Barnes, Peter@Waterboards

From: Russell Van Alen <evealen@aol.com>
Sent: Monday, March 23, 2015 2:08 PM
To: Barnes, Peter@Waterboards

Cc: evealen@me.com

Subject: DEIR, November 2014 by SWRCB Concerning FERC Project 2105--Thermal Curtains in

Lake Almanor and Butt Valley Reservoirs

Mr. Peter Barnes,

The effort to remove cold water from Lake Almanor via *thermal curtains and dam releases* has continued over twenty years in the absence of supporting evidence that withdrawing cold water from Almanor is the most effective and financially viable way to cool water downstream.

The DEIR and its proposed requirements fail to recognize the following:

- 1. It is questionable if the downstream sections of the North Fork Feather River *ever* had an appreciable cold water fishery. The evidence of such is weak at best.
- 2. It is also questionable if the proposals will reduce the downstream water temperatures to adequately maintain a cold water fishery. Any cooler water from Almanor will be mixed with the water stored in downstream reservoirs and thus the water reaching the lower stretches of the NFFR will, in general, be the same temperature as the reservoir water.
- 3. The cooling and improvement of water downstream of Almanor has consistently been better achieved by repairing downstream riparian habitats, not cold water withdrawals from Almanor.
- 4. Don't the existing hydroelectric facilities actually provide cooler downstream temperatures compared to water flowing over hot rocks during hot summer days? Water moved downstream in tunnels and penstocks is shaded from the effects of solar warming.
- 5. If thermal curtains are effective, there is real concern about the effects of increased water temperatures in Lake Almanor, which is an esthetic gem in Plumas County. It is used heavily because of its recreational and fishery attributes. Higher water temperatures would damage its existing fishery and result in considerable growth of aquatic vegetation. This would be devastating to the citizens of Plumas County who already struggle with a very fragile economy.
- 6. The monetary cost of the installation and operation of thermal curtains far outweighs the value of any improved downstream fishery. Have such cost/benefit evaluations been made?
- 7. While it appears that any summer increases in low level water releases would be compensated by reduced releases at other times of the year, the result would be reduced summer electric generation. Because the demand for electricity is generally greatest during the hot summer months, the lost generation would have to come from fossil fueled generation facilities. This would result in increased cost to electric customers, increased summer air contamination and further depletion of natural resources.

In summary, it is difficult to understand how the SWRCB could make the recommendations contained in the DEIR based on the adverse environmental and monetary costs compared to marginal if any benefits of a few cold water fish.

Janet C. Eveland

Don Van Alen

155 Slim Dr.

Chester, California 96020