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March 10, 2009

Danny McClure
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670

Re: Comments on Proposed Revisions to the 303(d) List of Impaired Water Bodies

Dear Mr. McClure:

We would like to submit the following comments from the County of Plumas regarding the proposed changes to the 303(d) list of impaired water bodies.

Middle Fork Feather River – Dissolved Oxygen

In the Supporting Information for the Middle Fork Feather River, two lines of evidence are presented for the dissolved oxygen listing:

- LOE 22572 cites 27 samples collected from March 2002 to April 2004, none of which exceeded the standard. According to the referenced report from the Department of Water Resources for the relicensing of FERC Project 2100, the sampling location was near Merrimac, which is located in the Middle Fork canyon just above Lake Oroville. The dissolved oxygen in the samples ranged from 8.9 to 13.2 parts per million.

- LOE 22571 cites nine samples that were collected from July 2005 to September 2006 at the A-23 Bridge near the bottom of Sierra Valley, all of which exceeded the standard. These samples were collected as part of the Irrigated Lands Regulatory Program (ILRP).

While the A-23 Bridge was selected as an initial sampling location early in the implementation of the ILRP, it is located at a point in the river where flow is slowed and forms a large, shallow pool. As the sampling protocols for the ILRP were refined, the approved sampling location was moved downstream to the bottom of Sierra Valley, just above the confluence of Grizzly Creek. Data collected for 2007 and 2008 (attached) show dissolved oxygen levels ranging from 7.62 to 15.8 parts per million, which is comparable to the 2002-2004 data from Merrimac. The Middle Fork Feather River should not be listed for dissolved oxygen based solely upon anomalous data from a flawed sampling location, as presented in LOE 22571, particularly when there is countervailing data from multiple sources (including later years) that show standards are not exceeded.

Middle Fork Feather River – Unknown Toxicity

The proposed listing for Unknown Toxicity is based upon four lines of evidence. For two of the lines of evidence (22618 & 22619), samples were collected near Merrimac and three samples out of ten exceeded standards. For the other two lines of evidence (22556 & 22620), samples were collected at the A-23 Bridge and none of the eight samples collected exceeded standards. If there is a source of toxicity, the only data shows that it is somewhere below Sierra Valley and above Merrimac. Sierra Valley should not be identified as impaired for this contaminant.

Lake Almanor - Mercury

We recognize that methylmercury is a highly toxic substance with significant adverse health effects for humans and animals, and we are involved in and support a number of efforts to remediate mercury in the environment, especially in our streams and lakes. At the same time, sport fishing is a valued recreational activity at Lake Almanor, and it is very important to us that if the lake is indeed listed as being impaired for mercury, it be done only after careful consideration of the available data in an appropriate context.

The evaluation guideline is the U.S. EPA standard for methylmercury in fish tissue of 0.3 parts per million (ppm), based on the human health impacts of fish consumption. The data presented in the Supporting Documentation include the following mercury concentrations in fish tissue samples from Lake Almanor:

o Brown trout – 4-fish composite sample	0.15 ppm
o Small-mouth bass – composite sample	0.20 ppm
o ***Small-mouth bass – composite sample***	***0.37 ppm (1 exceedance)***
o Rainbow trout – 1 sample	0.08 ppm
o ***Sacramento sucker – 5-sample average***	***0.83 ppm (4 exceedances)***
o Small-mouth bass – 2-sample average	0.10 ppm
o Steelhead trout – 12-sample average	0.10 ppm
o Warmouth – 5-samle average	0.11 ppm
o Brown bullhead – 6-sample average	0.08 ppm
o Small-mouth bass – 4-sample average	0.07 ppm
o Warmouth – 1 sample	0.06 ppm

The proposed listing is based upon five samples out of 36 exceeding the standard, which supports listing as provided in Table 3.1 in the Listing Policy. However, four of the exceedances were attributable to samples from Sacramento sucker. For the popular sport fish, including bass, trout, and steelhead, there was a single exceedance is a sample of small-mouth bass. Aside from the samples of Sacramento sucker, there is that one exceedance in 32 samples, which would <u>not</u> warrant listing under Table 3.1 of the Listing Policy. For that sample size, at least three exceedances would be required for listing.

For the guideline that is being applied here, the Regional Board relies upon the U.S. EPA's *Water Quality Criterion for the Protection of Human Health: Methylmercury* (EPA-823-R-01-001; January, 2001). However, that document itself concludes by stating that "EPA strongly encourages States and authorized Tribes to develop a water quality criterion for methylmercury using local or regional data rather than default values if they believe that such a water quality criterion would be more appropriate for their target population." In the case of Lake Almanor, where fish consumption is the basis for the applicable standard, reliance upon data from the Sacramento sucker is not an appropriate basis upon which to list the lake.

Lake Almanor – Water Temperature

The Regional Board is recommending that Lake Almanor not be listed as being impaired for water temperature, although three out of the five samples considered had water temperatures that exceeded standards for cold water species. The supporting documentation notes that there is no evidence that human activities are modifying the temperature regime in a way that adversely impacts those species. At least, not yet.

As part of the Federal Energy Regulatory Commission's relicensing of the Upper North Fork Feather River Project, which includes Lake Almanor, the State Water Resources Control Board is in the process of preparing a Clean Water Act Section 401 water quality certification. A number of the possible requirements being considered by the State Board include an increased withdrawal of cold water from Lake Almanor. Analysis conducted as part of the FERC relicensing has already shown that habitat for cold water fisheries is already significantly compromised during the summer months, and the withdrawal of additional cold water from the lake is a high concern.

In addition to the habitat impact on the fishery of having less cold water, we are also concerned by the fact that bioaccumulation of mercury is generally considered to correlate with water temperature. As shown above, except for the bottom-feeding sucker, the other fish species in the lake have mercury levels well below the EPA standard. An increase in lake temperatures could accelerate the bioaccumulation of mercury and/or lead to a different mix of species that are more likely to accumulate mercury, resulting in a substantial impairment of the lake's entire fishery.

With these concerns in mind, we hope that the Regional Board will continue to monitor water temperature data from Lake Almanor to ensure that existing beneficial uses are protected.

Thank you for considering these comments.

Sincerely,

Sharon J. Thrall

Sharon Thrall
Chair, Board of Supervisors