

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

**Meeting Summary**

**Introductions**

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

The meeting focused on the following agenda items:

1. Water Bond Briefing Status
2. Efficacy of Screening Fish in the Delta: Isolated Facility, Current Export Locations, Agriculture Diversion
3. Wanger Decision on Delta Smelt, Salmon and Steelhead
4. San Luis Low Point Update
5. Groundwater Program Briefing
6. San Joaquin River Settlement Agreement Legislation
7. Program Plan Schedule
8. Public Comments

WSS Co-Chairs Jerry Meral, Planning and Conservation League, and Ronald Jacobsma, Friant Water Users Authority, opened the meeting by welcoming those attending. This meeting focused on fish screen studies currently being conducted, the Wanger Decision, an update on the San Luis Low Point Project, a groundwater briefing, and the status of the San Joaquin River Settlement agreement. Additionally, a brief update was given on the status of the Water Bond.

The summary below provides an overview of the presentations at the meeting and comments and questions received from the subcommittee and meeting participants. See the attached presentations for more detail.

**1. Water Bond Status Briefing: Mark Cowin (DWR)**

Mark Cowin provided a brief update on the status of the Water Bond. He reported that officials are still working to develop a comprehensive Water Bond Package that may be submitted for the November 2008 ballot. Mark provided a handout that summarized the Perata and Business Alternative Perata Plus versions of the bond and reviewed the features of each version. The bond measure needs to clearly define the public benefits to the state such as ecosystem protection, water quality, flood protection and other benefits that provide the maximum rate of return for the public investment. Mark also noted the State's position that benefits such as water supply reliability and conveyance around the Delta would be paid for by water users.

Mark provided a brief comparison of the two bond proposals noting the large differences in surface storage funding (none in Perata's Bill, \$3.5 billion in business alternative) and Water Supply Reliability (business alternative adds \$500 million for local/regional underground/surface storage projects). Currently, there is disagreement over the proposed management of the bond funding and whether or not the bond funds should be continuously appropriated or controlled by the legislature and included in the annual state budget. There is also concern that the state budget crisis would have a negative effect on the bond passing in a November 2008 vote, but that the Governor is committed to advancing a more comprehensive water package.

### **Questions/Comments**

*A member of the public commented that more surface storage was needed but there is also concern about the need to restore groundwater supplies that are overdrawn. San Joaquin County is seeing salinity intrusion in wells and groundwater supplies need to be recharged.* A member of the subcommittee said people want more information on how the surface storage projects can service a broader area in California and more than just broad public benefits.

### **2. Efficacy of Screening Fish in the Delta: Isolated Facility, Current Export Locations, Agriculture Diversion: Tina Swanson, PhD (The Bay Institute) and Joe Cech, PhD (U.C. Davis)**

Joe Cech presented background information on the formation and findings of the fish screen treadmill studies conducted as part of the Collection Handling Transport and Release Efforts program. The study researched the affects of screens, potentially used for conveyance projects within the Delta, on delta smelt and salmon populations. Smelt behavior was tested using a testing reservoir (laboratory experiment) measuring approach and sweeping velocities, fish interactions with the screens, injuries, survival and other general behaviors during both day and night trials. Findings indicated that injuries, screen contact and mortality were higher during night runs with decreased visibility. The lowest velocities had lower injury, less screen contact and fewer mortality instances. The project helped determine a range of allowable exposure times and instances for smelt for both day (18-72 minutes) and night (4-16 minutes) conditions. It was noted that delta smelt tend to prefer mid-channel waters decreasing the consistent exposure to the screens at shorelines. It was also noted that the laboratory results may have limited application in the field because factors such as channel width cannot be fully analyzed in the laboratory.

Salmon contacts with fish screens were analyzed through field research in Butte Creek. Similar results regarding the increase of injuries, contacts and mortality were found for night conditions as were found with smelt.

General findings suggest that while fish use optical senses to avoid contact with the screens, vibration might also be a tool to alert fish of danger. Lateral line experiments were conducted to identify if far-field or near-field sounds cued fish of abnormal/unsafe conditions. Future studies will continue research to further understand the lateral line's ability to detect the screens.

Links for this 189MB presentation may be found at the following.

Slides 1-41 (in slightly different order and a little less detail):

[http://www.calwater.ca.gov/content/Documents/meetings/SDF/Sept23\\_2003/Fish\\_Treadmill\\_Investigations\\_Applications-Swanson.pdf](http://www.calwater.ca.gov/content/Documents/meetings/SDF/Sept23_2003/Fish_Treadmill_Investigations_Applications-Swanson.pdf)

Slides 42-59 are found here:

[http://www.swrcb.ca.gov/npdes/docs/cwa316b/symposium\\_2007jan/tim\\_mussen.pdf](http://www.swrcb.ca.gov/npdes/docs/cwa316b/symposium_2007jan/tim_mussen.pdf)

### **Questions/Comments**

*The subcommittee asked for a brief summary of the conclusions.* The current screen criteria has been found to be protective, and the research team suggests using the exposure time and rates generated from the study in projects in the Delta. It was noted that the size and smoothness of a screen can also be a factor, with greater roughness creating greater stress to the fish. The research team recommends implementing containment areas for fish with similar environmental conditions prior to entrainment or engineer screens for velocities found to be safe for fish. Greg Gartrell, Contra Costa Water District (CCWD) noted that CCWD has a screened intake at Old River and CCWD has had great success with these screens preventing fish mortality; the results presented indicate that CCWD's screen is well designed. Greg also suggested that the research team consider varying the boundary layer in future experiments to see how the fish respond.

*The public asked for a breakdown of the number of screened and unscreened intakes within the Delta system.* Over 1,800 intakes are unscreened and approximately 10 are screened. Professor Cech stated that tests on adjacent screened and unscreened intakes on Sherman Island indicated the unscreened intake took few delta smelt, the screened intake took none. He also pointed out that while the unscreened intake took few, when that is multiplied by 24 hour per day operation, the take per screen can be significant over an irrigation season for each screen and especially for the entirety of unscreened intakes.

### **3. Wanger Decision on Delta Smelt, Salmon and Steelhead: Jerry Johns (DWR)**

Jerry Johns provided an update and summary chart on the recent water rulings on Delta smelt, salmon and steelhead. The rulings restrict Project water exports after heavy rain events trigger the delta smelt to spawn. The decreased pumping allows for delta smelt spawning as well as the young to mature at locations remote from the export pumps. The rulings on the delta smelt conclude the biological options for delta smelt are deficient and needed to be revised. The judge is requiring new biological opinions for operations of Delta pumps after the 2007-2008 water year.

DWR has currently measured the reductions in pumping at about 100,000 acre-feet since December 25, 2007. There are currently some technical issues with the river flow measurements calculated by the U.S. Geological Survey. DWR is hoping that this issue will be resolved with the upcoming Operations Criteria and Plan coordinated operations plan.

Field studies were conducted for Judge Wanger to determine when negative draw velocities harm delta smelt and salmon. Results indicate that once negative flows increase to between

-5,000 and -6,000 cfs, smelt injury, contact and mortality increases. Weekly studies are conducted to measure where smelt are active and migrating within the Delta

The state and federal agencies are continuing to meet every week to decide operations under the Wanger Decision. Currently DWR and Reclamation are applying the same sharing formula they have used previously to allocate the pumping. Cutbacks in water deliveries to state water contractors may be 10 to 20% or as high as 30% this year depending on hydrology.

The salmon cases are still active, and a ruling may happen later this month.

### **Questions/Comments**

*The subcommittee asked if the 10 to 20% reductions are based on dry or wet year conditions. The 10 to 20% is based on an average of dry and wet years. However, it was noted that the average does not reflect many dry years.*

### **4. San Luis Low Point Improvement Project: Sharon McHale (Reclamation)**

Sharon McHale provided an update on the status of the San Luis Low Point Improvement Project describing the project need, objectives, the initial alternative results and the next steps and actions of the project. Highlights include:

- The project is needed to reduce algae blooms entering diversion facilities within the reservoir; and creating a 300,000 acre-foot reservoir with water quality that does not disrupt a portion of San Felipe Divisions' supply and other south-of-Delta contractors; increase the reliability and quantity of yearly allocations to contractors, and announce higher allocations earlier in the season to contractors.
- The Initial Alternatives Information Report is currently in draft form.
- The Initial Alternatives (17) consist of seven categories: institutional, source water quality control, water treatment, conveyance, storage, alternate water supplies, and a combination alternative.
- The Plan Formulation Report (as required by the Federal Process) is currently in process and should be available in draft form by June 2008.
- Alternatives will be refined into feasible alternatives.
- An Environmental Impact Statement/Environmental Impact Report, Public Scoping meeting is being held in February 2008 to solicit public comments on the project.

There were no questions or comments.

### **5. An Overview of Groundwater Program in California: Eric Hong (DWR)**

Eric Hong presented information about the new groundwater database, the Integrated Water Resources Information System being generated and pilot tested by stakeholders/partners for use by California utility providers. Copies of the slides were provided as handouts. The program provides resource management strategies such as reduced water demand ideas, improvements for water quality and operational efficiency and transfers, resource stewardship practices, and increasing water supplies. Data is managed into three pillars of information; project

construction, groundwater management, and capacity building. Data has been provided by local agencies, the state and regional water quality boards, the Department of Health Services and DWR.

DWR is also awarding grants for local groundwater assistance programs and for construction projects funded by previous bond money allocations. DWR hopes to release the program for state-wide use in May, 2008.

There were several questions concerning the cost of water from conjunctive water use projects. Eric mentioned total program costs and projected yield estimates of Proposition 13 and Proposition 50 grants. The Proposition 13 programs valued at \$1-billion are estimated to deliver 300,000 acre-feet (AF) of water per year. The Proposition 50 programs were valued at \$1.7 billion and are estimated to deliver approximately 500,000 AF per year. However, \$/AF costs were not calculated. [Note: In order to calculate actual \$/AF costs, other factors need to be considered like operation and maintenance costs, interest rate and term of payment. This was not done at the briefing.]

#### **6. San Joaquin River Settlement Agreement Legislation: Ronald Jacobsma (Friant Water Users Authority)**

Ronald Jacobsma provided a brief overview of the pending legislation needed to implement the San Joaquin River Settlement Agreement. Currently, all parties are moving forward with tasks as part of the settlement and they currently have adequate funding to move forward. If the settlement is significantly delayed that could impact Reclamation and DWR funding to meet the matching requirements. The settlement assists in creating fisheries, spring runs along the San Joaquin River, and adequately managing water supplies and environmental resources. Public workshops will be held in the near future. It is anticipated that the legislation will pass the Senate and be signed by the President by April 2008.

#### **7. Program Plan Schedule: Jerry Meral (WSS Co-Chair)**

Jerry Meral led a discussion on the development of Program Plans for the next year. It was agreed upon that the subcommittee members and the public will continue to review Annual Program Plans from the CALFED Program Managers (Conveyance, Storage, WUE, EWA and Transfers) and will comment on the Plans and submit comments to appropriate CALFED agencies.

There were no questions or comments.

#### **8. Public Comments**

A member of the public suggested using navy technology for desalinating water as part of efforts to prevent thermal pollution by coastal power plants as well as supply additional drinking water to the state.

*The meeting adjourned at 11:50.*