EPA perspective on the BAY DELTA CONSERVATION PLAN (6/6/2012)

Background: The Bay Delta Conservation Plan (BDCP) is a habitat conservation plan under the Endangered Species Act (ESA) and a Natural Communities Conservation Plan under parallel California law. The purpose of the BDCP is to provide the basis for 50-year permits under ESA for continued operation of the existing export facilities and construction and operation of new water export facilities in the Sacramento-San Joaquin River Delta (Bay Delta Estuary). For decades the Bay Delta Estuary has been the site of continued conflict between water exporters and fisheries interests. Over the last ten years, a range of anadromous and pelagic fishes have suffered dramatic declines. The BDCP proposes to build: (a) massive (up to 15,000 cfs) new diversion and conveyance structures to bring water from the Sacramento River around the Delta to the existing south Delta export pumps (and from there south to the San Joaquin Valley and Southern California); and (b) significant (tens of thousands of acres) restoration of shallow water aquatic habitat in the Delta to enhance fishery productivity.

EPA has multiple roles in this process. First, EPA will be reviewing the BDCP EIS/EIR under EPA's CAA 309 authority and we are a Cooperating Agency under NEPA. Second, EPA and the Corps have joint responsibilities for CWA 404 permits for the new facilities.[1] Finally, EPA will need to review and approve any changes in water quality standards in the Estuary that are adopted by the State Water Resources Control Board (SWRCB) in response to the BDCP.

Current status: The action agencies[2] plan to announce a proposed project as early as June 2012. In advance of that announcement, "preliminary draft" documents for both the BDCP and the related EIS/EIR have been publicly released, at various levels of completion, and the action agencies are soliciting feedback. Of the 10,000+ pages available for review, EPA has selectively commented on those documents most related to our interests and concerns.

Summary of issues: The following are highlights from EPA's review thus far.

1. **Incomplete and inconsistent NEPA analyses**. The current documents are remarkable because of what is <u>not</u> available. This is an acknowledged problem, and the result of an aggressive schedule, consultant turnover, and a decision to publicly release early drafts in the interest of transparency. Examples of incomplete information include: the Alternatives Development Report, which reportedly includes detailed descriptions of alternatives and the screening criteria; a fish entrainment analysis for the new Sacramento River intakes; and contaminant (i.e., selenium and mercury) impact analyses.

In addition, inconsistent definitions and assumptions (about operational scenarios, the nature of each alternative, the use of climate change forecasts, etc.) make meaningful comparison of alternatives difficult, if not impossible. Some of this is presentation of available analyses, but some appears to be incorrect or incomplete analyses. For example, the document includes aggressive negative impacts from climate change when it evaluates future fisheries scenarios, but does not make similar evaluations for the anticipated climate change effects on Northern California hydrological conditions (even though these projections are readily available in DWR documents). The analyses are further complicated by the fact that the state and federal action agencies are using multiple baseline and "no action" alternatives. For example, the document includes an "existing conditions" alternative and three *different* No Action Alternatives. That is

inherently complex, but the document fails to carry through in the discussion by frequently referring to "the" No Action Alternative.

2. Clean Water Act Section 404 Review and Permitting. EPA and the Corps have been working with the action agencies, especially the California Department of Water Resources (DWR) (the likely permit applicant), for over a year to integrate and streamline the 404 permitting process and its NEPA requirements with the ESA NEPA process. The goal of this coordination is to allow the Corps to rely on the BDCP EIS/EIR without significant additional environmental review. Progress has been slow and it is not clear at this point whether this goal will be attained.

a. Purpose and Need Statement. After a protracted process, federal and state agencies have agreed on the NEPA purpose and need statement. The Corps is reviewing DWR's proposed CWA 404 basic and overall project purpose for the first site-specific BDCP project (the conveyance facility).

b. Jurisdictional determination. DWR is currently producing a preliminary JD with oversight from the Corps and EPA using primarily remote mapping and a small amount of direct field work in the few sites where access can be obtained.

c. Alternatives and screening criteria. Although EPA and the Corps are aware of the alternatives as discussed in various documents, we have not received the screening criteria document. There has also been a recent change in the approach to developing operating criteria. Until the basic and overall project purpose is finalized, the Alternatives Development Report is available, and the new approach to operations is explained, EPA and the Corps are not commenting on the adequacy of the alternatives.

d. Use of Low Salinity Zone as a metric to evaluate impacts to aquatic habitat. EPA and the Corps have agreed to include anticipated changes to the location and areal extent of the low salinity zone as a metric to evaluate impacts to aquatic habitat in the Estuary. The Corps recently used this approach in evaluating a permit application for the Port of Sacramento.

3. Substantive Issues

a. Some of the BDCP analyses make assumptions about revisions to existing water quality standards or SWRCB water rights decisions. These proposed changes have not been evaluated by either the SWRCB or EPA. At a minimum, the BDCP needs to include an analysis based on the existing regulatory structure. (NOTE: the SWRCB recently initiated review of their Bay Delta standards, with a goal of completion by 2014. EPA believes this is the most critical CWA action needed to protect aquatic life in the Estuary and is supporting the Board in this effort. We also believe that this action is critical to making sound decisions on the BDCP.)

b. While a new conveyance structure may enhance the overall quality of exported water (Sacramento River water), it will result in a downstream Delta more dominated by relatively degraded San Joaquin River inflows. The entire Delta is currently listed as water quality impaired by one or more contaminants, and there needs to be serious consideration to this potential additional degradation. Constituents of notable concern include selenium, mercury, low dissolved oxygen, and microcystis and other harmful algal blooms.

c. EPA generally supports restoration of aquatic and tidal marsh habitat. Nevertheless, the draft proposal relies primarily on restoring habitat (including longer seasonal inundation) in the Yolo Bypass area, which raises concerns about methylmercury formation caused primarily by legacy mercury in sediments. The Regional Water Quality Control Board staff has already noted that "[w]hen the Yolo Bypass is flooded, it becomes the dominant source of methylmercury to the Delta." Our comments on the BDCP have said that habitat restoration programs will need to include robust efforts to minimize methylmercury formation and discharge, as well as monitoring to verify success of those efforts.

d. Sacramento River salmon – the main salmon runs in the system – would be exposed to a series of massive water diversions under the BDCP. Fish screens necessary to protect the salmon have never been built on this scale.

e. Scientific basis for the proposal needs to be credible. The National Research Council famously said, in its first report on the BDCP, that *"[t]he lack of an appropriate structure creates the impression that the entire effort is little more than a post-hoc rationalization of a previously selected group of facilities, including an isolated conveyance facility, and other measures for achieving goals and objectives that are not clearly specified."*[3] The NRC recently explicitly declined to endorse the proposed new conveyance facilities: *"The committee has not analyzed the benefits and disadvantages of an isolated conveyance facility, because not enough specific information was available about it, and we make no recommendation with respect to its adoption as a major part of water management in the Delta."*[4] Clearly, the BDCP process still needs to develop a credible scientific basis for the proposal.

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[1] The Corps issues the permits. EPA can "elevate" a permit pursuant to the national Corps/EPA MOA when the permit will result in "unacceptable adverse effects to aquatic resources of national importance." (EPA/Corps MOA 08/11/92, at Part IV.) CWA Section 404(c) provides that EPA can veto a permit if the Administrator determines that the permit "will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas."

[2] The action agencies include the agencies that operate the water export projects [the California Dept of Water Resources (DWR) and the U.S. Bureau of Reclamation (USBR)] and the fish and wildlife agencies (California Dept of Fish and Game (DFG), U.S. Fish and Wildlife Service (USFWS), and National Marine Fisheries Service (NMFS)). For planning purposes, DWR is being treated as the permit applicant for both ESA and CWA permits. No 404 permit application has yet been submitted.

[3] NRC, A Review of the Use of Science and Adaptive Management in California's Draft Bay-Delta Conservation Plan, 2011, at page 43.

[4] NRC, Sustainable Water and Environmental Management in the California Bay-Delta, March 2012, at page 7.