Seepage and Conveyance Technical Feedback Group
Monday, April 8, 2013, 1:00 – 4:00 p.m.
San Luis Canal Company
11704 Henry Miller Avenue, Dos Palos, CA
Draft Meeting Notes

Attendees

Shelly Abajian	Office of Senator Dianne Feinstein
Michelle Banonis	Bureau of Reclamation
Dan Burns	Nickel Family LLC
Greg Farley	DWR
Larry Harris (phone)	Wolfsen
Katrina Harrison	Bureau of Reclamation
Brian Heywood	CDM Smith
Randy Houk	Columbia Canal District (CCC)
Chase Hurley	San Luis Canal Company (SLCC)
Laura Jensen (phone)	The Nature Conservancy
Richie Iest	Landowner
Clifton Lollar	Mitigation Lands Trust
Katie Lichty	Circlepoint
Bill Luce	Friant Water Authority
Stephen Lee	Bureau of Reclamation
Len Marino	Central Valley Flood Protection Board
Mari Martin	RMC
Rod Meade (phone)	Restoration Administrator
George Park	Lone Tree Mutual Water Co.
David Pombo	D & D Pombo
Stanley Cotta	Landowner
Patti Ransdell	Circlepoint
Jeff Siemens	Nickel Family LLC
Peter Vorster	The Bay Institute
Chris White	Central California Irrigation District
Beth Wrege (phone)	NOAA

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 review the revised Seepage Management Plan (SMP) and receive feedback from the group, as well as discuss adjustments to thresholds.

Interim Flow Schedule

Katrina Harrison, Bureau of Reclamation, gave a quick overview of the restoration program, and reviewed the Restoration Administrator's (RA) recommended Interim flow (IF) schedule for Water Year (WY) 2013. The RA recommended that flows be increased to 700 cubic feet per second (cfs) as of March 29. An increase to 1,060 cfs is scheduled for April 12.

A question was asked about if the interim flows will put water past Sack Dam. Flow will continue to not be released below Sack Dam. Adjustments to the thresholds that will be discussed later in the meeting may allow flow past Sack Dam.

Levee Update

Greg Farley, California Department of Water Resources (DWR), provided an update on the levee evaluation project. DWR is working with Reclamation and the Division of Flood Management to evaluate levees within the Restoration Area with respect to levee seepage and stability. Flow limitations on levees have been reviewed, and improvements are being prioritized. Levees being evaluated first are those where flows cannot exceed 2,000 cfs. By the end of 2013, the geotechnical reports will be updated for these SJRRP levee investigations. The Data Report for the portions of the Restoration Area drilled under the Non-Urban Levee Evaluation (NULE) project, including portions of Reaches 2A, 3 and 4A should be available in late summer/early fall 2013. The technical memorandum will be available in draft in the summer of 2014 and final in fall of 2014.

An attendee asked if the data on subsidence along the Eastside Bypass (ESBP) has been included in calculations. The subsidence data will be included in these evaluations.

One of the attendees asked about the plans for levee improvements in Reach 2B. Currently flows are limited to 1,100 cfs releases at Friant Dam. Reach 2B is not the priority right now for levee evaluation projects, as there is potential that any work in that area would have to be redone once the Reach 2B project is built.

An attendee asked if there will be collaboration with the Regional Flood Management Planning. Flood control agencies will aid in conveying the regional vision. It is anticipated that these organizations will be part of the planning effort.

Seepage Projects

Brian Heywood, CDM Smith, provided an update on the status of seepage projects and an overview of the seepage project process. A map of parcel groups prioritized by color was handed out at the meeting.

Several questions were asked about what the thresholds for red (top priority) parcel priorities are based on—the revised SMP or the previous version of the SMP. It was clarified that regardless of which thresholds are used, the red parcels are still the top priority.

There was a brief discussion about the appraisal level designs currently being developed vs. the real estate appraisal process. A real estate appraisal will be conducted by Reclamation to estimate land value. The results of the appraisal will be used in the initial screening and design of seepage projects (i.e., the appraisal level designs).

There was a discussion on the accuracy of the parcel maps in relation to subsidence that has occurred in the area and how this could affect the thresholds. Katrina will look into the possibility of an updated hydraulic model that could address subsidence.

Action Item: Katrina will look into how updated hydraulic modeling could address subsidence.

Michelle provided an update on the Sand Slough sand removal project. This project is anticipated to be finished sometime this summer.

A question was asked about removing sand in the future. This will be something to monitor until Reach 4B improvements are made. At that time hopefully there would be enough flow to keep sediment moving downstream. Reclamation recognizes that maintenance will have to occur.

SMP Revisions

Katrina Harrison provided an overview of the SMP revisions that have been made, following the recommendations of the Peer Review Panel (PRP) and feedback from SCTFG. Katrina reviewed the purpose, objectives, and process of the peer review of the SMP.

Katrina reviewed the SMP major revisions. It was noted that general minor revisions were made to all of the appendices, with larger edits to the appendices below. The appendices were also re-lettered. Details on the revisions can be found in the meeting PowerPoint presentation. Discussions that occurred on the revisions are summarized below. Public comments on the public draft of the revised SMP are due on Friday, April 19, 2013.

Appendix H – Groundwater Level Threshold

Katrina discussed the PRP review of the groundwater level threshold appendix, Appendix H. The main methods for establishing thresholds are agricultural practices (root zone + capillary fringe) and historical groundwater level. Revisions were made to Appendix H per the PRP recommendations.

In the 2011/12 SMP, root zone depths were based on an average of the range of root zone depths.

Katrina discussed the historical groundwater method. This method has a variety of subparts because there is not a lot of extensive historical groundwater data in some areas. Katrina presented six possible ways of setting historical groundwater method thresholds.

There was a discussion about the winter 2012 historical groundwater method and concerns about leaving room for irrigation. Reclamation responded to comments from landowners and chose the deepest observed groundwater level from January and February of 2012, in order to leave room for irrigation once the irrigation season begins in March – August. There was concern about the effects on drainage because it may thresholds may be set low enough as not to allow levels to rise during the irrigation season.

Katrina presented monitoring well MW-10-95 as an example of the different thresholds methods. The deepest groundwater level reading from January or February 2012 was 4.7 feet below ground surface (ft bgs) in the well.

A meeting attendee expressed concern that the location of MW-10-95 does not represent the entire field because it is adjacent to an extension of a canal. He feels the readings would be different if the well was

located in the middle of the field. He was concerned that Reclamation is using this one well to represent too many acres.

An attendee asked if the revised thresholds are affecting the red zone parcel (high priority) determination. The threshold at MW-10-95 is restricting flows below Sack Dam to 0 cfs. With the threshold change, it would only get flows below Sack Dam to 70 cfs. This does not change the high priority determination.

The addition of other monitoring wells that would provide more analysis was discussed. MW-10-95 is the most restrictive in that reach of the river. MW-10-90 and MW-10-94 are also key wells that are being studied.

The method of tracking the levels in each well was discussed. The wells are being looked at separately to make sure that each is below the threshold.

There was a discussion about the lateral gradient. The lateral gradient accounts for the difference in ground surface elevation at the well and in the field adjacent to the well. The ground surface in the field is typically at a lower elevation than at the well.

Katrina showed and explained a diagram of the lateral gradient. The lateral gradient is the slope that occurs between the well and field.

There was a discussion about how the groundwater level slope determination is made. It is based on transects of groundwater level data.

There was concern from a meeting attendee that these thresholds would allow groundwater levels to get too close to the root zone for crops.

There was a question about the extent that Reclamation is looking at the historical groundwater method and agricultural practices method throughout the project area. Thresholds in Reach 4B are generally set by the historical groundwater method. Some areas have better well coverage, and in these the historical groundwater method selected is Method A or B, based on the USGS contoured groundwater surfaces.

A meeting attendee was concerned about assuming the groundwater level was at a certain place historically, and, therefore, the threshold should be set at that level all the time. This could affect growers because the groundwater levels are not the same all the time.

Katrina explained that actual thresholds are set at the minimum (i.e. shallower value) of the agricultural practices method and the historical groundwater method.

In response to a question, the 3.5 ft bgs field level threshold, as calculated back from 4.7 bgs well depth is an estimate to account for the lateral gradient.

It was noted that flow bench evaluations are based on the current hydraulic model, which is based on 2008 LiDAR data from the field. A meeting attendee noted that the elevations model needs to be updated due to recent subsidence.

Katrina reviewed the next steps on the SMP revisions. It was noted that comments on the updated SMP should be sent in writing by the April 19 deadline.

There was a request for a sketch of adjustments as described in slide 45.

There was support from some meeting attendees to get seepage projects installed. There was a brief discussion of funding and seepage projects. If money is available from delay of the Arroyo Canal project, a meeting attendee expressed that he would like to see some of that money used to install seepage projects on the first three priority parcels. Funding for projects including the sand slough removal project and Parcel groups 164 was discussed. The program has enough money to install all "core actions" projects, which would increase flows to 4,000 cfs.

The timing of projects for parcels 160 and 162 was discussed. Reclamation has just started talking to the owner of parcel 160. Parcel 162 is moving forward, and it will be next in line after the first three red parcel projects. A project in parcel 162 would probably be complete later in 2014.

A meeting attendee expressed that he would like to see Reclamation do the projects first and to not increase water and then try to put the projects in place afterwards.

Scoping of Groundwater Baseline Study

Katrina led the group in brainstorming session on a "groundwater baseline" study. This study follows the PRP recommendations to pull together additional information as to historical shallow groundwater level areas. Katrina asked for input on methodology or data sources or methodology type.

Katrina discussed a potential concern from growers about removing the irrigation buffer. Reclamation can try to incorporate this into the historical method, by picking a level when it is not the irrigation season so that levels are not artificially raised. Reclamation could potentially put some monitoring wells to measure electrical conductivity (EC) and oxidation reduction potential to get some information to address questions that may remain on capillary rise or drainage.

Anoxia was discussed briefly. Anoxia is a lack of oxygen. Oxygen cannot get to roots if they are water-logged.

It was suggested that EC be measured in existing monitoring wells to establish baseline data. Reclamation has purchased sensors that measure EC. Oxygen sensors can be purchased. Using existing wells would speed up the process.

This study is not needed to inform physical projects but may be needed for future realty actions.

This topic could potentially be discussed further at a future meeting. Katrina will consider setting up a "groundwater baseline study" subgroup.

Questions

An attendee asked if Reclamation has the ability to install additional wells to improve data collected. Katrina will set up a meeting with these landowners regarding installing additional wells. The soonest additional wells could be installed would be this fall.

Katrina reminded the group that comments on the public draft of the revised SMP are due on April 19, 2013, and reminded them to call the Seepage Hotline if they see any seepage or have any seepage concerns.

Action Items:

- Katrina will look into how subsidence could be address in the hydraulic modeling.

Parking Lot Topics

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