Special Meeting of the Delta-Mendota Subbasin Coordination Committee And Technical Working Group Monday, July 24, 2023, 1:00 PM DRAFT

SLDMWA Boardroom, 842 Sixth St., Los Banos, CA

Coordination Committee and Technical Working Group Members and Alternates Present

John Wiersma, Member – San Luis Canal Company (SLCC)/San Joaquin River Exchange Contractors (SJREC)

Jarrett Martin, Member – Central California Irrigation District (CCID)/SJREC

Chase Hurley, Member - Pacheco Water District (PWD)/Central Delta-Mendota Region

Vince Lucchesi, Member – Patterson Irrigation District (PID)/Northern Delta-Mendota Region

Christy McKinnon, Alternate – Stanislaus County/Northern Delta-Mendota Region

Ric Ortega, Member – Grassland Water District

Augustine Ramirez, Alternate – Fresno County

Jim Stilwell, Member – Farmers Water District (FWD)

Joe Hopkins, Member – Aliso Water District/Provost & Pritchard (P&P)

San Luis & Delta-Mendota Water Authority (SLDMWA) Staff Present

John Brodie

Scott Petersen*

Others Present

Anona Dutton – EKI Environment & Water, Inc. (EKI)

Sarah Gerenday - EKI*

Andrew Francis - Luhdorff & Scalmanini (LSCE)*

Leslie Dumas - Woodard & Curran*

Lauren Layne − Baker Manock & Jensen (BMJ)*

Chris Olvera – Department of Water Resources (DWR)

1. Call to Order/Roll Call

John Wiersma (San Luis Canal Company/SJREC) called the meeting to order at 1:01 PM.

2. Opportunity for Public Comment

Chase Hurley (Central Delta-Mendota/ PWD) noted that PWD has hired a new general manager.

Consent Calendar

- 3. Committee to Review and Take Action on the Consent Calendar (Wiersma/Brodie)
 - a. Minutes of the July 10, 2023 Meeting of the Committee and Technical Working Group
 - b. Grant Reimbursement Summary Report

Vince Lucchesi (Northern Delta-Mendota/ PID) suggested that detail be added to the minutes regarding the Northern Management Committee's statements on a potential six-way cost-share. Lauren Layne (BMJ) responded that the minutes were only intended to be a summary. It was agreed that any actions taken would be noted in the minutes for the current meeting. Jarrett

^{*} Denotes telephonic/Zoom participation.

Martin (CCID/ SJREC) moved to approve the consent calendar items. Lucchesi seconded, and the motion passed unanimously.

Action Item

4. Committee to Consider Approval of a Consultant to Complete a Single Groundwater Sustainability Plan (GSP) for the Subbasin, and Budget Augmentation to Fund a Task Order with the Consultant, Brodie

The Committee discussed EKI's proposal for completion of a single GSP. Scott Petersen (SLDMWA) reminded the Committee that the SLDMWA Board has approved execution of an agreement with EKI with a direct billing structure, subject to an approval vote by the Coordination Committee. John Wiersma (SLCC/SJREC) motioned to approve EKI's proposal with the note that agreement on a cost-share has not yet been reached. Chase Hurley seconded the motion and it was passed unanimously.

Report Items

5. Committee to Discuss Cost-Share for Completing the Subbasin's Single GSP, Wiersma

The Committee discussed the budget, scope, and cost-share for completing a the single GSP. It was agreed that a meeting dedicated to the topic would be held on 8 August 2023. Lauren Layne noted that there was still no decision regarding the number of seats on the new committee, which would need to be agreed upon for a cost-share to be determined. The Committee members requested an action item at the August 8 meeting to reflect the Committee's intent to conduct a cost share adjustment for expenses incurred in creating a single GSP for the Subbasin.

6. Committee to Discuss Composition/Membership on the Coordination Committee, Wiersma/Layne

This item was discussed under agenda item 5.

7. Committee to Discuss Draft Subbasin MOA, Layne (Policy)

Lauren Layne reported that she had incorporated the edits she had received on the draft MOA and that the only remaining question was the number of seats on the Committee. In response to a question regarding section 2.6 of the MOA, Layne clarified that revisions to the MOA would require the approval of all GSAs, regardless of whether each had a representative present at the Committee. The proposed adoption date of the MOA was changed from October 1, 2023 to November 1, 2023.

8. Committee to Discuss Public Outreach and Facilitation Support Services (FSS) Funding/Workplan, Brodie/Beutler (Policy)

John Brodie reported that he met with Lisa Beutler (Stantec) regarding outreach and confirmed that DWR will fund Stantec's outreach efforts in support of the single Subbasin GSP. Beutler will develop a work plan and agreement. The work plan will include a review of the various GSA websites. Brodie also noted that he reviewed the deltamendota.org website and noted changes were necessary. Ric Ortega, Vince Lucchesi, and John Wiersma volunteered to review proposed changes to the website before they are made.

9. Committee to Discuss Design of Interconnected Surface Water (ISW) Monitoring Network for the Delta-Mendota Subbasin, Halligan/Francis (Technical)

Andrew Francis(LSCE) gave an update on the status of the ISW monitoring network. Francis noted that talks with adjacent subbasins are ongoing and that while installation is not part of the

current work, it will hopefully occur within a few months. Leslie Dumas (Woodard & Curran) noted that DWR has extensive paperwork requirements associated with well installation funded by grants. Dumas advised that a Subbasin representative be present during the drilling to log the holes and expressed willingness to assist with the preparation of necessary documents. It was noted that the Subbasin has dedicated grant funds for monitoring and generally agreed that each GSP group would be responsible for monitoring the wells in their area.

10. Committee to Discuss July 26, 2023 Technical Issues Meeting with SWRCB/DWR Staff, Brodie/Dutton (Technical)

John Brodie and Anona Dutton reminded the Committee regarding a meeting with SWRCB/DWR staff on 26 July 2023 to receive feedback on technical work and obtain the staff's commitment for monthly meetings. Anona confirmed that the previously discussed slide deck had been shared with the SWRCB/DWR staff after incorporating the Committee's requested edits. The Committee agreed that Jarrett Martin, Chase Hurley, John Wiersma, Scott Petersen, and Lauren Layne would attend the meeting along with Brodie and Dutton.

11. Committee to Discuss Detail for Tracking Monitoring Exceedances in the Subbasin, Brodie/Dumas

John Brodie and Leslie Dumas sought input from the Committee regarding how much detail the monitoring exceedance information included in meeting packets should contain. The Committee agreed that results from wells in the representative monitoring network should be identified, but that the local or landowner ID's for the wells should not be included.

12. Committee to Review Monitoring Exceedances, Dumas/Dutton (Technical)

Monitoring exceedances were included in the meeting packet. It was noted that the direction of water level trends in individual wells was determined based on overall increases or decreases in the hydrographs, not by fitting lines to them directly.

13. Committee to Discuss WaterSMART Grant to Update Subbasin Hydrogeologic Model, Brodie (Technical)

Brodie reported that he had reached out to the Bureau of Reclamation regarding the cost-sharing requirement of the WaterSMART grant but had not received a response. Brodie noted that the non-federal cost match may range from 25% to 50% depending on the judgement of the reviewers. Dutton suggested that the funds could be used for further model refinements after receiving SWRCB approval and that the current expenditures may contribute towards the cost-share. Making a recommendation on the grant application will be an agenda item at the next regular meeting.

14. Committee to Discuss Other Available Funding Opportunities, Brodie (Policy/Technical)

Other available funding opportunities were listed in the meeting packet. Anyone interested in these opportunities should contact John Brodie.

15. Next Steps

- John Brodie will send a draft scope of work to the subcommittee for review.
- The next agenda will include items for scope of work, hydrogeologic model, and technical working group.
- Staff is to schedule a special meeting of the Committee for August 8, 2023 at 2:00 pm.
- Anona Dutton will send out list of topics for questions to be submitted regarding the water budget.

- Proposals regarding the cost-share should be submitted by August 8th for discussion on August 14th.
- Staff is to add an action item on the next meeting agenda to reflect the Committee's intent to conduct a cost-share adjustment for expenses incurred for the single GSP.
- Comments on the draft MOA are due August 14, 2023 and the adoption date for the MOA will be changed to November 1, 2023.
- John Brodie will look into the SLDMWA request for proposals for construction management for the ISW monitoring wells.
- Local well IDs will be removed from all charts published in meeting packets.
- The Committee will discuss responsibility for data collection, monitoring, access, etc. for representative monitoring network wells at the next regular meeting.

Closed Session

16. Conference with Legal Counsel - Anticipated Litigation

The Committee will meet in closed session to confer with legal counsel on significant exposure to anticipated litigation pursuant to paragraph (2) of subdivision (d) of Government Code Section 54956.9: (1 case)

17. Conference with Legal Counsel – Existing Litigation

The Committee will meet in closed session to confer with legal counsel pursuant to Paragraph (1), Subdivision (d) of Government Code section 54956.9; California Sportfishing Protection Alliance v. All Persons Interested in the Matter of the Validity of the Northern and Central Delta-Mendota Regions Groundwater Sustainability Plan, et al., Merced County Superior Court, Case No. 21CV-01691.

Open Session

18. Report out of Closed Session

There was no action to report from closed session.

19. Reports Pursuant to Government Code Section 54954.2(a)(3)

There were no reports.

- 20. Future Delta-Mendota Subbasin Coordination Committee Meetings
 - a. Monday August 14, 2023 1:00 PM
 - b. Monday August 28, 2023 1:00 PM (with Technical Working Group)
 - c. Future Policy-only Meetings will be Scheduled at the Request of the Committee

21. ADJOURNMENT

John Wiersma adjourned the meeting at 4:50 PM

Special Meeting of the Delta-Mendota Subbasin Coordination Committee Tuesday August 08, 2023, 2:00 PM DRAFT SLDMWA Boardroom, 842 6th Street, Los Banos, CA

Coordination Committee Members and Alternates Present

John Wiersma, Member – San Luis Canal Company (SLCC)/San Joaquin River Exchange Contractors (SJREC)

Jarrett Martin, Member – Central California Irrigation District (CCID)/SJREC∞

Chase Hurley, Member – Pacheco Water District (PWD)/Central Delta-Mendota Region°

Vince Lucchesi, Member – Patterson Irrigation District (PID)/Northern Delta-Mendota Region

Ric Ortega, Member – Grassland Water District∞

Augustine Ramirez, Alternate – Fresno County

Jim Stilwell, Member – Farmers Water District (FWD)

Will Halligan, Alternate – Farmers Water District/Luhdorff & Scalmanini C.E. (LSCE)

Joe Hopkins, Member - Aliso Water District/Provost & Pritchard

San Luis & Delta-Mendota Water Authority Staff Present

John Brodie

Scott Petersen*

Others Present

William Vaughn – City of Los Banos Bobby Pierce – West Stanislaus Irrigation District Adam Scheuber – Del Puerto Water District Steve Stadler – San Luis Water District Rick Iger – Provost & Pritchard Anona Dutton – EKI Environment & Water, Inc. (EKI) Amir Mani – EKI* Leslie Dumas – Woodard & Curran* Lauren Layne – Baker Monock & Jensen, PC*

- * Denotes telephonic/Zoom participation.
- Denotes departed the meeting early
- ° Denotes entered the meeting late.

1. Call to Order/Roll Call

John Wiersma called the meeting to order at 2:00 PM.

2. Opportunity for Public Comment

No public comments were made.

Action Items

3. Committee to Consider Its Intent to Perform a Cost-Share Adjustment for Expenses Incurred in the Formulation of a Single Groundwater Sustainability Plan for the Delta-Mendota Subbasin

The Committee was unable to act on this item because it involved a proposed budget action, which requires a unanimous vote of all Committee members. This item will be brought back to the Committee at the August 14, 2023 meeting.

Report Items

4. Committee to Discuss EKI's Scope of Work for the Subbasin's Single GSP

Discussion on items 4 and 5 were merged. See item 5.

5. Committee to Discuss Use of a Hydrologic Model for the Subbasin's Single GSP

Anona Dutton/EKI provided a presentation on the model (CVHM2-SJB), emphasizing its application as a basin-wide model that is approved by DWR for use in Groundwater Sustainability Plan (GSP) development and implementation under Sustainable Groundwater Management Act (SGMA).

Committee members posed several questions regarding model capability, SGMA and State Water Resources Control Board (SWRCB) requirements to approve the plan, and the additional refinements and budgets needed to accomplish such tasks.

Committee members shared their perspectives on the model's necessity and the degree of refinement needed to accomplish the goal of achieving an approved plan. Committee members supported development of a model that secures GSP approval but limits task expenditures and refinements to the model. Committee members did not approve the optional task for model enhancements.

Ms. Dutton provided responses to comments and questions shared by the Committee members on the draft scope of work. Staff was directed to move forward with the draft scope of work at the budget amount of \$1,401,052.

A request for information (RFI) from the GSP Groups/GSAs was discussed. Staff will send the RFI including formatted templates and Sharefile links to provide information to EKI. A September 8, 2023 deadline was set for the information to be submitted.

6. Committee to Discuss Structure, Priorities, and Directives for the Delta-Mendota Subbasin Technical Working Group's Role in the Subbasin's Single GSP

John Wiersma initiated the discussion on revisiting the Technical Working Group (TWG) purpose and function, including its member and meeting structure. There was consensus that the TWG should focus on technical matters, drawing on members with in-depth knowledge of the Basin to support EKI's work on a single GSP for the Subbasin.

Committee members were asked to provide names of persons to be named to an ad hoc TWG.

7. Committee to Discuss Alternative Cost Share Proposals for the Implementation Phase of a Single GSP for the Delta-Mendota Subbasin

Farmers Water District provided alternative cost share proposals for dividing the cost of a single GSP and/or costs of single GSP implementation. These included splits based on percentages of extraction or number of acres per GSA or voting seat. This item is to remain a standing report/discussion item on future Coordination Committee Meeting Agendas.

8. Next Steps

The following next steps were identified:

- Woodard and Curran will be added to the existing TWG communications including the RFI for the single GSP.
- Committee members will submit names at the August 14, 2023 meeting for ad hoc membership to the TWG.
- Staff is to keep a policy discussion on cost share alternatives on future agendas.
- 9. Reports Pursuant to Government Code Section 54954.2(a)(3)

There were no reports.

10. ADJOURNMENT

John Wiersma adjourned the meeting at 4:25 PM.



SAN LUIS & DELTA-MENDOTA WATER AUTHORITY

MARCH 1, 2023 - FEBRUARY 29, 2024

SGMA ACTIVITIES - COORDINATED COST-SHARE AGREEMENT ACTIVITY AGREEMENTS BUDGET TO ACTUAL COORDINATED (FUND 63)

Report Period 3/1/23 - 6/30/23 Coordination Meeting 08.14.23

C	Annual	Paid/		Amount	% of Amt	Expenses
EXPENDITURES	Budget	Expense	R	emaining	Remaining	Through
Legal:						
Baker Manock & Jensen	\$ 30,960	\$ 17,711	\$	13,249	43%	
Other Professional Services:						
GSP Implementation Contracts						
Coordinated Annual Reports Activities						
(Common Chapter, Water Level Contouring)	\$ 146,093	\$ 14,063	\$	132,030	90%	5/1/23
DMS Hosting, Augmentation and Support	\$ 11,367		\$	11,367	100%	
Staff Augmentation Support (EKI)	\$ 65,000	\$ 64,715	\$	285	0%	5/4/23
DAC Outreach and Coordination	\$ 30,000		\$	30,000	100%	
SGMA Implementation Grant Round 1 SPA (A9)	\$ 75,560	\$ 1,331	\$	74,229	98%	5/1/23
SGMA Implementation Grant Round 2 SPA (B0)	\$ 75,560		\$	75,560	100%	
Other:						
Executive Director	\$ 2,364	\$ -	\$	2,364	100%	
General Counsel	\$ 4,082	\$ 157	\$	3,925	96%	6/30/23
Water Policy Director	\$ 7,100	\$ 5,526	\$	1,574	22%	6/30/23
Water Resources Program Manager	\$ 62,400	\$ 24,016	\$	38,384	62%	6/30/23
Accounting	\$ 2,916	\$ 630	\$	2,286	78%	6/30/23
License & Continuing Education	\$ 500		\$	500	100%	
Conferences & Training	\$ 1,000		\$	1,000	100%	
Travel/Mileage	\$ 2,500		\$	2,500	100%	
Group Meetings	\$ 1,000		\$	1,000	100%	
Telephone	\$ 500		\$	500	100%	
Software	\$ 780		\$	780	100%	
Equipment and Tools	\$ 5,650		\$	5,650	100%	
Total Expenditures	\$ 525,332	\$ 128,149	\$	397,183	76%	

7/26/23 SWRCB Staff/D-M Subbasin Meeting Summary Notes

They see the coordination slides as progress, and they see movement on a pathway that will address the deficiencies identified by DWR. They are unable to give us anything specific until they see a completed GSP. They are only able to comment generally.

They requested copies of the draft MOA for review.

Question: How will the six existing GSPs be merged into one?

Answer: The subbasin is not converting to six management areas or the like. Subbasin SMCs will be applied basin-wide. Everything is being Coordinated on a basin scale.

Question on Undesirable results: how many wells are in the representative monitoring network (RMN) and how many wells are we talking about at the 25% threshold? This seems like a high number?

The subbasin must tie this 25% number to impacts on beneficial uses and users. Work back quantitatively from undesirable results and describe what those URs are qualitatively. The two (quantitative and qualitative) must correlate to each other.

Staff thought the explanation of the 25% and showing # affected wells in each aquifer was helpful.

How accessible will the well mitigation program be to the people who need it? We can't have a program that just looks good on paper but the affected well owners must have a Ph.D. to apply or understand if they qualify.

Overall they thought the presentation looking at water levels was helpful. They want a series of future meetings on how water levels will affect different undesirable results. Water quality and subsidence were specifically mentioned.

Age of wells on well mitigation slide: SWRCB staff has a definitive concern with that, saying it's interesting but not relevant. Even old wells are subject to action by a GSA. We shouldn't consider it for significant and unreasonable.

What is being dismissed as local vs. basin-wide in groundwater management? What does this mean for the Plan and impacts on the ground.

Explain what significant and unreasonable means at a local/basin level and extrapolate to say why its significant and unreasonable. Back it up with data and reasoning.

What additional analyses should we do as a subbasin? Lean on the analyses, not what numbers are used in other plans or subbasins. To them, any well going dry is significant and unreasonable. Projects and management actions may be able to affect it.

How will our new RMN represent domestic wells?

For the enxt meeting, they would like to take a deeper dive into MTs for water levels and how those will affect other sustainability indicators, especially water quality and subsidence.

DELTA-MENDOTA SUBBASIN RESPONSE TO INADEQUATE DETERMINATION

14 AUGUST 2023 CC/TWG MEETING

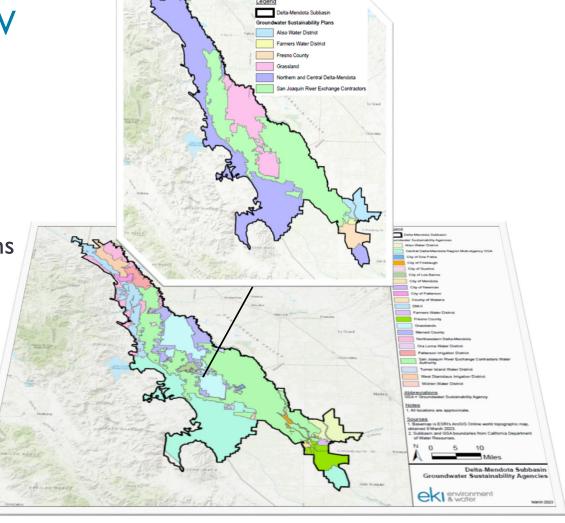


PRESENTATION OVERVIEW

Request for Information #1

Monitoring Network Considerations

3-Month Look Ahead





REQUEST FOR INFORMATION #1

- GSP Document Materials
 - Electronic files of text, tables, figures and GIS map packages for 2022 GSPs and Common Chapter
 - Annual Report files/back up
 - Local model files
- Identification of Revised Monitoring Network
 - Well information
 - Historical water level and water quality data
 - Identification of wells to be removed from the RMN
- Due date: September 8, 2023; Sharefile links sent in March 2023



3

GSP REGULATIONS 23 CCR § 354.34 § 354.38

- § 354.34 (a) Each Agency shall develop a monitoring network capable of collecting sufficient data to demonstrate short-term, seasonal, and long-term trends in groundwater and related surface conditions, and yield representative information about groundwater conditions as necessary to evaluate Plan implementation.
- § 354.38 (e) Each Agency shall adjust the monitoring frequency and density of monitoring sites to provide an adequate level of detail about site-specific surface water and groundwater conditions and to assess the effectiveness of management actions under circumstances that include the following:
 - (1) Minimum threshold exceedances.
 - (2) Highly variable spatial or temporal conditions.
 - (3) Adverse impacts to beneficial uses and users of groundwater.
 - (4) The potential to adversely affect the ability of an adjacent basin to implement its Plan or impede achievement of sustainability goals in an adjacent basin.



4

MEMORANDUM OF UNDERSTANDING

 Revisions to Subbasin-wide Representative Monitoring Network (RMN) is captured in the Draft MOA

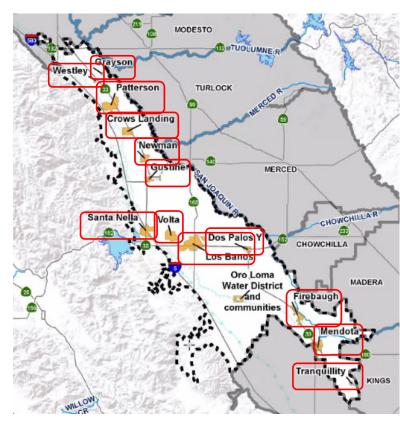


ARTICLE VIII – MONITORING NETWORK

- 8.1 In accordance with SGMA, the Parties hereby agree to coordinate the development and maintenance of a monitoring network at a Subbasin level. The Subbasin monitoring network description shall include monitoring objectives, protocols, and data reporting requirements specific to enumerated sustainability indicators. Each GSA is responsible for the following:
 - (a) Maintaining the representative monitoring network within its boundary;
 - (b) Filling data gaps in its GSA on a defined schedule;
 - (c) Collecting data per the approved Subbasin-wide monitoring protocol;
 - (d) Considering developing and maintaining a supplementary network for collecting data in excess of the minimum need, for the purposes of supporting local management decisions (since the level of detail necessary may not be sufficient in a Subbasin level network); and
 - (e) Each GSA shall have a minimum of one monitoring well (measuring water level and water quality) from each aquifer in which it has groundwater pumping within its GSA boundaries, sufficient to meet the recommendations of the Subbasin-wide GSP consultant.
- 8.2 The minimum monitoring network shall be based on the evaluation performed by the Subbasin-wide GSP consultant and may change from time to time. The Subbasin-wide GSP consultant shall evaluate to the monitoring network to ensure:
 - (a) There is a proper spatial and temporal coverage to inform a groundwater model:
 - (b) The level of monitoring is commensurate with the use in an area (e.g., limited monitoring well(s) in areas that do not pump or higher density of survey benchmarks in areas that have numerous deep wells); and
 - (c) The network is balanced, so that should an exceedance occur, it is not biased or weighted as a function of a poorly distributed monitoring network.

DESIGN PRINCIPLES FOR REVISED MONITORING NETWORKS

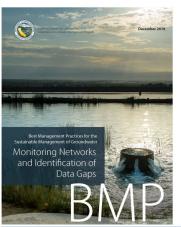
- I. Each GSA will have a **minimum** of one Representative Monitoring Well (RMW) per aquifer where pumping occurs within its boundaries.
- Incorporate wells from existing public water systems (PWS), where data are already being collected and drinking water beneficial uses are present.
- 3. Additional RMWs identified to address monitoring network gaps in Subbasin or achieve necessary data densities.
- 4. Avoid or screen out areas where degraded conditions already exist and where drinking water beneficial uses are not present. (e.g., COC concentrations > 3x MCL)





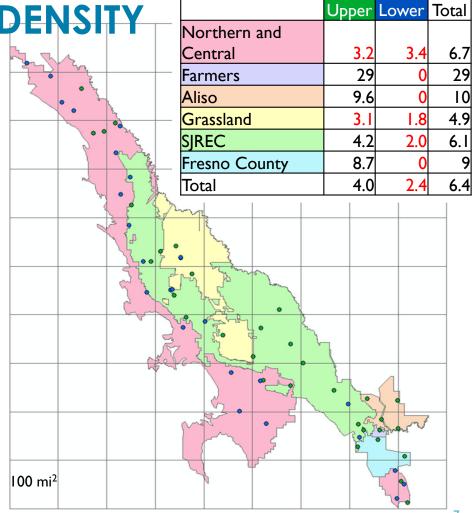
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CURRENT RMS-WATER LEVEL DENSITY



Delta-Mendota pumps ~37,000 AFY/ 100 mi²

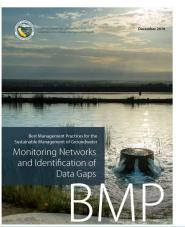
Reference	Monitoring Well Density (wells per 100 miles²)
Heath (1976)	0.2 - 10
Sophocleous (1983)	6.3
Hopkins (1984)	4.0
Basins pumping more than 10,000 acre-	
feet/year per 100 miles ²	
Basins pumping between 1,000 and 10,000	2.0
acre-feet/year per 100 miles²	
Basins pumping between 250 and 1,000	1.0
acre-feet/year per 100 miles ²	
Basins pumping between 100 and 250	0.7
acre-feet/year per 100 miles²	



Wells per 100 mi²

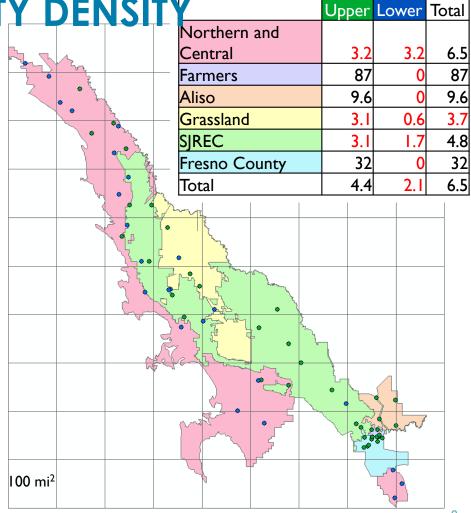


CURRENT RMS-WATER QUALITY DENSITY



Delta-Mendota pumps ~37,000 AFY/ 100 mi²

Reference	Monitoring Well Density (wells per 100 miles²)
Heath (1976)	0.2 - 10
Sophocleous (1983)	6.3
Hopkins (1984)	4.0
Basins pumping more than 10,000 acre-	
feet/year per 100 miles²	
Basins pumping between 1,000 and 10,000	2.0
acre-feet/year per 100 miles²	
Basins pumping between 250 and 1,000	1.0
acre-feet/year per 100 miles ²	
Basins pumping between 100 and 250	0.7
acre-feet/year per 100 miles²	



Wells per 100 mi²



THREE-MONTH LOOK AHEAD

- August 2023
 - Issue RFI #1 8/8/2023 RMN and GSP contents
 - Issue RFI #2 8/28/2023 Projects & Management Actions & Basis for Model Refinements
- September 2023
 - SWRCB Meeting 9/13/2023
 - RFI #1 responses due 9/8/23
 - RFI #2 responses due 9/30/23
- October / November 2023
 - SWRCB Meeting 10/11/2013
 - Draft Introduction and Plan Area chapters provided for GSA review
 - MOA adoption



9

QUESTIONS





Updated: August 9, 2023



Model Data Upload Request

The Department of Water Resources' (DWR) Fine Grid California Central Valley Groundwater-Surface Water Simulation Model (C2VSimFG) is in the process of being extended through water year (WY) 2021. As part of that effort, DWR is conducting local agency outreach to request provision of regional and groundwater basin/subbasin-specific groundwater model-related datasets.

How to Upload Data

To support this effort, DWR has added functionality to the SGMA Portal to allow for model-related dataset uploads, for each basin/subbasin. Please see the accompanying <code>Model_Data_Upload_User_Guide.pdf</code> for data upload instructions.



Figure 1. A screenshot of the SGMA Portal Homepage, highlighting the "All Models" icon.

Data Request Timeline

DWR is requesting this data be uploaded as soon as possible, especially with regards to diversion, stream flow, and evapotranspiration (ET) data. The data will support C2VSimFG and potentially other groundwater and surface water model development and calibration, which is scheduled for completion at the end of the 2023 calendar year.

After this initial request, additional requests for updated data will be sent out annually.

Requested Data, Priority, and Format

<u>Immediate priority:</u> DWR is requesting surface water diversion and local stream flow rate data for the period of **October 2015 through September 2021** (more recent or historical data is also welcome), preferably on a monthly or daily timestep with associated GIS files. Spreadsheet, text (including commaseparated values, or CSVs), or PDF data formats preferred.

<u>Secondary priority:</u> DWR is requesting ET ground-truthing data; that is, ET timeseries rasters or measured data (e.g., LandIQ rasters or eddy covariance station measured data).

Third priority: If available, DWR is also requesting the following (via GIS, spreadsheet, text, PDF, etc.):

- Diversion specifications
 - o Point-of-diversion, delivery area, capacity, conveyance (e.g., pipeline, lined/unlined open channel)
- Local streams
 - Streamflow rates and location
 - Stream dimensions, streambed thickness, hydraulic conductivity of streambed
 - Bypass rates and location/destination
- Wells
 - Pumping rates
 - Groundwater level time series
 - Well location, well construction logs or e-logs
- Recharge
 - Locations
 - E.g., detention/retention basins, wastewater treatment plant ponds, stormwater rock wells, other designated recharge locations
 - Rates
- Aquifer property estimates
 - E.g., hydraulic conductivity, transmissivity, aquifer thickness, specific yield, storativity, specific storage, etc.
- Aguifer test data
 - o E.g., specific capacity and pump test data
- Evapotranspiration
 - Any ET ground-truthing data or ET model inputs/assumptions
- Groundwater quality time series
- Model files
 - Model grid/node GIS files, if applicable
 - Model input data related to any of the above, if that's easier to send (with supporting documentation, if applicable)

Questions

For questions regarding the model-related dataset upload process, please reach out to your

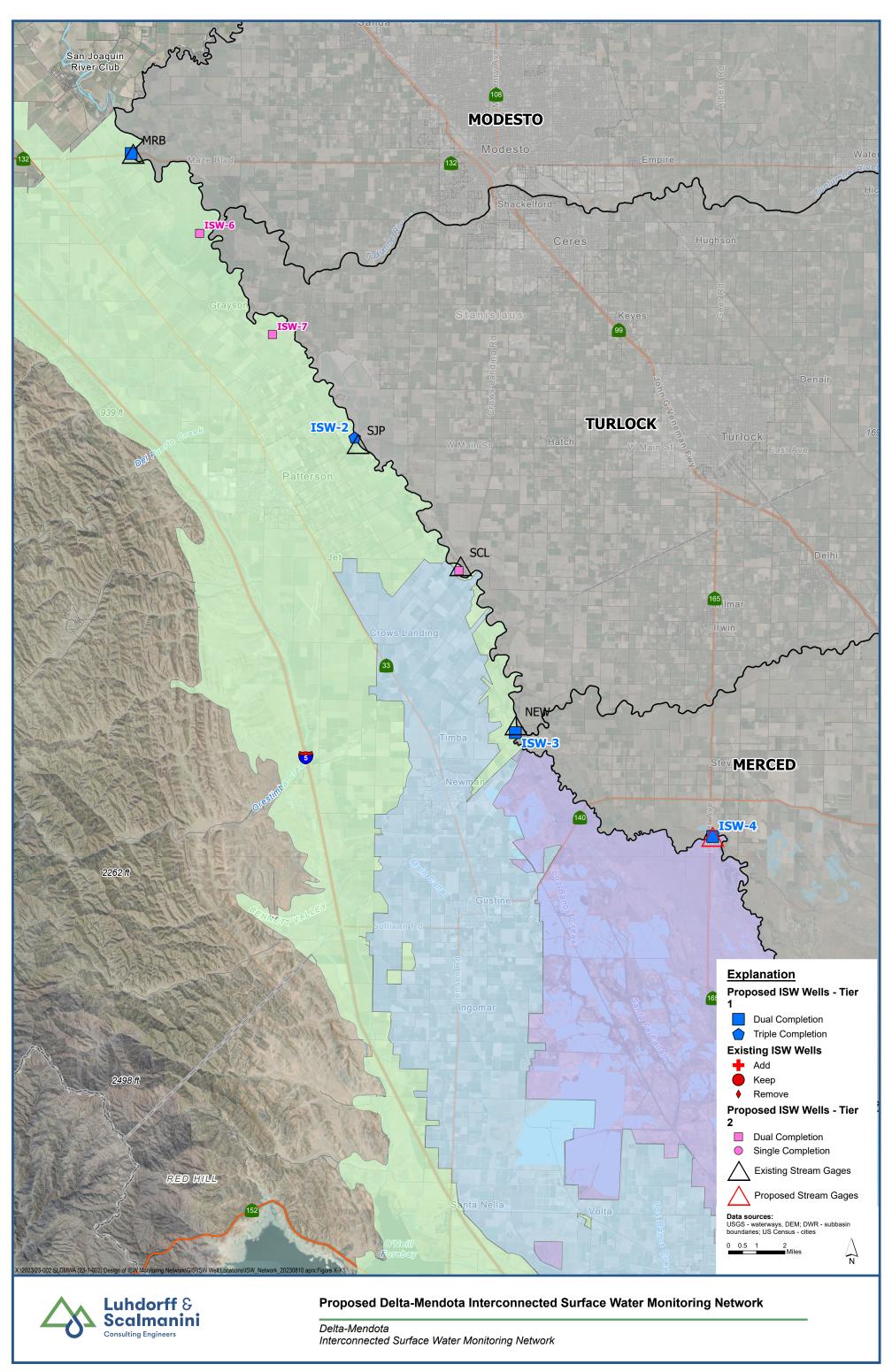
basin/subbasin's DWR Point-of-Contact (POC), which can be found at the DWR Assistance and Engagement webpage. Alternatively, e-mail requests can be sent to sqmps@water.ca.gov.

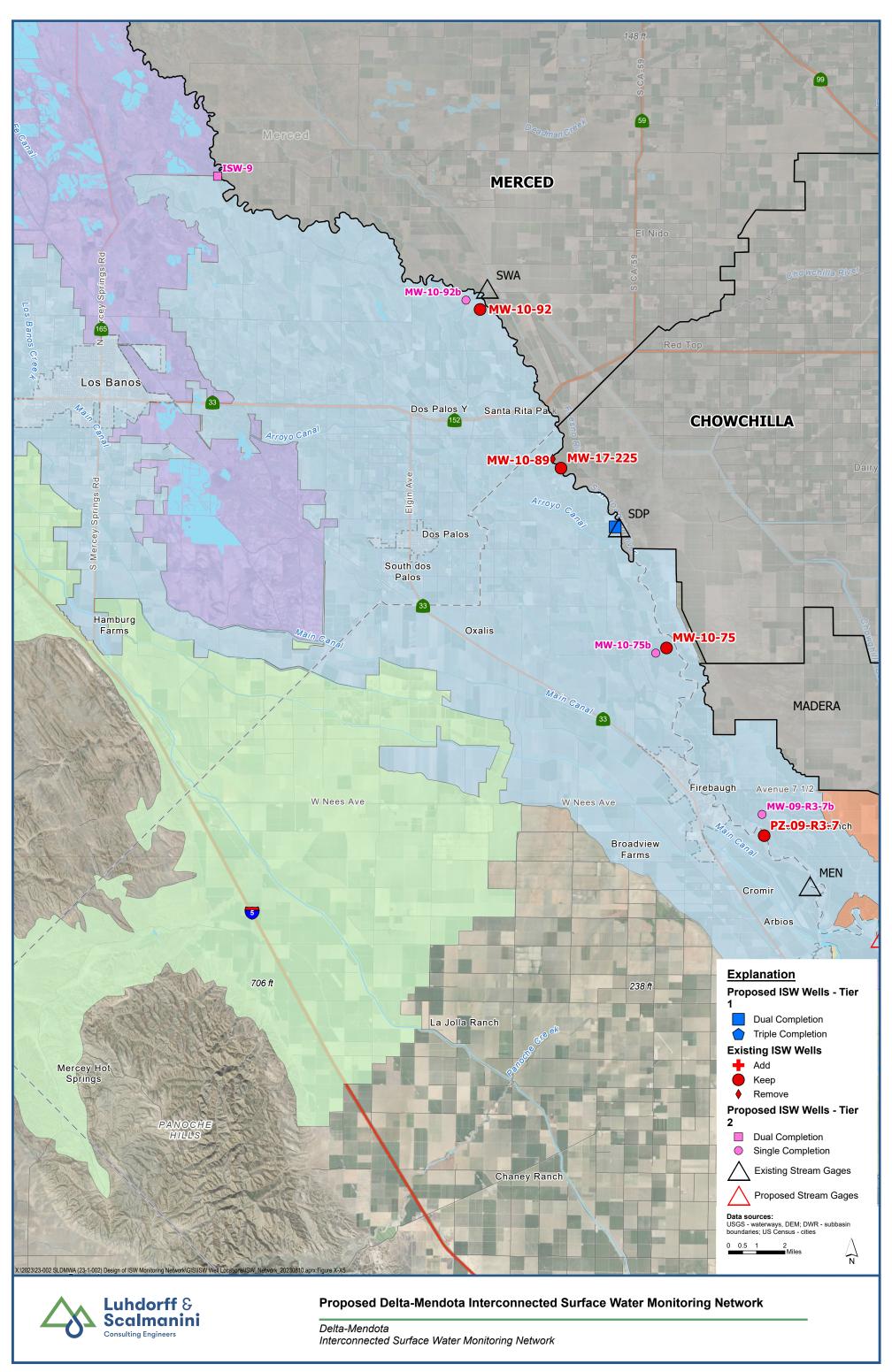
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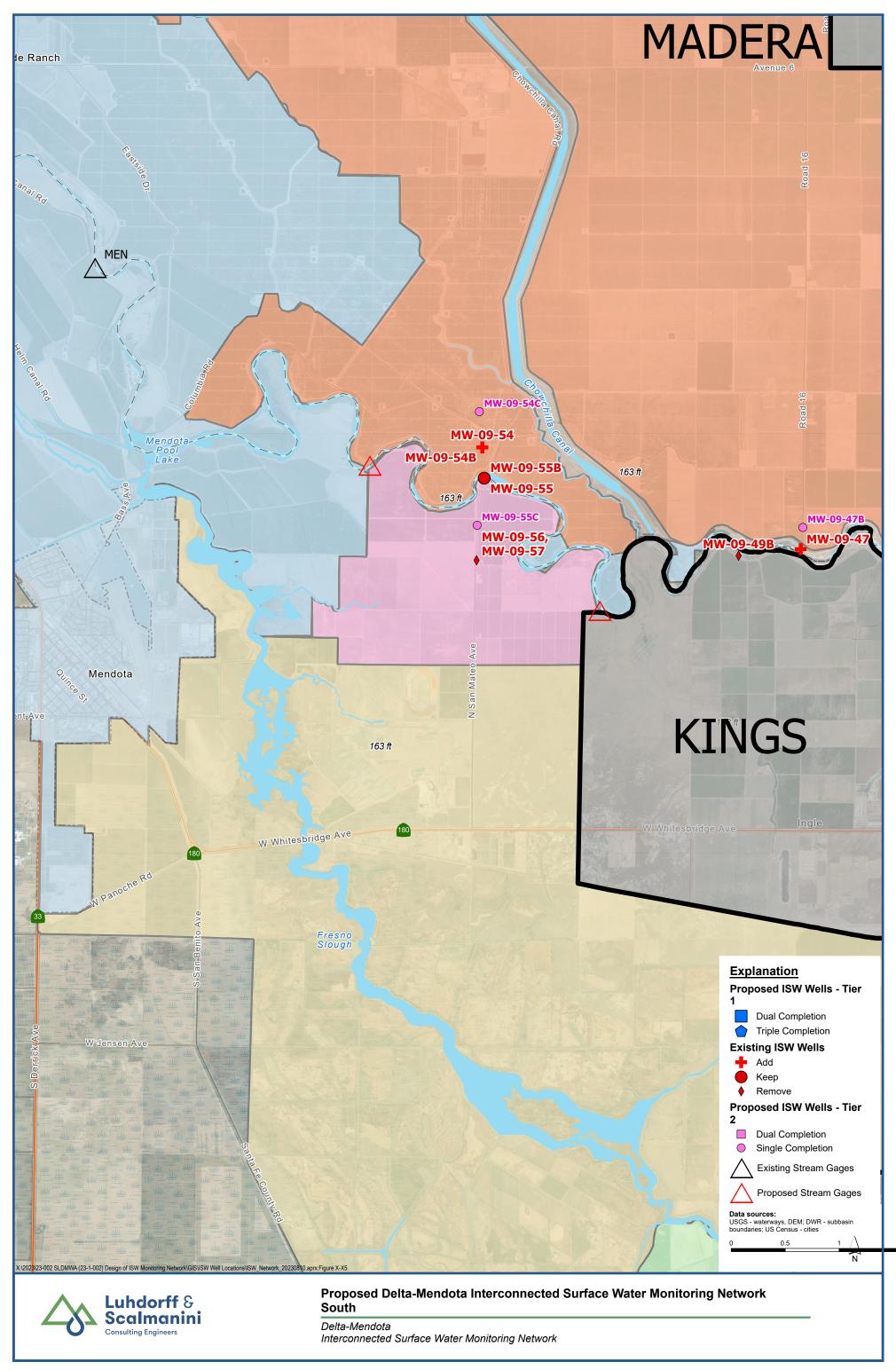
Delta-Mendota Interconnected Surface Water Monitoring Network

	Well Name	x (NAD83)	y (NAD83)	Well Type	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	GSP Group	GSA	County	Well Status	Comment
	MW-09-49B	-120.2702	36.7712	Single Completion	10	20	n/a	n/a	Fresno	Remove from Network	In Kings Subbasin
	PZ-09-R3-7	-120.4076	36.8352	Single Completion	17	20	SJREC	SJREC	Madera	Existing	
	MW-10-75	-120.4707	36.9313	Single Completion	13.7	28.7	SJREC	SJREC	Fresno	Existing	
	MW-17-225	-120.539028	37.023313	Single Completion			SJREC	SJREC	Fresno	Existing	Construction info missing
<u>s</u>	MW-10-89	-120.5444	37.028	Single Completion	10	25	n/a	n/a	Madera	Remove from Network	In Chowchilla Subbasin
Wells	MW-10-92	-120.5916	37.1045	Single Completion			SJREC	SJREC	Merced	Existing	Construction info missing
	MW-09-55B	-120.3128	36.7815	Single Completion	10	15	FWD	FWD	Fresno	Existing	
Existing	MW-09-56	-120.3143	36.7759	Single Completion	22	42	FWD	FWD	Fresno	Remove from Network	
EX	MW-09-57	-120.3143	36.7692	Single Completion	31.5	51.5	FWD	FWD	Fresno	Remove from Network	
	MW-09-55	-120.3128	36.7815	Single Completion	40	50	FWD	FWD	Fresno	Existing	
	MW-09-54	-120.3123	36.7826	Single Completion	36.2	51.2	Aliso	Aliso	Madera	Add to Network	
	MW-09-47	-120.2598	36.7721	Single Completion	20	40	Aliso	Aliso	Madera	Add to Network	
	MW-09-54B	-120.3123	36.7826	Single Completion	9.2	29.2	Aliso	Aliso	Madera	Add to Network	
	ISW-1-50	-121.229945	37.641476	Dual Completion	40	50	North-Central	Northwestern Delta-Mendota GSA	Stanislaus	Tier 1	Grant Funds
	ISW-1-150	-121.229945	37.641476	Dual Completion	140	150	North-Central	Northwestern Delta-Mendota GSA	Stanislaus	Tier 1	Grant Funds
er 1	ISW-2-50	-121.083212	37.497264		40	50	North-Central	PID GSA	Stanislaus	Tier 1	Grant Funds
iĔ	ISW-2-150	-121.083212	37.497264	Triple Completion	140	150	North-Central	PID GSA	Stanislaus	Tier 1	Grant Funds
ells ·	ISW-2-360	-121.083212	37.497264		350	360	North-Central	PID GSA	Stanislaus	Tier 1	Additional Costs covered by PID
We	ISW-3-50	-120.977476	37.346569	Dual Completion	40	50	North-Central	Northwestern Delta-Mendota GSA	Stanislaus	Tier 1	Grant Funds
eq	ISW-3-150	-120.977476	37.346569	Dual Completion	140	150	North-Central	Northwestern Delta-Mendota GSA	Stanislaus	Tier 1	Grant Funds
soc	ISW-4-50	-120.849662	37.294258	Dual Completion	40	50	Grasslands	County of Merced GSA	Merced	Tier 1	Grant Funds
rop	ISW-4-150	-120.849662	37.294258	Dual Completion	140	150	Grasslands	County of Merced GSA	Merced	Tier 1	Grant Funds
	ISW-5-50	-120.504004	36.9933	Dual Completion	40	50	SJREC	SJREC	Fresno	Tier 1	Grant Funds
	ISW-5-150	-120.504004	36.9933	Dual Completion	140	150	SJREC	SJREC	Fresno	Tier 1	Grant Funds
	ISW-6-50	-121.185005	37.600936	Dual Completion	40	50	North-Central	Northwestern Delta-Mendota GSA	Stanislaus	Tier 2	Recommended MW location
	ISW-6-150	-121.185005	37.600936	Dual Completion	140	150	North-Central	Northwestern Delta-Mendota GSA	Stanislaus	Tier 2	Recommended MW location
	ISW-7-50	-121.137153	37.549454	Dual Completion	40	50	North-Central	Northwestern Delta-Mendota GSA	Stanislaus	Tier 2	Recommended MW location
r 2	ISW-7-150	-121.137153	37.549454	Dual Completion	140	150	North-Central	Northwestern Delta-Mendota GSA	Stanislaus	Tier 2	Recommended MW location
Lie	ISW-8-50	-121.015007	37.429373	Dual Completion	40	50	North-Central	Northwestern Delta-Mendota GSA	Stanislaus	Tier 2	Recommended MW location
S - S	ISW-8-150	-121.015007	37.429373	Dual Completion	140	150	North-Central	Northwestern Delta-Mendota GSA	Stanislaus	Tier 2	Recommended MW location
Wells	ISW-9-50	-120.760956	37.171904	Dual Completion	40	50	North-Central	County of Merced GSA	Merced	Tier 2	Recommended MW location
> p	ISW-9-150	-120.760956	37.171904	Dual completion	140	150	North-Central	County of Merced GSA	Merced	Tier 2	Recommended MW location
ose	MW-10-75b	-120.47081	36.931238	Single Completion	140	150	SJREC	SJREC	Fresno	Tier 2	Recommended MW location
do.	MW10-92b	-120.600693	37.109228	Single Completion	140	150	SJREC	SJREC	Merced	Tier 2	Recommended MW location
Pr	MW-09-54c	-120.31182	36.782474	Single Completion	140	150	Aliso	Aliso	Madera	Tier 2	Recommended MW location
	MW-09-55c	-120.312807	36.78114	Single Completion	140	150	FWD	FWD	Fresno	Tier 2	Recommended MW location
	MW-09-47B	-120.260069	36.772458	Single Completion	140	150	Aliso	Aliso	Madera	Tier 2	Recommended MW location
	MW-09-R3-7b	-120.407671	36.835293	Single Completion	140	150	SJREC	SJREC	Madera	Tier 2	Recommended MW location

Proposed well Construction







AUTHORIZATION FOR THE DELTA-MENDOTA INTERCONNECTED SURFACE WATER REPRESENTATIVE MONITORING PROGRAM TO PROCEED WITH WELL-DRILLING ACTIVITIES AND MONTHLY GROUNDWATER MONITORING EVENTS

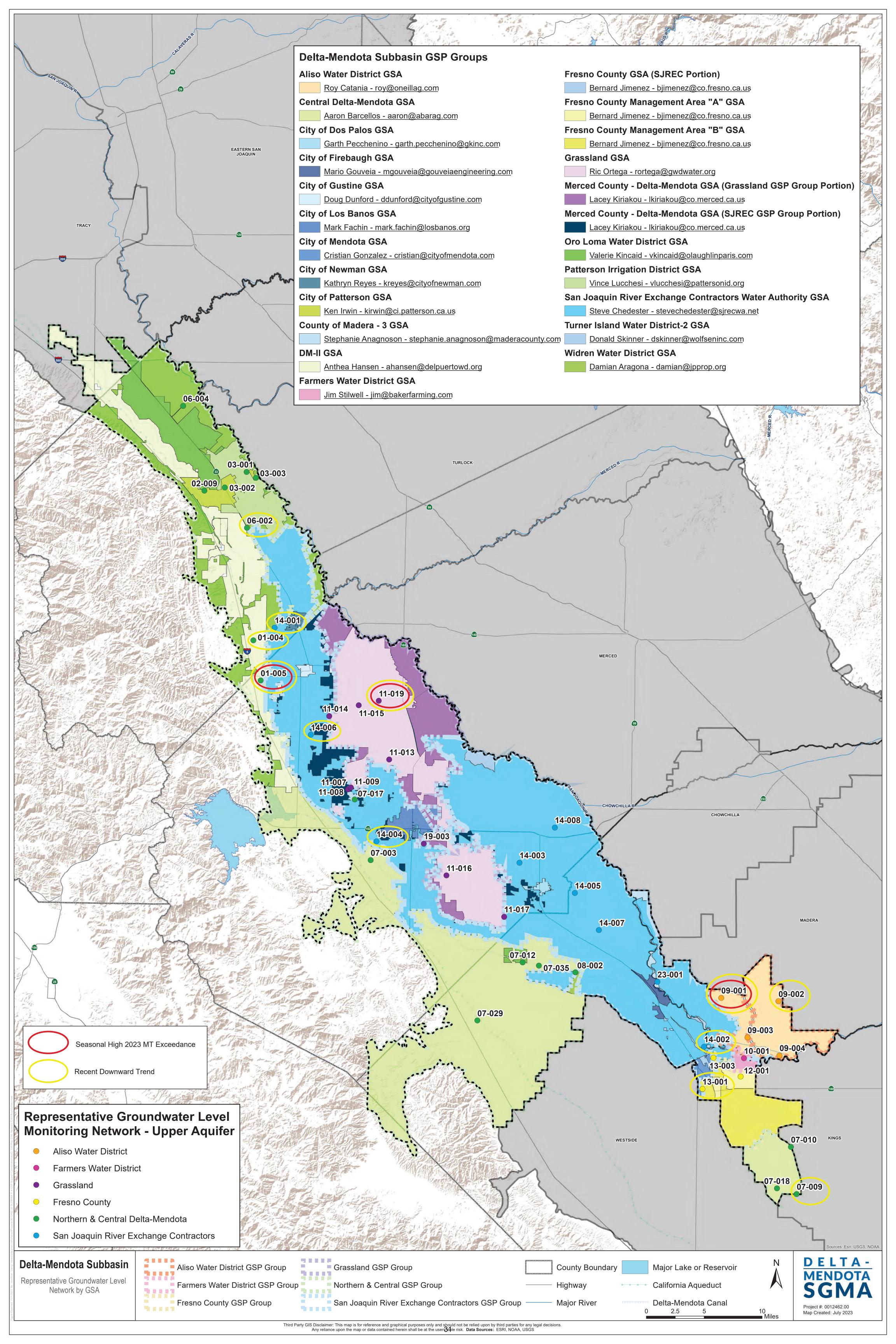
I,		, am the owner, or	r the owner's authorized designee,
of cer	tain real property situated in the cou	inty of	, California. The
	rty is described in the attached Exhi		
subter the pr Coord	gning this authorization, I agree to the tranean structures, hazards, or other coperty lines of the project, and that dination Committee and its representer connected surface water monitoric	adverse conditions h based on this informatatives and agents ha	have been properly identified within ation, the Delta-Mendota
and it	gning this authorization, I am also as as representatives and agents to proceed adwater monitoring wells, and at mo	eed forward with wel	ll installation activities for the
	[print name of entity]		
Ву: _	[signature]	Dated:	
_	[print name and title of signatory]	<u> </u>	

Delta-Mendota Subbasin Spring Groundwater Level MT Exceedances

DMS Site ID	Aquifer Designation	GSP Group	GSA/Member Agency	WY2023 Spring MT Exceedance	Recent Downward Trend	Notes
						Questionable measurement; Below MT in
09-001	Upper	Aliso Water District GSP	Aliso Water District	X	X	Feb. '22, b/w MT and MO in Oct. '22,
						below MT again in Feb. '23
09-002	Upper (Composite)	Aliso Water District GSP	Aliso Water District		Х	B/w MT and MO in Feb. '23
09-003	Upper	Aliso Water District GSP	Aliso Water District			Above MO in Feb. '23
09-004	Upper	Aliso Water District GSP	Aliso Water District			Above MO in Feb. '23
10-001	Upper	Farmers Water District GSP	Farmers Water District			Above MO in Jan. '23
12-001	Upper	Fresno County GSP	Fresno County Management Area A			No seasonal high '23 measurement reported
13-001	Upper	Fresno County GSP	Fresno County Management Area B		Х	Above MO in Jan. '23
13-003	Upper	Fresno County GSP	Fresno County Management Area B			B/w MT and MO in Jan. '23
13-004	Lower	Fresno County GSP	Fresno County Management Area B		Х	B/w MT and MO in Apr. '23
11-005	Lower	Grassland GSP	Grassland		Х	N/A - no numeric SMC set until 5 years of data collection
11-006	Lower	Grassland GSP	Grassland		Х	No numeric SMC
11-010	Lower	Grassland GSP	Grassland		^	No numeric SMC
11-013	Upper	Grassland GSP	Grassland			Above MO
11-017	Upper	Grassland GSP	Grassland			Above MO
11-019	Lower	Grassland GSP	Grassland	X		Above inc
11-022	Lower	Grassland GSP	Grassland			No numeric SMC
19-003	Upper	Grassland GSP	Merced County			No numeric sivie
01-001	Lower	Northern & Central Delta-Mendota Region GSP	DM-II			Above MO since Nov. '22
01-002	Lower	Northern & Central Delta-Mendota Region GSP	DM-II			Above MO since Oct. '18
01-003	Lower	Northern & Central Delta-Mendota Region GSP	DM-II		Х	Above MO since Jan. '23
						B/w MT and MO since Dec. '22 following
01-004	Upper	Northern & Central Delta-Mendota Region GSP	DM-II		X	exceedance b/c Jul. and Nov. '22
						MT exceedances in Feb. and Mar. '23; B/w
						MT and MO since Apr. '23, frequent
01-005	Upper	Northern & Central Delta-Mendota Region GSP	DM-II	X	X	exceedances of MTs since 2016 (lots of
						fluctuation around MT)
						Measured bi-annually; Downward trend
01-006	Lower	Northern & Central Delta-Mendota Region GSP	DM-II			until Oct. '22, trend reversed with Mar. '23
						measurement
01-007	Lower	Northern & Central Delta-Mendota Region GSP	DM-II			B/w MT and MO since Jan. '23 after
01-007	Lower	Northern & Central Delta-Mendota Region GSF	DIVI-II			exceedances b/w May and Nov. '22
01-008	Lower	Northern & Central Delta-Mendota Region GSP	DM-II		Х	Above MO in Mar. '23, trending downward
01-008	Lowel	Northern & Central Delta-Mendota Region GSF			^	again
02-002	Lower	Northern & Central Delta-Mendota Region GSP	City of Patterson			B/w MT and MO since Jun. '20
02-009	Upper	Northern & Central Delta-Mendota Region GSP	City of Patterson			Above MO in Feb. '23
03-001	Upper	Northern & Central Delta-Mendota Region GSP	Patterson Irrigation District			B/w MT and MO since Apr. '19
03-002	Upper	Northern & Central Delta-Mendota Region GSP	Patterson Irrigation District			B/w MT and MO since Oct. '14
03-003	Upper	Northern & Central Delta-Mendota Region GSP	Patterson Irrigation District			N/A - no numeric SMC set until 5 years of
	оррег					data collection
04-001	Lower	Northern & Central Delta-Mendota Region GSP	West Stanislaus Irrigation District			Above MO since Nov. '22
						B/w MO and MT since Aug. '22; Well very
06-001	Lower	Northern & Central Delta-Mendota Region GSP	Northwestern Delta-Mendota		Х	sensitive to pumping (based on seasonal
					,	downward trend and subsequent rebound
						after irrigation season)
06-002	Upper	Northern & Central Delta-Mendota Region GSP	Northwestern Delta-Mendota		X	Above MT since Sep. '22

Delta-Mendota Subbasin Spring Groundwater Level MT Exceedances

DMS Site ID	Aquifer Designation	GSP Group	GSA/Member Agency	WY2023 Spring MT Exceedance	Recent Downward Trend	Notes
06-003	Lower	Northern & Central Delta-Mendota Region GSP	West Stanislaus Irrigation District			Above MO since Nov. '22, following MT
00-003	Lower	Northern & Central Delta-Mendota Region GSF	West Stanislaus Irrigation District			exceedance in Sep. '22
06-004	Upper	Northern & Central Delta-Mendota Region GSP	West Stanislaus Irrigation District			Above MO since Dec. '22
07-002	Lower	Northern & Central Delta-Mendota Region GSP	San Luis Water District			Above MO since Mar. '23
07-003	Upper	Northern & Central Delta-Mendota Region GSP	San Luis Water District			Above MO since Mar. '23
07-005	Lower	Northern & Central Delta-Mendota Region GSP	Pacheco Water District		X	Above MO in Feb. through Apr. '23; B/w
	Lower	Northern & central belta-wendota Region GSI	racifeco water bistrict		^	MO and MT in May '23
07-007	Lower	Northern & Central Delta-Mendota Region GSP	Panoche Water District			Above MO since Dec. '22
07-008	Lower	Northern & Central Delta-Mendota Region GSP	Panoche Water District			N/A - well hasn't been monitored since
	Lower	Northern & central berta Menasta Region Gol	Tanoene Water District			2021; In process of replacing in network
						Measured bi-annually; B/w MT and MO in
07-009	Upper	Northern & Central Delta-Mendota Region GSP	Tranquillity Irrigation District		X	Apr. '23 following MT exceedance in Oct.
						'22
07-010	Upper	Northern & Central Delta-Mendota Region GSP	Tranquillity Irrigation District			Above MO in Apr. '23
07-012	Upper	Northern & Central Delta-Mendota Region GSP	Panoche Water District			N/A - no numeric SMC set until 5 years of
		, and the second				data collection
					.,	Measured bi-annually; B/w MT and MO in
07-014	Lower	Northern & Central Delta-Mendota Region GSP	Tranquillity Irrigation District		X	Apr. '23 following MT exceedance in Oct.
						'22
07-015	Lower	Northern & Central Delta-Mendota Region GSP	Tranquillity Irrigation District		X	Above MO in Apr. '23
07-016	Lower	Northern & Central Delta-Mendota Region GSP	Volta Community Services District		X	Above MO since mid Apr. '23
07-017	Upper	Northern & Central Delta-Mendota Region GSP	Santa Nella County Water District			N/A - no numeric SMC set until 5 years of
		<u> </u>	<u>'</u>			data collection
07-018	Upper	Northern & Central Delta-Mendota Region GSP	Tranquillity Irrigation District			N/A - no numeric SMC set until 5 years of
						data collection
07-028	Lower	Northern & Central Delta-Mendota Region GSP	Eagle Field Water District		X	B/w MT and MO in Apr. '23; MT
						exceedances b/w May and Nov. '22
07-031	Lower	Northern & Central Delta-Mendota Region GSP	San Luis Water District			N/A - no numeric SMC set until 5 years of
		+			+	data collection
07-032	Lower	Northern & Central Delta-Mendota Region GSP	San Luis Water District			N/A - no numeric SMC set until 5 years of data collection
07-035	Unnor	Northern & Central Delta-Mendota Region GSP	Panoche Water District			B/w MT and MO since Dec. '16
08-002	Upper	Northern & Central Delta-Mendota Region GSP	Widren Water District			·
14-001	Upper	San Joaquin River Exchange Contractors GSP	San Joaquin River Exchange Contractors		Х	Above MO since Nov. '22 Above MO
14-001	Upper	·	San Joaquin River Exchange Contractors San Joaquin River Exchange Contractors			
14-002 14-003	Upper	San Joaquin River Exchange Contractors GSP San Joaquin River Exchange Contractors GSP	San Joaquin River Exchange Contractors San Joaquin River Exchange Contractors		X	Above MO Above MO
14-003 14-004	Upper	San Joaquin River Exchange Contractors GSP San Joaquin River Exchange Contractors GSP			X	Above MO
14-004 14-005	Upper	San Joaquin River Exchange Contractors GSP San Joaquin River Exchange Contractors GSP	San Joaquin River Exchange Contractors San Joaquin River Exchange Contractors		^	Above MO
14-005 14-006	Upper	San Joaquin River Exchange Contractors GSP San Joaquin River Exchange Contractors GSP	San Joaquin River Exchange Contractors San Joaquin River Exchange Contractors		· ·	Above MO
14-00 6 14-007	Upper	San Joaquin River Exchange Contractors GSP San Joaquin River Exchange Contractors GSP	San Joaquin River Exchange Contractors San Joaquin River Exchange Contractors		X	Above MO
14-007	Upper	San Joaquin River Exchange Contractors GSP San Joaquin River Exchange Contractors GSP	San Joaquin River Exchange Contractors San Joaquin River Exchange Contractors		+	Above MO
14-008 14-019	Upper	San Joaquin River Exchange Contractors GSP San Joaquin River Exchange Contractors GSP	·		+	B/w MT and MO
	Lower		San Joaquin River Exchange Contractors		+	
14-020	Lower	San Joaquin River Exchange Contractors GSP	San Joaquin River Exchange Contractors		+	B/w MT and MO
14-021	Lower	San Joaquin River Exchange Contractors GSP	San Joaquin River Exchange Contractors			At MO
23-001	Upper	San Joaquin River Exchange Contractors GSP	Fresno County	1	1	Measurement discontinued as of Apr. '23



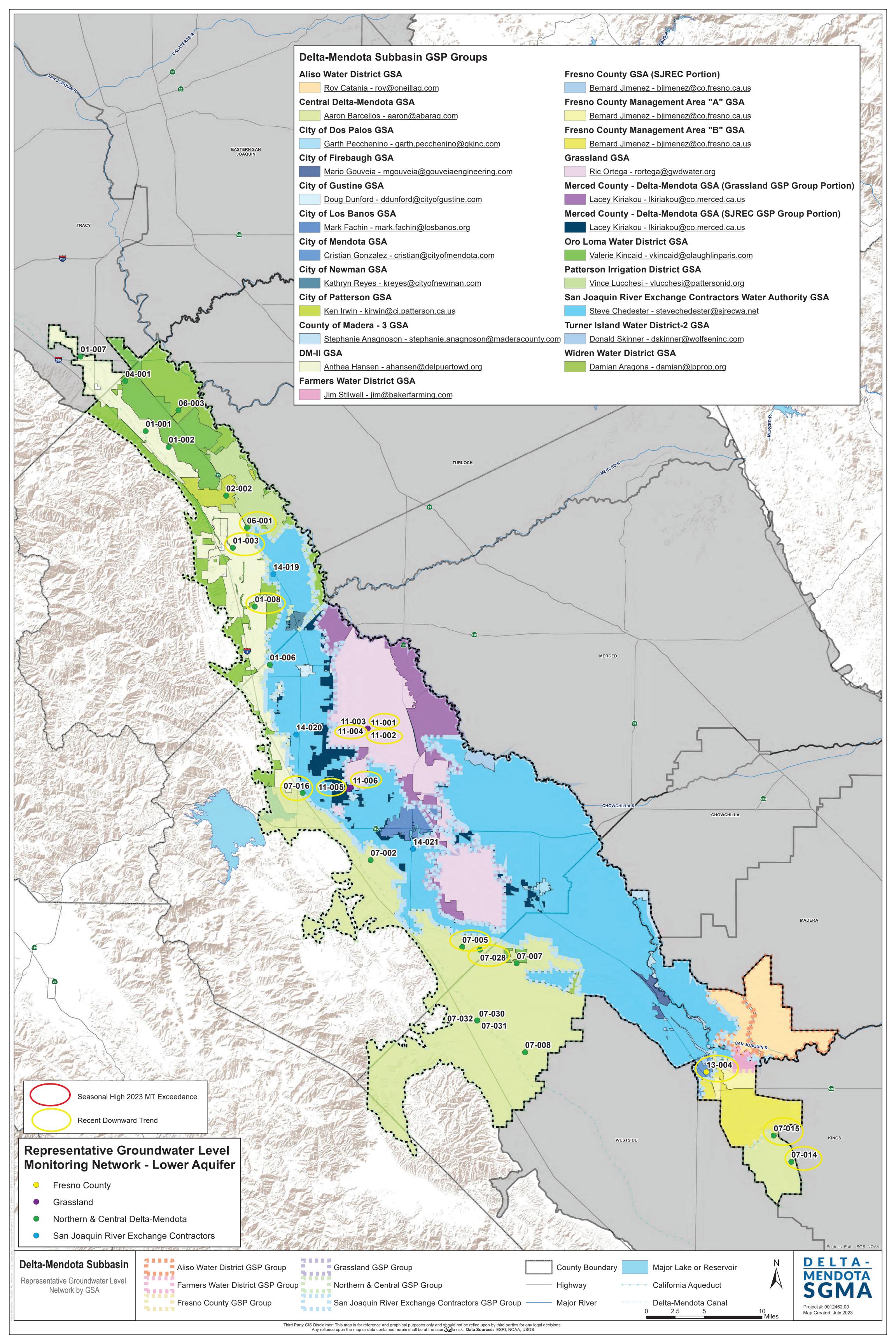




Table 1: Northern & Central Delta-Mendota GSP Implementation Commitments - in Text of Groundwater Sustainability Plan

				1			
Task	Activity	Related	GSP Deadline	GSP Reference ^(a)	Status as Reported in WY2022 Annual Report	Comments	Status of Activities ^(b)
1	Update/refine monitoring network as new wells are constructed	and well co	nstruction	information is obtained			
	Well Census and Inventory project		2025		Completed in February 2022	Reconciliation of Well Census and Inventory information with update to SGMA monitoring network remains to be done.	Additional changes to NCDM representative monitoring network (RMN) will be necessary because additional wells were removed from the RMN.
1b	Video log 14 wells that are missing well construction information		2025	NCDM GSP Section 7.2.5.1.6	N/A	Identified as an optional task in Well Census and Inventory project scope but not performed.	
1c	Determine if video-logged wells are appropriate to add to the [SGMA] monitoring network	1a	2025	CC Section 4.2.8; NCDM GSP Sections 5.3.8 and 7.2.5.1.6	N/A		
2	Establish ISW SMC as a rate or volume of surface water depletion	S					
2a	Install five additional ICSW monitoring wells adjacent to the San Joaquin River		2025	CC Section 4.2.8; NCDM GSP Section 5.3.8	N/A	\$929,400 awarded to Subbasin in SGMA Round 1 Implementation Grant for data gap filling efforts, including installation of at least one (1) and up to four (4) ICSW monitoring wells in the NCDM region.	SGMA Round 1 Funding Agreement executed with DWR on 10/7/22. ISW network design in progress. Funding for additional ISW wells in NCDM was included in SGMA Round 2 Grant Application (not sucessful).
2b	Collect and analyze data from ICSW monitoring wells	2a	2030	CC Section 4.2.8; NCDM GSP Section 5.3.8	N/A	Limited data collection and analysis to date.	
3	GDE mapping						
За	Analyze locations of potential GDEs using recent groundwater elevation/depth contour mapping		2025	CC Section 4.2.8; NCDM GSP Section 5.3.8	N/A	Limited/no data collection and analysis to date.	
4	Re-evaluate land subsidence SMC considering new data and studi	ies					
4a	Collect and analyze subsidence data from 2020-2025 and identify where there are spatial data gaps		2025	CC Section 4.2.8	Ongoing, data collected WY2020 and 2021	Completed Conceptual Master Plan for Subsidence Monitoring and Management for the Delta-Mendota Subbasin in June 2022. Some GSAs (PID, WSID) have been collecting local data.	Two NCDM GSAs performed subsidence monitoring at end of 2022. DWR performed survey along Aqueduct and CVP in Feb. 2023.USBR survey planned for Dec. 2023.
4b	Work with USBR to revise CVHM2 model to simulate interactions between groundwater extractions and land subsidence		2025	CC Section 5.4.4	N/A	Intermittent coordination meetings have occurred between SLDMWA, GSAs, and USBR.	Reviewed groundwater model with USBR & USGS in December 2022 and March 2023. Model likely not available for formal release until later in 2023. With input from Subbasin GSAs, EKI currently using the model to evaluate Subbasin water budget.
4c	Determine portion of subsidence caused by groundwater extraction within and outside the Subbasin at each RMS	4a, 4b	2025	NCDM GSP Section 6.3.5.3	N/A	\$929,400 awarded to Subbasin in SGMA Round 1 Implementation Grant for portion of data gap filling efforts, including subsidence monitoring.	SGMA Round 1 Funding Agreement executed with DWR on 10/7/22. Consultant RFP for subsidence monitoring in progress.
4d	Review and revise HCM to incorporate new subsidence data, including AEM survey and results from the subsidence study	4a, 4c	2025	CC Section 5.4.4; NCDM GSP Section 6.3.5.3	N/A	Limited/no analysis to date.	Review of recent subsidence data in progress through revision of SMCs in reponse to DWR Inadequate Determination.
4e	Assess allowable land subsidence on a Subbasin and localized basis	4a, 4c, 4d	2025	CC Section 5.4.4; NCDM GSP Section 6.3.5.3	N/A	Limited/no analysis to date.	Review of recent subsidence data in progress through revision of SMCs in reponse to DWR Inadequate Determination.
-	Conduct an updated subsidence DMC Conveyance Capacity Analysis		2025	NCDM GSP Section 5.3.8	N/A	SLDMWA led effort. SLDMWA noted that work has been done to create a model in HEC-RAS and an EIR for Subsidence Correction Project is expected to be complete mid-2023.	



Table 1: Northern & Central Delta-Mendota GSP Implementation Commitments - in Text of Groundwater Sustainability Plan

Task	Activity	Related	GSP Deadline	GSP Reference ^(a)	Status as Reported in WY2022 Annual Report	Comments	Status of Activities ^(b)
5	Refine/update water budget and sustainable yield estimates						
	Establish additional CIMIS and/or other weather stations to define spatial variability of precipitation and evapotranspiration		2025	NCDM GSP Section 5.3.8	N/A	Limited/no analysis to date.	
	Reconciliation of water budget nomenclature in individual GSPs with terminology used in the Common Chapter		2025	CC Section 4.3.1	N/A	Limited/no analysis to date.	Improvements to Subbasin water budgets in progress through Response to DWR Inadequate Determination.
	Improve estimated allocation of groundwater extraction between two aquifers (based on well construction information and inventory projects completed by GSAs in 2022)	1a, 1b	2025	CC Section 4.3.1	N/A	Limited/no analysis to date. Reconciliation of Well Census and Inventory information with update to pumping estimates remains to be done. Some GSAs have initiated efforts to register wells and require metering/water use reporting, but incomplete records to date.	
5d	Improve storage estimates of each aquifer using data collected from 2020-2025		2025	CC Section 4.3.1	N/A	Limited/no analysis to date.	Improvements to storage estimates in each aquifer in progress using model in Response to DWR Inadequate Determination.
6	Update Sustainable Management Criteria						
	Develop short-term (acute) thresholds for Chronic Lowering of Groundwater Levels		2025	CC Section 5.4.1; NCDM GSP Section 6.3.1.2	N/A	Limited/no analysis to date.	Revision of Subbasin SMCs in progress through Response to DWR Inadequate Determination.

Abbreviations:

AEM	= Airborne Electromagnetic	N/A	= Not Applicable
CC	= Common Chapter	NCDM	= Northern & Central Delta-Mendota
CIMIS	= California Irrigation Management Information System	PID	= Patterson Irrigation District
CVHM2	= Central Valley Hydrologic Model, Version 2	RMS	= Representative Monitoring Site
DMC	= Delta-Mendota Canal	SGM	= Sustainable Groundwater Management
EIR	= Environmental Impact Report	SGMA	= Sustainable Groundwater Management Act
GDE	= Groundwater Dependent Ecosystem	SLDMWA	= San Luis and Delta-Mendota Water Authority
GSA	= Groundwater Sustainability Agency	SMC	= Sustainable Management Criteria
GSP	= Groundwater Sustainability Plan	USBR	= United States Bureau of Reclamation
HCM	= Hydraulic Conceptual Model	WSID	= West Stanislaus Irrigation District
ICSW	= Interconnected Surface Water	WY	= Water Year

Notes:

- (a) Commitments identified in this table were made in either the 2022 Amended NCDM GSP or the Common Chapter for the Delta-Mendota Subbasin GSPs.
- (b) Based upon information communicated by GSAs.
- (c) A yellow highlighted row indicates that the activity was not included in the 2020 GSP submittal and was added during the 2022 GSP revision process.



Table 2: Northern & Central Delta-Mendota GSP Implementation Commitments - Projects

Tier ^(a)	Project ^(b)	Project Proponent	Implementation Start Date	Estimated Cost	Status as Reported in WY2022 Annual Report ^(c)	Comments ^(d)	Status of Activities ^(e)
1	Los Banos Creek Recharge and Recovery Project	San Luis Water District	February 2020	\$9,116,374	Preliminary design completed in 2018; additional steps pending funding for CEQA, design, and construction.		SGMA Round 1 Funding Agreement executed with DWR on 10/7/22. Permitting and design in progress.
1	Orestimba Creek Recharge and Recovery Project	Del Puerto Water District	February 2020	\$7,923,450	CEQA/NEPA complete; design anticipated complete in early 2023; construction anticipated to begin in early 2023.		Design is complete. Construction anticipated complete in winter 2023.
1	North Valley Regional Recycled Water Program (NVRRWP) – Modesto and Early Turlock Years	Del Puerto Water District	February 2020	\$96,000,000	Completed Turlock and Modesto components in March 2020; Ceres component in progress, funding requested through SGMA Round 1 Implementation Grant; anticipated completion in 2023.	Portions of project are completed. \$250,150 awarded in SGMA Round 1 Implementation Grant.	SGMA Round 1 Funding Agreement executed with DWR on 10/7/22.
1	City of Patterson Percolation Ponds for Stormwater Capture and Recharge	City of Patterson	February 2020	\$7,800,000	Project still in conceptual and EIR phase (linked to planned development); preliminary design initiated in 2022.		Preliminary design initiated and in progress.
1	Kaljian Drainwater Reuse Project	San Luis Water District	February 2020	\$16,500,000	Preliminary design and CEQA/permitting in progress; design planned in phases from 2023-2025, construction planned in phases to start in 2025.		Preliminary design complete; permitting in progress.
1	West Stanislaus Irrigation District Lateral 4-North Recapture and Recirculation Reservoir	West Stanislaus Irrigation District	February 2020	\$1,120,000	FS completed in Sept 2021; design anticipated to take 8 months with CEQA in parallel. Funding obtained from SGMA Round 1 Grant.	\$250,150 awarded in SGMA Round 1 Implementation Grant.	SGMA Round 1 Funding Agreement executed with DWR on 10/7/22. Construction planned to start in fall 2024.
1	Revision to Tranquillity Irrigation District Lower Aquifer Pumping	Tranquillity Irrigation District	February 2020	\$0	Well Water Operations Plan established in 2017 and implemented on an annual basis.		
2	Del Puerto Canyon Reservoir Project	Del Puerto Water District	January 2026	\$491,300,000	CEQA completed in October 2021; NEPA draft released in November 2021; preliminary design completed in 2022; 100% design and permitting anticipated complete in 2024; construction anticipated complete in 2028.		Preliminary design is complete. NEPA anticipated complete in 2024; 100% design and permitting anticipated complete in 2024; construction anticipated complete in 2028.
2	Little Salado Creek Groundwater Recharge and Flood Control Basin	Stanislaus County	January 2026	\$7,710,000	Scheduled for development in subsequent phases of the overall Crow's Landing Industrial Business Park.		·
2	Patterson Irrigation District Groundwater Bank and/or Flood MAR-type Project	Patterson Irrigation District	January 2026	TBD	Consultant retained for FS; acquired small potential property.		Pilot study anticipated in winter 2023.
2	West Stanislaus Irrigation District Lateral 4-South Recapture and Recirculation Reservoir	West Stanislaus Irrigation District	January 2026	\$1,500,000	Preliminary design completed in September 2021.	Partially funded under IRWM grant.	
2	Ortigalita Creek Groundwater Recharge and Recovery Project	San Luis Water District	January 2026	TBD	Funding requested in SGMA Round 2 Grant Application.	Partially funded under IRWM grant.	Expect to complete preliminary design in winter 2023. Funding request was included in SGMA Round 2 Grant Application (not successful).

Abbreviations and Notes provided on page 2



Table 2: Northern & Central Delta-Mendota GSP Implementation Commitments - Projects

Abbreviations:

CEQA = California Environmental Quality Act CLIBP = Crows Landing Industrial Business Park

EIR = Environmental Impact Report

FS = Feasibility Study

IRWM = Integrated Regional Water Management

MAR = Managed Aquifer Recharge

N/A = Not Applicable

NCDM = Northern & Central Delta-Mendota NEPA = National Environmental Policy Act SGM = Sustainable Groundwater Management

TBD = To Be Determined

USBR = United States Bureau of Reclamation

WY = Water Year

Notes:

(a) Projects and Management Actions divided into Tiers (pg 7-1 of Revised GSP):

<u>Tier 1</u> – Near-term projects and management actions that the Groundwater Sustainability Agencies (GSAs) are committed to implementing at this time. These projects and management actions are either currently in the process of being implemented or could be implemented in the near future (constructed and operational) within the next five years (by 2025).

Tier 2 – Projects and management actions that have been identified and require further development before implementation can occur. It is anticipated that these projects and management actions could be developed over the next five years and implemented beginning in 2026 or later, pending re-evaluation prior to the 5-year GSP Update in 2025.

Tier 3 – Longer-term projects and management actions that may be implemented in the future as needed. Many of these projects are outside of the GSAs' control but could have implications on surface water availability and/or are additional projects/management actions that could be implemented under an adaptive management approach For purposes of this analysis, did not include the Tier 3 projects listed in the GSP (because implementation of the identified projects is driven by others).

- (b) Project information obtained from Section 7 of the 2022 amended NCDM GSP.
- (c) Consolidated WY 2022 Annual Report dated March 2023.
- (d) Per SGMA Budget Spending Plan circulated by John Brodie on 12 August 2022, NCDM was awarded a total of \$1,500,300 from SGMA Round 1 grant to Subbasin.
- (e) Based upon information communicated by GSAs and other updates.



Table 3: Northern & Central Delta-Mendota GSP Implementation Commitments - Management Actions

Tier ^(a)	Responsible GSAs	Status of Activities ^(d)	Status as Reported in WY2022 Annual Report ^(c)	Notes
1	Lower Aquifer Pumping Rules for Minimizing	z Subsidence		
	Central Delta-Mendota GSA	Adopted Administrative Policy No. 2 regarding well metering and reporting in January 2023.	Several GSAs have adopted ordinances requiring	GSA efforts to require metering and reporting of pumping are
	City of Patterson GSA		registration of wells and/or reporting of	continuing. This pumping data, coupled with the Well Census
	DM-II GSA	Collecting data, and require signed agreement with owner of new wells that pumping will occur only per GSP	pumping. The Central GSA has developed and	and Inventory Report, could be used to better understand the
		rules. Policy adopted in 2022 which requires registration of wells, and metering starting in 2023.	approved an Administrative Policy for	location and distribution of pumping.
	Northwestern Delta Mendota GSA	Stanislaus & Merced County permits for new extraction wells require metering and reporting.	metering/reporting. A few GSAs do not extract	
	Oro Loma Water District GSA		from Lower Aquifer.	
	Patterson Irrigation District GSA	Adopted ordinance requiring the registration of wells and reporting of pumping. Working on implementation.		
	West Stanislaus Irrigation District GSA	Financial incentive for grower initial use (2 AF/ac) of surface water.		
	Widren Water District GSA	Two operational WWD Upper Aquifer (no Lower Aquifer) supply wells are equipped with meters.		
1	Maximize Use of Other Water Supplies			
	Central Delta-Mendota GSA	SNCWD: Signed partial agreement with USBR for CVP supply; additional USBR contracting planned.	No formal policies implemented.	
		Pacheco WD developing contract for surface water supplies to reduce Lower Aquifer pumping.		
	City of Patterson GSA	Evaluating stormwater recharge project (tied to development).		
	DM-II GSA	Adopted a policy requiring purchase of 75% of CVP allocation. Exceptions allowed only if groundwater use will not be increased.		
	Northwestern Delta Mendota GSA			
	Oro Loma Water District GSA			
	Patterson Irrigation District GSA	Surface water is preferred by local growers.		
	West Stanislaus Irrigation District GSA	Financial incentive for grower initial use (2 AF/ac) of surface water. Discharge of groundwater into WSID is		
		prohibited unless WSID is short of water.		
	Widren Water District GSA			
1	Increasing GSA Access to and Input on Well I			
	Central Delta-Mendota GSA	Merced updated its well permitting process.	GSAs have coordinated on increasing GSA	Governor's Executive Order N-7-22 regarding well permitting
	City of Patterson GSA		participation in well permitting process. Merced	provides some clarity and authority.
	DM-II GSA	District staff review submitted well applications for potential impacts.	County and Stanislaus County have updated	
	Northwestern Delta Mendota GSA	Merced updated its well permitting process. Stanislaus well permitting process being updated.	their well permitting process and requirements.	
	Oro Loma Water District GSA			
	Patterson Irrigation District GSA			
	West Stanislaus Irrigation District GSA	Adopted ordinance requiring the registration of wells and reporting of pumping.	_	
	Widren Water District GSA			
1	Drought Contingency Planning in Urban Area		To the transport	
	City of Patterson GSA	Conducted contingency planning described in adopted 2020 UWMP.	Conducted as part of UWMP.	
1	Fill Data Gaps	Tada dad Ada Salada Salada Salada Na 2 a caraba a all materia and a caraba Salada Na 2002	To refer the second of the Audi 2022 to Cili	
	Central Delta-Mendota GSA	Adopted Administrative Policy No. 2 regarding well metering and reporting in January 2023.	Funding was awarded in April 2022 to fill	See "Implementation Activities" tab for specific data-gap filling
	City of Patterson GSA	Conducted subsidence monitoring and added well to monitoring network. Improving well metering.	data gaps in interconnected surface water	efforts.
	DM-II GSA	DPWD serving as grantee for SGMA Round 1 Implementation Grant. Obtained WaterSMART grant to obtain	and subsidence monitoring under the SGMA	Additional ISW wells in NCDM included in SGMA Round 2 Grant
	Northwestern Delta Mendota GSA	remote monitoring equipment for high priority wells.	Round 1 Implementation Grant.	Application (not successful).
	Oro Loma Water District GSA		-	
	Patterson Irrigation District GSA	Improving pumping data collection.		
	West Stanislaus Irrigation District GSA	Improving pamping data conection.	-	
	Widren Water District GSA		-	
	TWILLIEH WATER DISTRICT GSA	1		

Abbreviations and Notes provided on page 2



Table 3: Northern & Central Delta-Mendota GSP Implementation Commitments - Management Actions

Abbreviations:

CDM = Central Delta-Mendota N/A = Not applicable
CVP = Central Valley Project PID = Patterson Irrigation District

DPWD = Del Puerto Water District

EO = Executive Order

GSA = Groundwater Sustainability Agency

GSP = Groundwater Sustainability Plan

SGM = Sustainable Groundwater Management

USBR = United Stated Bureau of Reclamation

UWMP = Urban Water Management Plan

WSID = West Stanislaus Irrigation District

NCDM = Northern & Central Delta-Mendota WY = Water Year

Notes:

(a) Projects and Management Actions divided into Tiers (pg 7-1 of 2022 Amended NCDM GSP):

<u>Tier 1</u> – Near-term projects and management actions that the Groundwater Sustainability Agencies (GSAs) are committed to implementing at this time. These projects and management actions are either currently in the process of being implemented or could be implemented in the near future (constructed and operational) within the next five years (by 2025).

<u>Tier 2</u> – Projects and management actions that have been identified and require further development before implementation can occur. It is anticipated that these projects and management actions could be developed over the next five years and implemented beginning in 2026 or later, pending re-evaluation prior to the 5-year GSP Update in 2025.

<u>Tier 3</u> – Longer-term projects and management actions that may be implemented in the future as needed. Many of these projects are outside of the GSAs' control but could have implications on surface water availability and/or are additional projects/management actions that could be implemented under an adaptive management approach.

- (b) Management Action information obtained from Section 7 of the 2022 Amended NCDM GSP.
- (c) Consolidated WY 2022 Annual Report dated March 2023.
- (d) Based upon information communicated by GSAs.



Table 4: Northern & Central Delta Mendota GSP Implementation - Status of Well Ordinances

Organization	Ordinance Identification	Ordinance Date	Text
Fresno County	Ordinance No. 00-13	September 2000	Section 14.03.090 - Conditions of permit approval. "C. If requested by the county, the permittee shall share with the county groundwater monitoring information and data, and, where practicable, the parties shall coordinate their groundwater management efforts to effectively monitor groundwater resources throughout the county"
Merced County	Ordinance No. 1930 An Ordinance to Prevent the Mining and Export of Groundwater from the Unincorporated Portions of Merced County	March 2015	Section 9.27.065 - Groundwater Monitoring & Reporting "A. Monitoring. All new permits for wells or groundwater exports under the scope of this ordinance shall be measured by a properly installed and maintained water measuring device satisfactory to the Department of Public Health, Division of Environmental Health. As an alternative to water measuring devices, other reasonable methods to determine groundwater extraction may be used if approved by the Department of Public Health, Division of Environmental Health. B. Reporting. All persons, including Public Works Agencies, that extract groundwater within the County shall cause to be prepared and submitted to the Department of Public Health, Division of Environmental Health, annual reports of groundwater information that are necessary to monitor the existing condition of groundwater resources within the CountyThe required information to be reported shall include without limitation water level and pumping data"
Stanislaus County	Ordinance CS 1155, Section 9	2014	Section 9.37.065 - Groundwater Monitoring. "A. All persons, including public water agencies that extract groundwater within the county shall cause to be prepared and submitted to the county department of environmental resources periodic reports of groundwater information that are reasonably necessary to monitor the existing condition of groundwater resources within the county, to determine trends, or to develop effective sustainable groundwater management plans and policies. A de minimis extractor shall not be required to submit such information. B. The department shall develop and recommend regulations to be adopted by the board that establish the frequency and timing of required reports, and the required information to be monitored, including, without limitation, water level and pumping data, or other data necessary for any other method to determine groundwater production."
Patterson Irrigation District	Resolution 05-2020: Patterson Irrigation District Groundwater Sustainability Agency Rule Regarding Irrigation Well Meters	15 April 2020	"The owner of any Groundwater Extraction Facility within the PID GSA must register that Groundwater Extraction Facility with the PID GSA The owner of every Groundwater Extraction Facility within the PID GSA must measure use of that Groundwater Extraction Facility by a water-measuring device (Meter) satisfactory to the PID GSA Meters must be installed on all Groundwater Extraction Facilities by January 1st, 2021."
West Stanislaus Irrigation District	West Stanislaus Irrigation District Groundwater Sustainability Agency Policy Regarding Irrigation Well Meters	2020	"The owner of any Groundwater Extraction Facility within the WSID GSA must register that Groundwater Extraction Facility with the WSID GSA The owner of every Groundwater Extraction Facility within the WSID GSA must measure use of that Groundwater Extraction Facility by a water-measuring device (Meter) satisfactory to the WSID GSA. Meters must be installed on all Groundwater Extraction Facilities by January 1st, 2021. The meter shall measure all flow rate in gallons per minute, or cubic feet per second and totalize total extractions in gallons, cubic feet, or in acre-feet."



Table 4: Northern & Central Delta Mendota GSP Implementation - Status of Well Ordinances

Organization	Ordinance Identification	Ordinance Date	Text
Del Puerto Water	Groundwater Well Metering Policy	2022	Covers well registration, metering, access, costs, semi-annual reporting, maintenance, and exclusions. Packets were sent to customers
District			explaining the new well registration and metering requirements.
City of Patterson	Ordinance No. 348, Section 1	1981	13.20.010 Private wells - Construction prohibited.
			No person, firm or corporation may drill, dig or install a water well in the city for any purpose whatsoever, save and except the
			Patterson City Water Company.
Central Delta-	Central GSA Resolution Nos. 2021-01 and	25 January 2021	Adopted two Resolutions on 25 January 2021: require registration of all wells by 4/1/2021, impose fee for late registration. Adopted
Mendota GSA	2021-02		Well Metering and Reporting Policy in 2022 to require installation of meters on production wells within the GSA and reporting of
			pumped groundwater volumes. Adopted Policy Number Two in January 2023, and distributed to constituents. GSA members are
			developing draft Well Access and Indemnity Agreements to allow meter reading for property owners with groundwater wells.
\A/*.d\A/.d	21/2	N1 / A	N/A That are a subtracted and a subtract NAMA Decreased with subtract
Widren Water	N/A	N/A	N/A. The two operational supply wells in WWD are equipped with meters.
District			

Abbreviations:

GSA = Groundwater Sustainability Agency
GSP = Groundwater Sustainability Plan

N/A = Not Applicable

NCDM = Northern & Central Delta-Mendota

No. = Number

PID = Patterson Irrigation District

SGMA = Sustainable Groundwater Management Act

WSID = West Stanislaus Irrigation District

Notes:

- (a) Online search for ordinances adopted by NCDM GSAs and member agencies performed in August 2022.
- (b) Note that County Ordinances are also discussed in Section 2.3.2 of the 2022 Amended NCDM GSP. Discussion speaks more to permitting process for well construction/destruction and less to measuring of pumped groundwater.

Funding Opportunities – Updated 8/10/2023

Pilot Program for Water Resource Projects for Disadvantaged Communities

The program seeks to fully fund small water resources projects for economically disadvantaged communities. Eligible projects include: emergency streambank protection for public facilities, local protection from flooding, and aquatic ecosystem restoration. No local cost share is required. U.S. Army Corps of Engineers. Deadline 8/21/23

<u>Integrated Climate Adaptation and Resiliency Program's Regional Resilience Planning and Implementation Grant Program</u>

The Regional Resilience Grant Program (RRGP) funds planning and implementation projects that strengthen climate change resilience at a regional scale. The RRGP funds projects led by partnerships that involve multiple jurisdictions working together to address the most significant climate change risks in their regions, especially in communities that are most vulnerable to climate change impacts. Up to \$3 Million per project, \$9.4 Million total available. Governor's Office of Planning and Research. Deadline: 8/29/23

Specialty Crop Block Grant Program

The program funds projects that enhance the competitiveness of California specialty crops. The SCBGP is designed to support all sectors of California's specialty crop industry and improve the performance of California specialty crops within local, domestic, national, and international markets. Up to \$500,000 per proposal with an estimated \$23 million available. California Dept., of Food and Agriculture. Deadline: 9/7/23

Pesticide Research Grant Program

The program provides funding to develop integrated pest management (IPM) practices in agricultural, urban, or wildland settings that reduce the risks from pesticides which are high-risk, of regulatory concern, or are of human health or environmental concern in California. Up to \$500,000 available per project. \$800,000 total available. Ca Dept. of Pesticide Regulation. Deadline: 9/14/23

Instream Flow Water Purchase Program

The Instream Flow Water Purchase Program (WPP) establishes financial instruments and agreements necessary to ensure water for beneficial instream flows are made available from those with legal rights to use or dedicate water. Projects must measurably enhance streamflow at a time and location necessary to provide fisheries or ecosystem benefits or that improve upon existing flow conditions. Minimum qualifications will require applicants to provide at least 2,000 acre-feet of water through sale, lease, license, dedication or other binding mechanism, including forbearance, for purposes of instream flow enhancement between January 1st and June 30th in every water year type in which the water right holder proposes to provide water. These flows must be provided in the Sacramento-San Joaquin Delta Watershed for at least 10 water years (subject to negotiation if only provided in specific water year types). Up to \$360 Million available. Department of Water Resources. Deadline: 10/1/23

Farm and Ranch Solid Waste Clean-up and Abatement Program

The program offers financial support to address the cleanup & prevention of illegal dumping on properties designated for agricultural purposes. It is possible to include multiple projects/sites within a single application. \$50,000 maximum per site, \$200,000 maximum per application. Dept. of resources, Recycling, and Recovery. Deadline 10/5/23.

Regional Climate Collaborative Program (Round 2)

The Regional Climate Collaborative (RCC) Program provides resources to advance climate change mitigation, adaptation, and resilience within under-resourced communities. The program funds cross-sector partners to form a Collaborative and conduct various capacity building activities, such as partnership development, project and plan development, data collection, education and training, and the creation of technical assistance hubs to pursue climate investments. A total of \$8.5 million available with a maximum award of \$1.75 million. Strategic Growth Council. Deadline: 12/6/23

Alliance Grants Program

To promote safer, more sustainable pest management practices in California, the program funds projects that promote or increase the implementation, expansion, or adoption of effective, proven, and affordable integrated pest management (IPM) systems or practices that reduce risks to human health and the environment in agricultural, urban, or wildland settings. The most competitive Alliance Grant projects are those that can serve as a model for similar situations, have a high potential for wide adoption, and for which research has already been completed. Up to \$800,000 per project with a total of \$1.1 million available. Ca Dept. of Pesticide Regulation. Deadline: 1/18/24

Water Resilience Infrastructure-Water Recycling

The purpose of the grant is to provide technical and financial assistance to local agencies for the planning and construction of water recycling projects that promote the beneficial use of treated municipal wastewater in order to augment fresh water supplies in California. Up to \$15 million available per project and a total of more than \$232 Million. State Water Resources Control Board. Deadline: 6/30/25

Emergency Community Water Assistance Program

This program helps eligible communities prepare, or recover from, an emergency that threatens the availability of safe, reliable drinking water and is targeted at small communities and rural areas (DACs, SDACs, and EDAs). \$150,000 available for leak repair and maintenance to existing water lines and construct water line extensions; up to \$1,000,000 for construction of new wells, transmission lines, treatment plants, or other sources of water. USDA Rural Development. Applications accepted on a continuous basis.

County-Wide and Regional Funding Program

Funding for regional programs that address drought-related and contamination issues for small water systems and domestic wells serving DACs. No deadline. Funding is from the State Water Board.

Restoration Grant Program

Multiple funding programs including wetland restoration, wildlife corridors, and addressing climate impacts. Project categories include: planning, implementation, acquisition, monitoring, and scientific studies. Applications accepted on rolling basis. Funding from CA Dept. of Fish and Wildlife.

Riparian Habitat Conservation Program

The Wildlife Conservation Board is accepting concept proposals for projects that provide meaningful and sustainable improvements to riparian habitats. \$3 Million available on a rolling basis.

Fertilizer Research and Education Program

Total of \$225,000 available for projects on: improving input management, understanding plant-soil processes, and evaluating loss pathways. They are focused on nutrients in general with nitrogen/nitrates as a particular focus. It is a rolling deadline with funding awarded as projects are approved. CA Dept. of Food and Agriculture.

Building Resilient Infrastructure and Communities (BRIC) and Flood Mitigation Assistance (FMA) <u>Programs</u>

Applications accepted through the Governor's Office of Emergency Services. BRIC is prioritizing the following types of projects: infrastructure projects, projects that benefit disadvantaged communities as referenced in EO 14008, and projects that incorporate nature-based solutions including those designed to reduce carbon emissions, climate change adaptation and resilience projects. 25% Match required. Applications accepted on a rolling deadline.