

California Stormwater Quality Association®

Dedicated to the Advancement of Stormwater Quality Management, Science a

October 24, 2011



Jeanine Townsend, Clerk to the Board State Water Resources Control Board

Subject: Proposed Ocean Plan Amendment – Model Monitoring

Dear Ms. Townsend and Members of the Board:

On behalf of the California Stormwater Quality Association (CASQA¹), thank you for providing this opportunity to provide input into the proposed amendments to the California Ocean Plan, as stated in the draft Substitute Environmental Documentation (draft SED, August 24, 2011). Many of CASQA's member agencies are located along the California coast, and would be affected by the proposed amendments. Our comments specifically address Issue 1: Model Monitoring (as detailed in Appendix III within Appendix A to the SED - Proposed Amendments to the 2009 Ocean Plan).

CASQA concurs with the principal purposes of the proposed model monitoring amendment, i.e.:

"(1) (implement) a question-driven monitoring framework to include regional monitoring, specific storm water monitoring, and specific non-point source monitoring and to (2) focus on assuring compliance with narrative and numeric water quality standards, the status and attainment of beneficial uses, and identifying sources of pollution."

However, we encourage the State Water Board to reconsider the Ocean Plan as the vehicle for implementing these goals. We are greatly concerned that the proposed regulation will:

- a) duplicate existing requirements,
- b) introduce confusion into an already-complex regulatory matrix, and
- c) increase costs without clear benefit.

Given these factors, the proposed Ocean Plan monitoring amendments, if enacted, would impose an unnecessary burden both on dischargers *and regulatory agency staff*.

Our fundamental objection to the proposed monitoring amendments is that Statewide Plans and Policies – such as the Ocean Plan – by their nature cannot specifically address local and regional water quality issues. For this reason, such Plans and Policies have typically not included monitoring requirements. Overall statewide guidance for monitoring is normally provided within such Plans and Policies, and specific monitoring requirements are defined for dischargers within National Pollutant Discharge Elimination System (NPDES) Permit provisions.

¹ CASQA is composed 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 formed in 1989 to recommend approaches for stormwater quality management to the State Water Resources Control Board..

A. Proposed Amendments Duplicate Existing Requirements

Through NPDES Permit provisions and Total Maximum Daily Load (TMDL) requirements, CASQA's Municipal Separate Storm Sewer System (MS4) members generally perform extensive monitoring of discharges and receiving waters. Many CASQA member agencies also have been developing and implementing question-driven approaches to the development and implementation of monitoring programs.

To more effectively address regional water quality issues and to better fulfill the terms of NPDES Permits and TMDLs, MS4 dischargers also have voluntarily formed regional monitoring collaboratives – especially for example:

- In the area of the Southern California Bight, where coastal MS4 agencies have formed the Stormwater Monitoring Coalition and teamed with the Southern California Coastal Water Research Project (SCCWRP) to perform regional monitoring of coastal watersheds, and, through participation in the Bight Monitoring Program, have conducted performed extensive monitoring of coastal waters.
- In the San Francisco Bay Area, members of the Bay Area Stormwater Management Agencies Association (BASMAA) subject to the Municipal Regional Stormwater Permit have formed the Regional Monitoring Coalition to perform regional stormwater monitoring, and also participate in the long-standing Regional Monitoring Program, which provides extensive monitoring of San Francisco Bay receiving waters

In many other coastal counties, MS4 dischargers have long-standing, multi-agency, collaborative monitoring programs, developed and implemented on a county-wide basis.

These existing, regional, collaborative efforts have developed effective agreements and processes for development and implementation of monitoring programs to address specific water quality issues within the context of each particular region. And the Regional Water Boards already have authority to require additional monitoring to address particular water quality issues through NPDES Permit provisions and TMDL Implementation Plans.

In addition, there is significant overlap of the proposed Ocean Plan Model Monitoring amendments with monitoring requirements included in:

- proposed Special Protections for Areas of Special Biological Significance (ASBS),
- proposed State Toxicity Policy,
- proposed sediment quality objectives (SQOs) for enclosed bays and estuaries being developed under the umbrella of the Bay Protection and Toxic Cleanup Program, and
- beach water quality monitoring required under AB 411.

B. Proposed Amendments Add Confusion to Already-Complex Regulatory Matrix

The preceding list clearly indicates that California coastal stormwater dischargers face an exceedingly complex – and growing – set of regulatory requirements. CASQA is concerned that the imposition of additional monitoring requirements through statewide Plans and Policies will at the very least be confusing, and may in fact be counter-productive.

The principal purpose of the Ocean Plan is to protect the quality the state's coastal *receiving waters*, yet the proposed amendments specify a variety of *discharge* monitoring requirements. A more appropriate Ocean Plan amendment would identify a statewide ocean monitoring program for coastal receiving waters, as an analog to the state's Surface Water Ambient Monitoring Program (SWAMP) for freshwater receiving waters.

Each NPDES Permit contains specific monitoring requirements designed to address the known nature of the discharge(s), quality of local receiving waters, and the environmental conditions in the area (including the specific hydrological regime, which varies greatly throughout the state).

The NPDES Permit monitoring programs must conform to the Standard Provisions and to U.S. Environmental Protection Agency (USEPA) protocols, and also generally must be compatible with SWAMP protocols; all three of these measures help ensure consistency statewide.

Dischargers also participate in development and implementation of monitoring programs to address TMDL requirements. Again, these programs address specific water quality issues within a specific (typically watershed) geographical context, and must generally conform to USEPA and SWAMP protocols.

Furthermore, when considered as a group, there is a lack of integration of the proposed new monitoring requirements amongst the Plans and Policies listed above. On top of existing NPDES Permit and TMDL monitoring requirements, this is certain to cause confusion among dischargers and regulators alike.

C. Proposed Amendments Would Increase Costs Without Clear Benefit

CASQA is also concerned about the incremental costs associated with the proposed Model Monitoring amendments. But of perhaps even greater concern is the lack of clear benefit to be derived from the proposed additional monitoring. This concern is founded on significant doubts regarding the feasibility of answering the questions proposed in the amendments, and our understanding – based on two decades of monitoring experience – of the technical challenges inherent in coastal monitoring and stormwater quality data analysis.

Questions Are Too Broad; Should be Locally-Focused and Directed

While CASQA strongly supports a question-driven approach to monitoring, the questions as posed in the Model Monitoring amendments are in some cases too broad, and may be technically infeasible to answer in many cases. Some of the questions involve comparisons and evaluations that would require an acceptable level of statistical significance to arrive at definitive answers, and the monitoring effort (number of data points) that would be required for statistical significance would be astronomical, based on the typical variability of stormwater quality data.

The questions should be developed for specific geographical areas, as is currently done by the existing regional collaboratives, such as the SMC in the southern California Bight region, and the RMP in the San Francisco Bay region.

Questions Should Be Answered Sequentially Within NPDES Permit Context; Use RPA

The questions also should be answered sequentially, and it is important to sequence the questions properly. The receiving water questions should be answered initially, and when there is a reasonable level of understanding of the presence and characteristics of any receiving water issues, then appropriate monitoring should be planned for discharges that may be causing or contributing to the receiving water issue.

Reasonable Potential Analysis (RPA) is the standard approach to assessment of impacts of discharges within the NPDES program. RPA involves an assessment of the potential that discharges that may be causing or contributing to the receiving water issue. But again, this proceeds from an earlier identification of a receiving water issue. It can be argued that this initial determination is the responsibility of the state, and this is in fact a principal reason for the creation of SWAMP originally.

Level of Technical Difficulty is Very High

Recent presentations at the annual CASQA Stormwater Conference [see especially S. Gruber et al. and C. Stransky et al.; <u>http://www.stormwaterconference.com/</u>] highlighted the great difficulty inherent in determining the net effects of stormwater discharges on near-shore ocean quality, especially in differentiating the effects of other freshwater flows in the tidal zone. Because of issues regarding timing of tidal cycles, tidal exchange, long-shore currents, and storm/runoff hydrology, the technical issues in making such assessments are immense.

Toxicity testing is particularly problematic for stormwater discharges, because it is technically infeasible within existing protocols to accurately quantify the effects of a short-lived, transient input (stormwater runoff) in the course of a multi-day toxicity test procedure. An in-situ toxicity testing technique, currently under development, appears to be the most technically viable approach.

Provisions Are Lacking for Data Analysis, Interpretation, Use

During the planning stage of a monitoring program or research study, study planners typically undertake an analysis of how the data will be used to answer specific questions. Again, this is much more effectively accomplished within the context of an individual NPDES permit. Without such individualized monitoring planning, CASQA is concerned that there would not be efficient use of the extensive amount of data that would be generated under statewide application of the proposed Model Monitoring requirements.

Summary

Currently, Appendix III of the Ocean Plan includes standard monitoring procedures that provide direction to the Regional Water Boards in developing monitoring programs to accompany discharge permits. These procedures reference analytical methods required for compliance with the bacterial, chemical, and toxicity requirements. CASQA considers this to be an appropriate level of direction to be included within a statewide Plan or Policy, and it comports with standard regulatory practice historically.

The proposed Model Monitoring amendments detract from the more effective practice of developing monitoring requirements for specific dischargers to address particular environmental circumstances, and the amendments would add unnecessary complexity to the growing list of overlapping regulatory requirements facing coastal dischargers.

There is a clear need to reduce duplication of effort and confusion, and provide direction to support monitoring that will generate genuine benefit. CASQA recommends that the State Water Board withhold implementation of any pending statewide monitoring requirements, and instead convene an expert panel to perform a comprehensive review and evaluation of the monitoring requirements included within the various proposed new and amended statewide Plans and Policies. The expert panel should then develop recommendations for a coherent, integrated approach to water quality monitoring throughout the state. This integrated approach should consider ongoing monitoring requirements as currently implemented by NPDES Permits and TMDLs, as well as existing regional monitoring collaborations.

We respectfully request that the proposed Model Monitoring amendments be withdrawn, and that the State Water Board instead convene an expert panel to review monitoring requirements statewide, and recommend a coherent, integrated approach to efficiently address the various needs for water quality monitoring in California.

Thank you for your consideration of our comments. If you have any questions, please contact CASQA Executive Director Geoff Brosseau at (650) 365-8620.

Sincerely,

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Scott Taylor, P.E., D.WRE Chair, California Stormwater Quality Association

cc: Vicky Whitney, Deputy Director – Water Quality, State Water Board Bruce Fujimoto, Stormwater Section, State Water Board Dominic Gregorio, Ocean Unit, State Water Board CASQA Board of Directors, CASQA Executive Program Committee, CASQA Policy and Permitting Subcommittee, CASQA Monitoring and Science Subcommittee