Bay Delta Conservation Plan (BDCP)
Steering Committee (SC) Meeting
November 19, 2009, 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 SC Meeting Notes July 16, 2009*
- *Draft BDCP SC Meeting Notes July 30, 2009*
- *Draft BDCP Development Process and Schedule*
- *Draft Steering Committee Meeting Agendas*
- *Draft BDCP Remaining Questions*
- *Draft BDCP Logic Chain*
- *Draft BDCP Chapter 6 Section 6.3 Regulatory Assurances and Changed Circumstances and Unforeseen Circumstances*

Action Items and Key Decisions

- Tabled approval of Draft BDCP SC Meeting Notes July 16, 2009 until the next meeting.
- BDCP SC Meeting Notes July 30, 2009 approved with changes/modifications
- Metrics Group to provide draft materials to SC by first SC meeting in January 2010
- Chair to identify a venue to discuss large-impact events (climate change, catastrophic levee failure, species jeopardy/extinction)

Updates

- Laura King Moon noted the unfortunate passing of Tom Graff of the Environmental Defense Fund. Ann Hayden announced that there will be a memorial service in early January.
- DFG announced that the Northern California Conservation Planning Partners workshop was held yesterday, which included a panel focused on BDCP and its relationship to local county-sponsored HCPs. Carl Wilcox, Kim Delfino, Maria Wong (Yolo Natural Heritage Program), and David Okita (Solano County Water Agency) were on the panel.
- NMFS announced that the contract for the National Academy of Science's review of the OCAP biological opinions has been signed. FWS and NMFS have been asked to provide names of prospective panelists and have requested that SC members provide names of panelists and local experts as well.
- NMFS also announced that a work plan concerning California water issues is under development as required under the MOU signed by the consortium of federal agencies. The federal agencies are charged with identifying the highest priority actions to implement in the next 1 to 2 years; regional and Washington DC offices are coordinating this effort. Public input has been requested prior to the development of a draft work plan (comments on the MOU). Comments are due by December 1. SC members requested that NMFS or another federal agency conduct a workshop on the document with a focus on the Delta and immediate, near-term actions.
- Secretary Chrisman and David Nawi are contemplating a state/federal planning process they will coordinate over the next 13 months that will balance agency leadership and stakeholder input.
- Recent survey results show that Delta smelt numbers remain very low.

Process and Schedule

Karen Scarborough, Chair, provided an overview of the *BDCP Development Process and Schedule, Draft BDCP Remaining Questions,* and *Draft Steering Committee Meeting Agendas* (see handouts).

The SC expressed a desire for a more methodical schedule with target dates set out for decisions. It was explained by Karen Scarborough that dates for discussion and decisions will be determined as task groups provide material for decisions and that January SC meetings will likely have longer agendas with more detailed discussions. Discussion and questions from SC members with regard to remaining Question #9 on handout "Vetting of Conservation Measures/Covered Activities." Paul Cylinder clarified that the conservation measures are still being fine-tuned and that there are expected to be refinements, additions, and deletions of conservation measures by SC before the effects and cost analyses can be completed.

A question was raised as to whether the focus of the next few months should be narrowed to adaptive management and objectives, terrestrial communities to be covered, governance, and assurances. Statement that addressing changed circumstances due to climate change would be challenging. It was clarified that the conservation measures be revised by December 2009 as the chapter is intended to be only an administrative draft, not a public draft. It was noted that there are a series of effects analysis preliminary outputs to support SC decisions to revise near and long-term operational conservation measures.

There was discussion regarding the intent of posting an administrative draft in December while some conservation measures, such as for terrestrial species, are not yet complete. Karen Scarborough explained that the various sections of the document are being posted to the website in draft form so that the public can better see how each section of the document relates to the document as a whole.

There was a comment that it is important to show how the provisions of the new legislation are being addressed in the plan. It was agreed that the December document should be called a "working draft" and not an "administrative draft."

Public Comment:

Ann Spaulding (City of Antioch) asked whether timely non-member respondents on the review of Chapter 3 would be provided a disposition table of their comments. The Chair responded that they would. The Chair explained that only those comments received [by this SC meeting] would receive individual responses in the disposition table. Comments received by the BDCP SC after November 19 will be described in a table, however, they will not receive individual responses.

Public Outreach

Karla Nemeth gave an update of the Public Outreach group's efforts. They met once but have not been able to meet again due to scheduling conflicts. They have received some comments from local counties on issues that go beyond scope of BDCP. This information has been compiled so that the public outreach group can address them. Karla Nemeth will coordinate with Carl Wilcox to make updated Delta smelt survey results available via a link on the BDCP website.

Public Comment:

Oshe Meserve (RD 999 and Stone Lakes NWR) submitted a memorandum to the Steering Committee regarding the addressing of public comments submitted before the deadline.

Presentation: Overview of BDCP Draft Project Near-Term and Early Long-Term Operations

Paul Cylinder introduced the topic stating that the information being conveyed on physical (hydrodynamic) model results will feed into the biological evaluation for effects analysis. Once the physical models have been run, groups of specialized experts will interpret the biological effects of the physical changes on individual covered species.

Armin Munevar is leading the modeling effort and Chuck Hanson and Rick Wilder are leading the biological interpretation. The agenda schedule provides checkpoints leading to the January 28, 2010 Steering Committee meeting at which preliminary biological conclusions reached by the technical subgroups will be used to decide on proposed operational criteria for the BDCP.

Armin Munevar presented early results of the physical model runs. There was a question for clarification as to what measures within the existing OCAP BO RPA were not input into the model. Mr. Munevar responded that the model runs did not include the San Joaquin E:I ratio (April–May springtime action in NMFS salmon BO). There was also a query as to what range of OMR flows were included in the model. Mr. Munevar responded that the OMR flows in the Near-Term model are consistent with the most likely water operations that Reclamation and the Fishery Agencies have identified based on allowable operational range in the RPA; the most likely scenario is close to the middle of the range from the RPA. Steering Committee members were reminded that the Near-Term operations package was not endorsed by the Steering Committee; rather, the SC generally concurred that the package of measures would be a useful starting point of analysis of the expected biological outcomes. At the end of the process, the Steering Committee will discuss what has been learned from the simulations and how to modify the operational inputs to the model. It was agreed that the title of the presentation as stated in the agenda should be changed to reflect the title and content of the presentation.

There was discussion regarding modeling the RPAs within CalSim and ranges used in the model simulations. Much work has been done to determine inputs to CalSim to reflect most likely or median operations, as there is a large range of operations allowable within the BOs RPAs. Reclamation is in the final stages of completing two technical documents that should be finished after a final meeting with the Fishery Agencies. Reclamation provided the "beta version" of the model inputs to Mr. Munevar for his model runs. In the next couple of weeks Reclamation will have the final model and any changes are expected to be minor.

NMFS noted that the results depicted for the RPA operations in the presentation show the most restrictive interpretation of operations for water exports. DWR noted a disagreement with NMFS's interpretation.

It was noted that the south Delta water exports under the draft Near-Term operations illustrated in slide 12 show no substantial difference from the RPA results; the draft Near-Term operations do not appear to improve water supply. Response that now is the time to discuss possible modifications to the draft Near-Term operational criteria.

A question was raised whether the tidal marsh restoration effects on salinity have been modeled in the CalSim runs? Mr. Munevar responded that both RMA and DSM2 model simulations are being conducted and the results will be available soon.

There was a comment that future presentations should show delivery reliability curves as a measure of success as opposed to export reliability curves. Mr. Munevar provided an example of multi-year storage carryover and management of three years (two dry and one wet). Export reliability would be low in the dry years and high in the wet year; however, if the San Luis Reservoir can mitigate the dry years and fill in for the reduced flows using stored water from the wet year this represents delivery reliability.

Public Comments: Justin Frederickson (California Farm Bureau Federation) asked if Mr. Munevar was modeling the two bookends at the extremes of the range (and the proposed project in the middle), or modeling the entire range. Mr. Munevar responded that we are modeling three discrete scenarios (the two extremes and the proposed project) for the Long Term operations to inform the SC regarding the adaptive range for the proposed project.

Anitra Pawley (DWR) asked whether the assumptions in the various model runs will be identified explicitly so that combinations of variables and different results can be compared. Mr. Munevar responded that yes, short-term and long-term examples can provide that information, but that the combinations of variables will not be explicitly stated in the effects analysis. Ms. Pawley also asked if the average X2 that is used in the model (multi-month average as opposed to a day-to-day or month-to-month average) has been accepted by biologists in the fish agencies. Mr. Munevar responded that it has been discussed but not resolved.

Biological Interpretation by SAIC of Modeling Preliminary Results

Chuck Hanson discussed his preliminary assessment of biological outcomes based on results of the physical models. This review had two purposes: 1) to determine if the new CalSim results, with its more detailed modeling, are consistent with the earlier CalLite results and 2) to identify any possible adverse conditions ("red flags") created by operations, given the many interacting parameters involved. Mr. Hanson explained that while his interpretation is based on input from other experts, it is his interpretation he is presenting today.

Mr. Hanson found that the modeling results from CalSim are consistent with earlier results from CalLite modeling. There are no major surprises. The Near term operations are better than D-1641 operations, in terms of biological processes. Near term differs in some ways from the BOs; there are no red flags, but there are areas to further investigate. Model results for long term operations indicate a substantial reduction in Sacramento River flow when the dual facility operations are implemented, which is consistent with predictions; also, there are substantially less negative OMR flows and less reverse flow in south Delta, which is also consistent with predictions. Areas that need further and more detailed analysis by the technical groups include Delta outflow and the spring X2 and end of September storage in drier years.

A question was raised about the reduction of inflows in the Sacramento River and the biological implications. There are biological implications, for example, juvenile Chinook salmon survival and their relationship with Sacramento River flow. The anadromous fish technical subgroup needs to analyze the relative value of the options. Food transport issues, transport of larval smelt, etc are other biological issues that need to be weighed among the various operations. Paul Cylinder added that this will be a key point and challenging task facing the effects group when they analyze various changes resulting from conservation measures and covered activities, and make an overall determination of the net effect on a given species. They will need to rely on best professional judgment. Mr. Hanson will provide a written version of his presentation.

A question was raised about whether the biologists will be given modeling on specific bypass flows or a range of bypass flows. Paul Cylinder responded that the effects groups will get full modeling outputs right after Thanksgiving that will include all of the flow rates discussed in Mr. Munevar's presentation. They'll be asked to determine the most likely outcomes as well as best and worst case scenarios in the extreme ranges.

Paul Cylinder stated that, at the request of Fishery Agencies, the technical subgroups will not conduct a full biological analysis at this time, but rather will focus on identifying large effects of water operations on key species and looking for "red flags" of adverse effects to help inform the Steering Committee.

Public Comments:

Ann Spaulding (City of Antioch) stated that a reduction in Sacramento River flow is of concern for those who receive their water from it and asked if that has been quantified. Mr. Hanson responded that it is quantified in the modeling results, and the output will provide information on predicted monthly changes.

Oshe Meserve (RD 999 and Stone Lakes NWR) asked if the benefits of north Delta diversion with reduced pumping in the south Delta are being compared with benefits that could accrue with the installation of screens in the south Delta in addition to or instead of the north Delta diversion. DWR responded that screening in the south Delta is not part of the project. If fish are screened in the south Delta, there remains the challenge of what to do with them (currently fish are salvaged and returned to the Delta). The benefit of the north Delta diversion is that the fish are never touched (no salvage necessary).

Dan Kelly (Sacramento County) asked if the model that showed reduced Sacramento River flows looked at the rest of the delta channels. Mr. Munevar responded yes, that assessment is currently underway. There was an additional comment that the reduction is just between Hood and Georgiana sloughs so the loss is just for this short reach.

Discussion of Adaptive Management and Monitoring Metrics

Will Stelle reported on Section 3.2 (Goals and Objectives), the "SMART" (Specific, Measurable, Achievable, Relevant, and Time-limited) approach to development of objectives and he presented the *Draft BDCP Logic Chain* (see associated handouts/documents).

John Cain reported that the next steps are: 1) to develop SMART objectives and articulate hypotheses that may prevent us from achieving those objectives; 2) the SAIC team will quantify projected outcomes of the conservation measures, relying on the work done during the DRERIP process to the extent possible; and 3) ensuring a crosswalk between the SMART objectives and the projected outcomes of the conservation measures.

There was a question regarding how the fish objectives will be quantified – in percentages or numbers? Mr. Stelle stated that we will be examining this during the process. There was an observation that emphasized that the chart presented represents a hypothetical example, and that the PREs do not agree that the fall mid-water trawl index is the appropriate way to measure Delta smelt population. Mr. Stelle stated that these are not intended as permit requirements but are general ecosystem goals, and that the permittees are not necessarily responsible for meeting all of the stated goals.

Steering Committee Members were asked if they are willing to meet every week in January and no concerns were voiced.

Changed Circumstances

Paul Cylinder gave overview of the Chapter 6 (*Implementation Plan*) and introduced the concept of "changed circumstances."

Marc Ebbin discussed handout *Draft BDCP Chapter 6 Section 6.3 Regulatory Assurances and Changed Circumstances and Unforeseen Circumstances*, emphasizing that it is a preliminary draft that will need additional work.

There was a question about how changed circumstances or foreseeable circumstances will be addressed within the context of NCCP Act requirements since they differ from federal requirements. Mr. Ebbin responded that he sees some of those concerns being addressed in the conservation measures and in the adaptive management associated with those conservation measures.

A question was raised concerning impacts on third parties such as levee seepage, reduced flood control capacity and where effects on the human environment would be addressed and mitigated. Mr. Ebbin stated that section 6.3 focuses on two very specific regulatory requirements under federal and state endangered species laws and that many third party issues will be covered in the EIR/EIS. Mr. Ebbin stated that the EIR/EIS will address mitigation measures and that obligations will be separately stated in EIR/EIS and are separate from the HCP.

There was discussion about how BDCP will address large events that adversely affect the ecosystem: 1) climate change; 2) a catastrophic seismic event, and; 3) significant likelihood of jeopardy or extinction of fish species. Suggestion that these issues should be addressed in another working group that includes subject matter experts. Noted that climate change is being addressed in BDCP in the design of conservation measures, facility design, and the effects analysis. Noted that jeopardy and the potential for extinction of fish is a regulatory issue. Noted that these large changes would be outside the control of the permit holders and beyond their responsibility under the permits.

Karen Scarborough, Chair, committed to identifying a venue for discussion of these issues.

Public Comments:

Melanie Rowland (NOAA) stated that everything in changed circumstances needs to be addressed in the adaptive management process. Mr. Ebbin responded that it is anticipated that most things will be addressed by the adaptive management program, but not all.

Stu Townsley (USACE) suggested reorganizing this section temporally into short-term and long-term mitigation actions and changed circumstances.

Oshe Meserve (RD 999 and Stone Lakes NWR) suggested organizing changed circumstances by what is within the control of or caused by the BDCP and what is outside of the control of the BDCP.

Attendees

Management and Representatives
Karen Scarborough (Chair, The Natural Resources Agency)
Laura King Moon (State Water Contractors)
Marc Ebbin (DWR, The Natural Resources Agency)
Will Stelle (The Natural Resources Agency)
Karla Nemeth (The Natural Resources Agency)
Jerry Johns (DWR)
Kari Fisher (CA Farm Bureau)
Patti Idlof (USBR)
Kim Delfino (Defenders of Wildlife)
Greg Zlotnick (Santa Clara Valley)
Tom Howard (SWRCB)
Brent Walthall (Kern County)
Greg Gartrell (CCWD)
Kurt Arends (Zone 7)
John Cain (American Rivers)
Paul Robershotte (USACE)
Roger Patterson (Metropolitan Water District)
Jason Peltier (Westlands)
Anthony Saracino (The Nature Conservancy)
Melinda Terry (North Delta Water Authority)
Carl Wilcox (DFG)
Dan Castleberry (FWS)
Maria Rea (NMFS)
Paul Cylinder (SAIC)

On phone
Greg Thomas (NHI)
Steve Ottemoeller (Friant Water Authority)
Ann Hayden (EDF)
Cindy Kao (Santa Clara Valley)
Peter Landreth (Mirant)
Deanna Sereno (CCWD)

Other attendees
See sign-in sheets