

ORIGINAL

Upper North Fork Feather River Project, FERC
No. 2105-089

Magalie R. Salas, Secretary Commission
Federal Energy Regulatory Commission
888 First Street, NE
Washington, D.C. 20426

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FEDERAL ENERGY
REGULATORY COMMISSION
June 19, 2003

Dear Mr. Salas:

I am a retired California Department of Fish and Game fishery biologist (32+ years), 25 years of which I spent as the fishery biologist overseeing the management of the Lake Almanor fishery. I also served as District Fishery Biologist for Plumas County. I am now on the Board of Directors for the Almanor Fishing Association as their fishery biologist.

The Almanor Fishing Association, formed in 1980, is a group of concerned anglers from all over California and Nevada as well as business people in the Lake Almanor basin. The Association is dedicated to the enhancement and preservation of a high quality fishery resource in the Lake Almanor basin.

On behalf of the Almanor Fishing Association, I offer the following comments on your Scoping Document for the Upper North Fork of the Feather River Hydroelectric Project, FERC No. 2105-089, California.

SD1 (4.1.2) Proposed Protection and Enhancement Measures

MEASURE: Study the feasibility of the temperature control structure at the Prattville intake in Lake Almanor...

Comments and questions concerning dissolved oxygen and water temperature:

1. The concentrations and distribution of oxygen within the various depths of Lake Almanor and Butt Valley Reservoir (BVR), in combination with temperature profiles, substantially determine the quantity and quality of their fisheries.
2. The amount of dissolved oxygen present in Lake Almanor and BVR is primarily dependent on the age, fertility and the chemical and biological oxygen demand of inflowing waters (rivers and springs). Temperature and dissolved oxygen concentrations are in a constant state of change. Even changes in weather conditions during the summer can produce drastic changes.

Due to thermal stratification with accompanying fall in dissolved oxygen and temperature with increasing depth, the fish in Lake Almanor and BVR are confined during the summer to a strata of water that is too warm for their optimum growth and survival. Some years this strata of water is only three feet deep and is located just above the thermocline. The most critical period for salmonids is in the late summer early fall immediately prior to fall turnover when the oxygen in the deeper strata is at its minimum. Any significant changes that would occur in this critical area could result in decreased growth, survival or elimination of our salmonid population in Lake Almanor and BVR.

Concerns:

1. Inflow density (water temperature) moves into Lake Almanor and BVR at the elevation where the density corresponds to the inflow temperature where it spreads out horizontally in the direction of least resistance. As the summer inflow enters these waters, it is colder than the surface water, moving along the lake bottom until it meets a more dense (colder) layer. In the case of a deep water release, would the density layer coincide with the withdrawal layer? If so, what are the effects of the inflow moving straight into the Prattville deepwater release?
2. When the cool inflow plunges through the warm water surface into its density layer, drag is exerted upon the adjacent warm water particles so that they are entrained in a downward movement. The warm water (which is carried away) is replaced by an upstream directed current at the surface toward the plunge point. What biological and chemical changes and potential effects would occur due to this process with a deepwater release?
3. What cumulative effects would changes in lake operation and runoff from the upstream drainage have on temperature structure and deepwater temperature releases in Lake Almanor and BVR?
4. What cumulative effects will deepwater (coldwater) releases from Prattville, BVR and Canyon Dam have on growth, reproduction, and distribution of both trout and nongame fish in the rivers downstream? (Same cumulative effects apply to Canyon Dam which is not part of this Measure) (a) How many miles downstream? (b) Effects on other flora and fauna? (c) Cumulative effects to the downstream trout and nongame fisheries (such as fish species redistribution as it relates to intra and inter specific competition)? An example would be nongame fish such as Hardhead and suckers moving further downstream to seek warmer water and displacing or competing with trout for habitat, food, and/or vice versa. (d) What cumulative effects would deepwater releases from Prattville have on the trophy trout powerhouse tailrace fishery in BVR (such as decreased growth rates)?

CURRENTS - Comments and questions:

Various types of complex systems of currents such as inflow, withdrawal, wind-induced, convective and balancing currents are present in Lake Almanor and BVR. The feasibility study should include a knowledge of these currents in order to predict water quality changes since they usually have a significant influence on the development of the stratification pattern and vice versa.

Concerns:

1. What affect will mixing have on water quality (especially temperature) between inflow water and lake water in Lake Almanor and BVR?
2. Do main channel density currents exist during stratified conditions in Lake Almanor and BVR, and if so, what affect do they have on the biological and chemical characteristics of these waters?

MEASURE: Remove a concrete weir on Butt Creek (a tributary on the Seneca reach of the North Fork Feather River).

Comments:

This issue was proposed as one of the mitigation proposals for the BVR dam repair project a few years ago. At that time the Department of Fish and Game opposed the removal of the weir. We oppose the removal for the same reasons which are as follows:

1. The weir is not a total barrier to trout but is to suckers.
2. Removing the barrier would open upper Butt Creek above the weir to both trout and suckers.
3. Limited trout spawning and rearing habitat in upper Butt Creek is probably at its maximum carrying capacity. The barrier limits the numbers of trout that can spawn in the creek, thus regulating the competition for limited trout habitat. Removing the barrier would allow all trout and suckers access to upper Butt Creek which could have a significant impact on trout survival in the creek and in BVR. The BVR wild trophy trout fishery has thrived for years with this partial barrier in place so it doesn't appear to have a significant impact on the recruitment of trout into BVR. **We therefore oppose the removal of the concrete weir.**

MEASURE: During the first 10 years of any new license, implement the following recreational resource enhancements:

- Expand parking at the Alder Creek boat launch.

Comments:

1. In addition to expanding parking at the Alder Creek boat launch we recommend the boat ramp also be improved. The ramp does not have enough slope to launch boats at all water levels.
- Proposed new recreational resource enhancement measure:

As a new recreational resource enhancement, we would highly recommend that PG&E deed their surplus property at the Hamilton Branch Powerhouse to the Department of Fish and Game (DFG). This would be an extension to DFG's newly acquired adjoining 3+ acres for angler parking and access. The DFG property has been developed and is being managed by our Association. The adjacent PG&E property was for sale a few years ago until it was taken off the market by PG&E. This property is one of the few angler accesses to Lake Almanor, the Hamilton Branch and powerhouse outfall during the winter months. PG&E crews remove snow from county road A147 to the powerhouse. The property has lake frontage, which could be used by the DFG and our Association for our joint cage culture program. The cage culture program is has been located at Lassen View Resort since 1980. When this resort sells, the DFG would have to terminate the cage culture program. Lassen View Resort is the only location except for the PG&E powerhouse property that is suitable for this program. A

total of 50,000 trout (over half the total rainbow trout allotment for Lake Almanor) are reared in the cages each year for release back into Lake Almanor. Loss of this program would have a significant effect on the Lake Almanor fishery.

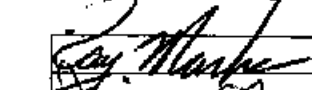
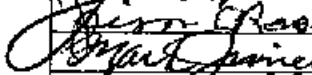
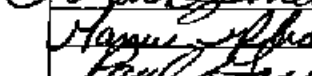
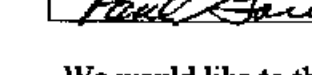
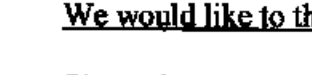
4.1.1 Water Use, Quantity and Quality

4.1.2 Aquatic Resources

Comment:

The issues that are of concern to us have been covered under the cumulative effect analysis.

Signatures of the following Lake Almanor Basin individuals and organizations share Lake Almanor Fishing Association's concerns with the potential adverse effects cited in this letter.

	RAY MARKS	ROTARY PRESIDENT, CEO SHARCA
	JIM RASKA	Pres. Combined 12th Grades of Carson
	MARK JIMENEZ	Fishing Guide, Lake Almanor
	JAMES PLEW	PRESIDENT ALMANOR FISHING ASS.
	PAUL GARRIDO	TREASURER ALMANOR FISHING ASSOC.

We would like to thank you for the opportunity to comment on your scoping document.

Sincerely,



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- cc: Bill Zemke, Coordinator PG&E
 Dana Differding, State Water Resources Control Board
 Kent Connaughton, Supervisor, Lassen National Forest
 Mark Madrid, Plumas National Forest
 FERC Coordinator, U.S. Department of the Interior
 Plumas County Fish and Game Commission
 Bill Dennison, Plumas County Supervisor
- Cc: Robert Meacher, Plumas County Supervisor
 Ken Kendargi, Fisheries Biologist, Department Fish and Game
 Banky Curtis, Regional Manager, Department Fish and Game
 Mike Mainz FERC Relicensing Coordinator, Department Fish and Game
 Bob Orange, Department of Fish and Game
 Water Rights and FERC Coordinator, Department of Fish and Game