

TRANSMITTAL

DATE: July 29, 2014

TO: BDCP.Comments@noaa.gov (via email)
CC: **Sierra Club Angeles Chapter, Water Committee**

FROM: **Dr. Tom Williams, Sierra Club, Angeles Chapter, Water Committee**

SUBJECT: **Draft Bay Delta Conservation Plan (BDCP) &
Draft Environmental Impact Report/ Environmental Impact Statement (EIR/EIS)**

RE: **COMMENT LETTER**

Dear Federal and California Agencies, Officers, and Staff Members for the BDCP:

Thank you for the extended period for review of 40,000+ pages of documents for the Draft EIR/EIS of the Bay - Delta Conservation Plan which is a very important project and concept for the State.

DEIR/DEIS Comments -

Project Purposes and Needs/Objectives

As developed, the Project purposes, needs, and objectives show clearly two general projects which have been hammered together for public acceptance: conservation and reliability. Conservation has been addressed by others and generally the levels of conservation projects do not compensate the natural environment for the stresses and impacts endured during the last fifty years with existing facilities nor the future impacts that will arise from the proposed Alternative and associated facilities and growth and their largely unassessed impacts and adverse effects, their very survival.

Reliability is commonly defined as "assurance operations or facilities", in this case, of an annual flow of the State Water Project and continued flow through the Delta to Suisun Bay. The focus has been largely on the reliability of the Delta's operations itself along with Suisun Bay as the potential sources for backflow of estuarine and sea water into the Delta when weak, unstable levees fail in a seismic event, collapse, and draw off all freshwater from the rivers and a lot of salt water from Suisun and San Pablo Bays, >10M acft in one day (>10ft depth x >10,000 sq mi).

However, as other comments will highlight, the proposed Alternative would in fact act as a new source of additional water, primarily to compensate for the evaporative losses

The reasonable assumption for most projects is that they will be operate at or above to their maximum physical/operational capacity as long as the financial and service area benefits compensate for operating costs, ass the economies of scale factors would favor 10M acft capacity rather than 6M acft. Also, incremental costs for minor improvements to existing facilities to support the higher flows, especially limited to the San Joaquin Valley may be undertaken without full financial and environmental review required for the proposed Alternative.

The Project Description and its objective, purposes, and needs do not reflect the reality that the proposed Alternative may provide short-term reliability improvements which will be overwhelmed by the growing use of the maximum feasible and induced capacity to induce growth which in turn will degrade the system reliabilities and require additional projects to maintain the initial reliability. If the tunnels were kept ready to divert, but not actually diverting flows, in the event of a significant damaging earthquake then such comments would be moot. The Project Description of the proposed Alternative does not include any meaningful conditions or mitigation to avoid reasonable expectation to operate the tunnels and make them profitable for the operating agencies and service users.

The Project purposes, needs, and objectives and thereby the Project description are inadequate and incomplete and do not fully reflect the proposed Alternative, its operations, and probable future augmentation.

Project Segmentation

The proposed Alternative description (and all the others) does not fully include the various additional projects which would be supported, promoted, and developed to make fuller use of the Alternative's basic capacity

currently set at 9000cfs and prospective enhanced flows, e.g., increasing flow velocities from 3.6ft/sec to 4.0ft/sec for additional flows of 2000 acft/d or 0.7M acft (=total consumption of the City of Los Angeles)

Additional distributed pumping stations and diversion could easily provide greater flow heads, while minor changes to the SWP Delta headworks and canal augmentations could be done with categorical exemptions if done individually.

Eventually once induced and planned growths in the San Joaquin Valley and the absences of sufficient, sustainable Sacramento flows are realized, the users will request the State to implement the earlier 2010 California Drought Contingency Plan (Nov. 2010, http://www.water.ca.gov/waterconditions/docs/Final_CA_Drought_Contingency_Plan-11-18-2010a.pdf). Since the maximum capacity of the proposed Alternative includes, at 6fps, up to 15000cfs/10.9Macft (or 1.5x current SWP). The proposed Alternative depends on maintained and flat or declining agricultural development in the Sacramento Valley and eventually upon the river storage reservoirs to maintain annual tunnel flows of 6-10Macft for the proposed Alternative.

The DEIR/EIS does not explore the maximum velocities and flow capacities of the proposed Alternative and reasonably feasible, expected additions within their headworks, the Delta, and the SWP/CVP facilities in the San Joaquin Valley. Thereby the Project Descriptions and Alternatives in the DEIR/DEIS are inadequate and incomplete for compliance with both CEQA and NEPA. Furthermore, with induced growth dependency upon imported

Growth Inducements in the San Joaquin Valley

Proposed Alternative flow maximization and increased southerly canal flows for the San Joaquin Valley would eventually face financial and technical barriers for transport across the Tehachapi Range as augmentation of the maximum physical lifting capacity is far more complicated and expensive compared to issues from the Delta to Tulare Basin which could not be readily concealed. However, total additional annual flows of the San Joaquin portion of the SWP could readily be diverted and absorbed by the San Joaquin users. Such use would generate huge economic benefits from more intense development of desert and drier lands and annual-to-perennial crop land conversions, as done with the original SWP, and would be sufficient to induce growth in land conversions throughout the San Joaquin Valley. These are not addressed in the relevant sections of the DEIR/DEIS, and thereby the DEIR/DEIS are inadequate and incomplete for the assessment of growth inducement from major increases in total volumes of

Increased Total Diverted Flows from Sacramento Valley

As indicated elsewhere, the current shared Central Valley flows for the State Water Project can be and would be expected to be eliminated, and the SWP's flow requirements could be met by the tunnels from the Sacramento Valley. San Joaquin flows can be directed solely to the current and future irrigators' needs in the San Joaquin Valley. Although this can be recognized in various sections of the DEIR/DEIS, the overall conceptual approach is that the proposed Alternative is only a reliability project and not a flow increase project, and thereby the DEIR/DEIS is inadequate and incomplete in their addressing of the San Joaquin diversions and related leachate issues and of the expanding reliability issues and risks by the San Joaquin farming and economic spheres being tied to the availability of water for the SWP from solely the Sacramento Valley.

Irrigation Leachate/Return Drainage

Although the proposed Alternative is suppose to be a reliability project, the Alternative would provide either directly or indirectly greater water volumes for irrigation which may be further considered as compensation for losses due to Global Warming and extended droughts in the San Joaquin Valley and adjacent Sierran watersheds. Even now San Joaquin flows have been diverted to irrigation and leaching of accumulated salts, etc. from the irrigated soils into the underlying groundwater tables and some aquifers. San Joaquin irrigators have postponed the "West Valley" Return Leachate Drain for years as the costs are large, feasibility questionable, and environmental effects severe. Unfortunately as irrigation volumes as a percentage of native stream flows have rocketed, the rivers dilution capacity has plummeted, while other irrigators have sacrificed their local groundwater and allow leachate to fill up the depress groundwater tables due to over pumping.

The proposed Alternative would further disconnect the San Joaquin irrigators from the consequences of continued and increased leaching of soil salts, pesticides, and fertilizers into the groundwater as long as they can get water to irrigate and leach soil contaminants.

Public Accessibility and Distortion

The whole character of the DEIR/DEIS does not support its use and review by the Public, the monstrous volume, separation of texts/references from illustrations, massive appendices, and widespread use of "techie talk" renders the document as totally inadequate for public review. Inclusions of both conservation and reliability elements in the same document further complicates the public review.

Although a summary document is included, any review comments regarding the summary can be readily dismissed by a response, akin to "This is answer in the main text".

Use of 9000cfs is largely unintelligible for the public who may read and desire to comment on the DEIR/EIS. Few of the public are familiar with cubic feet per sec, cu ft/sec, or cfs, while technical staff may use such numbers or even acre-feet with 43,560 cuft, the public are not and generally uses gallons. Therefore the proposed Alternatives, and others, remain largely unknown to the public. The instantaneous flow has nothing to do with the annual supply delivery (e.g., 9000cfs = 6.6M acft/yr at 3.6fps, or say 100% capacity of the existing SWP or 10xtotal LA DWP supply).

Use of the 9000cfs creates a false public impression of the "not very big" magnitude of the project and does not provide the public means of appreciation that it alone could supply most if not all of the total SWP supply without the San Joaquin Valley.

Faults and Seismicity

Reliability projects for seismicity mitigation require that the proposed Alternative will in fact be largely if not totally immune from the adverse effects affecting the primary facilities. The proposed Alternative lies generally within the same area and would be affected by the same geologic/seismic and hydrologic conditions, unlike the 2010 Water Plan. Close proximity of the tunnels and expected levee ruptures requires greater efforts for isolating the proposed Alternative from similar conditions affecting the levees.

Although smaller underground single tube transit facilities may be ideal survivors of general strong ground movement and can be very elastic in their response, their connects to anchored blocks - stations - are where most stress is focused and damages occur. Similarly the proposed larger diameter tunnels will require greater wall thicknesses and much more steel reinforcements and will create a rigid pole which will be far less flexible than the smaller (20 ft diameter) tunnels. Also like larger road tunnels and the proposed water tunnels, connections to rigid box/caisson structures will form the greatest stress during the same earthquake seismic waves. As the proposed Alternative has access shaft every five miles, every connection (two/shaft) between the shaft and tunnels would be points of stress and weakness during seismic wave passage and with so many such points, considerations must focus on the points of weakness and responses of the rigid tubes in weak soil and alluvium. Such studies and modeling has not been mentioned in the documents available.

Similarly with two sets of tunnels and shafts the probability of damages to both occurring during the same events is multiplied and no cross-connections are provided between the two tunnel systems. However, the presence of cross-connections between shafts other than at the surface would in themselves represent additional points of failure in the proposed Alternative. Furthermore the larger the diameters the greater internal stress are created by seismic compression waves especially when different geologic layers may enclose the same tubular form and because of its larger diameter designs may include greater rigidity and perhaps bracing.

An additional unexplored and unassessed issue is represented in this section is the seismic response of the tunnels and shafts during their construction which represents a significant impact of collapse with construction damages.

All of these seismicity issues clearly show the inadequacy and incompleteness of the DEIR/DEIS.

End of Comments

Again, thanks for the opportunity to comment on this project. Although I consider the efforts as largely not responsive to the requirements of CEQA and NEPA.

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and Citizens Coalition for a Safe Community
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