RTD-13
Testimony of Tim Stroshane
Policy Analyst, Restore the Delta
California WaterFix Change Petition Proceeding
Part 2
Topics (1)

• Flow and Water Quality Changes, including Water Transfers.

• Stressors’ interaction: Selenium and Non-native Invasive Clams.

• Giant Garter Snake Status and Habitat.
Topics (2)

• Fish Screens

• Appropriate Delta Flow Criteria.

• Reduced Delta Reliance.

• Reasons Petition Facilities are an Unreasonable Method of Diversion.
Flow and Water Quality Changes

• Brief summary:
  
  • Removal of flowing water from lower Sacramento River.
  
  • Greater frequency of San Joaquin River source flowing into central and western Delta.
  
  • Increased water residence time.
  
  • Increased capacity for water market transfers via Petition Facilities.
Stressors’ Interactions

- Selenium reservoir, biogeochemistry, loading, ecosystem interaction.

- Nonnative, invasive clams—*Potamocorbula amurensis* and *Corbicula fluminea*
  - Selenium bioaccumulation.
  - Salinity-range thresholds and flows.
  - DRERIP conceptual model.

- Region 2 Total Maximum Daily Load (TMDL) for selenium in northern San Francisco Bay estuary.
Interaction Recommendations (1)

• Selenium loads may change if San Joaquin River flows increase through the Delta.

• Consider quarterly studies available also to interested parties:
  • Bird egg monitoring.
  • Sturgeon muscle tissue plug sampling.
  • Fin ray sampling from sturgeon and other fish.
Interaction Recommendations (2)

• Require Petitioners to apply an early warning system for selenium contamination to Delta ecosystems, to implement Region 2 Selenium TMDL.

• Require increased selenium management in adaptive management scope through permit conditions.
Giant Garter Snake Status and Habitat

- Loss and fragmentation of native wetland and marsh habitat.
- Adapted somewhat to rice fields as alternative habitat.
- Urbanization converting aquatic land.
- Levee and canal maintenance (loss of vegetative cover).
- Water transfers—crop idling or shifting, reservoir releases, groundwater substitution.
- Small dispersed populations.
- Invasive aquatic competitors.
- Selenium and other contamination concerns for GGS favored prey—tadpoles, frogs, toads, small fish.
Giant Garter Snake Recommendations

• Look to 2017 GGS Recovery Plan.

• Require funding, expertise, and land purchases to establish “block pairings” of GGS-favored habitat and corridors.

• Improve water quality in suitable habitat.

• Include GGS studies in adaptive management program scope.
Appropriate Delta Flow Criteria Considerations

- Criteria-setting should be mindful of broader California water policy framework.

- D-1641 and vague “adaptive management process” are inadequate as permit conditions.
Recommendations

• If SWRCB intends to approve Change Petition:
  
  • Conduct water availability analysis for Change Petition.
  
  • Conduct comprehensive benefit-cost analysis accounting for all nature’s services in the Delta.
  
  • Protect giant garter snake habitat in Delta and upstream.

• Otherwise: Change Petition is contrary to plain language of Water Code § 85086(c)(2).
Reduced Delta Reliance for Meeting California’s Future Water Needs

• Numerous statements indicate water transfers will increase when Petition Facilities begin operation:
  
  • Petitioners’ environmental documents.

  • Westlands Water District.

  • Kern County Water Agency.

  • Metropolitan Water District of Southern California.
Change Petition proposes unreasonable method of diversion (1)

- Increase in stressors’ interaction between selenium loading and nonnative invasive clams.

- Further reduction in giant garter snake habitat in-Delta and in Sacramento Valley.

- X2 and Category B public trust-protective flow actions from SWRCB 2010 Delta flow criteria report.
Change Petition proposes unreasonable method of diversion (2)

- Fish screens touted to protect small fish have high uncertainty of success.

- Increased water transfers contrary to Legislature’s command to reduce Delta reliance for California’s future water needs.

- Change Petition scope and description contrary to Legislature’s formulation of change in diversion points.
Change Petition proposes unreasonable method of diversion (3)

• Lack of compliance with state’s scheme for acquiring and exercising appropriative water rights permits.

• Change Petition violates principle that a right cannot be so changed as to constitute a new right.