

DWR Comments on SWRCB Phase 1 SED

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Outline

- Acknowledgements
- Responsibility and Scientific Information
- Flow Standards
- South Delta Water Quality
- Groundwater
- Climate Change
- Summary

Responsibility and Scientific Information

- SED contains language assigning responsibility
 - Language should be removed and should be reserved for future water rights proceedings
- SED contains out-of-date scientific information
 - Regarding fish, scientific information is out of date and incomplete
 - Lack of predation analysis for salmonids
 - Should consider historical salt water intrusion, historical flood flows, and the impact of predation
 - No current consensus concerning the benefits of the Head of Old River rock barrier to fish

Flow Standards

- SED uses Unimpaired Flow Standards
 - These standards are currently ill-suited for real-time operations because necessary data are not available in a timely manner to manage Project operations
- DWR questions the appropriateness of using a “flow-only” approach to protecting fish and wildlife beneficial uses

South Delta Water Quality

- SED contains inappropriate and erroneous information on water quality within the south Delta
 - Net flows--not water levels or tidal flux--affect water quality
 - Temporary barriers should not be required as part of the WQCP
 - DWR does not cause degradation of water quality in the south Delta
 - Factors that do affect water quality have been provided to the board through various processes including the CDO process
- Objectives should provide for salinity degradation from Vernalis to interior stations during fall-winter (Sept-Mar)
 - 1.0 dS/m at Vernalis, 1.3-1.4 dS/m for interior stations

South Delta Water Quality (cont.)

- Recently completed south Delta study¹ concludes:
 - WQCP exceedances are due to local salinity sources
 - Are not caused by SWP operations or barriers
 - Are beyond the control of the SWP
 - Old River at Tracy Road Bridge station not representative and should be changed
- SED proposed alternatives include meeting water quality objectives throughout the channel reaches
 - Places additional responsibility on DWR to control for in-Delta diversions and discharges that DWR cannot influence

¹ Evaluation of Salinity Patterns and Effects of Tidal Flows and Temporary Barriers in South Delta Channels, ICF, September 2016

Groundwater

- SED assumes Groundwater Sustainability Agencies will take care of additional pumping to make GW basins sustainable
 - This increases the burden on locals in areas that are already critically overdrafted
- Impacts to groundwater are not known for the following reasons:
 - Qualitative rather than quantitative analysis that is not specific in terms of locations
 - Groundwater data from 2010 and prior is used, which does not include impacts from the five-year drought
 - Climate change is not taken into consideration
- DWR recommends adding a more specific, detailed, and quantitative analysis

Climate Change

- Our understanding about climate change impacts has substantially improved since the last WQCP update
 - However, the hydrologic analysis for the WQCP does not consider future climate change impacts
 - WQCP updates using distant past hydrology may become increasingly irrelevant for water resources planning as the climate changes

Summary

- Suggest a more flexible approach beyond flow that takes into consideration other actions to protect fish species
- Assign responsibility for water quality proportionate to those parties whose actions cause degradation
- Salinity problems in the south Delta are not caused by SWP operations (exports and barriers)
- Revised interior salinity objectives should provide for degradation downstream of Vernalis in Sept-Mar
- Old River at Tracy Road Bridge station not an appropriate compliance location and compliance by “reach” problematic
- Groundwater and Climate Change impacts should be further analyzed