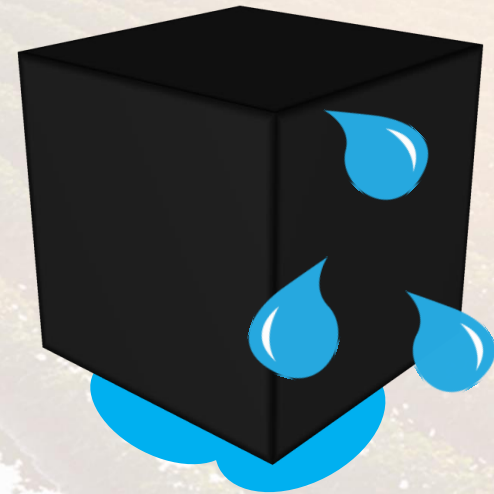
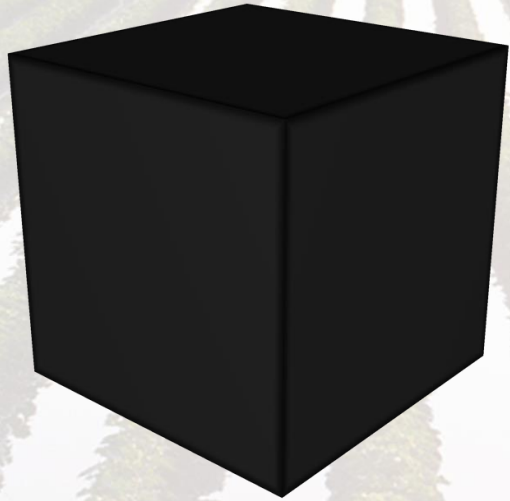


The Delta: Opening the Black Box



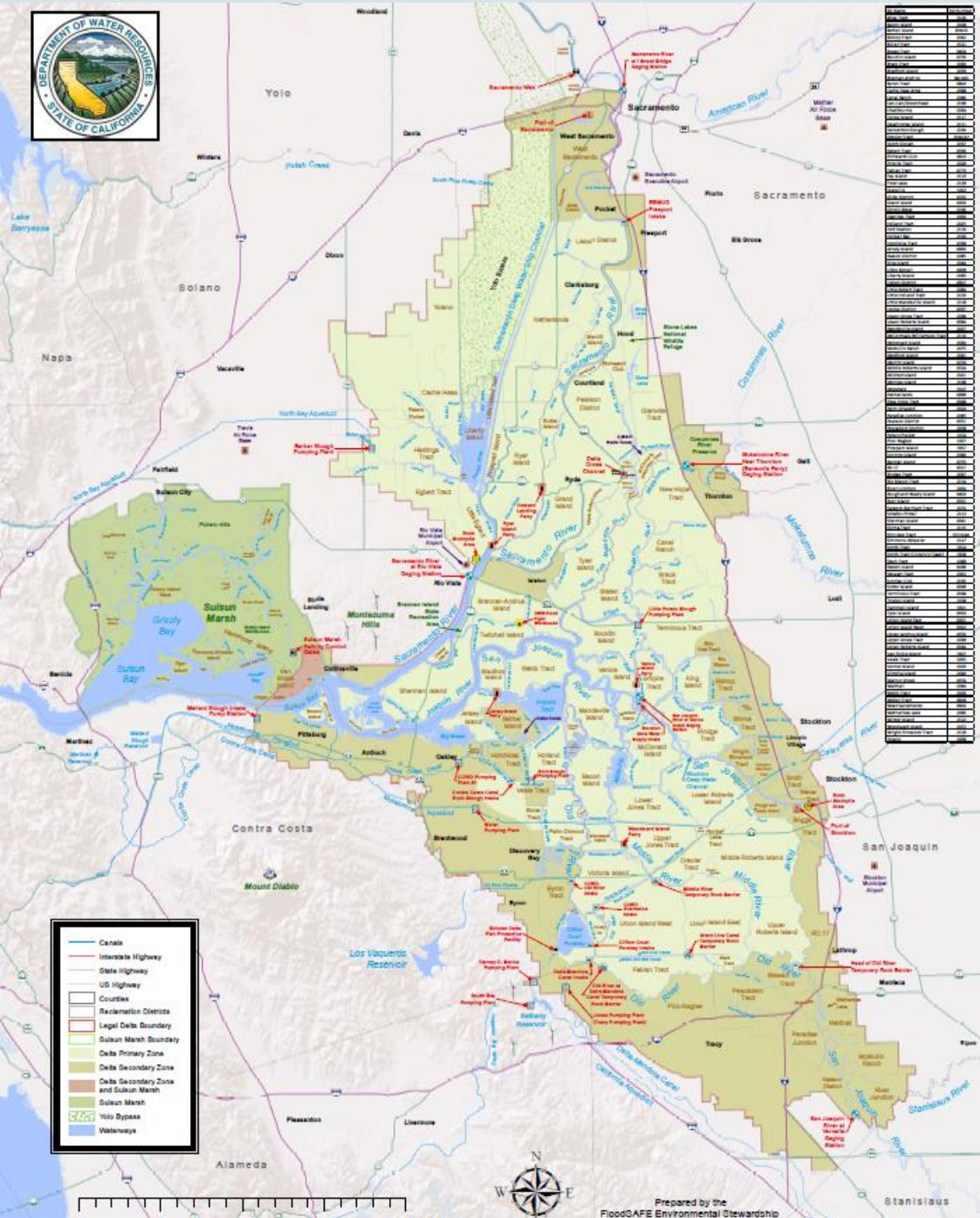
Michael Patrick George, Delta Watermaster
Presentation to California Water Association
Sacramento, May 19, 2016



Disclaimers

- I am not speaking for the SWRCB or the DSC
- I am not presenting State policy
- I am expressing personal observations and opinions, except where specifically referenced to published materials





Delta Orientation

- Today's Delta has been shaped by public and private interests carrying out government policies
- Transition from estuary and marsh to "reclaimed" land dedicated to agriculture
- Water "development" made the Delta the "crossroads" of the State's plumbing system



Water: “Over, Under, Around and Through” the Delta

- 1500 to 2,000 separate surface water diversion structures in the Delta
- Pumps, siphons, weirs, gates



Upstream development

- Irrigation from tributaries [Antioch]
- Reduced flushing
- Increased salt water intrusion [Contra Costa WD Study]



The Projects: CVP & SWP

- Area of Origin protections
- Project purposes
- Upstream storage reservoirs
- Pumping and conveyance facilities
- Contractors pay for the facilities to get “available water” from junior water rights
- Temporary misuse of the Delta for conveyance (1960)
- Peripheral Canal: rejected by voters in 1982



Stress on the Delta

- Channelization
- Dikes and subsidence
- Tributary depletions
- Project exports
- Invasives
- Pollution

Current Issues: Responses to Decline of the Delta

- Who Cares?
 - Environmentalists
 - Bureaucrats and regulators
 - Farmers inside and outside of the Delta
 - Water users (from Redding to San Diego)
 - Those who like to eat, drink and breathe
- The Delta drains 60% of California's land mass



Unscrambling the Egg

- CVPIA (1992), CalFed (1994) and the State Water Board's Decision-1641 (2000): Imposing Conditions on Projects
- Temporary but unsustainable expedient
- Time, money and regulatory space to evaluate alternatives
- Monitoring, litigating, and studying
- Restoration versus reconciliation



Water Quality Control Plans: Balancing beneficial uses of water

- Competing demands for limited supplies
- Priorities, Riparians, Public Trust and Reasonable Use
- Process, Phases and Timing
- Fear and trembling among water rights claimants
- The co-equal goals

“Coequal goals’ means the two goals of providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place.” (CA Water Code §85054)



Pending Regulatory Issues

- Implementation of the Sustainable Groundwater Management Act
- Delta Water Quality Control Plan update
- Measurement of agricultural diversions
- State Water Contractors' complaint alleging unlawful diversion from the Delta
- Petition for change in Projects' water rights for WaterFix

