



Seepage and Conveyance Technical Feedback Group

Wednesday, August 20, 2014, 1:30 p.m. – 4:30 p.m.

San Joaquin River Exchange Contractors Water Authority Office

541 H Street, Los Banos, CA 93653

Meeting Summary

Attendees

Ron Cunha	Nickel Family LLC/San Juan Ranch
Mike Day	Provost and Pritchard
Greg Farley	DWR
Katrina Harrison	Bureau of Reclamation
Brian Heywood	CDM Smith
Chase Hurley	San Luis Canal Company
Rick Iser	Provost and Pritchard
Katie Lichty	Circlepoint
Bill Luce	Friant Water Authority – Bill Luce Consulting
Patti Ransdell	Circlepoint
Monty Schmitt (phone)	Natural Resources Defense Council
Regina Story	Bureau of Reclamation
Mark Tompkins (phone)	Newfields
Peter Vorster (phone)	The Bay Institute

Introductions, Meeting Objectives and Agenda

Patti Ransdell, facilitator, opened the Seepage and Conveyance Technical Feedback Group (SCTFG) meeting with introductions, reviewed the agenda, and discussed the purpose of the SCTFG. The purpose of this meeting is to provide an update on seepage projects, discuss site evaluation and preliminary design, and provide an update on DWR’s levee evaluation projects.

Restoration Flow Schedule

Katrina Harrison, Bureau of Reclamation, gave a short overview of the status of the San Joaquin River Restoration Program (SJRRP) Restoration Administrator’s (RA) Restoration flow schedule for Water Year (WY) 2014. WY 2014 is currently classified as a “Critical Low” meaning there will be no flow releases for the SJRRP. The San Joaquin River Exchange Contractors releases into Mendota Pool are scheduled into or through late September. There are currently no flows below Sack Dam due to seepage thresholds near the Sand Slough Control Structure (SSCS) and Eastside Bypass (ESPB).

SJRRP Updates

Katrina Harrison discussed the current fisheries actions for the SJRRP and provided an update on the Reach 2B, Arroyo Canal/Sack Dam, Reach 4B, and Mud and Salt Slough projects.

An update about the Fisheries Actions undertaken by the SJRRP this year was discussed.

Reach 2B Update

An attendee asked if the map shown on the slide (slide 10) was the preferred alternative for Reach 2B. This map is likely to be similar to the preferred alternative, modifications may still occur. The landowner preferred alternative is a compact bypass around Mendota Pool. Katrina briefly explained the other alternatives.

There was a question if the existing bifurcation structures at the Chowchilla Bypass will stay in place. Yes, these structures will stay in place, but modifications will be made to allow for fish passage. A follow up question was asked regarding what modifications were being made for fish passage. The design for this has not been finalized yet. Reclamation will coordinate with the fisheries agencies on the design.

An attendee asked if the bifurcation structure will be able to meet 4,500 cubic feet per second (cfs) capacity requirements. Yes, this structure will be able to meet the 4,500 cfs requirement.

There was a question of where the compact bypass will start. The current plan is for the bypass to start near the Columbia Canal and Road 10½ intersection and end in Reach 3, across the river from property owned by Fresno County.

An attendee asked if there will be fish screens in the compact bypass. Yes, there will be fish barriers incorporated into the compact bypass design.

There was a question if the two bifurcation structures that are part of the Reach 2B project will operate in tandem. Yes, they will operate in tandem.

The Reach 2B project will not be finalized until the Record of Decision had been signed. Public comment will be accepted and considered throughout the process.

Arroyo Canal/Sack Dam Update

The Arroyo Canal/Sack Dam project will create a new dam slightly upstream from the current dam. This project is currently on hold until the issue of subsidence at Sack Dam is addressed.

An attendee asked that given that the Sack Dam project will take a while, would a temporary fish passage facility at Arroyo Canal be considered. Yes, Reclamation would consider a temporary fish screen.

Reach 4B

On slide 12, a bullet point contained the following omission that was noted during the meeting for Reach 4B: Construction would take place 2025.

There was a brief discussion about reaching a channel capacity of 475 cfs in Reach 4B. Some meeting attendees stated that reaching this capacity would be challenging and could create seepage problems.

Mud and Salt Sloughs

There was a brief discussion about the status of the Mud and Salt Slough projects, which are on hold pending further study.

Seepage Project Status

Brian Heywood, CDM Smith, provided an update on the status of seepage projects and an overview of the seepage project process and prioritization approach.

An attendee asked what Reclamation plans to do with any water reclaimed as a result of interceptor lines. No decision has been made but there are two potential options being currently considered. The first is to put the water back into the river/ESBP. The second is to provide the water to the landowner or local water district in exchange for the Operations and Maintenance (O&M) of interceptor line.

There was a question about how Reclamation plans to estimate the seepage losses for the properties with an easement where the water is not coming back to the river. Reclamation is currently evaluating unexpected seepage losses.

An attendee noted that Eastside Bypass seepage losses were not addressed in the Settlement.

An attendee asked if Reclamation is still planning on using temporary easements while a seepage project is being built. Reclamation may enter into license agreements in this case.

There was a question about the status of the recommendations made by the peer review panel regarding the historic conditions of the parcels and if consideration of these conditions changed the thresholds. The thresholds were already revised based on the peer review panel's recommendations and there are no plans for further revisions.

An attendee asked if the soil samples collected were logged. Yes and some soil tests were conducted as well. Every layer of soil was tested for electrical conductivity (EC). Every fourth hole bored was sent to the lab for analysis. There was a follow up question about how deep the holes bored are. They range from six to 17.5 feet. There was another question about the water quality readings from the holes. The EC is measured when groundwater is first encountered.

It was clarified that the first three seepage projects near the SSCS and ESBP are needed to get flows into the ESBP. Reclamation is hoping to complete realty actions on two properties this year. If a license agreement or seepage project can be completed for the third property then flows could be increased in the ESBP from 70 cfs to about 250 or 300 cfs. Increasing the flows would be done incrementally.

There was a question about monitoring the first interceptor line installed. Monitoring of this seepage project will occur.

An attendee asked about parcels groups 159 and 154 and how much seepage projects in these locations would increase the capacity of allowable flows in the river. Parcel Group (PG) 159 would increase capacity to a bit above 300 cfs. That project is the next limiting once the first three PG projects are completed.

There was a brief discussion on the removal of invasive species of plants from the channels. Reclamation is revising the Invasive Species Management Plan to include options for landowners to remove invasive plants. The SJRRP wants to create a habitat for fish; therefore some vegetation is required in the river. However, the Program would be willing to try to removing things that do not belong in the river such as invasive species, garbage, etc.

An attendee asked for update on the sand removal project in the ESBP. This project is still underway. Reclamation is hoping to enter into a long-term agreement for sand removal by late-2015.

There was a question about PG 87 and where flows of 4,500 cfs would be located and what the corresponding river stage would be adjacent to this PG. This information is currently based on HEC-RAS modeling. There was a brief discussion about the physical flow capacity issues. Some meeting attendees do not feel that 4,500 cfs through the area of PG 87 is possible. Attendees also mentioned subsidence and its potential to affect flow capacity.

An attendee asked when the hydraulic analysis for Reach 3 was conducted. This analysis is at least a couple years old.

There was a question if there are any current plans to use a slurry wall at a site. So far, there has not been a site where a slurry wall has been the preferable option.

An attendee asked if Reclamation has met with the grower on the west side of the river from parcels 53 and 40. No meetings have been conducted yet regarding this parcel.

Site Evaluations

Brian Heywood provided an overview of the Site Evaluation process. He described the purpose of analysis and the data evaluated.

Preliminary Designs and Estimates

Mike Day, Provost & Pritchard, discussed the seepage project preliminary design process.

There was a question about the slurry wall preliminary design and materials used. Mike clarified that a soil-bentonite slurry is currently proposed as the most cost effective slurry mix.

An attendee asked if the slurry wall requires trenching down through the centerline of a levee. Yes, the slurry wall would be aligned with the centerline of the levee.

There was a question about drainage ditches and if these have been recommended for any projects. Drainage ditches have not been recommended to date; however, it is an alternative that can be considered. This was followed up with a brief discussion of the merits of drainage ditches compared to interceptor lines. The general consensus of the discussion was that the group feels interceptor lines are preferable to drainage ditches.

A group member recommended a minimum pipe diameter of 15-inch for an interceptor line on the west side of the river because the soil consists of heavier clay. He also recommended a larger gravel envelope to increase the profile for interception and have a better chance for controlling flows above and below the interceptor line.

A group member expressed the opinion that if Reclamation purchases an easement for one property, the next parcel downstream or away from the river may not be protected from seepage issues. The group member would like impacts to the downstream or “in-land” parcels to be considered.

There was a question regarding the 1,000 foot distance between manholes. This distance is based on limitations of equipment to clean interceptor lines.

An attendee asked if a seepage easement agreement is reached with a grower, can he still farm that ground. Yes, the landowner can still farm the ground.

It was noted that the electricity cost used in the cost estimates is the current PG&E rate. An attendee recommended that these costs factor in at least 6 percent per year inflation factor through at least 2020.

An attendee asked what percentage of the property’s appraisal value is offered for seepage easements. The appraiser evaluates the land value before the easement at its highest and best use and what the change in highest and best use would be after the easement. Comparison properties are used to value each of the highest and best uses. The differential between before and after conditions is the cost of the seepage easement.

60Percent Design

Mike Day provided an overview of the hydraulic conductivity investigation being conducted for the 60% Design phase.

A group member noted the challenges with theft and vandalism of equipment in the field. Therefore, he believes that a 15-year life span may not be representative.

Brian Heywood invited feedback on these items in the future.

Realty Actions

Katrina Harrison presented three types of realty actions as potential groundwater seepage mitigation: license agreements, easements, and land acquisition. She reviewed Reclamation's process for obtaining land value appraisals.

An attendee asked if the timeline shown on slide 70 for the land acquisition process is in line with the current projects. Yes, this timeline has been in line with the durations on slide 70. There was a follow up question of what stage in the process has Reclamation reached with the landowner considering acquisition. Reclamation has made an offer and is in the process of negotiating the actual purchase contract.

There was a question of what the landowner can do with the land after a seepage easement has been agreed to. The landowner can continue to use the property as he wishes.

An attendee asked what the difference is between a temporary and a permanent easement. A temporary easement, called a license agreement or rental, would be for a defined period of time. An easement is a permanent encumbrance and recorded on the deed.

There was a question for clarification on the wording "right to raise groundwater levels as a result of refuge water supply" from Reclamation's easement language. Reclamation is considering using the San Joaquin River and Bypass system to supply water to the refugees. This easement language covers seepage from these deliveries.

An attendee asked which appraisers have been used. Three different appraisers have been used. These include George Zengel, Tony Toso, and Steve Salmon / Ron Garland.

DWR Levee Project Update

Greg Farley, California Department of Water Resources (DWR), gave an overview of the current status of the San Joaquin Levee Evaluation (SJLE) Project and the Non-Urban Levee Evaluation (NULE). He provided information on the goals, scope, limitations, schedule and next steps.

There was a question if the purpose of this project is to get to higher flows than have already been experienced in the channels. The SJRRP flows are limited to in-channel flow capacity (which is less than design capacity of the reach). DWR is performing this work to assess the levee stability above this in-channel flow capacity, and see whether SJRRP flows may rise above the in-channel flow capacity without damaging levee stability.

There was a question about whether the NULE project will be used for making decisions for Reach 4A and 4B. DWR is evaluating levees that are most constraining to channel capacity.

Feedback on SCTFG Meetings

Katrina invited the group to provide feedback on the format and content of the SCTFG meetings. She asked for suggestions on meeting topics, format, and frequency.

Katrina suggested that it may be useful to hold smaller landowner meetings for more focused topics.

Attendees made the following suggestions:

- Conduct meetings if new information is developed, or if a specific reason arises.
Meetings with less “new” information are not as productive. Suggested topics include:
 - Additional design information for the interceptor project underway
 - Updates on levee capacity
- Conduct SCTFG meetings twice a year for updates
- Invite water district staff to any targeted landowner meetings
- Provide regular e-mail update bulletins (monthly or quarterly)
- Continue to provide updates on seepage projects to the Resources Management Coalition (RMC)

Attendees with additional suggestions were asked to contact Katrina.

Action Items

- There are no action items.

Parking Lot Topics

- There are no new topics to add to the parking lot list