

# BOARD OF SUPERVISORS

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September 14, 2010

Charles R. Hoppin  
Chair, State Water Resources Control Board  
P.O. Box 100  
Sacramento, CA 95812-0100

Re: Water Quality Certification for FERC Project 2105 (Upper North Fork Feather River)

Dear Chair Hoppin:

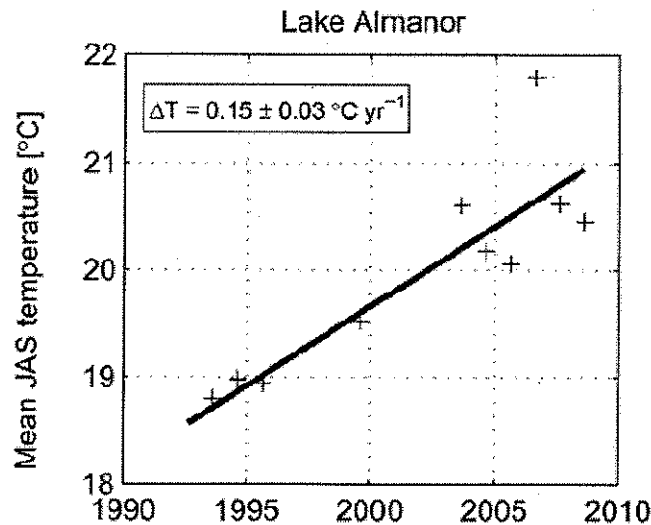
As you know, the State Water Resources Control Board is in the process of preparing a water quality certification and environmental impact report for the relicensing of FERC Project 2105, including Lake Almanor and Butt Valley Reservoir.

The CEQA process was initiated by the State Board in 2005, and issuance of the draft environmental impact report is still forthcoming. We understand that this process is not a simple undertaking and we recognize the many competing priorities the State Board has needed to address, particularly in the past year. However, in the absence of any official communication on Project 2105 since the Level 1 and 2 Screening Report was issued in 2007, there has been substantial time for speculation to grow and rumors to circulate among the many interested participants and observers in the relicensing.

One category of information that has made its way back to us from Sacramento are reports of concerns people may have about the *aesthetics* of a "thermal curtain," which is one of the options under evaluation for Lake Almanor. Aesthetic considerations are the least of our worries, and it is important that all parties involved understand there are substantial concerns about the use of a thermal curtain (or any other means) to withdraw cold water from Lake Almanor.

With current trends in increasing annual temperatures, changes in timing and volume of runoff, and existing water quality issues, the fisheries and ecosystems in Lake Almanor and Butt Valley already face significant challenges that may be beyond the influence of project operations. On top of those concerns, analysis performed as part of the relicensing indicates that cold water withdrawal will further reduce trout habitat. Local fishermen and other observers are well aware of the existing stressors to the fisheries in Lake Almanor and Butt Valley, and their concerns have only been confirmed by the technical analysis that has been undertaken in the Project 2105 relicensing.

- A report prepared by Thomas R. Payne and Associates in support of PG&E's license renewal analyzed the impacts to the fisheries in Lake Almanor and Butt Valley as a result of installing a thermal curtain at Lake Almanor's Prattville outlet. One of the report's conclusions was that the thermal curtain would alter water temperature and dissolved oxygen concentrations in Lake Almanor and Butt Valley and result in an overall reduction of habitat for coldwater species; a 38% reduction in habitat in Lake Almanor based on modeling of conditions from the year 2000.
- Under another analysis, the Payne report determined that "[d]uring summers with hot weather, the currently stressed salmonid population will experience additional stress under thermal curtain induced conditions."
- Lake Almanor was one of six lakes in California and Nevada analyzed for trends in surface water temperatures over a 17-year period from 1992 to 2009. The study found warming trends in all six lakes; lake water temperatures increasing twice as fast as air temperature; and that Lake Almanor (as well as Mono Lake) had the highest rate of temperature increase. (Geophysical Research Letters, Vol. 36, L22402.)



- On August 4, the State Board adopted the 2010 Integrated Report, including the 303(d) list of impaired water bodies. Lake Almanor was listed as being impaired for mercury as a result of tissue samples from warm-water fish species. The higher propensity for warm water species to accumulate mercury (as a result of feeding habits or other factors) is yet another reason we are concerned about Lake Almanor reaching a tipping point that renders it uninhabitable by coldwater species.
- Another concern related to mercury is dredging activity that is proposed to achieve the maximum benefit from a thermal curtain. Any activity that mobilizes and contributes to methylation of mercury will only exacerbate the existing water quality impairments and health risk to humans and other species.

At this point, these are all significant concerns related to the withdrawal of cold water and the long-term health of Lake Almanor and Butt Valley Reservoir. We understand that temperature control devices or measures have been employed at Shasta, Lewiston, Whiskeytown, and Oroville reservoirs, but all of those reservoirs differ significantly from Lake Almanor in terms of the ratio of depth to surface area, summertime oxygen depletion, and operational regimes.

We look forward to seeing how Lake Almanor's unique issues are analyzed in the EIR and to gaining an understanding of how the State Board may propose to achieve downstream temperature benefits without degrading existing beneficial uses.

Sincerely,

Sharon Thrall  
Chair  
Board of Supervisors