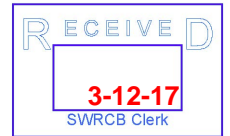


**From:** Mike Plum  
**To:** [commentletters](#)  
**Subject:** Comment Letter – 2016 Bay Delta Plan Amendment & SED  
**Date:** Sunday, March 12, 2017 9:58:53 AM



Thank you for this opportunity to comment.

I'm Mike Plum and writing on behalf of the McClure Boat Club. I am the Secretary Treasurer of the Club and have been a member since 1988. My wife's family has been on the lake for over 50 years so collectively we have a great deal of knowledge of the lake. I'm an engineer by training and retired as a high tech executive out of the Silicon Valley. I had many engineers working for me when I retired.

The McClure Boat Club is a community of 63 homes located on the shores of Lake McClure. The Club operates a water treatment facility licensed by the State Water Resources Control Board. Our experiences during the drought have many parallels to the conditions the lake will face if the Bay-Delta Plan SED is implemented as written. The lake is the community's sole source of water. The drought caused us to look for alternative and there are no other viable sources. A well is not possible within our property boundaries and trucking in water is the only alternative if the lake is made not usable by the SED.

The community has been in existence since 1970 and is now predominantly populated by retired people that range in age to 97. The community itself is not disadvantaged, but several of the residents are. The community leans heavily on volunteer labor to keep costs down. The majority of the Club's budget and the majority of the volunteerism are in support of drinking water. Our water production costs grow tremendously as the lake level drops and the need for volunteer labor increase substantially. Maintaining our water intake platform and pipeline becomes treacherous as the lake level falls. The shoreline turns to rock cliffs and silt filled valleys as the lake level drops.

The Club received grant funding under funding agreement PDE-2210905-001 to help deal with the effects of the drought. Two projects were funded under the drought; additional storage tanks and revisions to our water intake platform and pipeline. The platform and pipeline work was done as a stopgap measure to get us past the drought. A far more robust system would be required if the SED is implemented. In the last year of the drought, there were three separate water pump failures and numerous pipeline leaks due to the low lake level and corresponding high head pressures. This small community can't afford to implement a water intake system robust enough to deal with low lake condition on an ongoing basis. Yet the SED will put the Club in exactly that situation.

There is a direct relationship between lake level and raw water quality, there is also a direction relationship between the lake level fluctuation rate and raw water quality. The best raw water is observed when the lake is near full and at a relative steady level. In these conditions we observe raw water turbidity measurements well under 1 NTU and have observed as low as .070 NTU. On the other end of the spectrum in low water conditions and a rapid rate of lake level change we observe turbidity readings in the double digits and have observed as high as 57.846 NTU. The significant rainfall in late 2016 and early 2017 caused the lake level to rise at a tremendous rate. It started rise with approximately 400,000 acre feet in storage and added an addition 500,000. Through the time of rapidly increasing water levels we observed turbidity readings under 6 NTU. We supply daily turbidity data to water control board in monthly reports. The quality of raw water is compromised below 400,000 acre feet of storage in the lake and severely compromised when the lake is below 300,000 acre feet of storage. The lake elevation is approximately 715 feet above sea level when 300,000 acre feet are being stored. Below this level, silt filled valleys becomes exposed and that silt gets washed into suspension during the next runoff. Worse yet, many old gold mining locations become exposed to runoff. These operations used mercury to separate out the gold and disturbing the sites causes the mercury levels in the water to increase. The plan is significantly flawed with its

higher demand for water in dry years, the quality of water is compromised in these times and will cause more harm than good to the salmon.

The quality of the raw water is visible to the human eye. In good conditions, fish can be seen swimming around in depths up to 20'. In low water conditions the water is so cloudy there is no chance of seeing a fish. When the rains started late in 2015 the lake took on an ugly brown color. As is common, the lake developed a layer of silt filling the old river channel and the numerous valleys that supply runoff to the lake. The silt is made up of very fine particles of clay. These tiny light weight particles stay in suspension for a very long time. The water supplied to Lake McSwain, the Merced Falls Forebay and the Merced River had the same brown color. The point I'm trying to make is that the silt had infiltrated the lake at all levels and the quality of the water throughout the system was very low quality. The SED will routinely cause this same set of conditions to occur.

Some fish species can survive in dirty water, but trout and salmon cannot. The high turbidity condition on Lake McClure decimated the trout population. Their gills fill with silt and clear water is required to flush the silt away. The SED will cause these high turbidity conditions throughout the Merced River and will do more harm than good to the salmon. Are all fish equal? The SED has a slim chance of helping the Chinook salmon, but it harms all other species.

It appears to me that the salmon have more of a survival problem rather than a spawn problem. Yet the SED only address the spawn part of the problem. As I said in the Merced public hearing, an infinite flow rate won't fix the problem. Hatcheries on each of the tributaries would be the easiest way to address any spawn rate issue. The SED does nothing to address the bigger part of the problem and that is the survival rate of the salmon. There are numerous things killing off the salmon: pollution in many forms, predators, over fishing and habitat reduction. These all need to be addressed for the salmon to survive. The salmon will continue their decline if the SED is implemented as written.

Any successful plan needs to be multi-faceted. It has to be as complex as the problems it is trying to solve. A specific plan needs to be developed for each river. Merced Irrigation District's SAFE plan was developed with due diligence and will make a positive impact. The SED will do just the opposite. A success plan will need to address the survival rate problem the salmon face. It will need to individually deal with each of the causes and will need to involve many of the branches of state government.

There was a thought shared at the Merced Public hearing that the SED spreads the pain equally. I completely disagree with that statement. The SED as written will take away this community's access to safe drinking water. It would force us to truck in water or to abandon our homes in dry years. Equal pain would be to divert 100% of Hetch Hetchy water to the San Joaquin and into the delta. San Francisco could develop desalination plants for less money per capita than we could haul in water.

The level of diligence and inclusion in the SED is shockingly low. Merced Irrigation District's SAFE plan is obviously more comprehensive and evolved. The water board needs to start the over process over and include the stake holder in developing a workable plan. I implore you to work with all parties to find a solution that will protect drinking water, that will protect food production, that will protect the fish and most importantly will protect the people.

Sincerely,

Mike Plum

Secretary/Treasurer  
McClure Boat Club, Inc.