

Bay Delta Conservation Plan (BDCP)

Steering Committee (SC) Meeting

January 21, 2010, 9:00 a.m. to 12:30 p.m.

California Farm Bureau Federation Conference Room

2300 River Plaza Ave, Sacramento, CA

Draft Meeting Notes

Associated documents/handouts:

- *Agenda*
- *Draft Steering Committee Meeting Agendas*
- *Draft Proposed Approach to BDCP Site-Specific Near-Term Habitat Restoration Projects*

Action Items and Key Decisions

- Steering Committee members reached general agreement on the proposal, *Draft BDCP Proposed Approach to BDCP Site-Specific Near-Term Habitat Restoration Projects*, as amended.

Updates

- On January 24, the National Academy of Sciences' (NAS) National Research Council (NRC) will begin their review of Bay Delta water management issues. The kick-off event is being held at UC-Davis.
- Steve Hall, former ACWA Director, passed away this week and will be missed. Laura King Moon recounted his professional accomplishments.
- The Sacramento River is flowing at 70,000 CFS through the Sacramento Valley.
- DWR is monitoring potential flood conditions. Currently, only one stream in Northern California is at flood stage and several are at a moderate stage of flood risk. More flooding events are occurring in Southern California than in Northern California.

Process and Schedule

Karen Scarborough discussed the *Draft Steering Committee Meeting Agendas*. The agenda for the January 29 Steering Committee meeting will include several significant issues for decision. The February meetings will focus on conveyance facilities options, draft terrestrial conservation measures, and covered activities, among other topics. A reminder was offered that the dispositions of comments offered by Steering Committee members need to be discussed at some point and that this could be a time-consuming process. Paul Cylinder adds that as the conservation measures are further revised, some of the earlier comments will become moot (e.g., comments on measures that have been removed by the SC from the Conservation Strategy), while others will remain relevant.

State Water Board Instream Flows Process

Tom Howard discussed the State Water Board's process for developing flow criteria for the Delta ecosystem pursuant to the Board's public trust obligations and in compliance with the 2009 State water legislation (SB1). The process involves the following:

- 1) Establish the San Joaquin River inflows to meet South Delta salinity objectives. The scientific basis for amending flow objectives will be subjected to peer review in April, 2010. The environmental document is scheduled to be completed by end of summer, and hearings will begin in fall.
- 2) Provide an informational proceeding on Delta flow needs. The State Water Board will focus on outflows, but other issues might be identified in the process. Estuarine scientists from UC-Davis have been asked to participate. The State Board will host a 3-day hearing in March, 2010; exhibits for this proceeding will be due February 15th. Fifty-five parties have expressed interest in participating. The hearing will be limited to three days. A report will be issued in August, 2010.
- 3) Address flows and salinity in other parts of the Delta. The purpose of this effort is to update the last version of the Board's Bay-Delta Plan from 2006. The current Delta outflow proceedings will help to inform this process.

The BDCP will stay engaged with the State Water Board during this process. Much information will be available at the Board's scheduled March hearing. It is suggested that the Steering Committee members start planning and anticipating their contribution to the hearing.

EIR/EIS

Gwen Buchholz presented a brief update regarding the BDCP EIR/EIS. The EIR/EIS Lead Agencies and consultant team are in the process of responding to comments received during scoping and preparing a scoping report. The scoping report will be posted on the EIR/EIS website during the first part of February. Following the posting of the scoping report, the Lead Agencies and consultant team will work to complete the existing conditions section of the EIR/EIS. A question was raised about how information about existing infrastructure on the delta islands is being obtained for the purpose of the existing conditions section. Initial information on island infrastructure and population was gathered using publicly available reports and websites and currently, the EIR/EIS consultant team is contacting counties and flood control districts to gather more information on island infrastructure. Once the existing conditions section is complete, the lead agencies will begin determine modeling needs to conduct an impacts assessment.

Community Outreach/Engagement

Karla Nemeth reported on the status of a proposed stakeholder group structure. The purpose of a stakeholder group would be to promote additional input from local stakeholders around specific issues, including conservation measures. A draft of the proposal will likely be ready in the next week or two.

Public Outreach Workgroup meetings have been moved from Thursdays at 4pm to Wednesdays at 4pm. All Steering Committee members are invited to attend and participate. Public outreach information announcements are as follows: 1) The Diablo Valley League of Women Voters is holding a Delta forum on Saturday, January 23rd at 9:30am at the Antioch Historical Society

Hall. 2) There have been only a handful of responses for the tour of the Freeport intake facility; Steering Committee members will be polled for their availability.

Public Comment:

Barbara Damion (Delta resident) asked if members of the public could go on the Freeport intake tour. Ms. Nemeth responded that when space is limited, it is reserved for Steering Committee members first; then it is opened up for other interested observers.

Logic Chain

John Cain discussed the development of the logic chain process. There are two parts to the logic chain structure – the upper portion deals with goals, objectives, hypothesis, and desired change. First, the quantitative objectives are identified. Next, a hypothesis is developed for why the objectives are not currently being met. Then the desired change is articulated. Not only is there an attempt to reach a goal, there is also a testing of hypotheses from which to learn. The lower portion of the logic chain deals with determining conservation measures after the desired changes have been identified. If the conservation measures do not lead to projected outcomes, they may be adjusted. Metrics are at the bottom of the logic chain and provide a quantitative measure of conservation measure success. This process acknowledges uncertainties and provides for adjustments based upon new information gathered.

Steering Committee members have worked with CALFED scientists to discuss the idea and structure of logic chain and how CALFED scientists might assist. The logic chain will be back on the Steering Committee agenda in February. There was discussion among Steering Committee members about how the logic chain is being developed and how it is informing the Mini-Effects Analysis, including a suggestion that the Steering Committee be able to clearly see the input used to make decisions in the Mini-Effects Analysis. Discussion followed about including legal and regulatory input, as well as the scientific input, in the logic chain.

Decision on Phase 1 Restoration Projects List

This decision affected whether site-specific near-term habitat restoration projects would be described in the BDCP and specifically evaluated in the BDCP EIR/EIS. The aim of inclusion would be to get site-specific NEPA/CEQA compliance for habitat restoration projects under the BDCP EIR/EIS in order to expedite implementation of those projects. These are important restoration projects for the Delta. However, there was some concern that adding the specific projects could prolong the BDCP environmental review process and completion of the BDCP EIR/EIS. Therefore, the decision was made by the Steering Committee that the site-specific projects would proceed on parallel, but separate, tracks from the BDCP EIR/EIS with their own environmental reviews.

The *Draft Proposed Approach to BDCP Site-Specific Near-Term Habitat Restoration Projects* handout lists site-specific near-term habitat restoration projects that have been identified as important to Delta ecosystem health by CALFED and others. These projects will be listed in the BDCP as potential projects that could be used to meet BDCP habitat restoration targets, but they will not be considered as definite parts of the BDCP habitat restoration program. The point is made that this list may grow and change in the future, and that the approach of separate environmental review processes avoids unnecessary delays. Additionally, from a public outreach

point of view it is helpful to have a list of specific projects. The Steering Committee accepted the *Draft Proposed Approach to BDCP Site-Specific Near-Term Habitat Restoration Projects* handout with several amendments; and it will appear in Chapter 3 *Conservation Strategy* of the BDCP.

During this discussion, Carson Cox was introduced as an alternative for Greg Thomas on behalf of the National Heritage Institute.

Public Comments:

Ann Spaulding (City of Antioch) asked if only keeping this list of projects in the BDCP would in any way change the funding of these projects. Ms. Spaulding also asked who will pay for these projects. Carl Wilcox responded that many of these projects are well into the planning process and a number of them are funded by the Levee Maintenance Subventions Program (managed by DWR) and the CALFED Ecosystem Restoration Program. The planning for these projects has been funded by existing public sources, or is currently being funded and would be projected to be funded by public sources through the CALFED program or the subsequent Delta Conservancy program; and the BDCP could also contribute funding. Ms. Spaulding suggested that perhaps some wording to that effect should go into this section of Chapter 3 *Conservation Strategy*.

Maria Wong (Yolo County HCP/NCCP Joint Powers Agency) reminded the Steering Committee that BDCP actions meant to benefit BDCP covered species could have unintended consequences for neighboring developing and permitted HCP/NCCPs in the five-county Delta.

Presentation: Intake Site and Technology Selection Process and Recommendations

Dave Olson, BDCP EIR/EIS consultant, discussed the development of proposed BDCP intake locations that would be accessible to both the east side canal conveyance and the all-tunnel conveyance option. Various sizes and numbers of intakes were considered; from three to ten intakes with a 1,500-5,000 cfs per intake capacity range. They were designed to accommodate salmon criteria and operate to smelt criteria when smelt are present. The southernmost proposed intake location analyzed was near Walnut Grove and the Delta Cross Channel. Anything further downstream may incur water quality problems with future sea level rise. The northernmost proposed intake location analyzed was in the pocket area north of Freeport. Locations further upstream could create conflicts with facilities of the cities of Sacramento and West Sacramento. Many other factors were taken into account as locations were being chosen for consideration. For example, areas of high-value habitats, such as riparian, were avoided. All intakes were spaced at least 1 mile away from any other major diversions and as far from high-density community developments as possible to avoid visual impacts resulting from the intakes. Sites that may cause potential navigation conflicts were avoided.

The resulting intake location recommendations include five in-river intakes at 3,000 cfs capacity each that avoid high population density areas, and are upstream to improve smelt avoidance and reduced tidal influence. Nevertheless, discussions with the fishery agencies are ongoing in regards to intake location, type, and operations. A question was raised as to whether there are any established intakes in the Delta that are 3,000 cfs similar to the proposed intake size. The only intake of this size is the GCID (Glenn-Colusa Irrigation District) on the Sacramento River 100 miles north of the City of Sacramento.

It was asked whether the assumptions for these placements of intakes upstream have taken into account the potential changes in the tidal prism and aquatic species distribution that could result

from future climate change. Modeling results will assist in identifying potential changes in future species distribution due to climate change and will further inform the recommendations for proposed intake locations. The fishery agencies are concerned about potential increased predation associated with new intake structures and will continue to work with the consultants to address this issue; one idea is to locate two of the new intakes downstream of the confluence of Steamboat and Sutter sloughs. A concern was raised that the new intakes are designed to meet delta smelt criteria (a higher standard than that for salmonids), but historically not many delta smelt have been found at the proposed intake locations. Given the changes in species distribution that may occur over the 50-year life of the permit, it is prudent to plan for the intakes to be protective of all of the covered fish species.

It was asked whether or not the owners of property where potential intake location could occur have been notified. They have not; the exact locations of the proposed intakes are still flexible. Various sizes of Delta intakes were discussed; intakes of 300 cfs or more are generally considered to be large diversions. A request was made for more information about the sizes of largest existing intakes in the Delta. The point was made that any hard structure established in the river will attract predators of salmonids. Whether structure size matters in influencing predation rates is not yet known. The Contra Costa Water District (CCWD) offered information on their delta diversions with intakes of 250 and 350 cfs. The CCWD chose to overdesign for the greatest protection of fish in the face of future conditions that may change; and their placement of intakes on river bends has worked well.

Public Comment:

Barbara Damion (Delta resident) asked what the riverfront length would be for proposed intake facilities. Dave Olson responded that the total length of the setback levees associated with intakes is about 1,400 feet. The length of the intake structure itself will depend on the depth of the river. The latest estimate for the length of the fish screens is about 380 feet.

Presentation: Yolo Bypass and Fremont Weir Conservation Measure Update

Marianne Kirkland presented an update on the Yolo Bypass and Fremont Weir Improvements Conservation Measure. Under this conservation measure, the addition of operable gates to Fremont Weir and the proposed changes in hydrology could result in a third of the Yolo Bypass experiencing more frequent inundation events and the extension of inundation events to increase biological benefits to fish. There are several proposed actions that could be implemented to improve fish passage. These actions include modification of the existing fish ladder for salmonids and the addition of sturgeon ramps along Fremont Weir to increase fish passage; there are several agricultural structures (e.g., vehicle crossings) in the Tule Canal that impede fish passage that could be replaced with structures that allow for both vehicle passage across the canal and fish passage through the canal; modification of Lisbon Weir can help to pass fish; and the South Fork of Putah Creek has the Los Rios Check Dam that could be modified to improve fish passage.

The Steering Committee members will be asked to make a decision on whether or not to approve these proposed actions as conservation measures for inclusion in the Full Effect Analysis at the next Steering Committee meeting. A request was made for Ms. Kirkland to meet with a group of flood management engineers such as members of the Central Valley Flood Control Association to discuss the potential effects of this conservation measure on the flood control function of the Yolo Bypass.

Presentation: Update on Modeling to Assess Effects of Sea Level Rise

Armin Munevar, SAIC consultant team, discussed the range of the latest Intergovernmental Panel on Climate Change (IPCC) projections for future projected sea level rise. Michael McWilliams, SAIC consultant team, presented preliminary modeling results using a 3-dimensional hydrodynamic model called “UNTRIM” that provides more details than 2-dimensional models about future sea level rise and its potential salinity effects in the Delta, including X2 location. The finer technical points of the model assumptions were discussed such as emissions scenarios and tidal amplitude. A decision was made to set up an offline meeting to discuss in more detail the UNTRIM model and sea level rise.

Public Comment:

Dan Kelly (representing Sacramento County and Glenn Colusa Irrigation District) asked on behalf of his modelers that attended the “Modeling-for-Modelers” meeting if the UNTRIM model would be released to them. Mr. Munevar responded that such a decision would have to be made by those in management positions.

Discussion: Effects Analysis Update

Chuck Hanson presented an update on the Mini-Effects Analysis process. The anadromous and estuarine workgroups continue to meet. They are reviewing the summary of findings and looking at issues that were identified through the “red flag” process of the Mini-Effects Analysis. Dr. Hanson discussed the status of resolution of the five issues. The five issues raised were: 1) Sacramento River flows pertaining to Hood Bypass with specific emphases on the issue of pulse flows during winter as they affect salmonid migration and habitat conditions for delta smelt; 2) Yolo Bypass flows and their effect on and relationship to Sacramento River flows; 3) Upstream storage, cold water pool management (primarily within Shasta reservoir) and the interaction with X2 operations in the Delta; 4) South Delta exports, primarily focusing on April and May; and 5) North Delta intakes configuration and location, keeping in mind the issue of predator habitat and predation on covered fish species as it relates to intake locations.

Mike Tucker (NMFS) is heading a team that has put together a preliminary concept on integrating operating rules at the Hood Bypass to address the issue of pulse flows. Two efforts are underway to address Yolo Bypass flows as they relate to Sacramento River flows: preparation of a sensitivity analysis on the proposed management of flows, and the addition of more specificity in regards to Fremont Weir operation. The issue raised in the Mini-Effects Analysis regarding cold water pool management pertains to adaptive management as opposed to proposed operations; therefore, the adaptive management component of the BDCP is being analyzed in regards to how it addresses cold water pool management. South Delta exports are being analyzed relative to Old and Middle river reverse flow criteria versus San Joaquin River inflow to export ratios to identify possible refinements in operations and the adaptive range. A proposed alternative for north Delta intakes configuration is to locate two of the intakes south of the confluence of Sutter and Steamboat sloughs, giving fish an alternative pathway to avoid predation typically associated with in-stream structures.

A request was made for background information on inputs to the CALSIM model; and a criticism was offered on the Artificial Neural Network (ANN) that directs CALSIM how much water needs

to be released to meet salinity standards. In response, it was stated that the modeling group is developing different ANNs based upon the different geometries in the Delta. Concern was expressed about the uncertainty of modeling and the lack of evidence that modeling produces reliable results. A point is made that some information on the modeling - model assumptions, for instance - can be made available prior to preparation and release of the full report. A request was made for the consultants to create a summary of how they would recommend changing the existing proposed conservation measures in response to the results of the Mini-Effects Analysis with explanations of reasons behind the recommendations.

Presentation: Natural Community and Covered Species Conservation Strategy Development

Pete Rawlings presented an update on the terrestrial portion of the conservation strategy. The following materials were brought before the Steering Committee in 2009: 1) draft natural community problem statements, goals, and objectives; 2) draft wildlife and plant species problem statements, goals, and objectives; and 3) draft conservation measures. The portions of the terrestrial conservation strategy still under development are the summary of the approach to conservation, and the monitoring and adaptive management components.

Ecological considerations in developing the terrestrial conservation strategy include: the total extent of habitat that will be provided for individual species, minimum habitat patch sizes that can accommodate multiple covered species, shape and complexity of where preserved lands will be located, connectivity among habitats, geographical distribution in relation to existing preserve resources and occupied habitats, and means by which the BDCP can help to meet objectives of neighboring and overlapping habitat conservation programs.

The proposed acreage targets for restoration of terrestrial natural communities will be brought to the Steering Committee on February 4, and the Steering Committee members will be asked to make a decision on the proposed acreages on February 25.

Public Comment:

Maria Wong (Yolo County HCP/NCCP Joint Powers Agency) addressed BDCP coordination with county-led conservation plans. She suggested that the Steering Committee should consider that the BDCP and other regional conservation plans have overlapping planning areas and each will have to provide for the conservation species under the NCCPA standards; and these plans and the BDCP should coordinate to avoid overestimating the responsibility of meeting recovery standards. Secondly, the overlapping plans must coordinate on implementation to ensure they do not bid against each other for the same properties. Thirdly, local government entities will have opinions on retaining land use options on lands that are not targeted for conservation.

General Public Comments:

None

Attendees

Management and Representatives

Karen Scarborough (Chair, The Natural Resources Agency)

Laura King Moon (State Water Contractors)

Karla Nemeth (The Natural Resources Agency)
Keith Coolidge (California Bay-Delta Authority)
Jerry Johns (DWR)
Federico Barajas (USBR)
Patti Idlof (USBR)
Roger Patterson (Metropolitan Water District)
Jason Peltier (Westlands Water District)
Ara Azhderian (San Luis & Delta-Mendota Water Authority)
Kurt Arends (Zone 7)
Ann Hayden (Environmental Defense Fund)
Richard Roos-Collins (American Rivers)
Anthony Saracino (The Nature Conservancy)
Gary Bobker (The Bay Institute)
Greg Zlotnick (Santa Clara Valley Water District)
Kenny Watkins (California Farm Bureau Federation)
Melinda Terry (North Delta Water Agency)
Steve Ottemoeller (Friant Water Authority)
Tom Howard (State Water Resources Control Board)
Carl Wilcox (DFG)
Dan Castleberry (USFWS)
Michael Tucker (NOAA/NMFS)
Maria Rea (NMFS)
Paul Cylinder (SAIC)
Pete Rawlings (SAIC)

On phone

Marc Ebbin (DWR, The Natural Resources Agency)
Greg Gartrell (Contra Costa Water District)
