



SENT VIA ELECTRONIC TRANSMISSION/US MAIL

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Betty Yee
Regional Water Quality Control Board
Central Valley Region
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Re: Triennial Review Draft Work Plan

Dear Ms. Yee:

On July 11, 2011, the Central Valley Regional Water Quality Control Board ("CVRWQCB") issued its "Issue List and Work Plan for the 2011 Triennial Review of the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins" ("Issue List"), as well as a response to comments on the 2009-2010 Triennial Review. The following comments are submitted on behalf of the San Joaquin River Group Authority ("SJRG").

1. Beneficial Use Designations

Many of the issues listed in the Issue List, such as water bodies dominated by NPDES discharges; agricultural dominated water bodies and agricultural conveyance facilities; beneficial use designations; dividing long streams into smaller segments, each with different beneficial uses; and temperature transition zones all tie into beneficial use designations. Since beneficial use designations are the starting point for the regulation of water quality, a better, more efficient way must be developed to more precisely designate beneficial uses for streams, apply the tributary rule, and, if necessary, develop site specific objectives. The current method of amending the Basin Plan for every objective and every stream, such as that used for Deer Creek temperature objectives and MUN designations for Old Alamo Creek, are too time-consuming and expensive to make any meaningful progress. Developing a process and amending the Basin Plan to incorporate such a process would require time and money, but it would save time and money in the long run.

2. Salt and Nitrate Management

The Issue List appears to contradict the current Basin Plan. According to the current Basin Plan:

“Of the two major options for disposal of salts produced by agricultural irrigation, export out of the basin has less potential for environmental impacts and, therefore, is the favored option. The San Joaquin River may continue to be used to remove salts from the basin so long as water quality objectives are met.”

(Water Quality Control Plan for the Sacramento River and San Joaquin River Basin, p. IV-15.00.)

The Issue List, however, is less favorable towards using the San Joaquin River to export salt from the Basin, on the basis that salts are “recirculated into the federal and State water project pumps and returned to the water users in the San Joaquin River Basin, as well as to water users in the Tulare Lake Basin where there is no outlet for salt at the present time.” (Issue List, p. 6.) Absent a valley-wide drain to remove salt from the Basin, the San Joaquin River remains the only method available for the removal of salt. Unless salt can be removed from the Basin, salt balance cannot occur and salt will built up in the soil and/or groundwater, potentially harming agricultural beneficial uses, depending on where and how these harmful salts accumulate.

As the Issue List recognizes, CV-SALTS is currently working to develop long-term solutions for managing salt in the Basin. (Issue List, p. 9.) Recirculation of salts is one of the many challenges to address in developing a long-term, comprehensive strategy for managing salt in the Basin.

3. Use of EPA Region Temperature Criteria

According to the Issues List, the Department of Fish and Game (“DFG”), Region 4, requested the establishment of temperature objectives to protect fall-run Chinook salmon in the San Joaquin River Basin. (Issue List, p. 37.) EPA Region 9 and the DFG support using “the scientific approach used in the EPA Region 10 guidance for development of numeric temperature standards to protect salmonid beneficial uses in the Central Valley.” (Id.)

If the CVRWQCB chooses to develop numeric temperature standards to protect salmonid beneficial uses in the Central Valley and, in doing so, considers the EPA Region 10 guidance, it must not repeat a common error with the EPA Region 10 guidance of directly applying its criteria.

In 2003, EPA Region 10, which encompasses Oregon, Washington, Alaska, Idaho, and 267 Native American tribes, determined that there were a variety of chronic and sub-lethal effects likely to occur to Pacific Salmonids, that the guidance in *Quality Criteria for Water 1986* would not necessarily protect Pacific Northwest salmonids, and that guidance more specific to

Pacific Northwest salmonids was necessary. (EPA *Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards* (2003).) As a result, EPA Region 10 chose to adopt additional guidance for designating uses, developing temperature water quality objectives, managing stream temperatures, issuing National Pollutant Discharge and Elimination System permits for heat discharges, and identifying water quality limited segments under Clean Water Act Section 303(d) within its region. It did not adopt new water quality objectives or any new regulations, but simply additional guidance. The guidelines may offer states outside the Pacific Northwest assistance in developing their own temperature objectives. The Region 10 application of its guidelines and the criteria developed were specific to Pacific Northwest salmonids. As a result, the numeric criteria developed applies in the Pacific Northwest generally and may apply in the Pacific Southwest, but only to the degree that the salmonids and hydrologic and other conditions are sufficiently similar.

Region 10 obtained preference and avoidance figures for various Pacific Northwest salmonids by conducting a literature review (Sally Sauter, John McMillan, Jason Dunham, *Salmonid Behavior and Water Temperature (Issue Paper 1)*, Prepared as Part of EPA Region 10 Temperature Water Quality Criteria Guidance Development Project (EPA-910-D-01-001, May 2001)¹, p. 3-10.) Only one of the studies in the literature reviewed, a study of juvenile wild steelhead, was conducted in California. The other studies used salmonids from British Columbia, Virginia, Oregon, Washington, and Ontario, not California. The lone California study was conducted in an unspecified stream in “northern California,” not in the San Joaquin River Basin. Furthermore, only two of the studies observed fall-run Chinook salmon, the only run existing in the San Joaquin River Basin today, but both were conducted in Washington, not in the San Joaquin River Basin. Even then, the Region 10 Temperature Criteria was also only one part of Region 10’s guidance. It was not intended to operate alone and be applied directly, but as only one of multiple considerations, such as unusually warm seasonal conditions, natural background temperatures exceeding temperature criteria, and diurnal variations, in developing temperature objectives for the waters of the Pacific Northwest. (*Id.* at 20, 35.) The general methodology used by EPA Region 10 would be useful and informative, but in developing temperature objectives or in seeking guidance in applying current temperature objectives, the CVRWQCB must avoid directly applying temperature criteria that were never intended for the San Joaquin River Basin.

4. San Joaquin River Dissolved Oxygen

Dissolved oxygen conditions in the Stockton Deep Water Ship Channel (“Ship Channel”) have significantly improved since 2006. Much of the improvement has been attributable to the City of Stockton’s treatment plan upgrades, which have significantly reduced ammonia discharges since 2008. Upstream discharges of oxygen demanding substances are also lower and have further contributed to improved dissolved oxygen conditions in the Ship Channel. Finally, the Department of Water Resources (“DWR”) completed testing its aerator and showed that aeration is an effective method of improving dissolved oxygen conditions in the Ship Channel. A stakeholder group has agreed, in principle, to fund and operate the aerator for an initial five years and is currently negotiating an agreement providing for such funding and operation.

¹ Available at
http://www.deq.idaho.gov/water/data_reports/surface_water/monitoring/epa_reg10_paper%201_behavioral.pdf

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Basin Plan amendments to further refine the dissolved oxygen objective would greatly aid managing dissolved oxygen conditions in the Ship Channel. Potential refinements include, but are not limited to, the development of averaging periods and consideration of changing San Joaquin River flows. Most important, is a review of the scientific basis of the 6.0 mg/l September-November objective. The 6.0 mg/l objective was based on a 1969 agreement between the DFG and DWR to act as a trigger for DWR to install the barrier at the Head of Old River in order to maintain dissolved oxygen conditions of 5.0 mg/l or better. As a result, the 6.0 mg/l objective was not based on science, it lacks a scientific basis, and it was never intended to be an objective, but rather a trigger for an implementation action. Although five years are contemplated for the aerator funding and operating agreement, the initial term will be three years. Two one-year extensions may occur thereafter, but extending the agreement may depend on what progress has been made in reviewing and refining the dissolved oxygen objective.

Very truly yours,
O'LAUGHLIN & PARIS LLP



KENNETH PETRUZZELLI

KP/tb
cc: San Joaquin River Group Authority