



THE CITY OF SAN DIEGO



October 19, 2012

Electronic Submission: [commentletters@waterboards.ca.gov](mailto:commentletters@waterboards.ca.gov)

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

Subject: Comment Letter – Biological Objectives CEQA

Dear Ms. Townsend:

The City of San Diego (City) appreciates the opportunity to provide comments on the proposed bio-objectives policy, which was discussed at the CEQA meeting September 5, 2012. The City's comments are contained in this letter.

The California State Water Resources Control Board (State Board) is developing a scientific methodology for identifying bio-objectives for freshwater perennial streams. Bio-objectives constitute numeric values or scores that are associated with an unimpaired aquatic biological community. The State Board recognizes that chemical objectives alone may not adequately protect perennial freshwater streams. Benthic macroinvertebrate communities provide a more direct indicator of water quality conditions and integrate long-term pollutant effects. The State Board also recognizes that a consistent approach is needed to provide measurable, enforceable, biological thresholds.

Aside from having a consistent, rigorous bioassessment methodology, accurate bio-objectives are dependent upon two major scientific elements: 1) correct classification of waterbodies (e.g., mountain streams versus arid coastal streams) and 2) having appropriately selected reference sites for a given classification. If these two elements are addressed correctly, the assessment procedure will be reliable at discriminating truly impaired sites from non-impaired sites.

While the State Board has made great strides in refining their aquatic bioassessment program through collaboration with the California Department of Fish and Game (DFG) and other state organizations, the application of bioassessment information to bio-objectives must be done carefully to ensure that waterbodies are correctly assessed so that regulatory actions are appropriate.



Several technical aspects of the State Board's proposed bio-objectives policy are of concern to the City, all of which pertain to the two necessary elements mentioned above. The City is particularly concerned that both of these elements appear to be incompletely addressed for southern coastal xeric streams. These concerns are: 1) The classification being evaluated does not appear to address coastal arid streams of southern California; 2) the definition of "perennial" streams is vague and may not be applicable to most streams in the southern coastal region; 3) it is unclear how highly modified waterbodies, common in southern California, will be assessed in this bio-objectives policy; and 4) the observed/expected (O/E) model may not adequately represent what is biologically attainable in streams in southern coastal California. The following briefly summarizes each of these concerns.

#### Proper Classification of Southern Coastal Arid Streams

Proper classification of streams in terms of hydrology, climate, and other natural factors that affect the aquatic biota capable of being present, is critical for obtaining unbiased bio-objectives. Having sufficient biological data for reference streams in each classification is critical to developing O/E models for predicting the species expected to occur in a given waterbody. Thus far, the City is not aware of a robust O/E model that has been developed for southern coastal xeric streams, nor is it apparent that the models that have been developed are applicable to these streams. The State Board and DFG have indicated there are few reference sites in low-gradient, low elevation streams in the San Diego region, and these are under-represented in the reference pool. The Central Valley region is another example of an area which has a low number of reference sites and may be excluded from the bio-objectives policy as a result. The City is concerned that insufficient attention is being paid to this issue, and the result could be inappropriate biological expectations for streams in southern coastal California. More focus on low-gradient, low elevation streams in the southern coast xeric region is needed before applying bio-objectives to the region.

#### Definition of "Perennial" Streams

How perennial streams are being defined is a critical factor for streams in the southern coastal region. Currently the State Board defines it as "a stream with the year round presence of flowing surface water during a typical water year." However, DFG staff described it as a "working definition" at bio-objective scoping meetings. Most streams in the San Diego region do not meet this definition (approximately 73%) and would be classified as non-perennial. This is a large number of streams that would be excluded from the policy, as it is currently stated. Perennial streams in the region are greatly affected by development in upstream non-perennial streams at certain times of year, and certain flow conditions such as natural flashiness combined with urbanization. Thus, non-perennial streams need to be clearly addressed in the policy for this region of California.

#### Most Coastal, Xeric Streams in Southern California are Highly Modified

The O/E model approach predicts expected macroinvertebrate taxa in a given stream based on certain natural landscape factors. Most streams in the southern coastal region are affected by storm water from both natural and human sources. It is not clear if or how naturally storm water-influenced streams are being considered in developing bio-objectives. These streams are naturally flashy in southern California, which has a major influence on the macroinvertebrate

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fauna one collects at a given time of year. In addition, the City is concerned that the sampling index period may not adequately represent the fauna in a given stream; i.e., the "expected" fauna will not be properly calibrated to these flashy, natural disturbance conditions. The City urges the State Board to clearly address biological expectations for naturally storm water-influenced streams in its bio-objectives policy. These issues relate to the establishment of adequate reference sites and conditions, as discussed above.

Considering these important scientific limitations, it may be more beneficial to focus the policy on protecting high quality streams at this stage, which is a major goal of the policy. This would allow time for additional data collection and refinement of the policy to address these critical areas.

If you have additional questions, please contact Ruth Kolb at (858) 541-4328 or at [rkolb@sandiego.gov](mailto:rkolb@sandiego.gov).

Sincerely,



Kris McFadden  
Deputy Director

cc: Almis Udrys, Deputy Director, Office of the Mayor  
Garth K. Sturdevan, Director, Transportation & Storm Water Department  
Ruth Kolb, Program Manager, Transportation & Storm Water Development