California Regional Water Quality Control Board



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## San Francisco Bay Region

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- TO: Debbie Irvin, Clerk to the Board Executive Office State Water Resources Control Board
- FROM: Tom Mumley San Francisco Bay Regional Water Quality Control Board
- **DATE:** August 25, 2004
- SUBJECT: COMMENTS ON DRAFT FINAL WATER QUALITY CONTROL POLICY FOR DEVELOPING CALIFORNIA'S CLEAN WATER ACT SECTION 303(d) LIST (Listing Policy)

On behalf of the TMDL Roundtable, thank you for the opportunity to comment on the subject draft final Listing Policy. As the representative of the Regional Board participants in the TMDL Roundtable, my comments reflect the views of the scientists and engineers who will be responsible for carrying the load of implementing the Listing Policy. We have provided specific recommendations and submitted comments over the more than two years that this policy has been in development. We appreciate that a number of our recommendations have been incorporated, however we still have concerns that reflect interpretation of listing policy provisions or our previous recommendations and comments that have not been accommodated.

Our interpretation of key aspects of the draft final Listing Policy are listed below followed by further presentation of our concerns regarding each of these items.

- The Situation-Specific Weight of Evidence Listing Factor described in section 3.1.11 and 4.11 gives the Region Boards latitude to articulate a recommendation that is contrary to the conclusions that might be reached by application of the binomial distribution method.
- 2) Nothing in the Policy allows adopted water quality standards to be reinterpreted with respect to the allowable levels, frequency of exceedance of those levels, or the averaging period (if any).
- 3) Provisions in federal regulation, State or regional water quality control plans that address water quality standards and their application supersede the provisions in the Listing Policy to the extent there is any conflict.
- 4) Implementation of the Listing Policy will require additional resources at the Region Boards beyond those currently available for monitoring and assessment.
- 5) Regional Board approval may be accomplished with one hearing and written responses will only be required for written comments received in a timely matter.
- 6) Potential and unintended consequences of the Listing Policy will be revealed or realized through its implementation that will require changes to ensure that waters not attaining

standards are identified and that a reasonable resource commitment is needed to implement the Policy.

With respect to Item 1, the site-specific weight of evidence approach should allow the Region Boards to make a reasoned argument for listing or delisting, even if the binomial method would lead to a contrary conclusion. The binomial method does not effectively address critical water quality considerations such as magnitude of exceedance; timing or seasonality of exceedances; land use or other activities in the watershed that influence pollution patterns; water quality trends; monitoring study design; or preventive or corrective actions. In many cases, such factors must be considered in order to ensure the completeness and accuracy of the 303(d) List.

The site-specific weight of evidence approach should also allow use of the null hypothesis that water quality standards are not attained. We have previously commented that this hypothesis is more appropriate than the hypothesis that water quality standards are not attained, which is the basis of the binomial method listing factors in the Listing Policy. Our previous comments on this matter are presented at the end of this letter.

With respect to Item 2, many water quality standards do not have an allowed frequency of exceedance as suggested by the application of the binomial method (e.g. 5% or 10%). The binomial method can be an effective screening tool to determine exceedance or compliance with standards, but additional review may be needed to ensure that any conclusions drawn are consistent with how the standards are expressed.

With respect to Item 3, federal regulations or water quality control plans may already provide specific provisions on the application of water quality standards (e.g. how narrative objectives will be interpreted). To the extent the Listing Policy suggests a different interpretation of the application of water quality standards, we understand that the specific provisions in federal regulations or water quality control plans take precedent.

With respect to Item 4, the current Listing Policy suggests a significant increase in the level of scrutiny provided to data and the amount of documentation that must be provided by the Regions. Also, the data requirements for application of the binomial method based listing factors are not consistent those achieved with current funding of the Surface Water Ambient Monitoring program. Since the Regions use TMDL resources to conduct listing efforts, any significant increase in the 303(d) assessment process could undermine or delay TMDL development and implementation efforts. Consequently, we expect the State Board will grant some latitude and consider resource limitations in its direction for and review of Regional Board implementation of the Listing Policy.

With respect to Item 5, the Listing Policy calls for Regional Boards to provide written responses to all comments. This will be problematic if written responses are required for oral comments received at the Regional Board meeting, or for written comments received at the last minute. This would require two meetings before a Regional Board can act on its listing recommendations, one to receive testimony and one to take action with no further testimony. This is contrary to normal Regional Board meeting procedures, and due to Regional Board meeting frequencies and constraints, two meetings would add an additional month to the process. This would not be necessary if written responses will only be required for written comments received in a timely matter in accordance with a public notice for a hearing, the Regional Board need not consider last minute written comments, and oral comments require only oral responses.

With respect to Item 6, the success of the Listing Policy in meeting its intended goals will not be known until it is applied. There are many known or potential shortcomings of the Listing Policy that we have previously identified in previous comments that have not been resolved. Some of these will be revealed or realized as early as the first time the Listing Policy will be applied by the Regions in 2006. Lessons learned particularly adverse consequences of implementing the Listing Policy during this or other listing cycles should be resolved prior to subsequent listing cycles.

## Null Hypothesis

The Draft Policy requires use of the <u>null hypothesis</u> that water quality standards are attained when evaluating data. This is counter intuitive, inconsistent with other water quality programs such as the Surface Water Ambient Monitoring Program, and our recently developed TMDL Guidance, and creates a disincentive to monitor. Hypothesis testing is fundamental to implementation of the scientific method wherein a hypothesis is formulated based on consideration of available knowledge and information. Then the hypothesis is tested resulting in its acceptance or rejection. The use of the <u>hypothesis</u> that water quality standards are not attained is clearly appropriate when there is information indicating there is or may be impairment. Then the complete readily available data set would be used to verify the hypothesis. Note that use of the hypothesis that water quality standards are not attained does not mean that all waters in California are assumed to be impaired a priori. Use of the hypothesis is restricted to situations where there is some information indicating impairment.

Use of the null hypothesis that water quality standards are attained requires a high burden of proof and data requirements well beyond what will be generated by the Surface Water Ambient Monitoring Program. Furthermore, it creates a disincentive for the regulated community to monitor since a smaller data set is less likely to result in listing. On the other hand, use of the null hypothesis that water quality standards are <u>not</u> attained creates in incentive to monitor since there is less chance that a water body will be found impaired incorrectly.

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