

## **Barnes, Peter@Waterboards**

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**From:** Chuck040449@aol.com  
**Sent:** Saturday, March 21, 2015 12:28 PM  
**To:** Barnes, Peter@Waterboards  
**Subject:** Lake Almanor Thermal Curtain

Mr. Peter Barnes, Engineering Geologist ([Peter.Barnes@waterboards.ca.gov](mailto:Peter.Barnes@waterboards.ca.gov))

State Water Resources Control Board Division of Water Rights, Water Quality Certification Program

Sacramento, CA 95812-2000

Subject: Against Lake Almanor Thermal Curtain

Dear Mr. Barnes,

For the last several years I've driven around the lake's perimeter and noticed banners that read "Save Lake Almanor-Stop the Thermal Curtain". Until now, I never worried very much about the notion anyone would consider constructing a thermal curtain for the purpose of removing half the cold water from a lake that's under a hundred feet deep. The lake wasn't created by damming and filling a deep ravine. Instead, it was created by simply damming and flooding a large meadow. The water contained in this lake is collected from under water springs, the North Branch of the Feather River, the Hamilton Branch, and to some extent Bailey Creek. Some of the material I've read "against" the thermal curtain suggests nearly 50% of the lake's cold water will be removed. Also, the total thermal curtain construction package being proposed for Almanor and Butt Reservoir sites could exceed \$50,000,000. So far, the only reason I can find "for" this project is to lower the downstream temperature less than two degrees to help relieve the stress on trout living within a 40 mile stretch of river downstream of the lake. It seems to me, after the installation of a thermal curtain and removal of half the lake's cold water combined with two or three serious sequential drought years could realistically cause a chain of unfortunate events. First, the lake level would suffer a continual drop due to not enough rain or snow. With only half the cold water available, the lake would heat even more reaching temperatures that destroy the large schools of pond smelt baitfish population needed by the trout and bass as an important food source. The trout will over crowd underwater springs and entrances to feeder streams seeking cooler water for survival. Without bait fish, the larger bass and trout will begin focusing on eating the smaller trout. A shrinking trout population also means stress on other lake creatures as well, like ospreys, eagles, and otters. What is an excellent cold water fishery may transform into a warm water fishery, which may put an end to adult spawning trout annually running upstream to help populate miles of feeder streams that form the upper Feather River. Almanor is one of the top cold water fisheries in the state and the impact of its destruction negatively affects the economy for grocery stores, motels, gas stations, sporting good stores, campgrounds, restaurants, gift shops, and guide services.

There are a number of feeder streams upstream from Almanor. Every season adult fish swim from the lake and into the streams to spawn helping to create a healthy juvenile trout population which in turn becomes an important part of nature's food chain. Fishing for planted trout is certainly very enjoyable, but we should never need to rely entirely on waiting for trucks, with our fishing rods at the ready, to dump planted fish into our streams. Destroying the cold water trout fishery in the lake by removing half the cold water from it has to impact the upstream fishery and its associated food chain. Hopefully, someone has spent as much time studying the effect of stress on the trout in the lake and upstream of the lake as the downstream studies. I

have fished the upper reaches of the North Branch of the Feather, the South Arm of Rice Creek, the North Arm of Rice Creek, Warner Creek and Willow Creek extensively starting nearly 50 years ago. Every spring, as the snow was melting, I've witnessed those feeder streams loaded with three to five pound fish from Lake Almanor using those miles and miles of upper Feather River tributaries to spawn. In the effort of reducing the stress on the downstream trout, it seems the end result would increase the stress of the trout in the lake, increase the stress on the food chain upstream of the lake, increase the stress on the area's economy, and increase the stress on PG&E's customers pocket book by passing off a \$50,000,000 bill for them to pay. In the end this project may not even work as planned and may even destroy more than it saves.

Thank you for considering my thoughts,

Sincerely,

Chuck Deiner, 505 Ponderosa Drive,

Lake Almanor, CA ([ckdeiner@aol.com](mailto:ckdeiner@aol.com))