



March 10, 2017

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814-0100

Re: Comment Letter – Supplemental Environmental Document

Dear Chair Marcus and Members of the Board:

I am writing to express my strong and passionate opposition to the 2016 Bay Delta Plan Amendment and Supplemental Environmental Documents (SED), proposed last year, that will require the release of 30-50% of unimpaired flows into the Tuolumne River and require higher detention volumes in Don Pedro Reservoir.

As a user of the aquifer I have very serious concerns about the effect that reducing surface water allocation will have on our aquifers (Modesto and Turlock sub basins). When significant overdraft occurs, subsidence can take place, rendering the aquifer permanently unable to store water. The SED proposal will lead to serious overdraft of our aquifers. The most important recharge apparatus in these aquifers is via irrigation. The USGS GAMA Special Study titled Importance of River Water Recharge to Selected Groundwater Basins (LLNL-TR-686433) makes this point very clear:

The importance of river water recharge in the San Joaquin valley has nearly doubled and is likely the result of a total increase of recharge caused by river water irrigation return flows. Local precipitation recharge is no longer the dominant mechanism of recharge. In fact, local precipitation only contributes 40% to the yearly inflow. The importance of river water has nearly doubled due to enhanced river water recharge through irrigation return flows. While river water recharge has increased, it has not been able to keep up with increased discharge by pumping, resulting in overdraft and groundwater level declines (Scanlon et al., 2012). Higher future temperatures will exacerbate the summer dry season and droughts, and reliance on groundwater will increase. Local precipitation and groundwater recharge fall short of groundwater pumping in many areas and overdraft of groundwater resources has led to declining groundwater levels, land subsidence, and seawater intrusion.

The report emphasizes the importance of recharge of river water via irrigation for renewal of groundwater resources and provides proof through the use of isotope evaluation (both hydrogen and oxygen). After seeing the effect of the recent drought, which dropped the Modesto sub basin an average of more than 7 feet during 2015 in spite of diligent water conservation efforts, it is not hard to see that the changes the SED proposes will destroy the aquifer. This cannot be good for California as a whole.

As a Water Treatment Operator I am concerned that further drawing down the aquifer will have a significant deleterious effect on water quality. Many wells had to be taken out of service during the drought due to increases in nitrate, uranium and arsenic under conditions where irrigation was cut back, recharge was diminished and groundwater pumping was increased simultaneously.

Many of our domestic water wells are located in unconsolidated material, which keeps them very well oxygenated and free of dissolved iron and manganese. As the water table is lowered and we are forced to place the well pumps deeper we will be drawing water containing iron and manganese above the secondary standard. Our municipal wells are dispersed throughout the distribution systems, making centralized treatment very difficult and the capital cost for each well head treatment for these contaminants is approximately one-million dollars per well, with continuing operation and maintenance costs of around \$30,000 per year per well. This will drive up the cost of water for all citizens in one of the poorest counties in the State. It is impossible to see how creating the need for treatment on individual wells that have never needed treatment benefits California as a whole.

As a resident of Stanislaus County I am concerned with the quality of life effects that loss of evapotranspiration will have. The same USGS GAMA Special Study states:

The extensive irrigation with river water also impacts regional climate and air temperatures through the irrigation cooling effect (Kueppers et al., 2007).

The average high temperature in July is 95 degrees here and it doesn't cool off at night to safe temperatures for many hours after sunset. Heat illness is a very serious concern from April to October. With the loss of water for irrigation and the evaporative cooling that comes from plants, the temperatures will rise, making the situation worse. Higher temperatures in this agricultural valley cannot be good for California.

As an environmentalist I am concerned that drawing down the aquifers, will lead to higher energy use due to the water-energy nexus that is well understood. When you add the increased energy that will be needed to cool homes and businesses due to higher ambient temperatures, it is impossible to see how this proposal is good for California as a whole.

As a resident of the Central Valley I am concerned about air quality. According to the American Lung Association's annual air pollution rankings (April 2014) the "Los Angeles Basin and California's Central Valley still have the nation's highest levels of ozone and fine particle pollution. Air pollution is not just a nuisance or the haze we see on the horizon; it's literally putting our health in danger".

During the 2017-2015, when irrigation water allocations were dramatically cut, every vehicle driving on country roads created Dust Bowl like conditions and the dust did not settle. I literally tasted dirt every time I drove anywhere. The air quality was adversely affected by the drought and doctors have reported a dramatic increase in cases of asthma and Valley Fever due to drought conditions. The changes proposed under the SED will create a permanent drought. I cannot see how further diminishing the air quality in an area that already has the nation's worst air can possibly be good for all Californians.

As a consumer of fresh vegetables, fruits and nuts I am very concerned that the loss of production in our area will result in higher food costs. As a humanitarian, I am worried that people elsewhere on this planet will starve if we do not continue to produce masses of cheap food for the world. It is well understood that California rice, for example, stabilizes the cost of this commodity worldwide. Agriculture in California is one of the biggest contributors to our

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gross domestic product. California, as a whole, will not benefit from losses in tax revenue. We simply cannot produce food without surface water from the Tuolumne River. Every drop sent is precious.

We built and expanded Lagrange and Don Pedro dams to allow us prevent flooding, grow food, create stable communities and generate electricity. This system has been working for a hundred years. In spite of the recent severe drought, our aquifers are relatively healthy. We have been good stewards of our resources. We have shown the foresight to plan for the future and the ability to commit resources to insure continuing growth and success of our community. Please don't punish us for doing the right thing right.

I understand that you must develop policies that benefit all of California. I do not see how the SED proposal as written can benefit all Californians as a whole.

Thank you for your consideration,

Claudia Hidahl

