Bay Delta Conservation Plan ("Water-Fix") Supplemental Draft EIS
Briefing Paper – August 20, 2015

Background

- The project proposed a year ago was presented as a habitat conservation plan seeking a 50 year permit approving changes to the state and federal water facilities that export water out of the California Bay Delta estuary. The changes included new intakes and twin 40 mile diversion tunnels, as well as a very large scale aquatic habitat restoration program. The lead federal agencies included NMFS, USFWS, and BOR. CA Department of Water Resources was, and remains, the state lead agency.

- In August of last year, EPA was prepared to give (b)(5) (D + Up rating to the BDCP DEIS based on significant concerns with the project's environmental impact and lack of information.

- The lead agencies agreed to do a Supplemental DEIS in light of EPA's and others' concerns.

- In April 2015, the project proponent and lead agencies abandoned the plan to seek approval for a 50 year incidental take permit, and instead, focused on a more limited project centered on the construction of new intake facilities and the tunnel conveyance (adopting the new name "Water-Fix"); habitat restoration is no longer a component of the project. BOR is now the only lead federal agency. BOR intends, as its federal action, to modify operations to accommodate the new intake facilities.

- The scaled-down proposal (identified as the Preferred Alternative in this SDEIS) is a completely different federal action than the federal action proposed in the original DEIS.

Regulatory context

Our NEPA letter will precede a number of other critical decisions pending before other agencies. Water project operations have largely been run by the ESA and CA State Water Resources Control Board regulatory mandates for the past 25 years and successive jeopardy opinions have reduced exports during that time; this is expected to continue. For that reason, evaluating the true environmental impact of the proposed tunnels is very difficult in the absence of expected revised regulatory actions. It is important that any letter we submit supports advancing the goals of the Clean Water Act and these regulatory processes.

- The State Water Board, which holds the dual responsibilities of allocating surface water rights and protecting water quality, is preparing Bay Delta Water Quality Control Plans, a multi-year effort to revise/set water quality standards. Implementation of these Plans will include addressing flow objectives through water right requirements. In addition, in the very near future, the State Water Board will need to act on a "change in the point of diversion" petition to enable this project to proceed. The State Water Board will be mandating the terms and conditions – including flow requirements - of any change in the diversion point.

- USFWS and NMFS Section 7 Incidental Take Permits will be required for construction and operation of new facilities. This process is likely to address aquatic habitat for listed species, which is heavily influenced by flow and water quality. NMFS and USFWS have largely exited the NEPA process to concentrate on issuing a Section 7 Biological Opinion and Incidental Take Permit to BOR. The Biological Assessment is expected in September and the BO is expected next year. This puts EPA's comments on the SDEIS "out front" on the impacts to fish.

- Corps CWA 404 permits and Rivers and Harbors Act 408 authorization will be required for dredged or fill material and modification of levees.

Context: Evaluating Projects in a Collapsing Estuary

Declining Baseline: The DEIS showed aquatic resources in the Bay Delta Estuary in a downward trend. This historical decline in aquatic resources, due to multiple stressors, including operations of the federal and state water export facilities, is anticipated to be aggravated by the impacts of climate change, but in tandem with the way the DWR and BOR have operated the water export systems for decades. The BDCP proposed 2 coequal goals of water supply reliability and improving the Delta ecosystem via tunnels and large-scale restoration.

The SDEIS still shows a Bay Delta Estuary in a downward trend. Although the preferred alternative is no longer a proposal of restoration, and is solely a proposal for the operation of new tunnels and intakes, the project must be viewed in the larger context of the declining baselines of the delta ecosystems since the action agency has some control over those baselines.

Environmental and Analysis Issues:

A. Water Quality
   1. Increased salinity in Western Delta; will make more difficult to meet WQS, esp. during drought
   2. Increased exceedances of the aquatic life EC standard at Prisoners Point
   3. May affect hundreds of acres of wetlands and mitigation is not defined
   4. Increases selenium exposure

B. Fisheries/Beneficial Use protection
   1. Entrainment of most fish species into the CVP/SWP facilities will be reduced.
   2. Quantity and quality of aquatic habitat reduced for most fish species relative to today's conditions.
   3. Quantity and quality of aquatic habitat potentially reduced for a few fish species relative to the future, degraded baseline.

C. NEPA Analysis
   1. Uncertain, severely degraded future baseline; demonstrates that the project will make conditions unchanged or only slightly "less bad" than already bad future conditions
   2. Modeling was not based on the proposed project or the baselines
   3. No analysis of impacts on X2 ecosystem indicator
   4. Project operations are still undefined pending Section 7 consultations.
   5. Lack of optimized operations for each sized tunnel

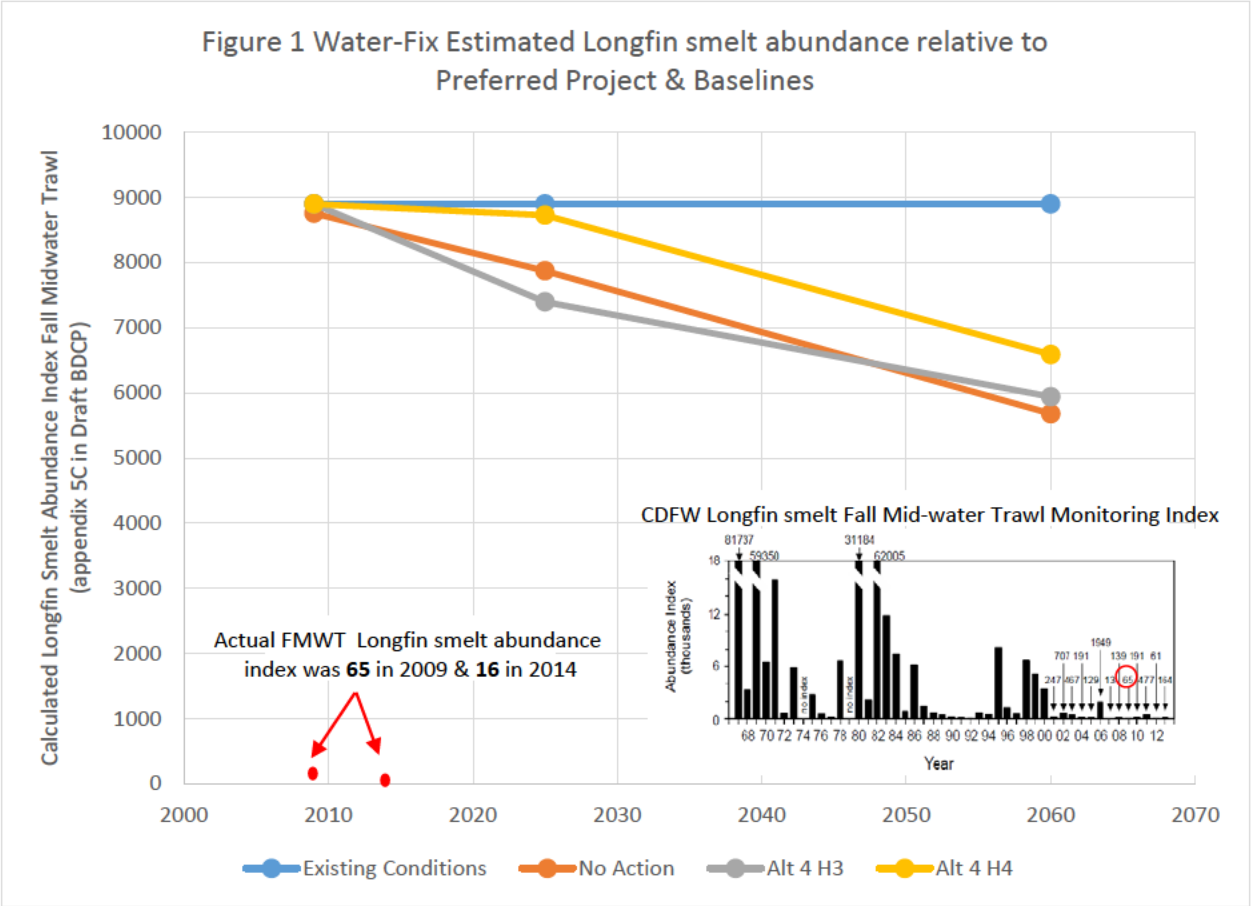
Recommendation re: Rating

- **The region believes that, at minimum, the SDEIS warrants [redacted] (b)(5) (D, jib .**
    - The decline of the Bay-Delta is attributable to numerous factors, including operations of the current federal and state water export systems; the projects' changing facilities and operations allow that trajectory to continue or worsen.
    - Modeling was not based on the proposed project, and potentially environmentally preferably alternatives were not evaluated with optimized operations, as were other alternatives.

- **[redacted] (b)(5) (D, jib ti may also an option, based on the lack of modeling for the proposed project and the failure to analyze optimized environmentally preferable alternatives.**

- **Regardless of rating, include language in the letter which clearly articulates our concerns so as to support anticipated federal and state regulatory actions under CWA, ESA, and state law.**

Attachment 1:



Attachment 2:

Table 2: Impacts to Quality and Quantity of Aquatic Habitat and Fish Species from Alternative 4A Relative to Existing Conditions Baseline (current conditions)

Fish Species	Impact Categories			
	Entrainment	Spawning	Rearing	Migration
Delta smelt (*T/E*)	significant	similar	substantially increased	similar
Longfin smelt (c/*T*)	substantially improved	substantially reduced - abundance loss of 6-22%		
Chinook Salmon winter run (*E/E*)	potentially improved	substantially reduced	similar	substantially reduced
spring Run (*T/T*)	improved	substantially reduced	substantially reduced	similar
fall-/late fall-run (*C/C*)	improved	substantially reduced	substantially reduced	substantially reduced
Steelhead *(T/)*	improved	substantially reduced	substantially reduced	substantially reduced
Sacramento splittail *(/C)*	similar	similar	similar	similar
Green sturgeon *(T/C)*	potentially improved	substantially reduced	substantially reduced	substantially reduced
White sturgeon *(/C)*	potentially improved	substantially reduced	similar	substantially reduced
Pacific lamprey *(/C)*	potentially improved	similar	substantially reduced	similar
River lamprey *(/C)*	potentially improved	similar	substantially reduced	similar*
Striped bass	significant & unavoidable	similar	significant	similar*
American shad	significant & unavoidable	similar	potentially significant	similar*
Threadfin shad	improved	similar	Similar	similar*
Sacramento Tule perch	N/A	similar	substantially reduced	N/A
Sacramento San Joaquin roach	N/A	similar	significant	similar
Hardhead	N/A	similar	significant	similar
Bay shrimp	N/A	similar	significant 2-10% abundance loss	similar

(Federal ESA/State ESA) **E** (endangered), **T** (threatened), **C** (species of special concern), **c** (candidate for listing)

* Text in analysis indicates the potential for significant reduction and does not match the conclusions

Table 3: Impacts to Quality and Quantity of Aquatic Habitat and Fish Species from Alternative 4A Relative to No Action Alternative (NEPA Baseline forecasts future degraded conditions)

Fish Species	Entrainment	Spawning	Rearing	Migration
Delta smelt *(T/E)*	improved	similar	similar	not adverse*
Longfin smelt *(c/T)*	improved	not adverse* - **abundance change -11% to +7%**		
Chinook Salmon winter run *(E/E)*	improved	similar	similar	**potentially reduced****
spring Run *(T/T)*	improved	similar	similar	similar
fall-/late fall-run *(C/C)*	improved	similar	similar	similar
Steelhead *(T/)*	improved	similar	similar	similar
Sacramento splittail *(/C)*	improved	similar	similar	similar
Green sturgeon *(T/C)*	improved	similar	similar	**potentially reduced****
White sturgeon *(/C)*	improved	similar	similar	**potentially reduced****
Pacific lamprey *(/C)*	improved	similar	similar	similar
River lamprey *(/C)*	improved	similar	similar	similar
Striped bass	**increased**	similar	similar	not adverse*
American shad	**increased**	similar	similar	not adverse*
Threadfin shad	improved	similar	similar	not adverse*
Sacramento Tule perch	N/A	similar	similar	similar
Sacramento San Joaquin roach	N/A	similar	similar	similar
Hardhead	N/A	similar	similar	similar
Bay shrimp	N/A	similar	similar	similar

(Federal ESA/State ESA) **E** (endangered), **T** (threatened), **C** (species of special concern), **c** (candidate for listing)
*text in DEIS/DSDEIS analysis does not match conclusion; **more information developed in ESA Section 7 process