

March 25, 2015

Subject: UNFFR Project – Comments

I question the MWAT modeling of temperature as models are not accurate especially to the range of 1-2 degree C. over such a long distance. How was the following used in the modeling? These questions raise my concern about modeling accuracy.

1. The North Fork is oriented on a NE to SW orientation which gives maximum solar heating – morning and afternoon. This raises water temperature. Where are the air temperatures?
2. The North Fork flowing thru steep canyons with rock and low vegetation allows the canyon to get very hot in the summer. Higher air temps raise water temperatures.
3. Belden reservoir is exposed to the sun, also increasing water discharge temperatures.
4. Water held back at the main Feather River hydroelectric dams is subject to solar radiation and heating of water.
5. What was the standard deviation of predictability at the confluence and further downstream?

I missed seeing the current effects of water temperature on aquatics in the main Feather River. Fish will move to where there is cooler water, like from inter-gravel water flow or springs. They adapt. Where are the fish kill numbers?

I question the determination of suitable fish habitat remaining in Lake Almanor during July-September. Where is the bathymetric map showing areas of suitable water depth? Where is the 1% decrease of suitable habitat taking place?

It was mentioned that springs under the lake cool the water. What if the springs are above the water level, such as Big Springs, when the lake level is down during mid-summer? That is surface water that gets warmed before entering the lake plus no place for fish to congregate except on the dirt banks.

The state water quality standard is a one size fits all approach with no relation to how species have adapted to their living conditions. Thus, the use of this standard is not appropriate.

I saw no chart showing inflow to Lake Almanor during the summer and how a discharge of 250 cfs. would affect lake levels and the rate of thermocline rising.

The proposed mitigation of the thermal curtain alternative of restocking fish in the lake is meaningless. If fish are expected to die, float to the surface, drift ashore and rot, then there is something wrong with the alternative.

With such large consequences on Lake Almanor and Butt Lake, the use of thermal curtain water is dubious to meet an arbitrary water quality standard and I object to the proposal.

Sincerely,

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