

California Bay-Delta Public Advisory Committee (BDPAC)
Water Supply Subcommittee (WSS)
Wednesday, March 12, 2008
9:00 a.m. to 12:00 Noon
CALFED
650 Capitol Mall, 5th Floor
Delta Room
Sacramento, California

Meeting Summary

Introductions

The following BDPAC members attended the meeting: Ronald Jacobsma and Jerry Meral.

The meeting focused on the following agenda items:

1. Bay Delta Conservation Plan Update
2. Senate Bill 27
3. Total Maximum Daily Loads (TMDLs) in the San Joaquin River
4. Carbon Sequestration in the Delta
5. Public Comments

Jerry Meral, Planning and Conservation League and WSS Co-Chair, and Ronald Jacobsma, Friant Water Users Authority and WSS Co-Chair, opened the meeting by welcoming those attending and reviewing the meeting agenda. This meeting focused on habitat conservation issues, total maximum daily pollutant loads in the San Joaquin River, and Carbon sequestration as a tool for mitigating climate change.

The summary below provides an overview of the presentations at the meeting and comments and questions received from the subcommittee and meeting participants in the order of the agenda, not necessarily the order of the discussion. The order of the agenda was adjusted to accommodate the presenters.

1. Bay Delta Conservation Plan (BDCP) Update: Barbara McDonnell (DWR)

The BDCP is an applicant-driven effort under the federal Endangered Species Act (ESA), and the State's California Conservation Act (CCA). BDCP provides a comprehensive set of solutions focused on long-term conditions for species conservation and seeks long-term permits for the listed fish species within the Delta. The goal is to ensure that future ESA listings will not result in additional environmental regulation and mitigation. The plan will be comprised of a Habitat Conservation Plan and a Natural Community Conservation Plan for the Delta. Several state, federal and local agencies, as well as national and local non-governmental organizations are involved in developing the plan.

The BDCP is narrower than the Delta Vision process. The BDCP will likely serve to implement Delta Vision recommendations for species and ecosystem recovery.

The BDCP has identified a dual-conveyance option with one new diversion point from the Sacramento River in order to meet ecological, conservation and water supply objectives. The project is continuing to develop a range of design options and operation scenarios. Costs have yet to be evaluated.

Various working groups are tasked with developing information for the plan and can be found in the presentation slides. Current efforts include publishing the project Notice of Preparation to conduct an Environmental Impact Statement/Environmental Impact Report (EIS/EIR) and site specific studies including conveyance alternatives. The U.S. Bureau of Reclamation (Reclamation) has been considering publishing a Notice of Intent to join in the National Environmental Protection Act/California Environmental Quality Act (NEPA/CEQA) process as a co-lead. A public draft is scheduled for release in 2009, and a final EIS/EIR is scheduled for 2010. Additional information and reports completed to date are available on the Resources Agency web site at <http://www.resources.ca.gov/bdcp/>.

Questions/Comments

- *Will flows from the San Joaquin be totally precluded from export under the dual conveyance facilities?* Yes, basically all San Joaquin flows would be isolated. Follow up comment from attendee: Then, the Friant Water Users Authority needs to be part of the discussions. The San Joaquin River Settlement currently contains provisions for recirculation of San Joaquin water.
- *Does the BDCP only cover aquatic species?* Yes.
- *The dual conveyance project would provide better water quality, is that so? Does dual conveyance preclude pumping at Banks or Tracy?* The plan is looking at the option of maintaining some level of pumping in the south Delta to meet various objectives.
- *Is it correct that the San Joaquin River has an important influence on listed species?* The hydrodynamics and how listed species are influenced by those dynamics are being considered for the San Joaquin River; the degree to which other Delta tributaries (Merced, Tuolumne, Mokelumne) influence listed species is less well understood.
- *CCWD has offered some information to help BDCP efforts, will East Bay Municipal Utility District (EBMUD) be offering their monitoring information as well?* No information/coordination with EBMUD is underway at this time.
- *Is there certainty that once you submit this plan to the agencies, that it will be approved?* The goal is to have agency approval before public review.
- *How are Delta stakeholders involved?* Delta agencies are not part of the steering committee, but their involvement is desired for the NEPA/CEQA study. The intent is for the outreach process to coordinate with land owners and others.
- *What about the Delta Protection Commission, are they involved?* They are not on the steering committee.
- *How does food supply enter into this?* Food supply is considered a major stressor and is a driver for many conservation actions.
- *Would the Bureau of Reclamation be covered under the BDCP Habitat Conservation Plan?* The Joint Point of Diversion (JPOD) would be covered, but Reclamation would follow the BO.
- *What storage assumptions are you considering in the EIS/EIR?* That has not been considered yet.

- *How will climate change be considered?* Each workgroup is charged with dealing with sea level rise.
- *To what extent is the U.S. Geological Survey (USGS) and their studies involved?* The BDCP is following USGS efforts, particularly concerning carbon credits.

2. Senate Bill 27: Alan Gordon (Principal Consultant to Senator Joe Simitian)

Senate Bill 27 seeks to create a new state authority to address Delta water conveyance, land use and conservation simultaneously. The bill would authorize environmental enhancement, water supply reliability programs, and establish an appointed board of directors with the authority to make decisions and expend funds for the preservation of the Delta ecosystem, flood protection in the Delta and the delivery of a reliable state water supply. The bill does not address surface storage questions. Storage would likely be dealt with in a separate and secondary step. The bill will likely be heard after the final Delta Vision and other Delta-related land use documents are completed in 2009.

Questions/Comments

- *Is the Public Policy Institute of California recommendations being considered?* Yes, including variation in the Delta that allows using adaptive management approaches to create additional habitat.
- *How would the bill address other non-State Water Project agencies that divert water from the Delta such as Contra Costa Water District and Reclamation?* Reclamation could potentially be brought on board by solving problems that impact them.
- *Is flooding considered?* Yes, the new authority would cover land use decisions in the Delta and secondary zone but would not be responsible for construction of new infrastructure. DWR would retain all other flood related activities.
- A hydraulic model of the Delta would be used to make decisions about water supply and environmental water requirements. The Science Program will hold workshops in April to discuss hydraulic models, contact stevec@calwater.ca.gov for more information.

3. TMDLs in the San Joaquin River: Karl Longley (Central Valley Regional Water Quality Control Board)

Work is underway and a State Board hearing is being held to look at updating current TMDL objectives. Issues pending and under development in the new TMDL include pathogens in Stockton area sloughs, mercury, and salt and boron upstream of Vernalis. The adopted San Joaquin River TMDLs include selenium, dissolved oxygen, organophosphate pesticides, salt and boron at Vernalis. Under development are pathogens, mercury, and upstream salt and boron.

The study area for this effort includes the lower basin of the river near Vernalis, which experiences underflows as a major contributor to salinity loads.

Best management practices and strategies that reduce loading to land and the river include drip irrigation, changing water sources for various land uses in order to reach compliance standards, developing salt load allocations for non-point sources and then offering this information forward at workshops. Loads need to be developed for biological and ecological safety.

The TMDL plan will go before the authority in 2010 as part of a public process.

Questions/Comments

- *Are you finding that municipal utilities are adding salt?* Yes.
- *How do you track compliance with non point sources?* The current approach is to measure the river and subtract allowances for known point sources.
- *What are dischargers doing to reduce the level of salinity?* Reductions in the amount of salinity being produced through plant processes, conservation and water reuse are being evaluated.

4. Carbon Sequestration in the Delta: Brian Bergamaschi (USGS)

USGS is conducting Carbon Dioxide Capture Farming research to evaluate sequestering atmospheric carbon dioxide by controlling Delta wetlands to optimize vegetative growth that restores Delta soils, minimizes oxidation and reverses subsidence.

Wetlands are conditioned to rapidly grow vegetation, building up the surface of soil through accretion while storing carbon in plant roots and peat. USGS estimates 25 metric tons of carbon dioxide could be sequestered per acre of wetland each year. The Twitchell Island Project has been in place since 1997, made up of two 7.5 acre plots with different treatments and inundation characteristics to analyze effectiveness. Preliminary results show increases in land surface, but more study is required. If the technology is successful, USGS estimates that applying these practices to all subsided lands within the Delta would be equivalent to converting all California SUVs to hybrids.

Technical considerations include the release of dissolved organic carbon from the wetlands that could interfere with the treatment of Delta water for drinking water supply. In addition, wetlands release nitrous oxide and methane, each with greater climate change impacts than carbon dioxide. Additionally, methyl mercury can be released by wetland processes and can bio-accumulate in the food chain. All of these issues are complex and highly interrelated and identify the need for additional research.

USGS proposes to implement carbon sequestration from wetlands on a regional level. This project would be farm scale (1000 acres) and would assess methane, nitrous oxide, DOC and methyl mercury releases along with carbon sequestration potential. Seven years and \$30 million are estimated to be required for implementation. Initial estimates indicate that the wetlands could be cost effective particularly in comparison to forest sequestration projects, could be economically more profitable for Delta farmers.

Questions/Comments

- *How does this relate to sea level rise?* Accretion would help build-up the Delta islands to protect against further land subsidence.
- *Will salt harm the growth and accretion of the Delta?* Some salt tolerant species are being evaluated.

- *How do you mitigate for methane releases?* One option is to oxidize it back into carbon dioxide; natural wetland processes are already doing this to some extent.
- *Where is the nitrous oxide coming from?* Wetlands trap a proportion of nutrients in biomass which can decrease nitrogen released from incomplete denitrification.
- *Is the \$30 million in requested funding available?* Federal and local level funding is being considered. At present, no funding is available to move the project forward. DWR and USGS have been discussing funding as well.
- *Are you approaching DWR to utilize DWR-owned Delta islands? Have you approached farmers who see this as an opportunity?* Preliminary discussions, mostly DWR-focused have been conducted. Other entities may be considered upon gaining funding. DWR and USGS are working together to fund the project but have had some problems with the development process. Both parties continuing to work together to get the project implemented.
- *Is there anymore information known about nitrous oxide generation?* This will be a priority upon gaining funding.
- *Can you make these slides available?* The slides are not available for public posting as per agency requirements. Watch for a possible project web site in the future.

ACTION ITEM: Committee would like to receive an update over the next month of how the project is moving forward.

5. Public Comments

No public comments were received.

The meeting adjourned at 11:45 a.m.