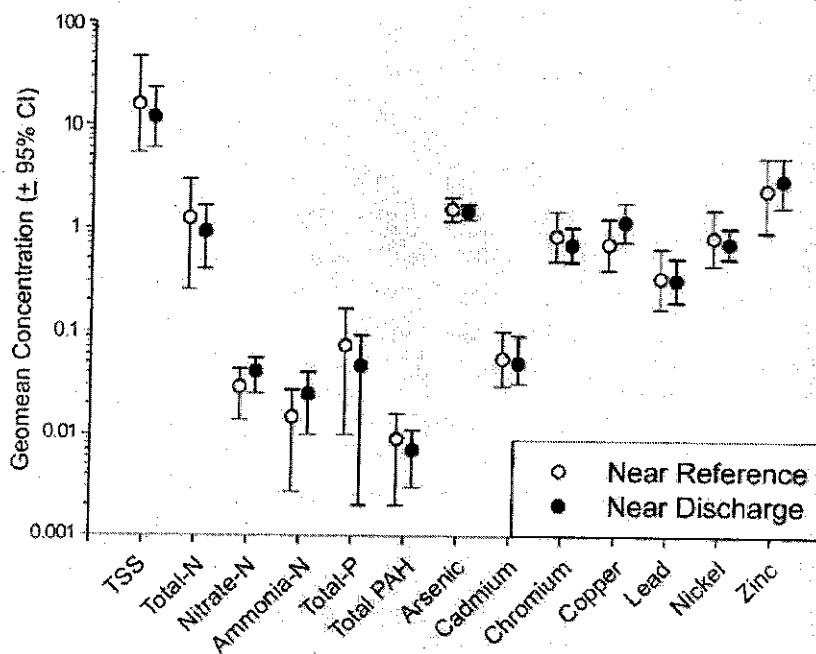


Figure 1. Comparison of geometric mean (+ 95% confidence interval) concentrations in ambient near-shore receiving waters following storm events at reference drainage and ASBS discharge sites. Total suspended solids (TSS) and nutrients in mg/L; Total Polycyclic Aromatic Hydrocarbons (Total PAHs) and total trace metals in $\mu\text{g/L}$. (Reproduced from Figure 2 of Schiff et al. (2010))

Pre-storm and post-storm concentrations were also compared for aggregated data from the 16 sites. This comparison showed no statistically significant difference between pre-storm and post-storm constituent concentrations. Neither sea urchin toxicity nor detectable total DDT/PCB were observed at any of the sites except for the rare occurrence of DDE at a few discharge sites.

Schiff et al. (2010) concluded as follows:

“Based on the data collected during this study, ASBS in southern California are consistently protective of natural water quality following storm events. On average, the range of post-storm pollutant concentrations in receiving waters sampled near ASBS discharge sites were not significantly different from post-storm concentrations at reference drainage sites, which included stormwater inputs free of (or minimally

influenced by) anthropogenic sources. No conservative tracer could be used to track natural constituents such as salinity, TSS, or DOC, in large part because pollutant concentrations were so low. Furthermore, synthetic anthropogenic contaminants such as total DDT or total PCB were not detectable across the wide variety of reference drainage sample locations in ASBS, and were rarely detectable at discharge sites in ASBS. Moreover, no post-storm samples collected near ASBS discharges exhibited toxicity." (Schiff et al. (2010) at p. 256)

Schiff et al. (2010) also presented data showing the frequency of "reference site based thresholds exceedances for all parameters during all storm events," reproduced as Figure 5.8.8 of the Draft PEIR.² This figure appears to indicate that constituent concentrations at ASBS 32 (Crystal Cove ASBS) exceeded reference site-based thresholds approximately 22% of the time. Schiff et al. (2010) defined the "reference site based thresholds" as the 85%-ile concentration based on the reference site dataset – i.e., these thresholds would be exceeded at reference sites 15% of the time. Although we obtained a dataset from the SWRCB (Dominic Gregorio, email communication, April 1, 2011), we have been unable to understand the data contained in this dataset or to reproduce the exceedance rates discussed by Schiff et al. (2010), and to date our queries about the dataset have not been answered.

In any case, it appears that the "exceedance frequency" for ASBS 32 (Crystal Cove) is not appreciably higher than the exceedance frequency in the reference dataset (i.e., approximately 22% v. 15%), confirming that the conclusions made generally (i.e., that storm water does not adversely impact ASBS sites in southern California in general) also hold for the Crystal Cove ASBS. These conclusions are reinforced by the high degree of variability of storm water in general, and the relatively small dataset used to characterize reference and discharge conditions.³

Detailed studies of water quality in ASBS 32 (Crystal Cove ASBS)

In 2004, Dr. Richard Ford (San Diego State University) drafted a report entitled, "Potential Impacts of the Pelican Hill Resort Project on the Marine Environment of the

² Note that this figure was printed incorrectly in the original version of Schiff et al. (2010). Ken Schiff has confirmed that the correct figure can be found as Figure 5.8.8 of the Draft PEIR (Ken Schiff, personal communication, March 7, 2011).

³ It is not clear that the 85%-ile threshold used by Schiff et al. (2010) provides an accurate measure of whether or not water quality at "discharge sites" is significantly different than water quality at reference sites, particularly given the small datasets available for comparison and the variability of constituent concentrations in storm water discharges. A more appropriate measure would be hypothesis testing using statistical tests (e.g., a student's t-test or Wilcoxon rank sum test) to determine if the dataset describing water quality at a discharge site is significantly different from the dataset describing water quality at reference sites.



Newport Coast.”⁴ The purpose of the report was to “provide an evaluation of the potential impacts on the nearshore marine environment that might result from the proposed Pelican Hill Resort Project” (Ford 2004, at p. 1-1), a proposed development near the existing Pelican Hill Golf Course and Crystal Cove Development, which would drain to the Newport Coast ASBS. Specifically, the report focused on the “potential effects of storm runoff and dry weather low flows on the marine environment of the Newport Coast” as a result of the project (Ford 2004, at p. 1-1). The report drew its conclusions based on prior studies of runoff and marine water quality on the Newport Coast between 1993 and 2003.

Dr. Ford concluded that prior storm water and dry weather runoff from the Pelican Hill Golf Course and Crystal Cove Development had “no significant or measurable adverse effects on water quality or marine organisms in the adjacent marine environment of the Newport Coast” (Ford 2004, at p. 6-1). Further, he reported that “the extensive complement of BMPs employed as part of the golf course operations and the Crystal Cove Development have been very effective in preventing such adverse effects by controlling water quality and flows of runoff water before they reach the ocean” (Ford 2004, at p. 6-1). He concluded that the additional BMPs proposed for the Pelican Hill Resort Project, coupled with the powerful natural mixing processes of the nearshore environment of the Newport Coast, indicate “very clearly that storm runoff and nuisance flows from the proposed Pelican Hill Resort Project sites would not change the ocean water quality of the Newport Coast” (Ford 2004, at p. 6-1).

In April 2007, a group of investigators—including Richard Ford and Eric Strecker (Geosyntec Inc.)—issued a report for the Irvine Company titled, “Final Report: Water Quality and Marine Ecological Monitoring Studies for the Crystal Cove Project, 1999-2006.”⁵ This report summarized water quality and marine ecological monitoring data collected in connection with the Crystal Cove Community Development Project, a primarily residential development adjacent to ASBS 32 on the Newport Coast. The project featured a range of cutting-edge water quality protection measures, including structural BMPs and an ongoing pollution prevention program implemented via the Home Owners Association.

The central conclusion of the monitoring report is summarized as follows: “All evidence from six years of the multifaceted monitoring studies discussed above indicates very clearly that storm runoff from Crystal Cove Community Development Project has

⁴ Richard F. Ford (2004). “Potential Impacts of the Pelican Hill Resort Project on the Marine Environment of the Newport Coast,” prepared for The Irvine Company, April 20. This report was previously provided to the SWRCB. We hereby request that this report be included in the administrative record for this matter.

⁵ Richard F. Ford, Barbara B. Hemmingsen, Michael A. Shane, Eric Strecker (2007). “Final Report: Water Quality and Marine Ecological Monitoring Studies for the Crystal Cove Project, 1999-2006,” prepared for The Irvine Community Development Company, April. This report was previously provided to the SWRCB. We hereby request that this report be included in the administrative record for this matter.

not significantly changed the ocean water quality of the Newport Coast or affected marine organisms. Nor have natural water quality conditions in the ASBS been changed or adversely affected, because water quality constituents have remained well within the characteristic ranges for these constituents. This is highly likely the reason that no measurable effects on the marine organisms and habitats of the Irvine Coast Marine Life Refuge Area of Special Biological Significance were observed." (Ford et al. 2007, at pp. 77-78).

The weight of evidence of these studies (i.e., Schiff et al. 2010, Ford 2004, and Ford et al. 2007) indicates that Southern California ASBSs, and the Crystal Cove ASBS in particular, are not adversely affected by stormwater discharges from local drainages.

Historical Regulation of Storm Flows to ASBS

Storm water quality was first discussed explicitly in the State's regulatory documents via the Basin Plans that were developed in each region of the State at the direction of the SWRCB in 1975. The Los Angeles Basin Plan⁶ (1975 Basin Plan) is representative of the approach taken at that time to the regulation of storm flows, both generally and to the ocean and ASBS.

In the section titled "Protection of Areas of Special Biological Significance," the 1975 Basin Plan states that, "Discharge of waste from non-point 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." (1975 Basin Plan at p.I-5-10).

The 1975 Basin Plan also states as follows: "The impact of the adoption of areas of special biological significance on the Basin Plan is that discharges of wastewaters and/or heat must be sufficiently removed spatially from these areas as to assure the maintenance of natural water quality in the areas. Existing wastewater and/or heat discharges which influence the natural water quality in the designated areas must be phased out as promptly as possible" (1975 Basin Plan at p. II-9-16 to 17). This passage indicates that discharges to ASBS from wastewater treatment plants (POTWs) and industrial cooling water systems (i.e., discharges of "heat") are the kinds of discharges to be prohibited and phased out. Importantly, storm water runoff discharges are different and separate from these two categories of discharge, and so were not included among the discharges to ASBS that were prohibited.

The 1975 Basin Plan also noted that few traditional "end-of-pipe" controls existed for storm flows, stating that "there is little, if anything, that can be done to mitigate the

⁶ California Regional Water Quality Control Board, Los Angeles Region (1975). "Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties," March (1975 Basin Plan).

effects of such runoff except for improved air pollution control practices, improved urban housekeeping, and improved environmental levels of performance for automotive equipment" (1975 Basin Plan at p. II-15-94). Although the Basin Plan specified controls for "traditional" point sources, storm water discharges were not covered: "... no practical and economic means has yet been developed for containment and treatment of urban runoff wastes for reduction of pollutants prior to downstream release, nor are standards for such measures presently in existence or contemplated for the foreseeable future, at least on a widespread basis.... There are presently no generally applicable effluent limits nor water pollution control facilities in connection with urban runoff that appear practical or economical. The emphasis for water quality control from this standpoint should be public education, public cooperation in improved (outdoor) housekeeping, and continued search of solutions to the air pollution problems" (1975 Basin Plan at pp. I-5-87 and I-5-88; see also SWRCB Order No. WQ 91-04).

Clearly, the regulatory requirements of 1975 did not include a prohibition or ban on the discharges of stormwater to the ocean, including to ASBS. SWRCB Order No. WQ 91-04 further clarifies this point, stating that "throughout the years many documents have treated storm water discharge as a nonpoint source, even though it is legally a point source. This has led to some confusion in terminology. However, it is often obvious from statements in the document [the Basin Plan] that decision makers have sought to exclude storm water from requirements otherwise applicable to point sources." (SWRCB Order No. WQ 91-04 at footnote 16).

SWRCB Orders No. 91-03 and 91-04 indicate that the Clean Water Act Amendments of 1987 (specifically, subsection 402(p), which established NPDES requirements for municipal and industrial storm water discharges) required controls to "reduce the discharge of pollutants to the maximum extent practicable." (See SWRCB Order No. WQ 91-04 at p. 7).

Orders No. 91-03 and 91-04 clarify the application of the California Ocean Plan to storm water discharges, stating that

"[n]arrative water quality objectives and toxic materials limitations (Table B) do apply to nonpoint sources, but compliance is determined by direct measurement in receiving waters... While on its face, Table B may appear to apply to storm water discharges, it is clear from reading the Functional Equivalent Document, which was adopted by the State Board at the same time as the Ocean Plan, that neither Table A nor Table B are meant to apply to storm water discharges: [citing the March 1990 Ocean Plan FED] 'The attainability analysis did not include stormwater discharges because there are few data available on pollutant concentrations in stormdrains. EPA's proposed regulations for stormwater discharges do not use water quality-based effluent limits for storm drains. Instead, an approach based on Best Management Practices is proposed, following an initial period of

characterization. We do not propose to apply water quality-based effluent limits such as Table B to stormdrains at this time. Technology-based standards will not be based on Table A, but on Best Management Practices...’ Following the above statement, the Functional Equivalent Document states that the Plan explains how to apply Table B objectives to nonpoint sources. From this statement, it is clear that in drafting the Ocean Plan the State Board was viewing storm water discharges as nonpoint sources.” (emphasis in original) (SWRCB Order No. WQ 91-04 at p. 13-14).

From these statements, it is similarly clear that the State Water Board did not intend to prohibit the discharge of storm water to the ocean (including ASBS, which are regulated by the Ocean Plan), but rather to manage storm water through the implementation of Best Management Practices (BMPs).

The statements above clearly imply that practical concerns (e.g., engineering feasibility, cost, etc.) are considerations relevant in determining to what extent storm water runoff to the ocean and to ASBS should be controlled. Thus, if the cost of preventing storm water runoff to the ocean would be extremely high, or if the engineering required to accomplish it would be impractical, it would be appropriate for these considerations to influence decisions about managing storm water runoff to ASBS.

The legislative history of the Ocean Plan also confirms that the SWRCB did not intend to regulate storm flows as point sources, or to prohibit storm flow discharges entirely. The transcript of a 1986 hearing before the California Senate Rules Committee on Ocean Plan legislation suggests that the legislation was primarily concerned with “complex effluent ocean discharges” from major municipal and industrial sources.⁷ In the same document, the fiscal impact of the bill was understood as limited to POTWs that discharge to the ocean, and that the “unknown potential costs” would be “to agencies discharging sewage to the ocean.” Also, there was no reference to storm water in the Legislative Analyst’s report on the relevant bill.⁸ These accounts of the legislative history of the Ocean Plan bill suggest that the bill was primarily aimed at controlling wastewater treatment plant discharge, and did not have storm water in view at all.

Later versions of the Ocean Plan also fail to indicate that storm water discharges would be prohibited. There is no reference to the prohibition of point- or non-point discharges of storm water in the 1997 Ocean Plan.⁹ Consistent with SWRCB Order No.

⁷ Hearing on AB 3500 before the Senate Rules Committee, Third reading, California Legislature 1985-85 Regular Session, August 11, 1986.

⁸ Legislative Analyst, Analysis of AB 3500 as amended, August 17, 1986.

⁹ State Water Resources Control Board, California EPA (1997). “Water Quality Control Plan, Ocean Waters of California: California Ocean Plan” (1997 Ocean Plan).

WQ 91-04, the State Board's 1997 Ocean Plan Functional Equivalent Document (FED) noted that "...it would be premature to amend the Ocean Plan to control storm water discharge while the SWRCB and other agencies are developing policy. Therefore the staff will follow progress of the U.S. EPA and SWRCB storm water management programs, but will defer the issue for future consideration."¹⁰ Thus, a prohibition of storm water was not mentioned in the 1997 Ocean Plan, and in fact that the State Board consciously chose in 1997 not to control storm water discharges via the Ocean Plan (as noted in the FED). The absence of such a prohibition, coupled with SWRCB awareness of the issue, indicates that the SWRCB chose in 1997 not to establish such a prohibition.

In the 2000 Ocean Plan FED, the SWRCB made the following statement:

"The proposed Ocean Plan amendments do not alter the State's existing regulatory framework for controlling storm water and non-point sources of discharge. The U.S. EPA and the State Water Resources Control Board have determined that numeric effluent limits are infeasible for storm water permits. Municipal storm water dischargers are required to reduce discharge of pollutants 'to the maximum extent practicable' utilizing 'best management practices' (BMPs) in lieu of numeric limits. If the implemented BMPs do not result in the attainment of water quality standards, dischargers are required to utilize additional BMPs to achieve the standards."¹¹

Thus, the intent of the SWRCB in updating the Ocean Plan in 2000 continued to be that storm water should be regulated via implementation of BMPs, and not via a prohibition on discharge of storm water to ASBS.

¹⁰ State Water Resources Control Board, California EPA (1997). "Functional Equivalent Document, Amendment of The Water Quality Control Plan for Ocean Waters of California: California Ocean Plan," March, at p. D-17.

¹¹ State Water Resources Control Board, Division of Water Quality (2000). "Functional Equivalent Document, Amendment of The Water Quality Control Plan for Ocean Waters of California: California Ocean Plan," September 1, at pp. 5-6.

Discharge of "Waste" to ASBS

The definition of "waste" given in the Porter-Cologne Act does not explicitly include storm water runoff. The relevant section of the Act states that "'Waste' includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal" (Cal. Water Code § 13050(d)). This definition seems largely focused on sewage and industrial wastes, and does not necessarily include storm water runoff.

In its current form, the California Ocean Plan (2009) includes the following implementation provision for ASBS: "Waste shall not be discharged to areas designated as being of special biological significance. Discharges [of waste] shall be located a sufficient distance from such designated areas to assure maintenance of natural water quality conditions in these areas."¹² In Appendix I, the 2009 Ocean Plan defines "waste" as "a discharger's total discharge, of whatever origin, i.e., gross, not net, discharge" (p. 27). Although somewhat unclear, this definition appears—given its focus on the "origin" of the discharge, and on the distinction between "gross" and "net" discharge—to mean discharges such as those from POTWs and utilities, which may utilize water from one source, process it, then discharge it to a receiving water body. This definition does not appear to encompass storm water discharges.

From a scientific perspective, storm water runoff should not be regarded as a "waste." Rainfall and subsequent storm water runoff are natural phenomena that occur even in natural watersheds without any anthropogenic alteration. Storm water runoff is the ordinary natural result of rain on any land surface, and often plays an important role in maintaining natural ecosystems. For example, in the nearshore environment storm water runoff provides an intermittent source of freshwater necessary to sustain fresh- and brackish-water lagoon and estuary systems that are common to the California coast. Preventing storm water runoff (i.e., the periodic introduction of freshwater) to the nearshore environment would, in fact, represent an alteration from the natural condition and water quality of the ecosystem. Thus, storm water runoff cannot be classed, in itself, as a form of waste.

Of course, certain pollutants present in particular storm water runoff could result in negative impacts or alterations to natural water quality, but this determination would need to be based on evidence of measureable water quality degradation or eco-system impact. As detailed in this comment letter, available data describing water quality, toxicity, and ecosystem health for ASBS in Southern California do not provide evidence

¹² State Water Resources Control Board, California EPA (2009). "Water Quality Control Plan, Ocean Waters of California: California Ocean Plan" (2009 Ocean Plan), p. 20.



of this nature. Rather, available evidence indicates that storm water discharges to ASBS do not generally alter natural water quality within those ASBSs.

For the reasons provided in this letter, I conclude that storm water discharges to ASBS should not be prohibited.

Please contact me at (626) 304-1134 if you have any questions regarding these comments.

Sincerely,

A handwritten signature in cursive script that reads "Susan C. Paulsen". The signature is written in dark ink and is positioned above the typed name.

Susan C. Paulsen, Ph.D., P.E.
Vice President and Senior Scientist