From: JLucas1099@aol.com
Sent: Wednesday, July 23, 2014 9:30 AM
To: BDCP.comments@noaa.gov; bdcp.comments@water.ca.gov
Subject: BDCP comment cont. Draft Bay Area Conservation Plan & associated Draft EIR/EIS

July 23, 2014

Ryan Wulff
National Marine Fisheries Service
650 Capitol Mall, Suite 5-100
Sacramento, CA 95814

Subject: Comments Continued on Draft Bay Area Conservation Plan and associated Draft EIR/EIS

Dear Mr. Wulff,

In summary, areas in which proposed BDCP project and associated Draft EIR/EIS is critically deficient are:

~ assessment of threat to endangered and threatened anadromous Delta runs of Steelhead and Chinook Salmon due to destabilization of historic migratory route by intake tunnels so situated on main channel of Sacramento River, with sufficiently strong and unseasonal side current as to divert runs from safe migration

~ proposed design's placement of intake tunnels appears to be unable to satisfy safeguards against salinity intrusion for fifty year life of project, however Draft EIR/EIS does not provide scientific evidence to verify or not

~ intake tunnel location is subject in high flow events to heavy sediment loads that facility will entrain from a natural trajectory through Estuary system, with up to 8 % loss of soil and nutrient resource replacement to wetlands and marshes, and causing unavoidable increase in facility maintenance for peak water diversions, and maintain impact of Sierra storm runoff sediment yield must be scientifically addressed in Draft EIR/EIS
to be in compliance with Clean Water Act criteria for project.

Delta Independent Science Board, in review of Draft BDCP EIR/EIS and Draft BDCP notes that changes in sedimentation in Delta and salinity intrusion into Delta are several important effects neglected in DEIR/DEIS.
Report also has concern that risks are not modeled or fully evaluated which is my concern in comment that

~ there appears to be an unwarranted and unmodeled risk in project design's deep and large bore tunneling through organic peat soil with high groundwater that could easily destabilize entire Delta Island complex

In # 8 of Delta Independent Science Board Review they say " A central purpose of an EIR/EIS is to clearly describe the alternative options--" so with this directive I would like to offer two rather divergent alternatives.

~ As Sacramento River navigation control point (NCP) flows are maintained at 5,000 cfs from April through October, and 4,000 cfs from November through March of all normal CVP delivery years, and as during years when deficiencies are imposed on CVP water deliveries, flows will be maintained at 4,000 cfs during all months of the year (assumed on a March-February basis, as deficiencies could be imposed), and as State Water Resources staff recently advised that this channel was not referenced in project analysis as it is now too silted in to use....I would propose that this regulatory approved flow diversion of Sacramento River at the Sacramento Weir be captured in an isolated, elevated canal (15' x 25') that would, by gravity flow, travel down along the shipping channel to Rio Vista and then by aqueduct, cross the Delta to point of CVP delivery.

This water source appears to be in place, pre-approved, and with appropriate engineering design for diversion, without multitude of impacts to Estuary's anadromous fisheries that BDCP proposed intake tunnels threaten. Can provide you with more detailed engineering design of such a facility as it has been in operation in France for hundreds of years as part of country's enlightened and environmentally sound Loire and Seine River canal network. King Francis I chose Leonardo De Vinci to design canal lock mechanism for grade transition (1530) and same design in locks is being automated in France today. Thousand year aqueduct design is Roman.

~ Second alternative would be based on Westlands' proposal (1990's) to site reservoirs within Delta Islands, and would be purely for in-Delta-use-agriculture, with sole purpose of establishing intake facilities sufficiently elevated in Delta to avoid

salinity intrusion in life of 50 year project. Reservoirs could be small, self-contained facilities, designed with sufficient vegetative buffer to independently survive earthquake action, (as submarine technology provides flexibility). Connected by modest piping or open step pool channels with use of gravity flow it could be said to be modeled on Scotland's Lake District gravity flow reservoir chain. (Hetch-Hetchy's tunneling from Sierra differs from BDCP low level Delta design as avoids water quality or sediment problems.)

Lastly, do agree with analysis of Delta farmer that BDCP project will not align with goals of Delta Reform Act and there is no analysis to determine amount of water available for export that will still sustain healthy Delta.

Believe watchdog, or bell weather monitor of effects of ongoing Sacramento River flows on Estuary resources should be Suisun Marsh regulators and Conservation District network of volunteers and that Delta outflows at Chipps Island continue to be guaranteed at historic levels as designated in 10,404,731.3 cfs annual average?

Thank you again for your kind consideration of these concerns.

Sincerely,

Libby Lucas
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