Delta-Mendota Subbasin
Coordination – Technical Working Group

Tuesday, August 21, 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. TSS Application Status Update

4. Update on San Benito County Area of Subbasin MOU or Boundary Adjustment

5. Definable Bottom of the Basin

6. Basin Monitoring Program and Management Areas Discussion
    - Water Quality, Subsidence, Water Level (CASGEM), Surface Water
    - Developed jointly or sum of the parts

7. Coordination of Sustainability Criteria

8. Projected Water Budget Methodology

9. GSP Status and Upcoming (July-August) Scheduled Milestones
    - North/Central
    - Grassland
    - Aliso
    - Farmers
    - Exchange Contractors
    - Fresno County

10. Next Steps

Delta-Mendota Technical Working Group Sign-In Sheet

Date:

Name	Affiliation	Initials
Adam Scheuber	Del Puerto WD	AS
Alejandro Paolini	Henry Miller Reclamation District	
Amanda Peisch	DWR	
Andrew Francis	LSCE	
Andrew Garcia	SLDMWA	AG
Anthea Hansen	Del Puerto WD	
Ben Fenters	SLWD	BF
Bobby Pierce	West Stanislaus ID	
Breanne Ramos	Merced County Farm Bureau	
Briana Seapy	California Fish and Wildlife	
Cheri Worthy	SLDMWA	
Chris Olvera	DWR	
Christina Guzman	Fresno County	
Diane Cannon	LSCE	
Diane Rathmann	SLDMWA	
Don Wright	Waterwrights	
Ellen Wehr	Grassland WD	
Frances Mizuno	SLDMWA	
Glenn Allen	Fresno County	
Jarrett Martin	CCID	
Jason Dean	Meyers	
Jim Stilwell	Farmers WD	
Joe Hopkins	Provost & Pritchard	
Joe McGahan	Summers Engineering	
John Beam	JAB Environmental	
Ken Swanson	Grassland WD	
Lacey Kiriakou	Merced County	
Larry Harris	Turner Island WD	

Name	Affiliation	Initials
Leslie Dumas	Woodard & Curran/SLDMWA	LD
Linda Harris	Murdoc	
Linda Sloan	Provost & Pritchard	
Lon Martin	San Luis WD	
Palmer McCoy	Henry Miller Reclamation District #2131; San Luis Canal Company	
Rebecca Akroyd	SLDMWA	
Ricardo Ortega	Grassland WD	
Rick Iger	Provost & Pritchard	
Steve Chedester	SJR Exchange Contractors	
Valerie Kincaid	O'Laughlin & Paris LLP	
Vince Lucchesi	Patterson Irrigation District	VL
Will Halligan	LSCE FWD / Fresno Co.	WLH
Zachary Roy	SLDMWA	ZR
Kait Pelys	P&P	KP
Chris Rogers	CCID	CR
Kyle Hill	CCID	KH
Christina Guzman	Fresno County	CG

Phone

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Delta-Mendota Subbasin
Technical Working Group Meeting

Tuesday, August 21, 2018, 10:00 AM
842 6th Street, Los Banos, CA

Meeting Minutes

Voluntary Technical Working Group Representatives in Attendance

Adam Scheuber (DPWD)
Jarrett Martin (Central California Irrigation District/SJRECWA)
Chris Rogers (Central California Irrigation District/SJRECWA)
Kyle Hill (Central California Irrigation District/SJRECWA)
Will Halligan (Luhdorff & Scalmanini [LSCE], Consulting Engineers/Farmers WD and Fresno County)
Joe Hopkins (Provost & Pritchard/ Aliso WD)
Kait Palys (Provost & Pritchard/ Aliso WD)
John Beam (Grassland WD)
Rick Iger (Provost & Pritchard/Grassland WD; by phone)
Ben Fenters (San Luis WD)
Glenn Allen (Fresno County)
Christina Guzman (Fresno County)
Larry Harris (Turner Island WD)
Vince Lucchesi (Patterson ID; by phone)

Authority Representatives Present

Andrew Garcia
Zachary Roy

Others in Attendance

Leslie Dumas – Woodard & Curran

1. Introductions

   Leslie Dumas/Woodard & Curran called the meeting to order at approximately 10:05 AM.

2. Review of Meeting Minutes from July 17, 2018

   There were no comments on the draft meeting minutes from the July 17, 2018 Technical Working Group meeting. The minutes will be finalized.

3. TSS Grant Update

   Andrew Garcia (SLDMWA) provided an update on the Technical Support Services (TSS) application has been submitted to DWR and is currently under review. The first application was submitted using our Subbasin data gap map and prioritized two locations for new monitoring wells – in the SLWD area and near PID/northern basin area. WSID identified a potential well that can be used as a monitoring well in the northern basin area, so this means we need to select a new second well for prioritization. Options for this 'replacement' data gap wells are in the western SLWD area (up in the hilly area) or near the Mendota Wildlife Area (MWA)/Fresno County area. Ben Fenters (SLWD) noted that the hilly area would be rather shallow depth to groundwater, so probably best to use DWR funding (if available) to do a deeper well in the eastern portion of the basin in the MWA area. Will Halligan (LSCE) noted that CFWS has a shallow well on the western boundary of the central part of the MWA, east of the slough, and recommended that if we propose this as the new well location, it would be good to have a nested well so we can better understand vertical groundwater interactions. The Working Group agreed to prioritize the MWA area for the new well.

4. Update on San Benito County area of Subbasin

   There have been several recommendations to 'let sleeping dogs lie' on this issue, but there is concern re: not covering the entire basin with GSAs and the GSP. As such, Rebecca Akroyd (SLDMWA) will be looking into contacting San Benito County about joining in to the Central GSA via an MOU. In the interim, Provost & Pritchard looked into what technical data are available in that area that could be used to justify a technical basin boundary modification, and found that there's very little data available. They feel that a basin boundary modification request would be difficult to support. Additionally, it appears that San Benito County has recently joined in as a GSA in a different basin, so it was agreed that the first step should be reaching out to them re: the Delta-Mendota Subbasin to see if they have/will change their minds about participating in our efforts. Failing this, the Working Group agreed that a good back-up approach to this would be to reach out to the SWRCB (as the entity providing oversight in absence of the County) to see how they want to handle this issue.

5. Defining Bottom of the Basin

   There are several possibilities for defining the bottom of the basin (as required by SGMA): bedrock, bottom of fresh water or CVHM2 model bottom. The bottom of the CVHM2 model is either 1,800 ft below land surface, and where the Corcoran Clay is present, to 1,500 ft below the Corcoran Clay, so not really the bottom of the basin. (Basically, CVHM2 determined the deepest groundwater pumping and then added a layer as buffer rather than simulate the entire basin depth.) Others are using the bottom of fresh water as defined by 3,000 mg/L TDS. Ben Fenters (SLWD) noted that water quality on Little Panoche Creek is ›3,000 mg/L. Additionally, it was noted that DWR has argued that water quality is not a justification as saline water can be extracted, treated and used for potable water. Jarrett Martin (CCID) noted that the SJREC is using the Croft 1972 definition of 3,000 mg/L as base of fresh water; this delineation is based on well logs and geophysical logs. Jarrett has a shapefile with these contours that he is willing to share, but noted that they are not exact (they were digitized from the original document). Leslie Dumas (Woodard & Curran) asked what the deepest well in the Subbasin is; most agreed it was a well ~1,100 feet deep near the border with Westlands Water District. It was suggested (and agreed upon) that

we ask Westlands how they are defining the bottom of the basin.

The Working Group agreed to use the base of fresh water (3,000 mg/L) as the basis for the bottom of the basin (similar to that described in Bulletin 118), and that the GSPs would note that this delineation is based on best available information and may be modified in the future.

6. Discussion regarding Perched Groundwater and GDEs

   In recent communications with The Nature Conservancy (TNC) regarding GDEs, TNC asked for cross-sections delineating the aquifers and perched groundwater. Given the upcoming meeting on GDEs, Leslie Dumas (Woodard & Curran) wanted to discuss how perched groundwater is viewed relative to GDEs and see if all were on the same page prior to the meeting.

   Jarrett Marin (CCID) noted that in the SJREC area, there is water above the A Clay that is independent of the aquifer and managed differently. He also noted that there are no wells in perched water zones. Will Halligan (LSCE) noted that in the Farmers WD area, all wells are below the A Clay and that they are not allowed to pump from above it. West of the Mendota Pool and in the Fresno Area B areas, there is shallow groundwater with wells $\leq$ 30 feet. The Working Group agreed on the importance of distinguishing between very shallow groundwater and perched groundwater. Further, the Working Group agreed that the definition of perched groundwater is that it is groundwater disconnected from the primary aquifers, and as it is not considered a water source (e.g. no wells in the perched zone) it is not part of the managed aquifers, and therefore, habitats depending on perched groundwater are not considered GDEs.

   It was noted that water levels in 2015 are the baseline for identifying GDEs based on water levels. It was also noted that, if your GSP is not found compliant (and the basin is considered probationary), the SWRCB is allowed to step in an develop and interim GSP, but per SGMA, the SWRCB cannot do anything relative to correcting surface water-groundwater interactions until 2025. This topic will be discussed in Friday's GDE Workshop with TNC.

7. Basin Monitoring Program and Management Areas

   Per SGMA, we have to develop a basin-wide monitoring program and coordinate management areas. The question discussed was whether we do this as a cooperative effort or does each GSP do their own work and then we roll it up. After discussion, the Working Group agreed that the approach to this would be: (1) Each GSP does their own work; (2) the various GSP efforts are rolled up into a basin-wide summary; and (3) the combined results are then reviewed to determine if it can be simplified. It was agreed upon that the basin-wide results would be reported, but it is up to each GSP to determine if they would like to do more on their own.

8. Coordination of Sustainability Criteria

   Similar to #7 above, we're going to need to coordinate sustainability criteria to make sure that we don't have two widely disparate results along the borders of two GSP areas. The Working Group had a discussion o this and agreed that development of these criteria will likely be completed in parallel with the projected future water budgets and identification of management actions and projects. Jarrett Martin (CCID) noted that the SJREC had completed something similar to this in the Los Banos Creek area, setting different

thresholds for allowed pumping in adjoining areas, and that they've been able to make it work.

9. Projected Future Water Budget Approach

   Jarrett Martin (CCID) led this discussion noting that there's basically three different approaches to take for doing the projected future water budgets:

   1. Option 1 is to pick specific periods (2014 – 2030, 2014 – 2040, 2014 – 2070 as required by GSP regulations for examining climate change impacts [2030 and 2070] and achieving sustainability [2040]). You would determine what average ET and surface water deliveries look like and then apply a climate change factor to get a projected ET from which you would project future water deliveries
   2. Option 2 is to select several specific independent years (2014, 15, 16, etc.) and match them up to historical years and water year types. The first year would be coordinated between all GSPs, and then subsequent years projected forward after that. ET would be selected for those years and a climate change factor applied onto that. The climate change factor selection will have to be a coordinated effort.
   3. Option 3 is to simulate 2018 conditions under wet, dry and normal conditions for each projected year. This would be the most complicated approach. We would have to coordinate choosing certain years as representatives water years.

   Will Halligan (LSCE) asked how are you accounting for respected dry and wet periods? We are trying to take a more historical sequence to protect ourselves down the road. Account for dry spells as well. Minimum thresholds at a low enough level.

   Joe Hopkins (P&P) noted that you may want to run it independently and separately for your own GSP if that is the concern. This is just for water budget projections.

   Of the options presented above SJREC prefers using 2017 as a projection with 2014, 2015, and 2016 as actual years.

10. Adjourn

    Andrew Garcia (SLDMWA) adjourned the Technical Working Group meeting at approximately 12:00 PM

-1500
-1500
-1500
-1500
-1500
-1500
-1000
-2000

Elevation of the bottom of the CVHM2 Model

- Index Contour (500 ft)
- Contour (100 ft)

Northern & Central Delta-Mendota GSP

Delta-Mendota Subbasin:
Layering Data
Model Data Summary

- Delta-Mendota Subbasin Boundary
- Major River
- Major Lake or Reservoir
- California Aqueduct
- Delta-Mendota Canal

N

0 2.5 5 10 Miles

Project #: 0011081.01
Map Created: August 2018

Third Party GIS Disclaimer: This map is for reference and graphical purposes only and should not be relied upon by third parties for any legal decisions.
Any reliance upon the map or data contained herein shall be at the users' sole risk. **Data Sources:** ESRI, NOAA, USGS

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