303 (d) Deadline:
1/31/06

January 27, 2006

Tam Doduc
Chair
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

Dear Chairwoman Doduc:

Thank you for the opportunity to comment on California's draft 2004-2006 Clean Water Act Section 303d list. We carefully reviewed the draft listing decisions and supporting documentation and have concluded the vast majority of the State's assessment determinations are consistent with federal listing requirements. We urge the State to promptly complete its final list revisions and submit the final list by the April 1, 2006 due date or shortly thereafter. This letter summarizes our remaining concerns about several assessment determinations; individual water body concerns are summarized in the table in enclosure 1. Enclosure 2 provides an analysis supporting continued nutrient listings for Laguna de Santa Rosa in Region 1.

EPA commends the State for its considerable effort to assemble and evaluate available water quality-related data and information. We were pleased to provide staff and contractor assistance to compile data and information.

We would like to highlight our support for several individual assessment determinations that are new or presented difficult analytical challenges:

- listing selenium in Colorado River,
- listing several Central Valley and North Coast waters due to invasive species,
- listing several Central Valley waters due to temperature,
- listing waters throughout the State based on sediment and/or fish tissue data analysis,
- delisting waters for which prior listings were found to be invalid or unsupported by available data and information,

I. Concerns

The State applied its new 303(d) listing policy to develop the 2004-2006 Section 303d list. During the development of the listing policy, EPA expressed concern that several aspects of the policy may be at odds with federal listing requirements and state water quality standards:

- listing thresholds used to apply numeric water quality standards for toxic and some conventional pollutants,
- minimum sample size requirements, and
- interpretation of narrative water quality standards (e.g., for nutrients).

The Policy includes "weight of evidence" provisions that authorize the State to make listing determinations based on its evaluation of different lines of evidence that collectively indicate water quality impairment even single lines of evidence do not indicate impairment. We urge the State to use the weight of evidence provisions of the policy to guide revisions of several assessment determinations discussed below.

II. Application of Numeric Water Quality Objectives

Our review of the listing record indicates several waters not proposed for listing exceed the applicable numeric water quality standards. We urge the State to list these waters.

A. Toxic Pollutant Assessments

The California Toxics Rule (CTR) contains numeric water quality standards for toxic pollutants that are applicable to most California's waters. The CTR states that pollutant concentrations should not be exceeded more than once in three years on average. Assessment decisions for toxic pollutants must be consistent with this allowable frequency. The State's application of a binomial statistical method to assess toxic pollutant attainment of water quality standards appears inconsistent with this CTR provision and has resulted in omission of several waters that should be listed for toxic pollutants. For example, several waters in San Gabriel River watershed appear to violate CTR standards for metals (see enclosure 1 for additional examples and supporting data summaries). We also recommend consideration of the magnitude of excursions and excursion frequency to assess water quality standards compliance.

B. Conventional Pollutant Assessments

Listing assessments of conventional pollutants such as dissolved oxygen, pH, and TSS must also be consistent with the provisions of applicable water quality objectives in each Basin Plan. For example, Regional Basin Plan standards for dissolved oxygen are variously described as values not be exceeded or values to be evaluated based on the 85^{th} or 90^{th} percentile. The policy's binomial statistical approach applies an allowable 25% exceedance rate for conventional pollutants that appears at odds with the applicable objectives. We recommend direct application of allowable exceedance rates where specified in Basin Plans. In cases where the Basin Plans do not specify allowable exceedance frequencies for conventional pollutants, we recommend application of a 10% exceedance rate for conventional pollutants, as recommended by EPA assessment guidance (EPA, 2002; EPA 1997). Several additional waters (e.g. Chumash Creek in Region 3 for DO) should be listed based on these considerations.

C. Bacterial Indicator Assessments

Several Basin Plans provide that bacterial indicator objectives are not be exceeded in more than 10% of available samples. EPA guidance suggests that in cases where State standards do not provide clear language regarding allowable bacteria exceedence rates, States should apply a maximum 10% allowable exceedance rate to assess attainment of bacteria objectives (EPA, 2005). The State's assessment approach applies a 25% exceedance frequency that appears

inconsistent with applicable water quality objectives and federal listing guidance. Several waters, including Mission Bay near San Diego, appear to meet listing requirements.

III. Application of Narrative Water Quality Standards

The State declined to assess some waters due to the perceived lack of reliable assessment criteria or the existence of only a single line of evidence. As a result, some waters are not proposed for listing in cases where the available data and information appear to support an impairment determination. The State's assessment of narrative standards attainment should be guided by the principles that (1) narrative standards must be applied in the assessment process (40 CFR 130.7(b)(3)), all existing and readily available water quality-related data and information should be used to assess water quality (40 CFR 130.7(b)(5)), and (2) assessment criteria can and should be developed to assess all types of available data and information (EPA, 2002).

A. Nutrient Effects Assessments

For many waters, the State declined to apply narrative biostimulation objectives to assess waters for nutrient-related impairments due to an apparent concern that available assessment criteria are not fully reliable. The State is required to evaluate potential violations of the narrative objectives (40 CFR 130.7(b)(3)). Several alternative assessment criteria are available for consideration including:

- numeric nutrient standards adopted by other Regional Boards or States,
- numeric targets developed for nutrient TMDLs developed for other waters,
- draft nutrient endpoints developed for California (Tetra Tech, 2005),
- nutrient thresholds proposed in academic literature, and
- EPA's national ecoregion-based nutrient criteria recommendations (EPA, 2000).

We recognize the State has not yet identified discriminating nutrient criteria values for all California waters. To evaluate whether a water should be listed, it is not necessary to know the exact nutrient thresholds beyond which adverse biostimulation effects will occur. Instead, it is sufficient in a weight of evidence framework to observe that actual water column nutrient values are far higher than the range of potential assessment criteria or that a very high percentage of observed values exceed potential assessment criteria. As discussed in enclosure 2, our review of available data for Laguna de Santa Rosa clearly supports the continued listing for nitrogen and phosphorus. We would like to work with State Board staff to evaluate the Laguna and other waters for which available data appear to indicate adverse biostimulation problems.

B. Assessment of Total Metals Data

For some waters, it appears the State did not consider total metals data as the CTR standards are expressed in terms of dissolved metals. The CTR identifies three options for translating dissolved metal results to total recoverable levels, or vice versa. We encourage the State to apply one of these options to evaluate readily available total metals data. This data review will likely support several additional listings (e.g., San Jose Creek in Los Angeles).

C. Lower Lost River Temperature Assessment

The State proposes to retain the existing listing of Lower Lost River (LLR) for temperature. This listing was originally made by EPA in 1992 and it appears the listing has been retained in each subsequent State listing decision based on EPA's initial listing determination. In support of our ongoing work with the North Coast Regional Board to develop Lost River and Klamath River TMDLs, we reviewed the data and information that supported the 1992 listing decisions. We determined that there was no data to support the temperature listing for LLR. EPA's temperature listings for North Coast rivers in 1992 were based on evidence of salmonid habitat degradation due to elevated temperature conditions that does not specifically reference LLR impairments. As LLR does not support salmonid habitat and the 1992 listing record does not support a finding of temperature impairment, this listing was in error. Our review of the very limited recent temperature data for the LLR indicates there is insufficient evidence of temperature impairment to support this listing; therefore, we recommend removal of LLR for temperature. We understand staff at the North Coast RWQCB support this recommendation. Based on our nutrient problem assessment, however, we recommend retention of nutrient-related listings for the Lost River.

D. DDT in Sediments

The State did not evaluate sediment DDT data in cases where this was the sole type of available data due to its apparent concern that available sediment DDT assessment criteria may be unreliable. We recommend the State evaluate available sediment DDT data. It is possible to derive an acceptable screening criterion by using DDT-specific sediment-water ratios to convert CTR saltwater criteria for DDT into the corresponding sediment value for assessment purposes (see EPA, 1994). This analysis will support listing of some areas in the Los Angeles Harbor.

E. Sediment Chemistry Assessment

The State did not assess waters in situations where only sediment chemistry data. While we support the general practice of evaluating multiple lines of evidence to evaluate potential sediment contamination, the State should evaluate available sediment chemistry data even if it is the sole type of available data. We note the State assessed several waters based solely on fish tissue data—a practice EPA supports. The assessment of sediment chemistry data should consider the frequency and magnitude of excursions above the screening criteria along with other information such as occurrence of related impairments in upstream or downstream segments. Review of sediment chemistry data in this manner supports additional listings in several waters including Los Angeles Harbor.

IV. Listing of Tribal Waters

The State proposed listing the Lower Klamath River for sediments. This assessment appears to be based, at least in part, on data collected in Tribal waters. Federal regulations provide that State jurisdiction to make Section 303(d) listing decisions does not extend to waters within Indian Country, as defined in 18 U.S.C. Section 1151. EPA requests clarification that the proposed listing does not address portions of the Klamath River that are within Indian Country.

V. New Data and Information Submissions

We expect some commenters will provide additional data or information with their written comments on the draft 303d list. The State should evaluate whether it needs to consider newly submitted data and information on a case-by-case basis. If the submitted data and information are found to be "existing and readily available", federal regulations require consideration of the new data and information in the listing assessment (40 CFR 130.7(b)). Factors the State should consider in evaluating whether data and information are "existing and readily available" include:

- data and information age,
- the form in which the data and information were submitted,
- they type of data, and
- whether evaluation of the data and information would support changes in listing determinations.

EPA would like to work with your staff to evaluate data and information received from the public to determine whether it should be considered in the 2004-2006 listing cycle. We would like to balance the obligation to consider available data and information with our shared objective to promptly complete this listing cycle.

At some future time, we would like to discuss the proposed long term TMDL schedules with the State and Regional Boards in an effort to narrow the broad spectrum of proposed completion schedules.

In conclusion, we believe the State produced a sound framework for assessing the condition of its waters and commend your substantial effort on the listing update. We would like to work with your staff to resolve the outstanding concerns discussed in this letter and move toward submittal of a fully approvable Section 303(d) list. If it would help expedite completion of the listing process, we would be happy to provide additional contractor assistance to assist the State in reviewing any additional data and information that need to be considered. If you have any questions concerning our comments, please call me at (415) 972-3572 or David Smith at (415) 972-3416.

Sincerely yours,

/original signed by/

Alexis Strauss
Director, Water Division

enclosures

From: Craig J. Wilson
To: Carmencita Sannebeck; Yates, Randal
Date: Mon, Jan 30, 2006 7:15 AM
Subject: Fwd: EPA comments on CA 04-06 Sec. 303(d) List

For the record and distribution to Board. CJW

>>> <Smith.DavidW@epamail.epa.gov> Friday, January 27, 2006 >>>
Ken and Craig
These comments were signed today by Alexis Strauss. Will fedex a printed set on Monday. The two figures in Enclosure 2 are contained in the attached spreadsheet. Will look foward to discussing next steps in a week or so. Have a good weekend.
(See attached file: 0406 List Comments.fin12706.doc)(See attached file: 0406Comments-Enc1Table.doc)(See attached file: 0406Comments-Enc2 Laguna.doc)(See attached file: LSR Nutrient Analysis12706.xls)