

**Spoken narrative for presentation of Chris Shutes to State Water Board  
Stockton, California  
December 16, 2016**

**Slide 3:** California in general, and the San Joaquin tributaries in particular, have an unsustainable agricultural business model. It is a boom and bust cycle built on overallocation of water. Too much delivery in good years creates crisis after 2-3 dry years.

This system remains semi-functional only because it diverts water needed for rivers, over-pumps groundwater, or both. Many water interests have argued in this proceeding that restoration of protective flows to rivers and the Sustainable Groundwater Management Act will be the cause of water shortage. On the contrary, these initiatives daylight a condition that was already there.

**Slide 4:** On the three major San Joaquin tributaries, average annual deliveries are about half of the average annual runoff. This level of deliveries is not sustainable and creates permanent stress on the system. The SED accepts this system by pushing the impacts of flow increases to dry and critically dry years. The Board needs to require water management when there is water to manage: in the good years. The urban model passed by the legislature in 2009, 20% reduction in urban water use by the year 2020, is a better model.

**Slide 5:** These are four of the biggest problems with the SED. We will discuss extensively in written comments.

**Slide 6:** Many aspects of the modeling in the SED are better than 2013. But the SED uses modeling to avoid showing the impacts of how one might actually manage the system. The SED uses the Water Supply Effects Model to show, with perfect foresight, that an Adaptive Management Group could make annual adjustments to eliminate this or that impact, such as high water temperatures in September or summer increases in salinity.

A more realistic approach would use alternatives for each variable of concern including rules and triggers, and either acknowledge the impacts or budget enough water to mitigate them.

**Slide 7:** When the 1988 Stipulation Agreement on the Stanislaus and the 1966 Fourth Agreement on the Tuolumne were created, the public trust was not at the table. These agreements divide up amounts of water that don't account for what the rivers need.

**Slide 8:** The Bay Area, and San Francisco in particular, has done a good job of reducing demands and water deliveries. Efficiencies in agricultural water use on the east side of

the San Joaquin valley have not translated into reduced demand, and deliveries are down only in droughts.

**Slide 9:** The San Francisco Public Utilities Commission and the Bay Area Water Supply and Conservation Agency deserve credit for reducing demand, in large part through conservation messaging. But their messaging on increased flows in the Tuolumne River has consistently been in opposition.

This opposition doesn't line up with the values of their customers. These agencies must diversify their water portfolios, much as EBMUD has done, including treatment plants for water diverted from the Delta. The SED assumes transfers from MID and TID, but these entities do not appear to be willing sellers. There is no reason not to look to other sources.

**Slide 10:** The Bay Area should invest in reliability, and not just its own.

**Slide 11:** This slide is a summary of some major general recommendations for the SED.

**Slide 12:** And here is the summary for the Bay Area and its water agencies. Thank you.