Barnes, Peter@Waterboards

From:	Robert Heming <robert.heming@earthlink.net></robert.heming@earthlink.net>
Sent:	Monday, March 23, 2015 2:51 PM
То:	Barnes, Peter@Waterboards
Subject:	Lake Almanor cold water diversion

Dear Mr. Barnes,

I am writing to object to the plans to divert cold water from Lake Almanor to help lower temperatures in the Feather River. I attended meetings which examined the results and methodology of the engineering study on which your decision is based. The engineering study was a major simplification of a very complex hydraulic and ecological system and the estimation of the reduction in water temperature contained a high margin of error. So it is unlikely, even under optimal circumstances, that the goal of a reduction of water temperature of the Feather River by 3 degree Celsius will be obtained.

My conclusion from that review is that the plan to divert cold water from Lake Almanor will probably not have the planned benefit to the downstream water temperature but will definitely harm the Lake Almanor ecosystem.

Lake Almanor is a shallow lake which depends on river inflow and most importantly, the inflow from Lake bottom springs to provide fish habitat. Recent studies have shown that the recharge rates from springs is diminishing and that, combined with over abstraction of cold water will have a harmful effect on Lake temperature and lead to a decline in this ecosystem.

California is in a severe drought and data shows that it may be in the early stages of a multi-decade drought in which a few wet years will be interspersed with many dry years. This may be the beginning of a significant dry period for California and to impose a major change on an important part of its environment would be wrong.

The engineering study is now nearly a decade old and was not designed to incorporate a multi-decadal drought. Therefore I believe it is fundamentally flawed and its implementation could cause great environmental harm as well as failing to meet the goal of lowering water temperatures in the Feather River.

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