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Via electronic mail

Robert Cantilli (MC- 4304)
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Dear Mr. Cantilli:

Comments on the Ecoregion 1 (Central Valley, Willamette Valley) Lakes and Reservoirs Nutrient Criteria Documents

I am writing on behalf of Tri-TAC, the California Association of Sanitation Agencies (CASA), and the Southern California Alliance of POTWs (SCAP) to express our concerns regarding the Ecoregion 1 (Central Valley, Willamette Valley) document for lakes and reservoirs.

CASA, SCAP, and Tri-TAC are statewide organizations of local public agencies responsible for wastewater collection, treatment, disposal, and reclamation. Tri-TAC is an advisory group including representatives from CASA, the California Water Environment Association, and the League of California Cities. CASA's membership includes 92 agencies responsible for the operation of publicly owned treatment works (POTWs). SCAP's membership includes over 50 water and wastewater agencies serving more than 16 million people in southern California. Together, the constituent agencies of CASA, SCAP, and Tri-TAC serve most of the sewered population of California.

While we understand that nutrient enrichment is a concern in some water bodies, we do not believe developing numeric criteria for specific nutrients at the ecoregional level is the answer. We have stated this in comments previously submitted to EPA on May 11, 2001 on the western-forested mountains document for lakes and reservoirs and the xeric west document for rivers and streams and on May 22, 2002 on the Central Valley, Willamette Valley rivers and streams and xeric west lakes and reservoirs documents, which are hereby incorporated herein by reference. We restate our concerns in this letter on the newly released document for Central Valley, Willamette Valley lakes and reservoirs. Our main concerns with the ecoregion criteria are as follows:

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The criteria are based on a statistical analysis of current nutrient levels in the nation's waters rather than on the latest scientific knowledge linking nutrient levels to adverse effects and, therefore, are inconsistent with Section 304(a) of the Clean Water Act.

EPA has not definitively linked the numeric criteria to beneficial use protection nor has it clearly defined what goal it is trying to accomplish by issuing these criteria.

Numeric nutrient criteria, if they are to be developed at all, should only be developed at a site-specific level to address specific responses within an aquatic system. Enrichment and eutrophication are controlled by many site-specific factors (e.g., substrate, canopy cover, velocity) other than nitrogen and phosphorus alone. Developing nitrogen and phosphorus criteria at the eco-regional level to accurately address nutrient impairment is infeasible and scientifically unsupported.

Because the proposed criteria do not reflect the latest scientific information, are not linked to protection of beneficial uses, and are likely to result in extremely costly and unnecessary retrofits to municipal wastewater treatment plants, we recommend that the criteria be rescinded pending further study.

In previous comment letters, we have expressed detailed arguments for each of the points listed above. Although we will not reiterate these comments here, all of our previously submitted comments apply to the approach taken to develop the newly released eco-region-based criteria document. For the purposes of these comments, we will focus on the specific concerns with this criteria document, namely the data sets used to develop the criteria and the application of those data sets.

According to Figure 4 on page 14 and Table 1 on page 15 of the Ecoregion 1 lakes and reservoirs criteria document, all of the data used to develop the criteria came from a very limited dataset in the Willamette Valley in Washington and Oregon. No data from the Central Valley of California were used to develop the criteria. The data set contained data points from 12 stations on 8 lakes in Oregon and Washington. None of the lakes were considered to be reference lakes. A median value for each constituent for each lake was calculated and then the percentile was based on these median values. For all parameters except Secchi depth, data were available from only 3 or 4 lakes. The percentiles were calculated based on 3 or 4 values, resulting in 25th percentile values equal to the minimum median lake concentration because of the small number of lakes sampled. The use of percentile calculations with such limited data sets is inappropriate.

Additionally, the application of these criteria to the Central Valley sub-ecoregion is inappropriate since no data are available from this area. The Willamette Valley receives two to three times the amount of annual rainfall as the Central Valley, and correspondingly less sunlight, more flow and other factors that could influence the amount of nutrients in the lakes and reservoirs of this region. Taking a limited data set and extrapolating it to a region with no available data is unreasonable, especially given the assumption that these values represent reference conditions. As has been demonstrated in pilot studies in California, the assumptions made in developing the criteria do not appear to apply to California. Specifically, the Region IX RTAG has found that EPA's hypothesis of the 25th percentile representing reference conditions is not applicable to the Ecoregion II rivers and streams and, interestingly, has also found that un-impacted waterbodies within this ecoregion tend to have higher nitrogen and phosphorus concentrations than impacted waterbodies. The study revealed that if the EPA reference-based values were adopted for the Ecoregion II rivers and streams, a large number of potentially unimpacted waterbodies would be

misclassified as impaired.¹ Consequently, criteria should not be promulgated for the Central Valley subecoregion until appropriate subecoregion specific data are collected.

As discussed in our previous comment letters, we are not asking EPA to ignore or discount waterbody impairment caused by eutrophication. We are asking that EPA use the existing standards in Basin Plans to address the effects of nutrient enrichment. Developing improper and unsound criteria could possibly harm the environment and require regulated entities - and the public - to absorb unnecessary significant costs. We believe EPA must do the following in order to effectively address eutrophication:

Rescind the 304(a) ecoregion criteria documents.

Redirect the national nutrient program from numeric criteria development to developing an approach that focuses on protecting beneficial uses at a localized level.

Focus the federal nutrient program on the use of existing authority in state water quality standards to address problems related to nutrient enrichment.

We appreciate this opportunity to comment. If you have any questions or comments, please contact Ashli Desai at (805) 449-0011.

Yours very truly,



David R. Williams, Chair
Tri-TAC

DRW:akg

cc: Suesan Saucerman, EPA Region IX Nutrient Coordinator
Chris Bailey, State Water Resources Control Board

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¹ *US EPA Region IX Demonstration Project: Ecoregion II Rivers and Streams*. Prepared by Tetra Tech for USEPA. March 2000.