

**Bay Delta Conservation Plan (BDCP)
Steering Committee (SC) Meeting**
July 1, 2010, 9:00 a.m. to 12:00 p.m.
California Farm Bureau Federation Conference Room
2300 River Plaza Ave, Sacramento, CA

Draft Meeting Notes

Associated documents/handouts:

- *Agenda*
- *Draft BDCP Steering Committee Meetings Agenda Schedule*
- *Draft BDCP SC Meeting Notes January 21, 2010*
- *Draft BDCP SC Meeting Notes January 29, 2010*
- *Draft Chapter 4 – Description of Covered Activities and Associated Federal Actions*
- *Draft Section 3.5 – Monitoring and Research Program (July 2009 version)*
- *Draft Section 3.6 – Adaptive Management Program (July 2009 version)*

Action Items and Key Decisions

- *Approved Draft BDCP SC Meeting Notes December 17, 2010*
- *Approved Draft BDCP SC Meeting Notes January 7, 2010*
- *Approved Draft BDCP SC Meeting Notes January 14, 2010 with corrections*

Updates

- Karen Scarborough (chair) announced that at their last meeting, the Delta Stewardship Council discussed their letter to DWR regarding CEQA compliance as it relates to alternatives to the BDCP proposed project; and the Council received a tutorial on natural community conservation planning from Kevin Hunting of the California Department of Fish and Game. Ms. Scarborough noted the Steering Committee's desire to have the Council's ongoing engagement and involvement to ensure coordination between the BDCP and the Delta Plan. Council representatives were not present at today's meeting,
- DWR announced an allocation increase to 50% of requested deliveries, as a result of late spring rains that improved Oroville Reservoir storage levels.
- The State Water Board's flow criteria report will be released in mid-July. The Steering Committee will hear a presentation on the report at the July 29, 2010 SC meeting.
- The National Academy of Sciences has scheduled a July 13, 2010 public meeting at the Embassy Suites Hotel and would like to include a presentation on the BDCP. Other topics of discussion will include pollutants and other stressors; and the panel will tour the Delta. Registration is required for attendance at the public meeting.
- Contra Costa Water District (CCWD) announced a new intake dedication ceremony for July 20, 2010. Guest speakers will include Don Glaser (U.S. Bureau of Reclamation Regional Director for the Mid-Pacific Region) and Mark Cowin (Director of California Department of Water Resources). CCWD offered to give the Steering Committee a presentation on the construction which involved a tunnel, pipeline, and intake on the Delta. Ms. Scarborough congratulated CCWD on their accomplishment and thanked them for the presentation offer.

Process and Schedule

Karen Scarborough introduced and discussed the *Draft BDCP Steering Committee Meetings Agenda Schedule* handout which outlines planned topics of discussion for the coming months. The current meeting agenda includes the first presentation of the separate analyses (conveyance and intake sizing analysis) and an update on the EIR/EIS process. The protocol for reviewing and discussing upcoming draft chapters was discussed. It was suggested most chapters could

require three meetings from review to resolution. The first meeting would introduce the draft chapter, the second meeting would hold a discussion of the chapter to resolve any issues, and final approval of the draft chapter could occur at the third meeting. A suggestion was made to reduce the amount of meetings needed per chapter by releasing chapters for review the week before Steering Committee meetings. Another suggestion was made to have subgroup meetings during the weeks between SC meetings to discuss remaining issues on BDCP chapters.

The Modeling-for-Modelers meeting held on June 18th was discussed. Inclusion of the San Joaquin River restoration flows in the analysis was discussed in detail. Some Steering Committee members had been under the assumption that part of the analysis would determine whether San Joaquin River restoration flows could contribute to additional exports. Though San Joaquin River restoration flows have not been included in the model, the intent of the modelers is to revisit this as progress is made on the analysis of the San Joaquin flows.

Public Comments:

Mark Rockwell (Endangered Species Coalition) commented on the large scope of the BDCP, and suggested that if extra time is needed for development of the BDCP, it should be allowed for.

Ann Spaulding (City of Antioch) asked if water operations would be revisited. Karen Scarborough (chair) answered in the affirmative; as part of the aquatic conservation measures. Ms. Spaulding requested that if small workgroups are formed to work out chapter details offline, they be open to interested parties. Ms. Spaulding asked if the length of the public review period for the draft BDCP had been identified. Ms. Scarborough responded that it hasn't been decided, however, the public review period would be at least 60 days.

Public Outreach

Karla Nemeth (Natural Resources Agency) met with representatives of North Delta CARES and DWR engineers to discuss the status of BDCP proposed terrestrial conservation measures, potential water intake locations and DWR survey work (e.g., geotechnical). As a result of this meeting, another meeting has been scheduled to specifically discuss intakes. Ms. Nemeth has been in communications with the Yolo Basin Foundation about scheduling a stakeholder meeting, which would be open to the public, to discuss development of the Yolo Bypass conservation measure and its implementation. Discussions continue with the Delta counties; Ms. Nemeth will meet with representatives of San Joaquin County in August. The Secretary of Resources, Lester Snow, is continuing development of MOUs (memorandums of understanding) with the individual Delta counties.

A question was raised about whether the Yolo Basin Foundation had brought to Ms. Nemeth's attention their idea of sending water down the west side of Yolo Bypass as opposed to the current proposed configuration. Ms. Nemeth responded in the affirmative; this will be discussed in greater detail at Yolo Bypass stakeholder meetings. It was suggested that if the Yolo Bypass measure is revised to incorporate sending water down the west side of the Yolo Bypass, potential terrestrial impacts (e.g., to giant garter snake) will have to be examined. Paul Cylinder (SAIC) responded that while the Yolo Bypass measure is included in the BDCP Effects Analysis as currently written, the SAIC team, DWR, and the Yolo Basin Foundation are working on alternative approaches.

A question was raised about what topics were covered during Ms. Nemeth's meeting with North Delta CARES. Ms. Nemeth responded that the majority of the area concerning North Delta Cares is in Conservation Zone (CZ) 3; the proposed actions for CZ 3 were discussed, as were the proposed intake facilities and overall potential impacts in the north Delta.

Governance Implementation Structure

Roger Patterson (Metropolitan Water District) reported on the status of the governance/implementation structure chapter. The state and federal agencies are comparing notes and offering consolidated comments on the chapter. The non-governmental organizations are also discussing topics of governance while waiting for state and federal agency comments.

Logic Chain/Metrics – Science Input

David Harlow (State Water Contractors) gave an update on application of the logic chain approach to the BDCP. Longfin smelt and winter-run salmon have been the subject of the logic chain evaluation to date. DFG has been assisting on application of the logic chain to longfin smelt. Application of the logic chain has followed the March 25, 2010 recommendations from the Science Advisors; parallel to that, development of the logic chain is moving into the science review process (i.e., proof of concept). This effort is being led by Bruce DiGennaro, Dr. Cliff Dahm, and Dr. Anke Mueller-Solger. A panel for review of the fully developed logic chains is planned for August 2010. On July 15, 2010, the logic chain workgroup will return to the Steering Committee with a brief explanation of the logic chain developed metrics.

Preparation: Monitoring and Research Program/Adaptive Management Program

Paul Cylinder presented the *Draft Section 3.5 – Monitoring and Research Program (July 2009 version)* and *Draft Section 3.6 – Adaptive Management Program (July 2009 version)* handouts that have previously been reviewed by the Steering Committee and asked the Steering Committee members to again review the content therein. Specific monitoring actions will be developed to fill out the blank tables once the logic chain metrics have been identified. During the July 15, 2010 Steering Committee meeting, a discussion will be held on key monitoring and adaptive management concepts; some of these concepts relate to other chapters (e.g., governance structure).

Public Comment:

Tina Cannon Leahy (consultant to the California Assembly Water, Parks and Wildlife Committee) asked if several terms (implementing entity, permit holders, and management entity) had been clearly defined for Chapter 3, *Conservation Strategy*. Dr. Cylinder responded that the definitions of these terms are evolving. For instance, the term “implementing entity” had evolved into the term “management entity;” however, the governance structure is still being developed.

Presentation: BDCP Steering Committee New Delta Conveyance

Ron Milligan (US Bureau of Reclamation) gave a presentation on the separate analysis for intake and tunnel sizing. This analysis was conducted in response to a Steering Committee request made in January, 2010, to examine potential tunnel sizes in case a tunnel is chosen for water conveyance, as opposed to a canal. Factors examined included operational flexibility in light of fishery conditions, capital and maintenance costs, water supply and quality, and Delta outflow requirements. Assumptions used in the analysis include tunnel sizes developed in 3,000 cfs (cubic feet per second) increments (with each 3,000 cfs intake including six 500 cfs pumps), two parallel tunnels, and use of gravity flow where possible.

The tunnel capacity and sizes analyzed were 3,000; 6,000; 9,000; 12,000; and 15,000 cfs. Mr. Milligan outlined the tunnel interior diameters, number of intakes, and number of pumps required for each size option. Based on several independent estimates, the upper range of the cost would be \$7.2 billion for a 3,000 cfs configuration to \$12.3 billion for a 15,000 cfs configuration. Mr. Milligan discussed the analytical scenarios used in the sizing analysis, which included possibilities such as south Delta exports being further constrained or ceased entirely, and increased Delta outflow requirements.

The capital cost per acre foot of water decreases with constrained south Delta operations and an added benefit of reduced Old and Middle River (OMR) reverse flows. Water supply provided in the scenarios evaluated does not show a dramatic increase with increased tunnel size unless south Delta exports are constrained. With constrained or halted south Delta operations, the larger tunnel sizes create greater increases in yield. Old and Middle River reverse flows decrease with increased tunnel size; and at 12,000 cfs the Old and Middle River flows become positive. This outcome can create better central and south Delta fishery conditions.

Mr. Milligan discussed the costs of power, operations and maintenance, and debt service of the various tunnel sizes. Debt service includes principal and interest at 4.5% over 50 years. When looking at costs in terms of millions of dollars per cfs capacity, the cost per cfs capacity decreases with increased tunnel size. Next steps in this effort include completion of the

biological effects analysis, the intake location sensitivity evaluation, and the optimization studies of various conveyance designs.

A suggestion was made to analyze the current Delta water quality and how it could be affected by different conveyance sizes; this information is likely to come from the BDCP Full Effects Analysis. It was noted that water quality indicators to be analyzed in addition to water salinity are total organic carbon, bromides, and algal growth. A point was made that to examine Old and Middle River flows in context, it must be recognized that because of the tides each day, Old and Middle River flows are positive and negative at a flow rate of 15,000 cfs; an additional point was made that the tidal flows have been observed as high as 25,000 cfs.

Public Comments:

Mark Rockwell (Endangered Species Coalition) asked if the term “improved water supply” meant meeting full contractual obligations. Mr. Milligan responded that meeting full contractual obligations could be seen as improved water supply; however, the term is used here to merely represent an improvement in water supply.

Ann Spaulding (City of Antioch) asked if the DSM2 results that Armin Munevar previously presented are included in the sizing analysis described today. Mr. Milligan responded that they are to the extent that they affect the CALSIM runs. This is a more coarse-level analysis. Ms. Spaulding noted that Mr. Munevar found a western Delta salinity increase of 20-30% with the early long-term operations, accounting for climate change; making the point that some locations in the Delta may experience greater increases in salinity (i.e., decreases in water quality) than others.

Jonas Minton (Planning and Conservation League) pointed out that although cost decreases with increased capacity of the tunnel size, this does not address the acre-feet of water delivered. Mr. Milligan agreed and noted that starting a project at all creates costs; and as the size of the project increases, the costs per unit of the project decrease. The goal is to find the size of the project that is most useful.

Jonas Minton asked if this presentation would be posted on the BDCP website. Karen Scarborough (chair) answered in the affirmative. Mr. Minton asked when the backup information for this analysis would be provided. Mr. Milligan responded that it would likely be made available in pieces over the course of coming weeks, given the workload of the BDCP modelers. Mr. Minton expressed appreciation for the development and presentation of this work. It offers opportunities to examine the additional information: (1) the State Water Board will soon release their recommendations for Delta outflow; and (2) the sequencing of constructing alternate facilities; the idea that one tunnel would work for now, with the option of adding another tunnel later. Mr. Minton suggested that political acceptability of any idea should be part of the criteria analyzed and considered.

Presentation: Defining the Preliminary Array of Alternatives for BDCP Draft EIR/EIS

Jerry Johns (DWR) and Dan Castleberry (USFWS) gave an update on the process of defining the alternatives for the BDCP Draft EIR/EIS. Mr. Johns began the presentation with a discussion of the lead, responsible, and cooperating agencies for the EIR/EIS; and an identification of the initial alternative concepts. After the Notice of Preparation (CEQA) and Notice of Intent (NEPA) were released, over one thousand public comments were received. Comments included requests to incorporate concepts described in 2007-2008 Public Policy Institute of California reports and concepts presented to the Delta Vision Blue Ribbon Task Force. These concepts have been included in BDCP handouts over the past few years, along with concepts generated by the BDCP Steering Committee and working groups.

The alternative concepts include three components: habitat restoration, measures to reduce a variety of stressors on fish, and a conveyance component. Analysis of the conveyance component has largely focused on three alternatives: isolated conveyance (north Delta intakes and a peripheral conveyance around the Delta), dual conveyance (utility of both north and south Delta intakes), and through-Delta conveyance (the use of existing south Delta intakes). The EIR/EIS evaluation of the BDCP is project-level for the purpose of permit issuance by the fish and wildlife agencies and plan adoption by DWR, and is programmatic from the standpoint of environmental review of specific implementation actions (e.g., habitat restoration and other stressors components).

Mr. Johns discussed the habitat restoration conservation measures (e.g., tidal marsh and riparian habitat restoration), and the conservation measures to address various stressors in the Delta (e.g., control of nonnative aquatic vegetation and installation of non-physical barriers to redirect fish). Other Delta stressors undergoing evaluation in terms of how the BDCP can help reduce stressors such as ammonia, pesticides, and endocrine disrupting compounds (cause hormonal effects) loads in Delta waterways; and fish entrainment by other non-Project intakes (approximately 2,000) in the Delta. Mr. Johns discussed the alternative designs of the isolated conveyance, dual conveyance, and through-Delta conveyance concepts.

Mr. Johns described the multi-step screening criteria process, which included reviewing for feasibility, consideration of Sacramento-San Joaquin Delta Reform Act requirements, and consideration of information needs identified by CEQA/NEPA responsible and cooperating agencies during the scoping process. The resulting preliminary array of alternatives under consideration for evaluation in the draft EIR/EIS document all address conveyance, capacity, operations, habitat restoration, and other stressors components. Three time horizons are also being evaluated in light of potential environmental changes resulting from climate change and sea level rise: 10 years from issuance of the permit (late near-term), the year 2025 (early long-term) and the year 2060 (late long-term).

Dan Castleberry continued the presentation with a discussion of the alternatives under evaluation. The programmatic aspects of the BDCP (habitat restoration measures and measures to address various stressors) are consistent among the alternatives, while the project-specific aspect of water conveyance varies in design. Marc Ebbin (Natural Resources Agency and DWR) added that issuance of permits by the fish and wildlife agencies under the Endangered Species Act and NCCPA require a project-level EIR/EIS analysis for the purpose of those agency actions.

Mr. Castleberry discussed the no-action alternative and the five project alternatives currently under consideration: (1) the BDCP as proposed, with dual conveyance (north and south Delta) using a new isolated facility and existing through-Delta conveyance; (2) dual conveyance with a smaller pipeline/tunnel; (3) isolated conveyance which would cease use of the through-Delta system and south Delta intakes; (4) dual conveyance with enhanced aquatic conservation (additional 20 miles of channel margin enhancement) and a smaller pipeline/tunnel as part of dual conveyance; and (5) through-Delta conveyance with separate corridors which includes modifications to the existing through-Delta system, to provide separate corridors for water supply and fish habitat in the south Delta. This preliminary array of alternatives is still under development. There may be modifications to these alternatives and the addition of new alternatives.

A question was raised about the habitat restoration component and whether more alternatives for that part of the proposed project will be developed. Mr. Johns and Mr. Castleberry answered in the affirmative. It was asked if all of the alternatives would be modeled. Mr. Johns answered in the affirmative.

Public Comments:

Tina Cannon Leahy asked if a document describing the screening process will be made available before the release of the draft EIR/EIS. Mr. Johns responded that they are working on two documents as part of the environmental document. One is a more detailed review of the screening criteria and one will be a summary of alternatives considered and not carried forward for detailed analysis.

Jonas Minton expressed the hope of the Planning and Conservation League to see one of the alternatives show a 3,000 cfs tunnel as part of dual conveyance.

Review: Covered Activities (Chapter 4)

The latest draft of Chapter 4, *Description of Covered Activities and Associated Federal Actions*, has been made available for review. Paul Cylinder (SAIC) discussed the latest changes made to the chapter which include clarifying the federal associated actions to the non-federal covered activities. This is the third draft of Chapter 4 that the Steering Committee has received. This version reflects changes made in response to feedback received from the SC in March 2010.

General Public Comment:

Erik Ringelberg (Reclamation District 999) submitted written comments on chapters 3 and 4 on behalf of Osha Meserve (Reclamation District 999 and Stone Lakes NWR Association).

Attendees

Management and Representatives

Karen Scarborough (Chair, The Natural Resources Agency)
Marc Ebbin (DWR, The Natural Resources Agency)
Laura King Moon (State Water Contractors)
Karla Nemeth (The Natural Resources Agency)
Tom Howard (State Water Resources Control Board)
Jerry Johns (DWR)
Cindy Tejada (USACE) – verify name spelling
Jason Peltier (Westlands Water District)
Brent Walthall (Kern County Water Agency)
Roger Patterson (Metropolitan Water District)
Ann Hayden (Environmental Defense Fund)
Anthony Saracino (The Nature Conservancy)
Kim Delfino (Defenders of Wildlife)
Jim Fiedler (Santa Clara Valley Water District)
Steve Ottemoeller (Friant Water Authority)
Carl Wilcox (DFG)
Melinda Terry (North Delta Water Agency)
Ara Azhderian (San Luis & Delta-Mendota Water Authority)
Greg Gartrell (Contra Costa Water District)
Federico Barajas (USBR)
Kari Fisher (California Farm Bureau Federation)
Dan Castleberry (USFWS)
Michael Tucker (NOAA/NMFS)
Paul Cylinder (SAIC)

On phone

John Cain (American Rivers)
Greg Thomas (Natural Heritage Institute)
Kurt Arends (Zone 7)
