

**Delta-Mendota Subbasin
Coordination – Technical Working Group**

**Tuesday, October 16, 2018, 10:00 AM
842 6th Street, Los Banos, CA
Call-in Number: (866) 661-7061; Code: 9811738464**

AGENDA

1. Introductions
2. Meeting Minutes Review
3. Recap of Subsidence Mapping
4. Development of Subsidence-related Sustainability Indicators and Monitoring
5. GSP Status and Upcoming (October) Scheduled Milestones
 - North/Central
 - Grassland
 - Aliso
 - Farmers
 - Exchange Contractors
 - Fresno County
6. Next Steps

**Delta-Mendota Subbasin
Technical Working Group Meeting**

**Tuesday, October 16, 2018, 10:00 AM
842 6th Street, Los Banos, CA**

Meeting Minutes

Voluntary Technical Working Group Representatives in Attendance

Adam Scheuber (Del Puerto WD)
Ben Fenters (San Luis WD)
Christina Guzman (Fresno County)
Jarrett Martin (Central California Irrigation District/SJREC)
John Beam (Grassland WD)
Larry Harris (Turner Island WD)
Kyle Hill (CCID)
Chris Rogers (CCID)
Kait Palys (Provost & Pritchard/Aliso WD)
Keasha Blew (Provost & Pritchard)
Rick Iger (Provost & Pritchard; by phone)
Will Halligan (LSCE)
Joe Hopkins (Provost & Pritchard/Aliso WD)
Ric Ortega (Grassland WD)

Authority Representatives Present

Andrew Garcia
Claire Howard

Others in Attendance

Leslie Dumas (Woodard & Curran)
Natalie Cochran (Woodard & Curran)

1. Introductions

Leslie Dumas/Woodard & Curran called the meeting to order at approximately 10:10 AM.

2. Review of Meeting Minutes

There were no comments on the draft meeting minutes from the September 18, 2018 Technical Working Group meeting. The minutes will be finalized.

3. Recap of Subsidence Mapping

A subsidence map package was presented in-person. Maps showing NASA JPL subsidence data from May 2015-2016, US Bureau of Reclamation subsidence data from December 2011-2017, major infrastructure, basin-wide well locations and depth relative to the primary aquifers, and subsidence monitoring locations were discussed.

Several Technical Working Group members pointed to locations where there are existing subsidence monitoring locations not reflected on the current map. Kait Palys/P&P will send out a request for Working Group Members to send additional known subsidence monitoring locations not currently reflected on the map. Stations specifically mentioned include additional UCSD and UNAVCO CORS stations, a CORS station located at the Tranquillity Irrigation District office, additional Aliso WD subsidence stations and possible CORS stations at John Deere dealerships. A request was made to create separate subsidence stations maps showing continuously monitored stations and intermittently surveyed stations, as well as provide the period of record for each station. An additional request was made to put the NASA JPL and Reclamation subsidence datasets into the same units, which Kait will coordinate with the P&P GIS team to do. Additional subsidence data is expected from a DWR survey along the DMC this week that was completed in August, which will be used to update subsidence charts.

The Working Group members largely agreed to use the Reclamation subsidence data sets since they cover a longer time period and are created using on-the-ground measurements, while the NASA JPL data has greater temporal limitations and also includes spatial data gaps with accuracy limitations presented by InSAR measurements. A question was raised as to why a different network of extensometers/benchmarks couldn't be used. Jarrett Martin/CCID mentioned that the time periods don't match up to create a robust dataset using another network. Reclamation publishes subsidence maps every 6 months. Rick Iger/P&P agreed to send a link to access the Reclamation data to the Working Group members. Jarrett Martin/CCID mentioned that the Reclamation dataset was fine to look at the overall, long-term picture of subsidence but it is important to look at the on-the-ground impacts relative to critical infrastructure.

4. Development of Subsidence-related Sustainability Indicators and Monitoring

Input was received from Working Group members relative to how to develop sustainability indicators relative to subsidence and how to develop monitoring locations. An agreement was made that all GSP groups would work to identify critical infrastructure and determine sensitivity of critical infrastructure to additional subsidence, which will be used to set measurable objectives and minimum thresholds as well as determine monitoring locations. The monitoring network for subsidence will be backed out from the identified minimum thresholds and measurable objectives, where data gaps will then be identified.

Jarrett Martin provided a summary of a study being conducted in the Red Top area looking at pumping groundwater levels and correlating how much groundwater can be extracted without subsidence. It was largely agreed that a similar basin-wide study for the Delta-Mendota Subbasin was not feasible given the timeframe. A similar targeted study may be feasible for smaller areas, such as Highway 152 near El Nido, Tranquillity ID, and Patterson ID. Westlands WD has also conducted a similar study looking at groundwater extracted, water levels, and CVP deliveries. Reclamation is currently designing infrastructure for an additional 2.5 feet of subsidence as part of the San Joaquin River Restoration Project in the Mendota Pool area.

5. GSP Status and Upcoming (October) Scheduled Milestones

Members of the Technical Working Group were reminded that water budgets and their associated TMs documenting key assumptions and methodology are due by this Friday (October 19th). Each GSP is expected to present separate water budgets for above and below the Corcoran Clay as well as composite, where applicable and practical. Water budgets are expected to be presented in tabular form (units in acre-feet) with other elements presented as seen fit by each GSP, such as free-body diagrams. Zachary Roy/SLDMWA is working on developing groundwater contour maps for above and below Corcoran Clay for spring and fall 2003-2017, which will be uploaded to the dropbox when completed. The Water Budget Review Workshop will be held on October 30th.

The following milestones were set relative to subsidence as a result of this meeting:

- Provide additional subsidence monitoring locations to Kait Palys/P&P by November 2nd along with shapefiles and a list of critical infrastructure impacted by current and future subsidence
- Provide a list of sustainability criteria relative to critical infrastructure in the form of quantitative thresholds by the November 13th in-person Technical Working Group meeting

6. Next Steps

The following action items were identified during this meeting:

1. Send Kait additional subsidence monitoring points
2. P&P GIS team to update subsidence monitoring maps with additional monitoring points, separating out continuous vs intermittent monitoring locations
3. P&P GIS team to put NASA JPL and Reclamation subsidence datasets in the same units, send out updated maps
4. Rick Iger to send a link of the Reclamation subsidence datasets
5. Each GSP will provide shapefiles and a list of critical infrastructure to Kait by November 2nd and quantitative thresholds for sustainability criteria relative to critical infrastructure before the November 13th meeting

The subsidence discussion will be continued at the November 13th meeting. The GDE discussion and mapping will be wrapped up at next month's meeting as well as the water budget discussion.

7. Adjourn

Leslie Dumas/Woodard & Curran adjourned the Technical Working Group meeting at approximately 12:00 PM.