Lower Yolo Bypass Planning Forum
BDCP Subcommittee Meeting #3

May 5, 2009
Center for Collaborative Policy
Sacramento, CA

Attendance

Meeting Participants
Ann Brice, Yolo Basin Foundation (YBF)
Brad Burkholder, Department of Fish and Game (DFG)
Regina Cherovsky, Reclamation District (RD) 2035
Cliff Covey, Sonoma County Department of Resource Management
Steve Crooks
Harry Englebright, Solano County Department of Resource Management
Linda Fiack, DPC
Chuck Hanson, Hanson Environmental
Mike Hardesty, RD 2068/2098
David Harlow, SWC
Butch Hodgkins, Central Valley Flood Protection Board, (CVFPB)
Selby Mohr, Mound Farms
Karla Nemeth, California Resources Agency (Resources)
David Okita, Solano County Water Agency (SCWA)
Tom Philp, Metropolitan Water District, (MWD)
Pete Rawlings, SAIC
Don Stevens, Glide-In-Ranch
Jan Vick, City of Rio Vista
Bob Webber, RD 999
Jay Ziegler, MWD

Staff
Dave Ceppos, Center for Collaborative Policy (CCP)
Sam Magill, CCP

ACTION ITEMS

1. CCP will work with Bay Delta Conservation Plan (BDCP) and meeting participants to schedule a Fremont Weir and BDCP mitigation discussion. This meeting should take place during the final week of March (**note: scheduled for May 29th from 12:30-4:00pm**

2. CCP will schedule an additional meeting with meeting participants and BDCP staff to continue the discussion of tidal habitat restoration/creation options in the Cache Slough Complex.

Introductions and Agenda Review

Dave Ceppos opened the Lower Yolo Bypass Planning Forum (Planning Forum) BDCP Subcommittee (Subcommittee) meeting and conducted a review of the agenda. Mr. Ceppos welcomed meeting participants and asked them to introduce themselves. The meeting would be broken into two main sections. During the first part of the meeting,

staff and consultants from the BDCP would deliver a presentation on proposed BDCP Conservation Measures for the Cache Slough Complex. The second portion of the meeting would focus on Subcommittee priorities and next steps for developing a Yolo Bypass (Bypass) specific conservation measure for BDCP.

Cache Slough Presentation

Karla Nemeth and BDCP consultant staff delivered a presentation on BDCP Conservation measures intended for the Cache Slough Complex, defined as the lands and waterways at the southern end of the Bypass and the adjacent waterways including, but not limited to, Liberty Island, Egbert Tract, Hastings Island, Cache Slough, Barker Slough, Shag Slough, and Lindsay Slough.

Chuck Hanson commented that a primary goal of BDCP is to combine permanent tidal wetlands with seasonally inundated floodplain to create increased habitat for species such as the Delta smelt. The Cache Slough Complex was identified as a key area of current biological productivity that could be used to meet this goal. Attributes of the Cache Slough Complex that could be beneficial in the restoration and creation of tidal/seasonal wetland habitat include its connectivity to the Sacramento River and its relative isolation from the hydrological effects of the State/Central Valley Water Project pumps (SWP/CVP). Mr. Hanson then remarked that while an isolated conveyance facility will eventually allow for large scale habitat restoration in the Central and South Delta, habitat restoration/creation in Cache Slough can begin immediately.

BDCP is in the process of determining what types of hydrologic conditions would be created by opening up new habitat by breaching levees near Cache Slough. It is expected that such changes would affect the tidal prism and hydrologic regimes. Questions for designing habitat include what types of water depths, salinity effects on native and non-native species, invasive exotic vegetation, species targets and populations, and effects to water quality (most notably methyl mercury, turbidity, and temperature). It is believed that the ideas for tidal habitat restoration for BDCP are similar to those being considered for the Operating Criteria and Plan (OCAP) Biological Opinion (BO), although implementation may be simpler for the BO since it only requires 8,000 acres of restoration as opposed to the much larger targets for BDCP.

Discussion:

- Selby Mohr asked what the baseline targets are regarding habitat conditions and species. Mr. Hanson responded that a key question is what historical records show us regarding species amounts and habitat types. Another question to consider is the trade off between increased habitat versus a loss of existing land use.
- Jan Vick asked what the status of the current and future modeling for habitat creation/restoration in the Bypass is. Mr. Hanson responded that current modeling is basically finished. Water quality modeling was done by Ch2M Hill; Hydrodynamic modeling was done by RMA. Although these initial

models are somewhat coarse, more refined models will be completed in a few months.

- Ms. Vick asked if the refined habitat modeling is being done as a complete overlay of the Bypass. Dave Scholes responded that the Cache Slough Complex has regular spawning for Delta smelt. By contrast, the current flooded islands in the Lower Bypass do not appear to show the same benefit, and smelt spawning has not been confirmed in the flooded portion of Liberty.
- Mr. Ceppos asked what the physical conditions are that BDCP seeks to achieve. Mr. Hanson responded that they are looking for diversity in habitats, variable water depths between 1 and 6 feet with a variety of aquatic vegetation.
- Mike Hardesty asked what the effects of tidal restoration/creation on water quality are according to the current modeling. Mr. Hanson responded that there appears to be no change in salinity or dissolved oxygen (DO) levels. Velocity and turbidity do appear to be affected. Future modeling will be refined to look at various scenarios under the current BDCP actions.
- Mike Hardesty asked what the characteristics are that seem to support existing populations of Delta smelt. Mr. Hanson said that there is no clear data on this. Ongoing studies are being conducted to determine this. Despite this uncertainty, BDCP consultants explained that they are at a point where meaningful proposals/conclusions can be made on the desired habitat characteristics needed for pilot projects. These pilot projects will still be on a large scale (hundreds or thousands of acres) but will be completed in steps instead of all at once.
- Mr. Ceppos and Mr. Mohr asked if the intention of tidal habitat improvement under BDCP is to restore *historical* habitat or create *new* tidal wetlands in areas it has not previously existed. BDCP consultants agreed that there will be a combination of both. Mr. Crooks added that new habitat will be based on what worked historically. Mr. Ceppos noted that the Planning Forum was created with the understanding that directly affected stakeholders would be given direct information and input for conditions that could change on and around their property. **The difference between "created" and "restored" habitat is an important philosophical distinction that these landowners and stakeholders should be aware of.**
- Mr. Stevens noted that historically Delta smelt were found everywhere before the construction of the SWP/CVP pumps, including man made channels and sloughs. Mr. Hanson agreed, and reiterated that the Cache Slough area is not subject to the hydrological effects of the CVP/SWP. As such, Cache Slough will be restored as the first opportunity. Once an isolated facility comes on line, additional restoration opportunities will be available in the Central and South Delta.
- Brad Burkholder asked if it was fair to assume that before the completion of the CVP/SWP, there was bi-directional flow in the channels and sloughs that could benefit smelt. If so, he noted that this type of flow is not present on some of the current flooded islands. Mr. Hanson agreed, and noted that restoration/creation in these areas will include restoration of tidal flows. By

changing flow directions through the use of an isolated facility, BDCP staff and consultants believe it will help restore historic bi-directional flows that will benefit fish species.

- Mr. Hanson stressed that current modeling and planned pilot projects will not quantify the benefit of tidal restoration in terms of hard numbers. The goal instead will be to see how the system as a whole responds, and whether it exhibits improved characteristics in line with restoration objectives. The current uncertainties will be answered by improved modeling, monitoring, and a rigorous adaptive management plan. If the restored/created habitat does not respond in a way that will meet BDCP objectives, tidal habitat will be managed differently.

Karla Nemeth presented the proposed BDCP restoration acreage targets and schedule. In the first 25 years of the BDCP implementation process, 25,000 acres of tidal habitat is slated for restoration/creation. This initial restoration will be geographically distributed throughout the Delta, with the largest portions occurring in Suisun Marsh, the North Delta, and the Bypass, including the Cache Slough Complex. This acreage is not expected to include the 8,000 acres identified for restoration by the OCAP BO.

Discussion:

- Cliff Covey asked if all acreage for tidal restoration/creation would be purchased from willing sellers. Mr. Hanson said that if acreage is not available for sale, targets may be revised. Specific plans for land acquisition have not been defined, and are expected to be addressed by the BDCP implementation agency.
- Mr. Hardesty noted that the areas talked about for restoration in the Cache Slough Complex are protected by levees. If some landowners in these areas are willing to sell, but others are not, the levees cannot be breached for tidal restoration/creation. If this were to happen, all lands would be subject to flooding, not just those purchased from willing sellers.
- Ms. Vick noted that Cache Slough and the surrounding areas have been identified for “short term” restoration. Once the isolated facilities come on line, other lands will be available for restoration in other areas. She asked how modeling and targets will be affected as a result. Mr. Hanson responded that different models will be developed for different “slices” in time to represent a full range of scenarios. Other factors such as near term operations of the SWP/CVP and climate change will be included in these analyses.
- Mr. Hardesty noted that three parcels of land are outside of levees in the Cache Slough Complex: Little Hastings Tract, the portion of land immediately south of the cross channel, and the southernmost portion of RD 2098. He then asked if any analysis of habitat productivity has been completed. Mr. Hanson and Mr. Burkholder responded that it has not, although extensive analysis of habitat productivity and hydrology is underway on Liberty Island. The Breach III study of Liberty Island will show the evolution of habitat on Liberty Island since its inundation in 1997. An additional hydrological study of flood flows will be complete in one year; the full study will be complete in three.

- Mr. Hardesty asked if the sloughs adjacent to Liberty Island are included in the Breach III and companion hydrological study, as they play a major role in local flooding and flood protection. Mr. Crooks said that they are not, but can be included. He noted that the study assumes the levees on Liberty Island are still intact.
- Harry Englebright asked where the 20,000 acres identified by mapping efforts for possible tidal habitat restoration/creation in Solano County will occur. Pete Rawlings responded that this will be under the implementing agency's jurisdiction, and will be based on the willing seller principle.
- Mike Hardesty asked if land acquisition deals will still allow current landowners to access their mineral rights under the land surface. Ms. Nemeth said that this discussion has not taken place, but that it will be addressed by the BDCP at the next meeting with Solano County.
- Mr. Mohr noted that if levees are breached and more areas are accessible by boats, an expansion of local Emergency Medical Services and other first responders may be required, especially during hunting season.
- Ms. Fiack noted that the DPC Management Plan will be adopted in July, and should be included in the BDCP Conservation Measures.
- Mr. Ceppos delivered a summary of the discussion and previous BDCP Subcommittee commitments to BDCP. Key points included:
    - The Subcommittee previously agreed to work with BDCP staff, and propose suggestions for Conservation Measure improvement.
    - BDCP staff has said that BDCP is a planning process that is being rolled out as new information becomes available.
    - The Subcommittee has agreed to provide input as BDCP moves forward above the level of comment typically provided in the California Environmental Quality Act (CEQA) review process.

Subcommittee Priorities and Alternatives Discussion

Mr. Ceppos reconvened the meeting after a break, and asked meeting participants to continue their discussion of a Bypass alternative from the previous Subcommittee meeting.

Discussion:

- Mr. Mohr noted that given the ongoing development of information on tidal habitat restoration, it won't benefit the Subcommittee or Planning Forum to develop a detailed alternative for the Conservation Measures at this time. Mr. Ceppos added that BDCP staff won't have hard numbers on Delta smelt production or parcel-by-parcel land acquisition information at this time. They have agreed to continue providing updates as more information becomes available, and will continue to receive input from the Subcommittee for consideration in the BDCP.

- Ms. Vick said that the interaction with BDCP staff has been very helpful, and agreed that while all of the Subcommittee's questions can't be answered at this time, the answers provided to date have been good.
- Mr. Okita noted that the discussions around Fremont Weir are different than those around the Cache Slough Complex. For Fremont Weir, there are a range of viable alternatives that can be used to reach the same goals. For Cache Slough, there will be some habitat creation that will affect current agricultural and water delivery systems. As such, the goal of additional discussions should be defining what mitigation will be required to protect local interests. Ms. Nemeth agreed, and suggested that an alternative to the current Fremont Weir Conservation Measure should be crafted with the Planning Forum over the next month. Dialogue on Cache Slough will continue as modeling progresses over the next six weeks. A meeting with the Planning Forum will be set to continue the development of a Fremont Weir proposal in partnership with BDCP staff. This meeting will also include a discussion to define what "mitigation" means for the Subcommittee (**see Action Item #1**).
- Mr. Ceppos suggested that the Fremont Weir discussion should include an activity to look at actual maps of the area and design very specific details for a potential Conservation Measure alternative. Examples of possible alternatives include the construction of training levees to deflect low flood flows to specific areas for the most habitat benefit at the lowest impact to adjacent landowners.
- As more information Cache Slough becomes available, an additional meeting between the Subcommittee and BDCP staff will be scheduled to continue this discussion (**see Action Item #2**).
- Mr. Hardesty noted that the level of response from BDCP staff has been good. However, there are certain things from the landowner perspective that cannot be negotiable. Mr. Ceppos noted that he has held ongoing meetings with landowners to flush out these details, and suggested that discussions about landowner concerns should not take place without them present in the room.
- Mr. Ceppos delivered a recap of non-technical, "policy" issues for further consideration by the Subcommittee:
    - Will acquisitions be fee-title only, or will easements be an option?
    - How will land use/landform changes affect the existing hydrology of the Bypass?
    - How will tidal restoration/creation affect the federal flood control levees?
    - Can monitoring on parcels outside of existing levees (as discussed above) be built into existing or new studies?
    - Is BDCP ultimately talking about habitat *restoration* or habitat *creation*?
    - Will tidal restoration require additional emergency and first response capability as a result of increased recreation in the Bypass?

    - Will eminent domain be used to acquire land for habitat restoration/creation?
    - Will landowners and local agencies have continued access to water for agriculture and municipal/industrial uses?
    - Will habitat restoration/creation cause additional restrictions on waste water discharges, including agriculture and POTWs?
    - Will Conservation Measures address water rights issues?
- Mr. Ceppos suggested that the Subcommittee consider the level of detail it is willing to provide to BDCP. Subcommittee members agreed to move beyond "protectionist" principles and make specific proposals.

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