

California Stormwater Quality Association®

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Subject: Statewide Biological Objectives Policy – CEQA Scoping Comments

The California Stormwater Quality Association (CASQA) appreciates this opportunity to provide comments regarding the California Environmental Quality Act (CEQA) scoping of the proposed Statewide Biological Objectives Policy and Program of Implementation for Perennial, Wadeable Streams (Policy). It is our understanding that the purpose of the Policy is to establish a new, narrative biological objective for all perennial, wadeable streams in the state, establish numeric tools for interpreting the narrative objective, and develop an implementation plan that would define a framework for implementing the Policy.

The State Water Board's CEQA scoping meeting informational document further describes the intent of the Policy and identifies three potential alternatives for developing the statewide biological objectives:

- 1) No Action; or
- 2) Adopt biological objectives for protecting high quality streams and preventing further degradation of degraded streams; or
- 3) Adopt biological objectives for all perennial, wadeable streams in the state.

This effort is one of the most significant policy and scientific undertakings by the State Water Board to-date. Knowing that this Policy could have a substantial impact on CASQA member agencies, CASQA has actively participated in the Biological Objectives Stakeholder Advisory Group (SAG) meetings over the last two years and, during this time, has provided comments regarding the Policy. The enclosed comments are consistent with, and build upon the comments previously made by CASQA representatives during the SAG meetings. The comments provided herein should be considered preliminary and will be supplemented with additional comments by CASQA as the Policy is further scoped and draft concepts are developed.

In general, CASQA supports the need to establish a consistent, statewide approach for establishing biological objectives in perennial, wadeable streams. Conceptually, biological objectives developed at a statewide level with regional considerations can provide a mechanism for the assessment and reasonable protection of beneficial uses of these streams and/or watersheds. In addition, biological objectives can also assist in more practical evaluations of beneficial use attainment, compared to traditional chemical analysis, because they directly measure the aquatic resource of interest.

However, if the Policy does not have clear goals and objectives and is not integrated within the current regulatory framework, it could create an additional multi-million dollar regulatory burden for our members that would further strain limited resources¹ without providing an offsetting water quality benefit.

Specifically, the Policy could lead to additional requirements in municipal stormwater permits for expensive data collection that have not been prioritized against all other monitoring requirements, and are beyond the available resources of the municipalities. The biological objectives and resulting program of implementation could also pose significant challenges to municipalities if impractical biological goals are set for some streams, or if there are significant uncertainties in evaluating compliance with biological objectives due to inherent temporal and spatial variability in bioassessment data. These implementation challenges need to be addressed during the development of the Policy so that the municipalities are not compromised in their collective ability to assess and protect perennial, wadeable stream reaches in California in practical manner. Integration of the Policy into the existing regulatory framework is also necessary to ensure that the State Water Board's policies work together to assist municipalities in prioritizing and focusing resources on the highest water quality threats so as to promote environmental outcomes in a timely and efficient manner.

The specific comments below further elaborate on the points raised above and/or identify additional concerns and recommendations regarding the development of this Policy.

No direct linkage between the proposed biological objectives and aquatic life beneficial uses has been established

The State Water Board's CEQA informational document states that the Policy is aimed at protecting and potentially restoring aquatic life beneficial uses, which include warm water habitat, cold water habitat, marine and estuarine habitat, migration, spawning, wetland habitat, wildlife habitat, and preservation of rare, threatened or endangered species. The informational document goes on to state that bioassessment will be used as the method of measuring the resident aquatic organisms as indicators of biological integrity, and tools associated with bioassessment (i.e., Indices of Biotic Integrity and O/E models) are likely to be used via the Policy to evaluate aquatic life beneficial use attainment in California perennial wadeable streams. However, no linkage has been made to-date between specific California aquatic life beneficial uses and the proposed biological objectives or numeric derivations thereof.

CASQA recommends the State Water Board identify the specific beneficial uses that will be addressed by the proposed biological objectives and provide scientific information supporting the linkage between such beneficial uses and biological objectives. This linkage is needed because of the diversity of beneficial uses in the "aquatic life" category and the need to associate biological objectives with evaluations of attainment of these beneficial uses in the future. This information should be presented in a clear manner prior to moving forward with the development of the Policy. Doing so will provide resource managers, including Regional Water Boards that will be implementing the Policy and stakeholders that

¹ In addition to the significant resources that have been expended by CASQA member agencies to develop and implement Total Maximum Daily Loads (TMDLs), and associated monitoring programs.

will be affected by the Policy, a more complete understanding of beneficial uses (and associated streams) that will be affected by the Policy and avoid confusion in future evaluations of attainment.

The Biological Objectives Policy needs to be coordinated with and/or integrated within related policies and regulatory programs

The CEQA informational document states the State Water Board will ensure the Policy will be well coordinated with other related policies, including the Wetland and Riparian Protection Policy (Proposed), Nutrient Numeric Endpoint Policy (Proposed), Toxicity Policy (Proposed), Sediment Quality Objectives Policy, and the Division of Water Rights efforts to develop instream flow criteria. Additionally, the informational document indicates that the State Water Board will develop an implementation program that describes how biological objectives will be incorporated into NPDES permits and other regulatory actions, such as addressing aquatic life beneficial uses for 303(d) listing.

Based on the information presented to-date to the SAG, it is currently unclear how and to what degree the proposed Policy and the associated implementation program will be coordinated with and/or integrated within other proposed/current State Water Board policies and regulatory programs. Coordination between these polices and programs will be paramount to the cost effective implementation of biological objectives by Regional Water Boards and subsequent requirements for permittees. For example, biological objectives will most likely be implemented through NPDES permits. Therefore, guidance must be provided by the State Water Board via the implementation plan to ensure if bioassessments are considered the primary tool to assess the condition of applicable aquatic life uses in perennial, wadeable streams, then other monitoring indicators such as water and sediment chemistry should not be required via NPDES stormwater permits unless used to assess the causes of applicable biological objective exceedances (as a part of the causal assessments).

Additionally, integration of biological objectives into the 303(d) Listing Policy needs to be completed as a part of this effort to ensure that applicable biological objectives are compared to the appropriate levels of bioassessment data, indices and models. Otherwise, confusion in implementation requirements will likely be realized among Regional Water Boards and permittees as data are evaluated and incorrect 303(d) listings may be identified.

CASQA recommends the State Water Board provide an analysis of the linkage between the proposed Policy for biological objectives and other proposed/existing policies and regulatory programs as early as possible in the Policy development, and identify refinements in existing policies that must be addressed for biological objectives to be implemented effectively and when those refinements would be made.

The Policy must develop and incorporate practical biological expectations for all applicable streams

Biological communities in perennial, wadeable streams throughout California differ dramatically based on a number of factors. These differences are primarily attributable to natural diversities in biological communities, and controllable and/or uncontrollable water quality factors. As

acknowledged in the State Water Board's informational document, the biological objectives should be developed with consideration of these factors.

CASQA agrees with the State Water Board's consideration of these factors, and also recommends the biological expectations for all applicable aquatic life uses must be practical and implementable. For example, heavily modified stream reaches should not be subject to the same biological expectations as stream reaches within a natural or semi-natural state. Setting reasonable biological expectations for streams in consideration of their current condition and the reasonable potential to improve their condition will allow the State Water Board and the permittees to set priorities for resource acquisition towards biological objectives are not based on our current collective understanding of the reasonable attainment of aquatic life uses in streams, then the limited public resources available will likely be spread too thin to achieve the goals of the Policy.

CASQA recommends the biological objectives be developed based on reasonable expectations of biological integrity for various types of stream reaches. Additionally, a clear prioritization process for biological monitoring should be established in the implementation plan.

The bioassessment monitoring must be integrated and prioritized within current monitoring programs

The informational document states that, as a result of the Policy, bioassessment "surveillance" monitoring will be incorporated into receiving water monitoring requirements in NPDES stormwater permits. Bioassessment methods have historically been considered "rapid" due to their relatively low resource requirements and quick turnaround time for results. However, benthic macroinvertebrate bioassessment monitoring required in recent municipal stormwater permits must comply with State Water Board protocols for fieldwork, laboratory analysis, quality assurance validation and verification, and data management and reporting. As a result, bioassessment monitoring is no longer "rapid" and associated monitoring costs have increased significantly. Due to spatial variability in biological community assemblages, bioassessment data are only applicable to the stream reach in which they were monitored. Because of the high degree of inherent temporal variability in bioassessment data associated with natural fluctuations in climate and hydrology in streams, multiple years of data² will likely be needed to effectively compare against applicable biological objectives to assess stream health and identify trends.

In addition to bioassessment monitoring, stormwater NPDES permittees may also be required to fund and conduct causal assessments to identify the causes of biological impairments once identified. Based on previous evaluations conducted by the State Water Board, it appears that numerous stream miles may be considered to exceed biological objectives. Therefore, a multitude of causal assessments may be required of stormwater NPDES permittees. Although

 $^{^2}$ The number of years of data needed to effectively establish the current biological condition at a stream reach should be dependent upon the estimated or known interannual variability in biological condition scores at the stream reach of interest, with the goal of developing an adequate statistically-based condition score that reflects central tendency and accounts for inherent variability at that reach.

the costs of assessments are dependent upon their scope and extent, these new monitoring costs could easily cost hundreds of thousands of dollars per assessment conducted.

Based on the high costs associated with implementing a bioassessment monitoring program and conducting causal assessments, CASQA is concerned that this could result in a new and additional, multi-million dollar monitoring program that would be implemented via NPDES stormwater permits, with the associated costs being paid for by local public agencies. This monitoring program would be in addition to the costs of conducting current water quality monitoring (e.g., chemical monitoring and toxicity testing) required by stormwater NPDES permits.

CASQA recommends the State Water Board develop a framework to prioritize bioassessment and other water quality monitoring required in stormwater NPDES permits based on a set of well-defined management questions. Additionally, CASQA recommends that the State Water Board clearly identify the roles and responsibilities for the bioassessment monitoring and causal assessments. The potential to reduce or eliminate other monitoring currently required in NPDES Permits should also be considered.

Summary of recommended next steps

In summary, the Policy and associated implementation plan could potentially require local public agencies to: 1) implement costly new or significantly expanded receiving water monitoring activities, 2) develop and conduct very expensive investigative studies (causal assessments) to determine sources of impacts regardless of whether they are stormwater related, and 3) comply with impractical biological goals for heavily modified streams. Thus, CASQA is very concerned that the Policy could represent a significant expenditure of additional public resources without commensurate water quality benefits. It is essential that the implementation requirements developed as a result of the Policy be prioritized, to address identified, significant water quality problems linked to relevant water quality management questions and phased over time based on a realistic assessment of municipal resources and the other burdens being placed on California cities, counties, and other agencies.

Considering the significant undertaking of developing practical biological objectives for all perennial, wadeable streams in California, and the implementation challenges presented, CASQA recommends that the State Water Board consider developing and implementing biological objectives in a phased approach. As a first step, and proof-of-concept, the State should focus the proposed Policy and its limited resources on identifying and protecting perennial, wadeable streams of exceptionally high quality (i.e., a prioritized version of Alternative #2). A phased approach would provide the State with the ability to protect applicable aquatic life uses in high quality streams, while continuing to learn from the implementation challenges and successes in preparation for developing biological objectives for stream reaches of lesser quality over time.

We hope our comments will assist you in identifying additional improvements as the Policy is further developed. CASQA has been an active member in the Biological Objectives Stakeholder Advisory Group over the last two years and plans to continue to participate throughout the development and adoption process. CASQA appreciates the opportunity to work with State CASQA comments on CEQA Scoping of Statewide Biological Objectives Policy

Water Board staff collaboratively to develop a Policy that ensures the best use of limited public resources to meet the program objectives of protecting our streams.

Please contact me at (714) 955-0670 or Geoff Brosseau, our Executive Director at (650) 365-8620 if you have any questions or would like to discuss our comments further.

Sincerely,

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Richard Boon, Chair California Stormwater Quality Association

cc: Karen Larsen, State Water Board Bruce Fujimoto, State Water Board CASQA Executive Program Committee CASQA Board of Directors