



Meeting Summary

Restoration Goal Technical Feedback Group Meeting

Thursday, May 17, 2012

Los Banos Community Center, 645 7th Street, Los Banos, Calif.

Attendees

Apurba Borah, Reclamation
Carrie Buckman, CDM-Smith
Andy Collison, ESA PWA
Ernie Dosio, D&D Land and Cattle Co.
Jason Faridi, Fish Bio
Elif Fehm-Sullivan, National Marine Fisheries Service
Seth Genzler, URS
Michelle Gilbert, PRBO Conservation Science
Chuck Hanson, SJRRP Tech. Advisory Committee
Dave Koehler, San Joaquin River Parkway Trust
Shannon Leonard, URS
Clifton Lollar, KRWA
Louie Long, KRCO-KRFMP

Bill Luce, Friant Water Authority
Palmer McCoy, Henry Miller Reclamation District
Erica Meyers, Dept. of Fish and Game
David Mooney, Reclamation
Greg Pearl, HMRD Board Member
Alexis Phillips-Dowell, Dept. of Water Resources
Julie Rentner, River Partners
Erin Rice, Reclamation
Stephen Tighe, Reclamation
Mark Tompkins, Newfields
Rob Tull, CH2M Hill
Magill Weber, The Nature Conservancy
Craig Moyle, MWH

On the phone:

Monty Schmitt, Natural Resources Defense Council

Next Meeting

July 19, 2012 – 1:30 p.m. to 4:30 p.m.: Location: Stanislaus County Agricultural Commissioner's Office, 3800 Harvest Hall, Modesto, California

Welcome and introductions

Craig Moyle, the meeting facilitator, welcomed the meeting participants, introduced the meeting topics, and began introductions. Meeting participants introduced themselves around the room.

Standing Items

Erin Rice provided a review of the meeting agenda, an overview of the San Joaquin River Restoration Program (SJRRP), and a brief background of the Settlement and its goals. Mr. Rice outlined the purpose of the Restoration Goal Technical Feedback meetings:

- Exchange of restoration technical information between the Implementing Agencies, Cooperating Agencies, Settling Parties, Third Parties, landowners, and other interested stakeholders.

His summary provided an update on current documents, a look at flow operations, and a few handouts to be distributed.

Upcoming SJRRP Documents include:

- Draft Arroyo Canal and Sack Dam Environmental Assessment/Initial Statement (EA/IS) (early June 2012 release)
- Final Program Environmental Impact Statement/Report (EIS/R) (July 2012 release)
- Mid-year 2012 Annual Technical Report (late July 2012 release)

Reclamation will continue to release Interim Flows from Friant Dam as recommended by the Restoration Administrator for a Dry water year allocation for SJRRP. Mr. Rice provided a brief overview of the Field Activity Tracker and the 2012 Restoration Goal Technical Feedback Group (RG TFG) Meeting Schedule.



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Reach 2B Bypass and Channel Improvements Project

Seth Genzler, URS, provided an overview of the Reach 2B Bypass and Channel Improvements Project. This included the project setting and location, existing conditions, and project overview/process. He further provided an overview of the alternatives formulation process and its relationship to technical memorandum and major field surveys.

Mr. Genzler said elements common to current alternatives include:

- Modifications at Chowchilla Bifurcation Structure for fish passage
- Modification of San Mateo Crossing to convey flows and fish passage.
- Provide floodplain connectivity for fish rearing

He reviewed elements of the narrow and wide floodplain alternatives and noted that each feature a re-vegetation approach that have low-end and high-end cost analyses for initial construction and long-term operations and maintenance. Upcoming project milestones include:

- Working on project description for the Project EIS/R (Final Alternatives)
 - Revisions based on agency comments, TAC feedback, and recent technical analysis
 - Technical Memorandum available late Summer 2012
- Initial Project EIS/R
 - Environment setting written
 - Impacts analyses start summer 2012
 - Draft public document available spring 2013
 - Final EIS/R available early 2014
 - Record of Decision in summer 2014
- Preliminary design underway
- Anticipated future milestones:
 - Property acquisition process beginning summer 2014
 - Construction beginning early 2016

Technical challenges for the Reach 2B project reviewed by Mr. Genzler included grade control and sediment continuity; fish passage and fish rock ramp concept design; and borrow area assessment and testing. Analyses include assessment of delivery of sediment to Reach 3 for improved habitat; and actions that would decrease seepage effects through lowered water surface elevation. He said the rock ramp concept, developed in coordination with the Fish Management Work Group, provides for better passage for sturgeon, which do not favor traditional fish ladders. The rock ramp concept, however, is a higher cost due to its length. He reported that DWR soil borrow material assessments indicate that approximately 1.6 million of the overall 1.7 million cubic yards material necessary for the Reach 2B project can be excavated from within the project area.

The widest of the Reach 2B levee alignments is approximately 3,000 feet. As part of the alternatives screening and evaluation processes, the project team is considering operations and maintenance costs, particularly for the levees and floodplain.

Arroyo Canal Fish Passage Project

Palmer McCoy, Henry Miller Reclamation District, provided a brief introduction and introduced HMRD Board Member and Secretary/Treasurer Greg Pearl. Mr. Pearl provided an overview of the district's operations. It is the only district that draws its diversions from the San Joaquin River via the Delta Mendota Canal. The district serves 47,000 acres of farmland and wheels water to the San Luis Wildlife Refuge Complex, the California State Los Banos Wildlife Area, and refuge lands within the Grassland Water District. Sack Dam and Arroyo Canal are owned and operated by San Luis Canal Company (SLCC) and HMRD, respectively. SLCC is a private company.

Mr. Pearl said Sack Dam is a vertical structure with flash boards. This construction does not offer precision in flow management necessary for a successful fish passage. Replacement of Sack Dam and provision for a fish screen and ladder at Arroyo Canal stem directly from the Settlement. The District intends to operate and maintain the dam and fish screen via a financial agreement with Reclamation.



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Rob Tull, CH2M Hill, provided an overview of the 60 percent design for the project. He said the site will be designed to convey flows up to 4,500 cubic feet per second (cfs) and will include moving Sack Dam approximately 100 feet upstream of its current location for improved hydraulics. He reported that the basis of the fish ladder design is the Through-Delta Facility White Sturgeon Passage Ladder Study (DWR 2007) and fish ladder design studies led by UC Davis. The fish passageway will include a two percent grade, and operate at flows of 45 cfs. The five-bay design will include features that allow passage of salmon and sturgeon. Obermeyer bladder gates will be deployed to provide the level of precision necessary to operate the dam, fish screen and delivery facilities. A water jetting system will be included to manage the accumulation of sediments in the fish ladder and screen facilities.

Mr. Tull said the 90 percent design should be completed in July 2012, with 100 percent design completed in September 2012. The Public Draft EA/IS is slated for June 2012, with Final EA/IS released in October 2012. Construction bidding is slated to start in October 2012, with a construction contract in place by December 2012. Construction is estimated to start January 2013 and complete October 2014.

The facility design also has to accommodate San Joaquin River and Kings River flood flows which historically have exceeded 4,500 cfs. With the Obermeyer bladder gates, the facility will be able to convey these and other anticipated flood flows. The fish screen design also includes a jetting system and areas where HMRD can access the Arroyo Canal by Bobcat and a hydraulic dredge. HMRD and Reclamation anticipate entering into a financial assistance agreement covering facility operations and maintenance.

There was a question about apparently excessive velocity for fish passage in the slot leading up to Sack Dam. Mr. Tull explained that this had already been addressed by the design team although the change was not updated in his presentation. The design team has also incorporated a variety of features intended to minimize predation downstream of Sack Dam. For example, the sheet piles in the fish screen will include holes large enough for juvenile salmon to rest, but not so large predators can enter. This project includes the area immediately downstream of Sack Dam, but is not investigating flows further downstream.

Reach 4B Channel Improvements and Bypass Project

Carrie Buckman, CDM-Smith, provided a brief overview of the project including the alternative analysis process, and a review of Alternative 1 (Main Channel Restoration), Alternative 2 (Bypass Restoration), Alternative 3 (Bypass All Pulse Flows), and Alternative 4 (Split Pulse Flows, Restore Both). This included a description of the flow regimes provided by the four Reach 4B1 levee alignments currently under review. Ms. Buckman said the Eastside Bypass downstream of the Mariposa Bypass has been determined as not having sufficient value for the project and has been screened from further consideration for restoration actions. This bypass reach would continue to function as a flood management facility.

Andy Collison then provided a presentation titled Modeling Floodplain Productivity on the San Joaquin River, Reach 4B. Mr. Collison's presentation focused on actions needed to restore and maintain fish populations in "good condition." This topic is addressed through answering questions, such as:

- How much floodplain inundation do we need (area, duration, frequency) to support the fish population goals?
- How can we estimate floodplain function to screen initial alternatives and to evaluate final alternatives in more detail?
- Can we make better use of available water and floodplain to optimize fish survival and productivity?

He then provided an overview of a floodplain productivity conceptual model developed by the CDM team. The conceptual model provided the foundation for development of a "productivity indicator" developed in concert with Reclamation's Blair Greimann. The productivity indicators acknowledge two extreme cases for the modes of production: Connected floodplain production and disconnected floodplain production.

The conceptual model broadly describes production of phytoplankton, zooplankton, benthic invertebrates and macroinvertebrates as floodplains are inundated. Production is affected by seasonal timing and duration of sunlight exposure and variability in water surface elevation. The productivity indicators based on the conceptual model seek to semi-quantitatively evaluate differences in food production among the project alternatives, considering both connected and disconnected production. Draft preliminary results show wider floodplain alignments are much more productive than a narrow alignment, and productivity is very dependent on water year



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type. Disconnected productivity can be relatively consistent and high even during dryer years for wider sub alternatives. Mr. Collison said that the model is a tool for screening alternatives, can be a tool to inform floodplain design to increase floodplain productivity, and could be further developed to allow more detailed evaluation of project alternatives.

Information Sharing

Craig Moyle asked the group for future topics suggestions for the remaining three 2012 meetings.

Meeting Adjourned