Turlock Groundwater Basin Association

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March 28, 2013

MEMBER AGENCIES:

URBAN

Cities:
Turlock
Hughson
Ceres
Modesto

County WDs:
Hilmar

Community SDs:
Denair
Keyes

AGRICULTURAL

Water Districts:
Eastside
Ballico-Cortez

Irrigation Districts:
Merced
Turlock

OTHER ENTITIES

Counties:
Stanislaus
Merced

Jeanine Townsend
Clerk of the Board
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95814-0100

RE: Comment Letter – Bay-Delta Plan SED

To Whom It May Concern:

The following comments regarding the Draft Substitute Environmental Document (SED) were developed to evaluate potential changes to the Bay-Delta Plan and the potential impacts to the Turlock Sub-basin. As proposed, the Draft SED would adversely impact water resources within our region and have a cascading effect on local jobs and the economy.

Turlock Groundwater Basin Association (TGBA) is an association formed by eleven local agricultural and urban water agencies and two counties, which cover the basin and work together to preserve and protect groundwater resources for the benefit of the community. TGBA meets regularly to implement the Turlock Groundwater Basin Groundwater Management Plan (Plan), by monitoring groundwater levels and coordinating various water management activities.

Groundwater currently is the only supply for urban, private domestic, commercial, industrial, and some agricultural users. The only surface water supplies are imported by the Turlock and Merced irrigation districts. Within their service areas, surface water and groundwater are used conjunctively to meet irrigation demands. A water balance analysis completed for the TGBA Plan clearly shows that surface water, imported from the Tuolumne River, provides the majority of recharge within the sub-basin.

Even with the recharge from surface water supplies, the groundwater basin is over-drafted on the eastern side where surface water is not available. To help reduce the overdraft; growers have implemented advanced irrigation practices to minimize crop

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water requirements. A switch to drip and micro systems slowed development of the cone of depression in that area for a time. However, additional acreage is being planted further to the east, in an area of the sub-basin that was previously non-irrigated range land. This new development has increased the demand on the groundwater system in an area where the capacity of the aquifer is not well known.

A future water supply needs study by the TGBA evaluated long-term water supplies, which clearly illustrates how agricultural imports of surface water are helping to sustain the basin, particularly in the western region. Even with surface water supplies recharging the aquifer, sequentially dry years when groundwater is pumped more heavily could see a cone of depression extending westward. Without surface water diversions, more groundwater will be pumped on the western side of the sub-basin without the benefit of recharge; substantially impacting the groundwater basin.

The local agencies continue to work together to address the current overdraft. Turlock Irrigation District (TID) maximizes its conjunctive management practices, limiting pumping on its eastern side, in favor of surface water deliveries. TID and Eastside Water District (EWD) have actively evaluated recharge opportunities by testing two different pilot recharge sites with varying degrees of success and will continue to pursue recharge opportunities. Additionally, the TGBA has applied for a Local Groundwater Assistance Grant, to be administered by the City of Turlock, to better understand the geology on the far eastern side of the sub-basin, update and refine the local groundwater model, refine the future needs study using this new information, and identify additional monitoring locations in newly planted areas to the east.

To help relieve future demand on the groundwater system, local communities are working to develop a surface water treatment plant to provide drinking water for the cities of Turlock, Ceres, and South Modesto. The blending of surface water and groundwater will allow agencies to better meet drinking water standards and help reduce the salinity of urban supplies and the resulting waste stream. Changes proposed by the Draft SED could jeopardize this program, forcing the cities to expensive on-site treatment options and increase demand on the groundwater system. Without a surface water supply for municipal and industrial needs, groundwater levels will decrease in urban areas as they continue to grow and pumping and treatment costs will increase.

Should surface water diversions to this sub-basin be reduced significantly, as currently proposed in the Draft SED, the impacts to groundwater would be significant. It would not only increase groundwater pumping, but also reduce groundwater recharge. This double impact to groundwater supplies would extend the cone of depression westward; reducing water supplies relied upon by public water systems, private domestic water users, businesses, industry, and agriculture.

Local cities and agricultural interests are making great strides to manage the local resources, by implementing urban, agricultural, and groundwater management plans, conservation measures,

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and conjunctive management. These tools will not be able to replace the losses in water supplies, anticipated by the actions proposed in the Draft SED, and have the potential to render groundwater supplies in this area unsustainable.

Water quality is also a concern. Salinity levels would likely increase as a result of the proposed action. Lower groundwater levels would allow saline water at the bottom of the aquifer to migrate upward, impacting water supplies in the confined freshwater aquifer. This is already being seen on the far eastern side of the sub-basin, where agriculture is concerned about groundwater salinity impacting crop production. Additionally, declines in groundwater levels on the western side of the sub-basin would enable saline water west of the San Joaquin River to migrate eastward, increasing salinity in the Turlock Sub-basin. Increased salinity could impact the ability to use the water without costly, electricity intensive treatment.

Agriculture drives the local economy. Many jobs are agricultural related industries and businesses. Additionally, those that make their living in the agricultural industry, live in the sub-basin's cities, small communities, and family farms. They eat locally grown foods, shop in local businesses, and attend local schools. Affordable hydropower helps to attract and retain industry and other local businesses. The actions proposed in the Draft SED will devastate the local economy, already strained by national economic issues. As state law requires urban water agencies to demonstrate the ability to provide long-term water supplies prior to approving new development, if groundwater supplies become unsustainable, future growth may be impacted.

While the Draft SED recognizes that there will be potential impacts to groundwater supplies, the extent to which this might occur is not adequately evaluated, but merely identified as "significant" and "unavoidable." The impacts to groundwater quantity and quality must be thoroughly evaluated and mitigated, along with the impacts to those that rely upon the groundwater and the resulting economic impacts to the communities it serves.

Studies have shown that water supply is not the only factor that is influencing the salmonid survival and recovery. Even with the additional flows on the Tuolumne since 1996, salmonid populations have continued to decline, indicating other factors (such as ocean conditions, predation, invasive species, etc.) have a much greater impact. Actions to address these other factors should be implemented before additional flows are required.

Additionally, the Upper San Joaquin River once provided significant instream flows. Limiting the proposed action and focusing impacts on the eastern side of Stanislaus and Merced counties is inappropriate. If additional flows are needed to protect salmonids through the Delta, flows from the Upper San Joaquin River should be required and constraints should be placed on in-Delta uses to ensure the water released for this purpose remains in the system. It should not be able to be pumped for in-Delta or export purposes.

In closing, the loss of surface water supplies, as proposed by the Draft SED, would be devastating to the local groundwater system, its communities, economy, and way of life.

Groundwater resources are not sufficient to meet the needs of the sub-basin. While no one wishes any harm to the fishery, the local impacts of the proposed action are unwarranted when other alternatives available to address the issue aren't being considered. We urge the State Water Resources Control Board to revise the Draft SED to address the shortcomings identified in these comments and exhaust non-flow alternatives before pursuing additional instream flows which will devastate our region.

Sincerely,

Dan Madden, Chairman
Turlock Groundwater Basin Association