Special Joint Meeting of the Northern Delta-Mendota Region Management Committee, Central Delta-Mendota Region Management Committee, and Central Delta-Mendota GSA

Monday, March 21, 2023, 10:00 AM DRAFT

SLDMWA Boardroom, 842 6th Street, Los Banos, CA

Northern & Central Delta-Mendota Regions Management Committees Members and Alternates Present

Bobby Pierce, Member – West Stanislaus Irrigation District
Aaron Barcellos*, Member – Pacheo Water District
Chase Hurley*, Alternate – Pacheco Water District
Danny Wade*, Member/Alternate – Tranquillity Irrigation District/Fresno Slough Water District
Maria Encinas, Member – City of Patterson
Hugh Bennett*, Alternate – Eagle Field Water District
Amy Montgomery*, Member – Santa Nella Water District
Adam Scheuber, Alternate – Del Puerto Water District (latter portion of meeting)
Wayne Western*, Member – Panoche Water District
Damian Aragona*, Member – Widren Water District
Lacey McBride*, Member – Merced County (latter portion of meeting)
Steve Stadler*, Alternate – San Luis Water District
Vince Lucchesi, Member – Patterson Irrigation District
Augie Ramirez*, Alternate – Fresno County

* Indicates representative, alternate or second alternate of Central Delta-Mendota GSA

San Luis & Delta-Mendota Water Authority Staff Present

John Brodie
Scott Petersen – via Zoom

Others Present

Jessica Johnson – Baker Manock & Jensen – via Zoom
Anona Dutton – EKI Environment & Water, Inc. – via Zoom
Meredith Durant – EKI Environment & Water, Inc. – via Zoom
Leslie Dumas, Woodard & Curran
Joe Hopkins – Provost & Pritchard

1. **Call to Order/Roll Call**

   Aaron Barcellos/Pacheco WD called the meeting to order at 10:10 AM.

2. **Opportunity for Public Comment**

   No public comment was shared under this meeting agenda item.

3. **Committees to Review and Take Action on Consent Calendar, Barcellos/Brodie**

   a) **Minutes for the February 23, 2023 Joint Meeting of the Northern and Central Delta-Mendota Region Management Committees and Central Delta-Mendota GSA**
   b) **Minutes for the March 13, 2023 Special Joint Meeting of the Northern Delta-Mendota Region Management Committee, Central Delta-Mendota Region Management**

Committee, Central Delta-Mendota GSA, and Delta-Mendota Subbasin Coordination Committee

c) **Budget-to-Actual Report (through January 2023)**

d) **Grant Reimbursement Summary Report**

John Brodie/SLDMWA communicated that the grant reimbursement summary report included in the meeting materials is the final report for this grant. A correction was noted for the February 23, 2023 joint meeting minutes: Item 12 of the meeting minutes should have identified the San Joaquin Valley Drainage Authority. Bobby Pierce/West Stanislaus Irrigation District provided the motion to approve the Consent Calendar, as amended, for the Northern Region Management Committee and Vince Lucchesi/Patterson Irrigation District seconded. The motion was passed unanimously by those present. Amy Montgomery/Santa Nella County Water District provided the motion to approve the Consent Calendar, as amended, for the Central Region Management Committee and Wayne Western/Panoche Water District seconded. The motion was passed unanimously by those present.

4. **Committees to Consider Directing Northern and Central Delta-Mendota Representatives to the Subbasin Coordination Committee to Approve the Consolidated WY 2022 Annual Report for the Delta-Mendota Subbasin, Brodie**

Leslie Dumas/Woodard & Curran reported that water levels in some wells are exhibiting a downward trend, and asked the GSAs to please respond as possible to curtail this observed trend. Maria Encinas/City of Patterson provided the motion to direct the Committee representative to the Subbasin Coordination Committee to approve the Consolidated Annual Report for the Northern Region Management Committee and Bobby Pierce seconded. The motion was passed unanimously by those present. Augie Ramirez/Fresno County provided the motion to direct the Committee representative to the Subbasin Coordination Committee to approve the Consolidated Annual Report for the Central Region Management Committee and Amy Montgomery seconded. The motion was passed unanimously by those present.

5. **Committees to Consider Directing Northern and Central Delta-Mendota Representatives to the Subbasin Coordination Committee to Approve the Proposal from Luhdorff & Scalmanini to Design the Interconnected Surface Water Monitoring Network (Component 1, Task 8 of SGMA Round 1 Implementation Grant), Brodie**

John Brodie referred to the proposal from Luhdorff & Scalmanini (LSCE) included in the meeting materials, and noted the proposal is for design of the Interconnected Surface Water Monitoring network, as funded by the SGMA Round 1 grant. Bobby Pierce inquired about prior well siting planning work performed on this topic by Woodard & Curran. Leslie Dumas responded that she had previously prepared figures displaying potential monitoring locations in the northern portion of the Subbasin and provided those figures to LSCE, so the prior investment has been preserved and incorporated.

Vince Lucchesi provided the motion to direct the Committee representative to the Subbasin Coordination Committee to approve the proposal for design of the Interconnected Surface Monitoring System for the Northern Region Management Committee and Bobby Pierce seconded. The motion was passed unanimously by those present. Steve Stadler/San Luis WD provided the motion to direct the Committee representative to the Subbasin Coordination Committee to approve the proposal for design of the Interconnected Surface Water Monitoring System for the Central Region Management Committee and Danny Wade/TQID/FSWD seconded. The motion was passed unanimously by those present.

6. **Committees to Discuss DWR Inadequate Determination of the Amended 2020 Groundwater Sustainability Plans for the Delta-Mendota Subbasin, Brodie**

John Brodie noted that a small group representing the Delta-Mendota Subbasin Coordination Committee has scheduled a meeting with the Water Board for Thursday March 23, 2023. The one-hour meeting will be in-person at the Water Board offices in Sacramento. One objective is to obtain additional information regarding the Water Board's anticipated schedule for its review of the GSPs, and scheduling of a public hearing.

7. **Committees to Discuss Schedule and Timeline of Tasks for Responding to DWR Inadequate Determination and Potential Probationary Hearing at the State Water Board, Brodie/Dutton**

Anona Dutton/EKI summarized the direction provided by the Subbasin Coordination Committee, with the intent of near-term focus on revising and unifying the Subbasin water budget and supporting the sustainable management criteria. A "term sheet" outlining the intended deliverables and milestones for discussion with the Water Board was also proposed. The near-term objective is to immediately start to address the deficiencies identified by the Department of Water Resources (DWR) while recognizing that the Water Board may have separate findings regarding the GSPs. The need for developing and documenting a consistent approach for water budgeting among the Subbasin GSP groups was identified, with potential use of the groundwater model that is being developed by the USGS.

8. **Committees to Discuss Work Plan and Schedule for Preparation of 2025 GSP Update, Brodie**

Leslie Dumas reported that DWR is making data from the Annual Reports available to the public via its SGMA data viewer portal.

9. **Committees to Discuss Consolidating Meetings with the Coordination Committee, Brodie**

During the previous meeting of the Northern & Central Delta-Mendota Management Committees, an action item was assigned to John Brodie to evaluate alternate meeting dates/times in effort to reduce conflicts and improve participation. Based upon the responses provided by the GSA representatives, John was not able to identify a consensus on an improved meeting date. The Committees discussed the request to consolidate future meetings to improve the communication as the Subbasin works to revise its GSPs. Monday afternoons were identified as a possibility for meetings.

10. **Committees to Discuss 2023 GSP Implementation**

a) **2023 GSP Implementation Activities Review, Dutton**
b) **Three-Month Look-Ahead Schedule, Dutton**
c) **WY 2022 Annual Report (including results/findings), Dumas**
d) **Upcoming GSP Implementation Monitoring Activities, Dumas**
e) **Stakeholder Outreach and Engagement, Dumas/Dutton**

Anona Dutton reviewed the GSP implementation summary tables included in the meeting materials, noting the additional definition and detail provided for the Management Actions, which are shared among all of the GSAs. She asked the GSAs to provide any updates and additional information. The meetings identified in the three-month look-ahead schedule may be revised. Leslie Dumas reported that the WY 2022 Annual Report will be submitted to DWR no later than March 31, 2023. Woodard & Curran has transmitted reminders to the GSAs regarding performance of the Spring water level monitoring, and she requested that the GSAs provide information regarding any necessary changes in their portion of the Representative Monitoring

Network. Leslie Dumas also reminded the GSAs to conduct and document their stakeholder outreach activities.

11. Committees to Discuss Potential Additional Funding Opportunities, Brodie

John Brodie noted that updated information on potential additional funding opportunities is included in the meeting materials.

12. Next Steps

- Staff will follow up with Woodard & Curran regarding GSAs responsible for wells with water levels that were approaching minimum thresholds.
- Staff will discuss with the Subbasin Coordination Committee the potential to conduct joint meetings with the Northern & Central Delta-Mendota Region Management Committees in the future.
- Staff will communicate outcomes of meeting with Water Board staff and the Subbasin ad hoc team scheduled for Thursday March 23, 2023.

13. Conference with Legal Counsel – Anticipated Litigation

A conference with legal counsel was not conducted.

14. Conference with Legal Counsel – Existing Litigation

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.

A conference with legal counsel was not conducted.

15. Report out of Closed Session

A closed session was not conducted.

16. Reports Pursuant to Government Code 54954.2(a)(3)

No topics were discussed under this item.

17. Future Delta-Mendota Subbasin Coordination Committee Meetings

a. Tuesday March 21, 2023 at 1:00PM
b. Monday April 10, 2023 at 1:00PM
c. Monday May 8, 2023 at 1:00PM

18. ADJOURNMENT

Aaron Barcellos adjourned the meeting at 10:58 AM.

SAN LUIS & DELTA-MENDOTA WATER AUTHORITY
MARCH 1, 2022 - FEBRUARY 28, 2023
SUSTAINABLE GROUNDWATER MANAGEMENT ACT SERVICES AGREEMENT
ACTIVITY AGREEMENTS BUDGET TO ACTUAL
NORTHERN DELTA-MENDOTA REGION (FUND 64)

Report Period 3/1/22 - 2/28/23
N/C Meeting 04/27/23

			Allocation by Participants						
REVENUES	Annual Budget	Total Revenues	Patterson ID 10.3181%	West Stanislaus ID 13.7814%	Del Puerto WD 32.0271%	Oak Flat 2.7843%	City of Patterson 4.6628%	Merced County 1.8217%	Stanislaus County 34.6045%
Membership Dues	$ 59,944	$ 59,943	$ 6,185	$ 8,261	$ 19,198	$ 1,669	$ 2,795	$ 1,092	$ 20,743
Total Revenues	$ 59,944	$ 59,943	$ 6,185	$ 8,261	$ 19,198	$ 1,669	$ 2,795	$ 1,092	$ 20,743

EXPENDITURES	Annual Budget	Total Expenses	Patterson ID 10.3181%	West Stanislaus ID 13.7814%	Del Puerto WD 32.0271%	Oak Flat 2.7843%	City of Patterson 4.6628%	Merced County 1.8217%	Stanislaus County 34.6045%	Budget Remaining	% of Amt Remaining	Expenses Through
Legal:												
Outside Counsel	$ 25,000	$ 39,763	$ 4,103	$ 5,480	$ 12,735	$ 1,314	$ 1,854	$ 724	$ 13,760	$ (14,763)	-59%	2/28/23
Other Professional Services:												
Contracts	$ 617,840	$ 84,164	$ 8,684	$ 11,599	$ 26,955	$ 2,781	$ 3,924	$ 1,533	$ 29,125	$ 533,676	86%	2/15/23
Other:												
Executive Director	$ 397	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 397	100%	
General Counsel	$ 5,829	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,829	100%	
Water Policy Director	$ 3,244	$ 1,291	$ 133	$ 178	$ 413	$ 43	$ 60	$ 24	$ 447	$ 1,953	60%	2/28/23
Water Resources Program Manager	$ 74,480	$ 39,263	$ 4,051	$ 5,411	$ 12,575	$ 1,297	$ 1,831	$ 715	$ 13,587	$ 35,217	47%	2/28/23
Accounting	$ 4,051	$ 573	$ 59	$ 79	$ 184	$ 19	$ 27	$ 10	$ 198	$ 3,478	86%	2/28/23
Hydrotech 3	$ 35,380	$ 18,432	$ 1,902	$ 2,540	$ 5,903	$ 609	$ 859	$ 336	$ 6,378	$ 16,948	48%	2/28/23
Los Banos Administrative Staff	$ 750	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 750	100%	
License & Continuing Education	$ 250	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 250	100%	
Conferences & Training	$ 2,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,500	100%	
Travel/Mileage	$ 3,750	$ 23	$ 2	$ 3	$ 7	$ 1	$ 1	$ 0	$ 8	$ 3,727	99%	
Group Meetings	$ 500	$ 200	$ 21	$ 28	$ 64	$ 7	$ 9	$ 4	$ 69	$ 300	60%	
Telephone	$ 1,250	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,250	100%	
Equipment and Tools	$ 1,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,500	100%	
Software	$ 2,425	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,425	100%	
Total Expenditures	$ 779,146	$ 183,709	$ 18,955	$ 25,318	$ 58,837	$ 528	$ 8,566	$ 3,347	$ 63,572	$ 595,437	76%	

Fund 64 Excess/(Deficit) w/o Grant Reimbursement	$ (719,202)	$ (123,766)	$ (12,770)	$ (17,057)	$ (39,639)	$ 1,141	$ (5,771)	$ (2,255)	$ (42,829)

Grant Reimbursements	Annual Budget	Total Revenues	Patterson ID 10.3181%	West Stanislaus ID 13.7814%	Del Puerto WD 32.0271%	Oak Flat 2.7843%	City of Patterson 4.6628%	Merced County 1.8217%	Stanislaus County 34.6045%
Grant Reimbursements	$ -	$ 21,281	$ 2,196	$ 2,933	$ 6,816	$ 703	$ 992	$ 388	$ 7,364
Grant Retention	$ -	$ 1,977	$ 204	$ 272	$ 633	$ 65	$ 92	$ 36	$ 684
Total Grant Reimbursements	$ -	$ 23,258	$ 2,400	$ 3,205	$ 7,449	$ 769	$ 1,084	$ 424	$ 8,048

Fund 64 Excess/(Deficit) with Grant Reimbursement	$ (719,202)	$ (100,508)	$ (10,371)	$ (13,851)	$ (32,190)	$ 1,910	$ (4,686)	$ (1,831)	$ (34,780)

Subject to Rounding

SAN LUIS & DELTA-MENDOTA WATER AUTHORITY
MARCH 1, 2022 - FEBRUARY 28, 2023
SUSTAINABLE GROUNDWATER MANAGEMENT ACT SERVICES AGREEMENT
ACTIVITY AGREEMENTS BUDGET TO ACTUAL
CENTRAL DELTA-MENDOTA REGION (FUND 65)

Report Period 3/1/22 - 2/28/23
N/C Meeting 04/27/23

			Allocation by Participants											
REVENUES	Annual Budget	Total Revenues	Panoche WD 8.3333%	San Luis WD 8.3333%	Eagle Field WD 8.3333%	Fresno Slough WD 8.3333%	Mercy Springs WD 8.3333%	Oro Loma WD 8.3333%	Pacheco WD 8.3333%	Tranquillity WD 8.3333%	Fresno County 8.3333%	Merced County 8.3333%	Santa Nella County WD 8.3333%	Widren GSA 8.3333%
Membership Dues	$ 156,369	$ 156,372	$ 13,031	$ 13,031	$ 13,031	$ 13,031	$ 13,031	$ 13,031	$ 13,031	$ 13,031	$ 13,031	$ 13,031	$ 13,031	$ 13,031
Total Revenues	$ 156,369	$ 156,372	$ 13,031	$ 13,031	$ 13,031	$ 13,031	$ 13,031	$ 13,031	$ 13,031	$ 13,031	$ 13,031	$ 13,031	$ 13,031	$ 13,031

EXPENDITURES	Annual Budget	Total Expenses	Panoche WD 8.3333%	San Luis WD 8.3333%	Eagle Field WD 8.3333%	Fresno Slough WD 8.3333%	Mercy Springs WD 8.3333%	Oro Loma WD 8.3333%	Pacheco WD 8.3333%	Tranquillity WD 8.3333%	Fresno County 8.3333%	Merced County 8.3333%	Santa Nella County WD 8.3333%	Widren GSA 8.3333%	Budget Remaining	% of Amt Remaining	Expenses Through
Legal:																	
Outside Counsel	$ 25,000	$ 58,096	$ 4,841	$ 4,841	$ 4,841	$ 4,841	$ 4,841	$ 4,841	$ 4,841	$ 4,841	$ 4,841	$ 4,841	$ 4,841	$ 4,841	$ (33,096)	-132%	2/28/23
Other Professional Services:																	
Contracts	$ 617,840	$ 83,055	$ 6,921	$ 6,921	$ 6,921	$ 6,921	$ 6,921	$ 6,921	$ 6,921	$ 6,921	$ 6,921	$ 6,921	$ 6,921	$ 6,921	$ 534,785	87%	2/15/23
Other:																	
Executive Director	$ 397	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 397	100%	
General Counsel	$ 5,829	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,829	100%	
Water Policy Director	$ 3,244	$ 1,231	$ 103	$ 103	$ 103	$ 103	$ 103	$ 103	$ 103	$ 103	$ 103	$ 103	$ 103	$ 103	$ 2,013	62%	12/31/22
Water Resources Program Manager	$ 74,480	$ 40,860	$ 3,405	$ 3,405	$ 3,405	$ 3,405	$ 3,405	$ 3,405	$ 3,405	$ 3,405	$ 3,405	$ 3,405	$ 3,405	$ 3,405	$ 33,620	45%	2/28/23
Accounting	$ 4,051	$ 548	$ 46	$ 46	$ 46	$ 46	$ 46	$ 46	$ 46	$ 46	$ 46	$ 46	$ 46	$ 46	$ 3,503	86%	2/28/23
Hydrotech 3	$ 35,380	$ 18,432	$ 1,536	$ 1,536	$ 1,536	$ 1,536	$ 1,536	$ 1,536	$ 1,536	$ 1,536	$ 1,536	$ 1,536	$ 1,536	$ 1,536	$ 16,948	48%	2/28/23
Los Banos Administrative Staff	$ 750	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 750	100%	
License & Continuing Education	$ 250	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 250	100%	
Conferences & Training	$ 2,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,500	100%	
Travel/Mileage	$ 3,750	$ 23	$ 2	$ 2	$ 2	$ 2	$ 2	$ 2	$ 2	$ 2	$ 2	$ 2	$ 2	$ 2	$ 3,727	99%	
Group Meetings	$ 500	$ 200	$ 17	$ 17	$ 17	$ 17	$ 17	$ 17	$ 17	$ 17	$ 17	$ 17	$ 17	$ 17	$ 300	60%	
Telephone	$ 1,250	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,250	100%	
Equipment and Tools	$ 1,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,500	100%	
Software	$ 2,425	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,425	100%	
Total Expenditures	$ 779,146	$ 202,445	$ 16,870	$ 16,870	$ 16,870	$ 16,870	$ 16,870	$ 16,870	$ 16,870	$ 16,870	$ 16,870	$ 16,870	$ 16,870	$ 16,870	$ 576,701	74%	

Fund 65 Excess/(Deficit) w/o Grant Reimbursement	$ (622,777)	$ (46,073)	$ (3,839)	$ (3,839)	$ (3,839)	$ (3,839)	$ (3,839)	$ (3,839)	$ (3,839)	$ (3,839)	$ (3,839)	$ (3,839)	$ (3,839)	$ (3,839)

Grant Reimbursements	Annual Budget	Total Revenues	Panoche WD 8.3333%	San Luis WD 8.3333%	Eagle Field WD 8.3333%	Fresno Slough WD 8.3333%	Mercy Springs WD 8.3333%	Oro Loma WD 8.3333%	Pacheco WD 8.3333%	Tranquillity WD 8.3333%	Fresno County 8.3333%	Merced County 8.3333%	Santa Nella County WD 8.3333%	Widren GSA 8.3333%
Grant Reimbursements	$ -	$ 21,281	$ 1,773	$ 1,773	$ 1,773	$ 1,773	$ 1,773	$ 1,773	$ 1,773	$ 1,773	$ 1,773	$ 1,773	$ 1,773	$ 1,773
Grant Retention	$ -	$ 1,977	$ 165	$ 165	$ 165	$ 165	$ 165	$ 165	$ 165	$ 165	$ 165	$ 165	$ 165	$ 165
Total Revenues	$ -	$ 23,258	$ 1,938	$ 1,938	$ 1,938	$ 1,938	$ 1,938	$ 1,938	$ 1,938	$ 1,938	$ 1,938	$ 1,938	$ 1,938	$ 1,938

Fund 65 Excess/(Deficit) with Grant Reimbursement	$ (622,777)	$ (22,815)	$ (1,901)	$ (1,901)	$ (1,901)	$ (1,901)	$ (1,901)	$ (1,901)	$ (1,901)	$ (1,901)	$ (1,901)	$ (1,901)	$ (1,901)	$ (1,901)

Subject to Rounding

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 - 3/31/23

SGMA 5/08/23

EXPENDITURES	Annual Budget	Paid/ Expense	Amount Remaining	% of Amt Remaining	Expenses Through
Legal:					
Baker Manock & Jensen	$ 30,960		$ 30,960	100%	
Other Professional Services:					
GSP Implementation Contracts					
Coordinated Annual Reports Activities					
(Common Chapter, Water Level Contouring)	$ 146,093		$ 146,093	100%	
DMS Hosting, Augmentation and Support	$ 11,367		$ 11,367	100%	
GSP Approval-DWR Response to Comments	$ -		$ -	0%	
Staff Augmentation Support (EKI)	$ 65,000		$ 65,000	100%	
DAC Outreach and Coordination	$ 30,000		$ 30,000	100%	
SGMA Implementation Grant Round 1 SPA (A9)	$ 75,560		$ 75,560	100%	
SGMA Implementation Grant Round 2 SPA (B0)	$ 75,560		$ 75,560	100%	
Other:					
Executive Director	$ 2,364	$ -	$ 2,364	100%	
General Counsel	$ 4,082	$ -	$ 4,082	100%	
Water Policy Director	$ 7,100	$ 828	$ 6,272	88%	3/31/23
Water Resources Program Manager	$ 62,400	$ 4,327	$ 58,073	93%	3/31/23
Accounting	$ 2,916	$ 27	$ 2,889	99%	3/31/23
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	$ 5,182	$ 520,150	99%	

	A	B	C
1	**IRWM Proposition 1 Round 1**		
2	Amount Paid		
3	Administration	$ 9,000.00	
4	City of Huron	$ 584,974.57	
5	NVRRWP-Turlock	$ 45,000.00	
6	WSID Pumping Plant	$ -	
7	Orestimba Creek	$ 404,632.00	
8	Broadview Aquifer	$ 218,683.66	
9	**Total**	**$ 1,262,290.23**	
10			
11	Amount Remaining		
12	Administration	$ 1,000.00	
13	City of Huron	$ 25.43	
14	NVRRP-Turlock	$ -	
15	WSID Pumping Plant	$ 809,264.00	
16	Orestimba Creek	$ 404,632.00	
17	Broadview Aquifer	$ 67,316.34	
18	**Total**	**$ 1,282,237.77**	
19			
20	**Prop 1/Prop 68 SGMA Plan Development**		
21	Amount Paid		
22	Administration	$ 65,757.08	
23	Technical Assistance	$ 877,385.42	
24	Generic DMS	$ 178,500.00	
25	N-C Region GSP	$ 534,291.00	
26	Grassland GSP	$ 208,678.64	
27	Farmers GSP	$ 168,988.62	
28	Aliso GSP	$ 201,487.25	
29	Fresno GSP	$ 252,899.02	
30	SJREC GSP	$ 376,705.55	
31	Well Census	$ 100,000.00	
32	Subsidence Study	$ 92,907.04	
33	**Total**	**$ 3,057,599.62**	
34			
35	Amount Remaining		
36	Adminstration	$ 10,841.92	
37	Technical Assistance	$ 154,503.98	
38	Generic DMS	$ -	
39	N-C Regions GSP	$ -	
40	Grassland GSP	$ -	
41	Farmers GSP	$ -	
42	Aliso GSP	$ -	
43	Fresno GSP	$ -	
44	SJREC GSP	$ -	
45	Well Census	$ -	
46	Subsidence Study	$ 8,318.50	
47	**Total**	**$ 173,664.40**	

NORTHERN & CENTRAL DELTA-MENDOTA

MEMORANDUM

TO: Northern & Central Delta-Mendota Region Management Committees and Central GSA Members and Alternates

FROM: John Brodie, Water Resources Program Manager

DATE: April 26, 2023

RE: Approval of Methodology to Set Sustainable Management Criteria for the Chronic Lowering of Groundwater Levels Sustainability Indicator

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BACKGROUND

In March 2023, the California Department of Water Resources (DWR) issued its final Determination on the six Delta-Mendota Subbasin Groundwater Sustainability Plans (GSPs), finding them to be Inadequate. The Coordination Committee approved an amended scope of work and budget for EKI to work on the Sustainable Management Criteria (SMC) and Water Budget to address those aspects of DWR's Determination.

ISSUES FOR DECISION

The Committee must consider directing their representatives to the Coordination Committee to approve revised groundwater level SMC methodology for presentation to the State Water Resources Control Board (SWRCB) and DWR, as necessary/appropriate.

RECOMMENDATION

Staff recommends that the Committee direct its representatives to the Coordination Committee to approve the proposed methodology.

ANALYSIS

DWR cited, among its reasons for the inadequate determination a lack of justification, lack of specific, quantitative details, and lack of analysis to support the setting of for Sustainable Management Criteria (SMCs) "in accordance with GSP regulations"; SMCs include Undesirable Results (URs), Minimum

Thresholds (MTs), and Measurable Objectives (MOs). For the Chronic Lowering of Groundwater Levels Sustainability Indicator, DWR specifically cited a lack of justification for: (a) the 50% UR threshold, (b) what impacts would occur to Subbasin pumping wells at the chosen MTs, and (c) how the MTs set at historical lows relate to and would avoid Undesirable Results for other applicable Sustainability Indicators. EKI presented to the TWG for discussion a conceptual approach and supporting arguments for setting Groundwater Level SMCs in a meeting on March 27, 2023, and this topic was further discussed at TWG meetings on April 10 and April 24, 2023. The methodology to set and justify SMCs for Chronic Lowering of Groundwater Levels for the Subbasin is outlined in excerpts from relevant presentations immediately following this memo.

BUDGET

These tasks are included in the amended scope and budget approved by these Committees and the Coordination Committee.

ATTACHMENTS

A. Excerpts from Relevant GW Presentations

DELTA-MENDOTA SUBBASIN RESPONSE TO INADEQUATE DETERMINATION

27 MARCH 2023

eki environment & water

DWR DEFICIENCIES FOR THIS INDICATOR

Deficiency #2:"The GSPs have not established common definitions of undesirable results in the Subbasin"

- *No new supporting information* is provided within the Common Chapter or within the revised GSPs to justify the new groundwater management approach. (i.e., the coordinated Undesirable Results definitions)
- *No justification for setting a 50 percent threshold* for groundwater levels or water quality is provided, details regarding modifying wells and pumps are absent from the resubmitted material, … (i.e., part of revised significant and unreasonable definition)
- … *lack of specific, quantitative details*, or a more defined and transparent decision-making process for establishing definitions of sustainability

Deficiency #3:"The GSPs in the Subbasin have not set sustainable management criteria in accordance with the GSP regulations"

- The Plan does not indicate when these historic low groundwater levels were observed.
- *No analysis was provided explaining or justifying why 50 percent was chosen* as the threshold or *what impacts would occur* to the Subbasin's pumping wells or the beneficial uses and users of groundwater if that threshold is approached or exceeded.
- There is no discussion in the Plan related to continued overdraft or subsidence, migration of contamination plums, degradation of water quality, or depletions of interconnected surface water if groundwater levels approach or exceed to new minimum thresholds, especially for those wells located near the San Joaquin River.
- The revised Plan does not provide an explanation *how the GSAs have determined that managing the Subbasin to near historical low groundwater elevations would avoid undesirable results* for the other applicable sustainability indicators.
- It is unclear if the minimum thresholds have been selected to avoid undesirable results.

SUMMARY OF WATER LEVEL URs

Basin	UR Criteria	UR Justification
Delta Mendota	MT exceedances at 50% of RMS using a 4-year rolling average of annual groundwater measurements	MT exceedance at 50% of RMS is considered to cause S&I impacts, "namely, the increased costs associated with modifying wells to access groundwater, securing alternative sources, or require mitigation of GDEs."
Kings	MT exceedances at 15% of RMS in a single monitoring period	"to provide a balance between unanticipated hydrology, potentially erroneous data, and coverage of a significant area within the GSA" "the GSAs will develop a shallow well mitigation program to help address the impacts…"
Westside	If water levels fall below 50% of the screen interval of a domestic well **OR** if 10% of agricultural wells within a hexagon (zone of GSP area) go dry during fall of a non-drought year	Domestic well component of criteria "ensures that each (domestic) well is protected from going dry" For ag wells, 10% going dry "would reduce available supply capacity to a degree that may impact beneficial uses … and may cause long-term reduction in viability of ag wells"
Merced	MT exceedances at 25% of RMS for 2 consecutive years (WY type does not matter)	"dewatering of a single domestic well is not considered significant and unreasonable and is not considered a UR" "will evaluate in first 5 years establishing mitigation for domestic wells that might be dewatered"
Eastern San Joaquin	MT exceedances at 25% of RMS for 2 consecutive years	"to establish a pattern rather than an isolated event." "three years was felt to be too extreme, whereas a single exceedance was not sufficient to establish a trend."

SUMMARY OF WATER LEVEL MTs/MOs

Basin	MT Methodology	MO Methodology
Delta Mendota	Historic low groundwater level (prior to end of WY 2016)	Maintain water levels at or above WY 2015 seasonal high at > 50% of RMS
Kings	MO groundwater level minus margin of operational flexibility (as much as 40 feet below historic lows)	Incremental correction to historic rate of groundwater level decline
Westside	40 feet below the 2012-2016 historic low groundwater level	Average spring water levels from 2006-2012
Merced	Fall 2015 groundwater levels	November 2011 groundwater levels
Eastern San Joaquin	Shallower of: - Deeper of 1992 and 2015-2016 groundwater levels + historical range; **OR,** - 10th percentile total depth of domestic wells within 3 miles of RMW	MT plus difference between minimum and maximum historic groundwater level at each RMS

PROCESS REQUIRED TO JUSTIFY SMCs

Undesirable Results (URs) (CCR §354.26)

- Identify beneficial uses/users that are impacted by URs
- Describe the causes and effects of URs
- Describe what constitutes "significant and unreasonable" effects
- Define quantitative criteria relating URs to MT exceedances

Minimum Thresholds (MTs) (CCR § 354.28)

- Describe information and criteria used to establish and justify the MTs
- Describe relationship between MTs for each SI, and how URs are avoided
- Describe how MTs avoid impacts to adjacent basins
- Describe how MTs may affect beneficial uses/users, land uses and property interests
- Discuss related state, federal or local standards

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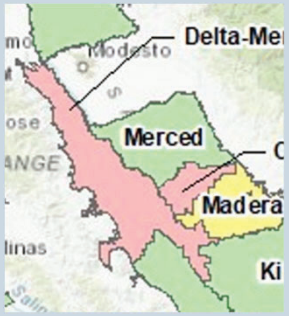
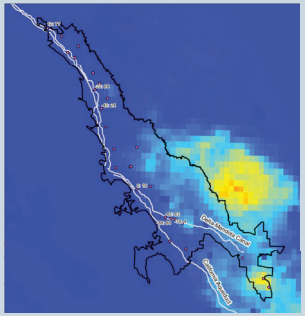
PROPOSED WATER LEVEL URs AND MTs/MOs

- **Undesirable Results:** UR occurs if MTs are exceeded at 25% or more of RMS for two consecutive years.
- **Minimum Thresholds:** Set at historic low groundwater level (prior to end of WY 2016 [i.e., up through Sept 2016])
- **Measurable Objectives:** Set at seasonal high water levels from WY 2015 (i.e., Spring 2015)
- **Interim Milestones:** Glide path between MTs and MOs based on future modeling and planned P/MA implementation

WATER LEVEL SMC DEVELOPMENT PROCESS

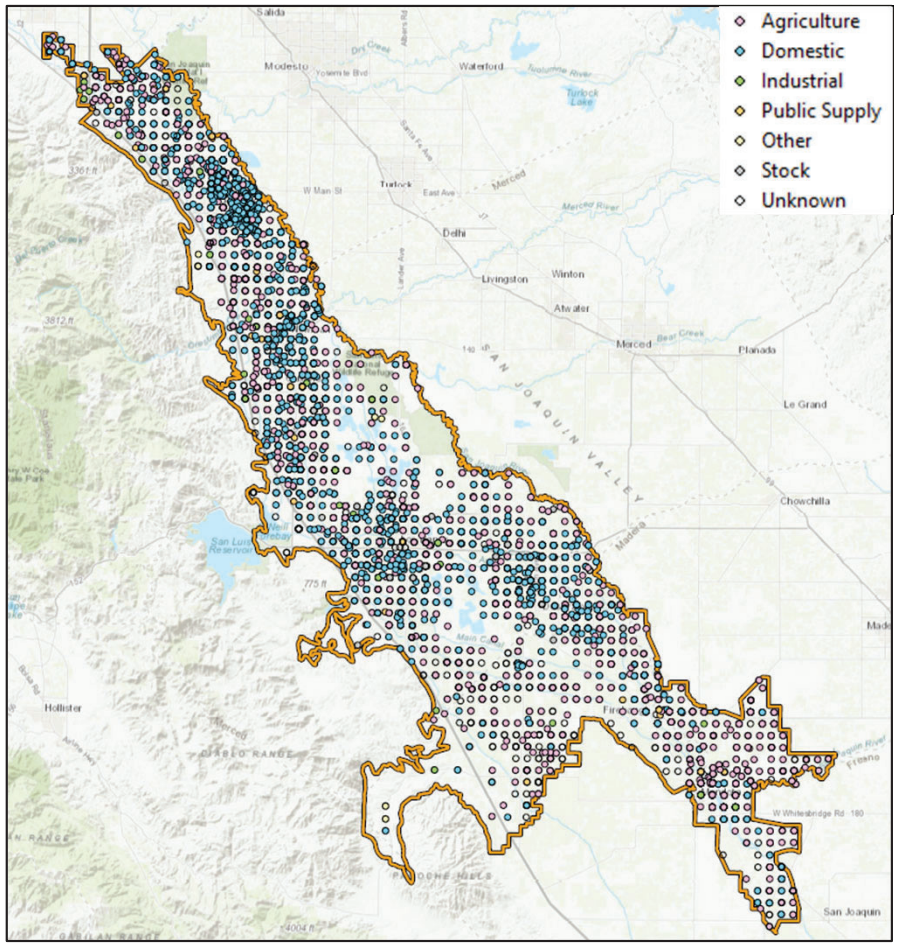
ID Beneficial Users	Impacts to Beneficial Users	Consideration of Adjacent Basins	Relationships with Other Sustainability Indicators	State, Federal, and Local Standards
• Holders of overlying GW rights (ag users, domestic well owners) • Municipal Well Operators • Environmental Users of GW (GDEs, managed wetlands)	• Well impacts analysis to assess vulnerability of well dewatering • Analysis of GDE health (using PULSE data)* * Recognize that managed wetlands are also supported by surface water	• Compare MOs/MTs to those in adjacent basins to assess potential impacts to GW gradients 	• GW Storage • Subsidence • Interconnected Surface Water • Water Quality 	• Not applicable for water levels

BENEFICIAL USERS: GROUNDWATER PUMPERS

Well Count by Type*:

- Agricultural: 1,729
- Domestic: 2,470
- Public Supply: 87
- Industrial: 71
- Other: 1,172

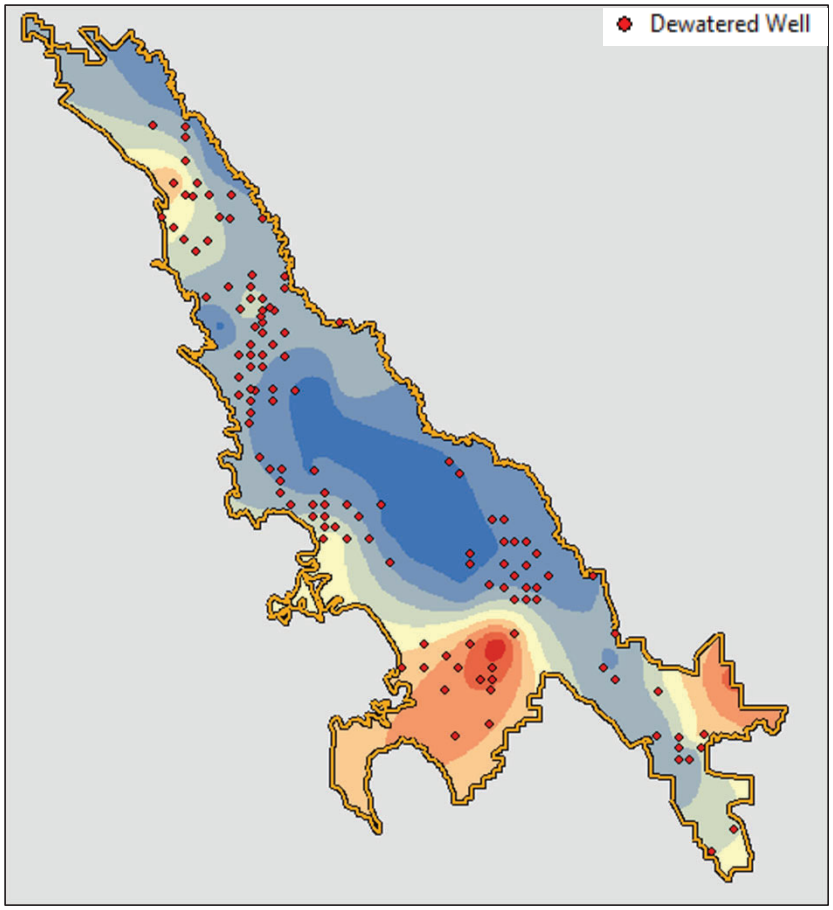
Total: 5,529 wells



* Excludes cathodic, test, injection, remediation, and monitoring wells

WELL IMPACTS ANALYSIS AT SMCs – UPPER AQUIFER

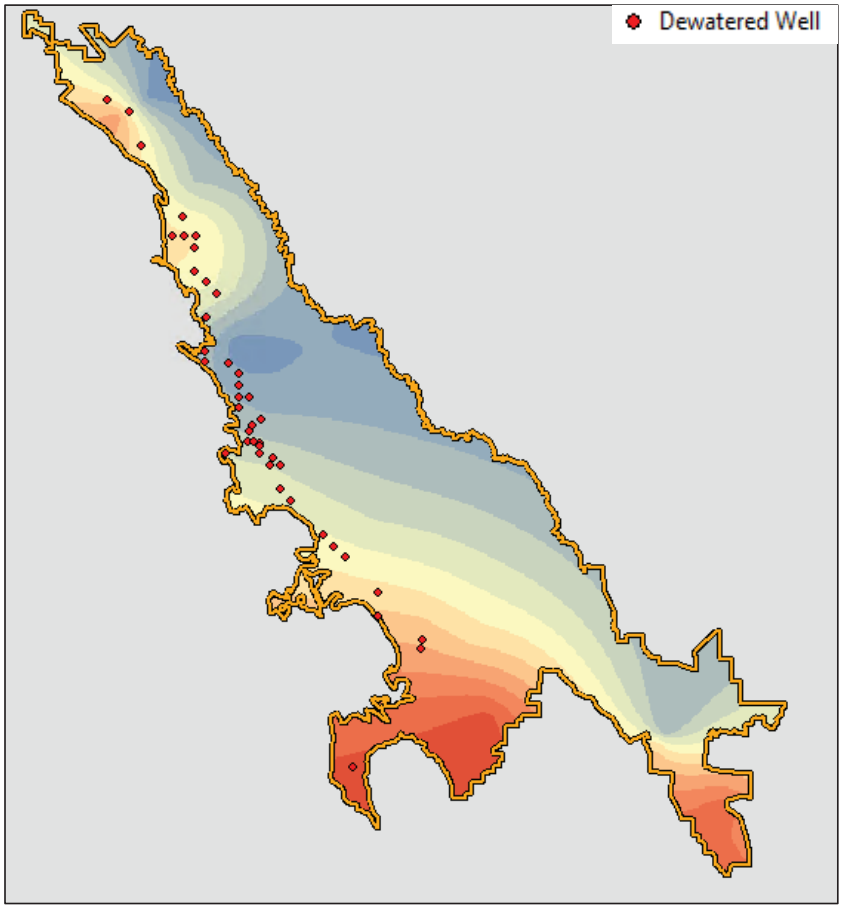
- 1.5% of wells dewatered at MOs
  - 46 out of 3,051 total wells
  - 31 out of 1,739 domestic wells (1.8%)
- 5.4% of wells dewatered at MTs
  - 165 out of 3,051 total wells
  - 128 out of 1,739 domestic wells (7.4%)



Wells Dewatered at MTs – Upper Aquifer

WELL IMPACTS ANALYSIS AT SMCs – LOWER AQUIFER

- 0.6% of wells dewatered at MOs
  - 15 out of 2,386 wells
  - 9 out of 683 domestic wells (1.3%)
- 2.4% of wells dewatered at MTs
  - 57 out of 2,386 total wells
  - 32 out of 683 domestic wells (4.7%)



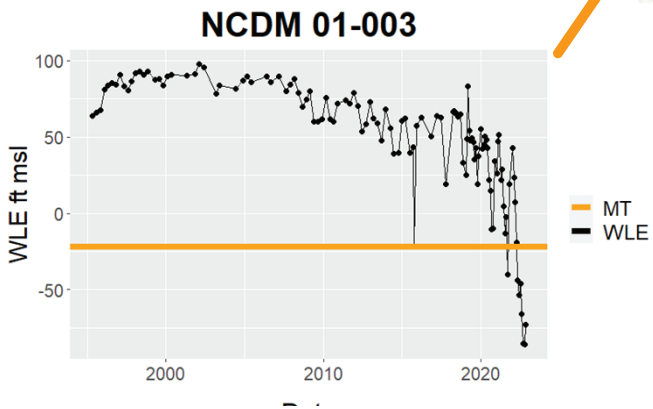
Wells Dewatered at MTs – Lower Aquifer

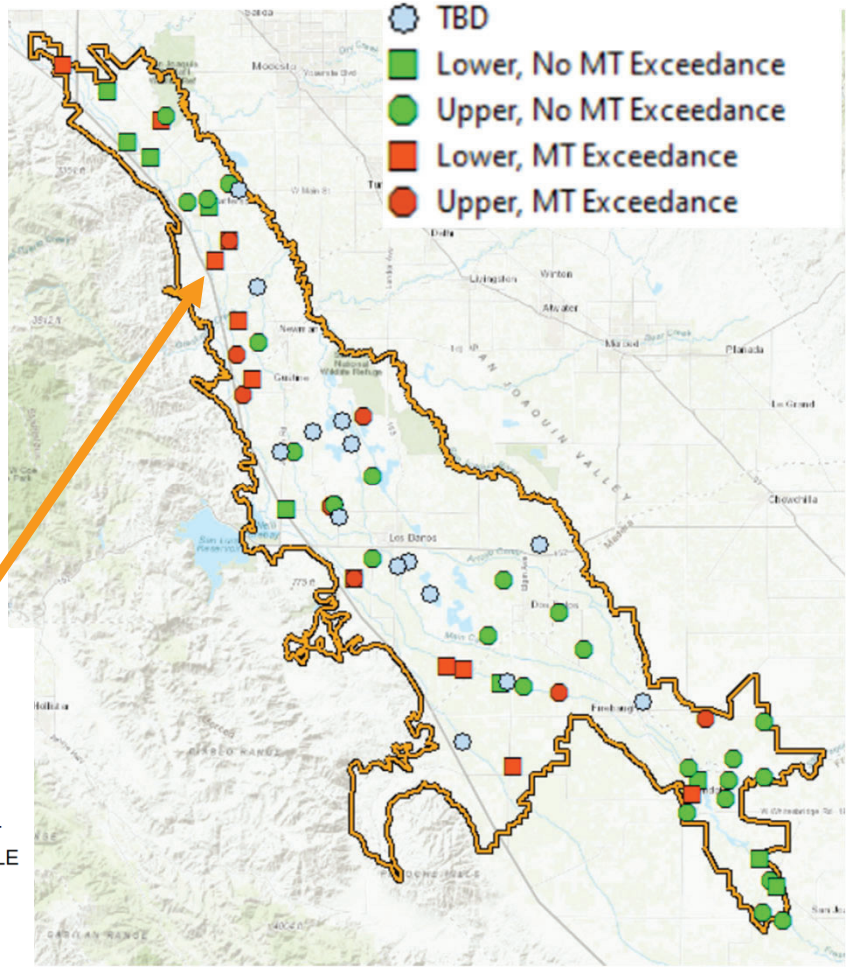
ASSESSMENT OF RELATED SUSTAINABILITY INDICATORS

- **GW Storage:** Do GW level MTs allow for adequate flexibility for operation of the basin during drought periods? → Analyze volume of GW available above MTs and compare to volume extracted during past/foreseeable multi-year drought; requires application of GW Model
- **Subsidence:** Do GW level MTs prevent GW levels from exceeding historical lows, thus theoretically preventing new subsidence? **YES**
- **Interconnected Surface Water:** Do GW level MTs prevent GW levels from exceeding historical lows prior to 2015, thus avoiding new undesirable results for the ISW indicator? → Analyze MTs relative to pre-2015 GW levels; requires application of GW Model
- **Water Quality:** Do GW level MTs prevent GW levels from exceeding historical lows, thus theoretically preventing new water quality degradation related to groundwater extractions? **YES**

POTENTIAL RISK TO BASIN / GSAs

- Can the GSAs maintain water levels above the SMCs?
- In the past two years there have been MT exceedances and water level trends remain generally downward, despite some recovery during wet years
  - In WY 2021: **9 MT exceedances** out of 54 RMS wells with data and established MTs (17%)
  - In WY 2022: **19 MT exceedances** out of 52 RMS wells with data and established MTs (37%)





Wells Exceeding MTs – WY 2022

MT/MO JUSTIFICATIONS

Impacts to Beneficial Users	Impacts to Adjacent Basins	Impacts to Other Sustainability Indicators
• Less than 10% of wells will be impacted, which is lower than the anticipated natural replacement rate given current well ages • The average change in GDE health by area between 2009-2018, which represents a historical range of GDE health fluctuation and response to climatic and managed conditions, increased by 37% • Well mitigation program	Groundwater level MTs set at 2016 historical lows in the D-M basin are generally as high or higher than those set in adjacent basins	• Impacts no worse than recent historic lows, SGMA baseline • Sufficient GW storage to meet several years of drought • MTs limited to no lower than historic lows theoretically prevents additional subsidence* and groundwater quality degradation due to groundwater extraction * *Delayed subsidence from historic lows may still occur for years*

UR DEFINITION & JUSTIFICATION

UR Criteria	UR Justification
MT exceedances at 25% of RMS for two consecutive years (four seasonal measurements)	**Groundwater Pumpers** • Even if MTs were exceeded in ALL RMS, less than 10% of domestic wells would be impacted; fewer wells would be impacted at the UR criterion of 25% of RMS. • A percentage much lower than 25% suggests a primarily local impact, whereas much larger percentage suggests a widespread impact inconsistent with the Sustainability Goal. • Impacts are not significant and unreasonable because, based on current age of wells, approximately 19% of domestic wells (and 25% of all wells) are more than 40 years old and would likely have to be replaced anyway before 2040. • Well mitigation program **Groundwater Dependent Ecosystems** • Based on NDVI trends between 2009 and 2018, the average change in GDE health by area increased by approximately 37%, which represents the historical range of GDE health fluctuation and response to climatic and managed conditions. • A UR criterion of 25% of RMS falls within the range of GDE health by area fluctuations observed between 2009-2018 (37%)

NORTHERN & CENTRAL DELTA-MENDOTA

MEMORANDUM

TO: Northern & Central Delta-Mendota Region Management Committees and Central GSA Members and Alternates

FROM: John Brodie, Water Resources Program Manager

DATE: April 26, 2023

RE: Approval of Methodology to Set Sustainable Management Criteria for Water Quality Sustainability Indicator

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BACKGROUND

In March 2023, the California Department of Water Resources (DWR) issued its final Determination on the six Delta-Mendota Subbasin Groundwater Sustainability Plans (GSPs), finding them to be Inadequate. The Coordination Committee approved an amended scope of work and budget for EKI to work on the Sustainable Management Criteria (SMC) and Water Budget to address those aspects of DWR's Determination.

ISSUES FOR DECISION

The Committee must consider directing their representatives to the Coordination Committee to approve revised water quality SMC methodology for presentation to the State Water Resources Control Board (SWRCB) and DWR, as necessary/appropriate.

RECOMMENDATION

Staff recommends that the Committee direct its representatives to the Coordination Committee to approve the proposed methodology.

ANALYSIS

DWR cited, among its reasons for the inadequate determination a lack of justification, lack of specific, quantitative details, and lack of analysis to support the setting of for Sustainable Management Criteria (SMCs) "in accordance with GSP regulations"; SMCs include Undesirable Results (URs), Minimum

Thresholds (MTs), and Measurable Objectives (MOs). For the Water Quality Sustainability Indicator, DWR specifically cited a lack of justification for: (a) the 50% UR threshold, (b) removal of constituents of concern (e.g., boron, nitrates, etc.), and no analysis of how the updated MTs will affect all beneficial uses and users of groundwater. EKI presented to the TWG for discussion a conceptual approach and supporting arguments for setting Water Quality SMCs in a meeting on April 24, 2023. Excerpts from a presentation on the methodology to set and justify SMCs for Water Quality for the Subbasin is outlined in presentation immediately following this memo.

BUDGET

These tasks are included in the amended scope and budget approved by these Committees and the Coordination Committee.

ATTACHMENTS

A. Excerpts from Relevant WQ Presentation

Confidential Draft – For discussion purposes only

DWR DEFICIENCIES FOR THIS INDICATOR

Deficiency #2: "The GSPs have not established common definitions of undesirable results in the Subbasin"

- *No new supporting information* is provided within the Common Chapter or within the revised GSPs to justify the new groundwater management approach. (i.e., the coordinated Undesirable Results definitions)
- … *lack of specific, quantitative details*, or a more defined and transparent decision-making process for establishing definitions of sustainability

Deficiency #3: "The GSPs in the Subbasin have not set sustainable management criteria in accordance with the GSP regulations"

- *No analysis* has been conducted to justify the use of 50 percent [of RMS with MT exceedances] as a threshold
- Minimum thresholds associated with *other constituents of concern*, such as boron, nitrate as nitrogen, and unquantified "poor quality groundwater" have been removed from the revised Plan and *no justification* for the removal of these constituents has been provided

PROCESS REQUIRED TO JUSTIFY SMCs

Undesirable Results (URs) (CCR §354.26)

- Identify beneficial uses/users that are impacted by URs
- Describe the causes and effects of URs
- Describe what constitutes "significant and unreasonable" effects
- Define quantitative criteria relating URs to MT exceedances

Minimum Thresholds (MTs) (CCR § 354.28)

- Describe information and criteria used to establish and justify the MTs
- Describe relationship between MTs for each SI, and how URs are avoided
- Describe how MTs avoid impacts to adjacent basins
- Describe how MTs may affect beneficial uses/users, land uses and property interests
- Discuss related state, federal or local standards

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REQUIREMENTS FOR WATER QUALITY SMCs

- The **minimum threshold** for degraded water quality shall be the degradation of water quality, including the migration of contaminant plumes that impair water supplies or other indicator of water quality …that may lead to undesirable results [23 CCR § 354.28(c)(4)].
  - based on the number of supply wells, a volume of water or a location of an isocontour that exceeds concentrations of constituents … of concern for the basin
  - consider local, state and federal water quality standards applicable to the basin
- The **measurable objective** shall be … quantitative values using the same metrics and monitoring sites as are used to define the (MTs) [23 CCR § 354.30(b)].

ADJACENT BASIN CONSTITUENTS WITH SMCs

Basin	Constituent (Bold = Identified by SWRCB)	Additional Constituents Identified by SWRCB
Tracy	B, **NO_3-N**, **TDS**	Cr(6), Gross Alpha radioactivity, NO_3 + NO_2, PFOA, PFOS
Chowchilla	Annual: As, DO, Electrical conductivity, **NO3-N**, ORP, pH, TDS, Temperature. 5-Year: Ca, Cl, CO_3, HCO_3, K, Mg, Na, SO_4	NO_3 + NO_2
Turlock	**1,2,3-TCP**, **As**, **NO_3-N**, PCE, **TDS**, **U** (Obtain data from GAMA)	Gross Alpha radioactivity, NO_3 + NO_2, NO_2-N, PFOS
Eastern San Joaquin	**TDS**	1,2,3-TCP, As, DBCP, Gross Alpha radioactivity, NO_3-N, NO_3 + NO_2, NO_2-N, PCE, PFOA, PFOS, U
Westside	**TDS**	--
Kings	Varies by GSP. May include: **1,2,3-TCP,** Al, **As**, B, Cl, **Cr(6)**, Cr(total), **DBCP**, F, Fe, **Gross Alpha radioactivity**, Mn, MTBE, Na, **NO_3-N,** Pb, **PCE**, **TCE**, **TDS**, **U**	NO_3 + NO_2, NO_2-N, PFOA, PFOS
Modesto	**1,2,3-TCP**, **As**, **DBCP**, **NO_3-N**, PCE, **TDS**, **U** (Obtain data from GAMA)	Gross Alpha radioactivity, NO_3 + NO_2, NO_2-N, PFOA, PFOS
Merced	**TDS**	1,2,3-TCP, As, Gross Alpha radioactivity, NO_3-N, NO_3 + NO_2, U
Madera	Varies by GSP. May include **As**, B, Cl, Electrical Conductivity, Fe, Mn, Na, **NO_3-N**, N(total), TDS	DBCP, Gross Alpha radioactivity, NO_3 + NO_2

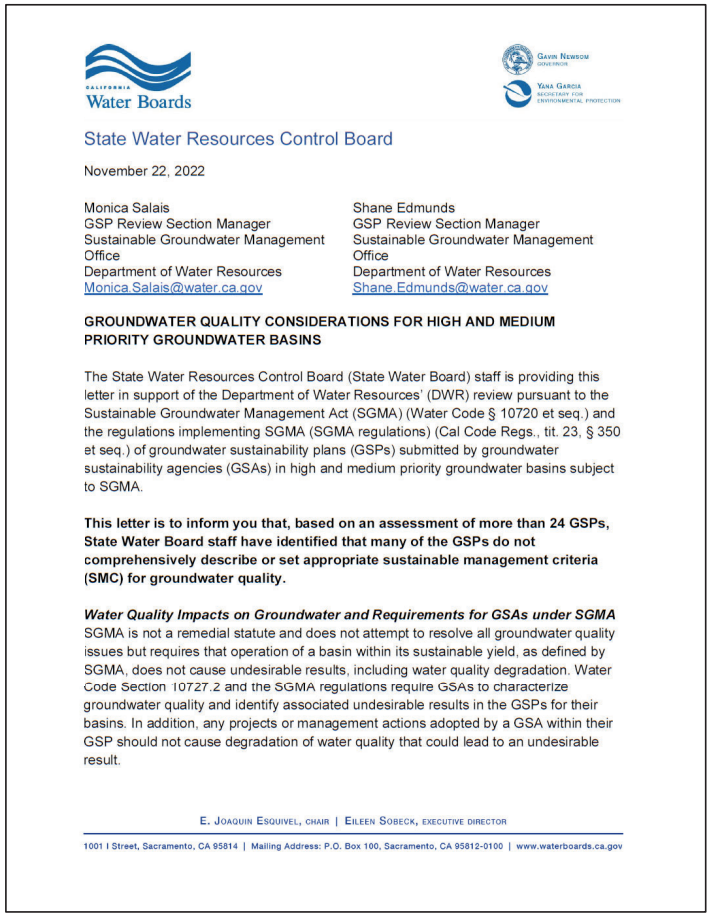
SUMMARY OF WATER QUALITY MTs/MOs

Basin	MT	MO
Delta-Mendota (Common Chapter)	1,000 mg/L TDS (upper SMCL)	<1,000 mg/L TDS
Kings	COCs with historic MCL exceedance in GSP area. May include: 1,2,3-TCP, Al, As, B, Cl, Cr(6), Cr(total), DBCP, F, Fe, Gross Alpha radioactivity, Mn, MTBE, Na, NO_3-N, Pb, PCE, TCE, TDS, U • CA primary MCLs (if recently below) • 20% higher than recent historic high (if recently above MCLs)	MO is to keep concentrations of COCs in below MCLs • For wells with concentrations currently above MCLs, MO is to maintain a stable or decreasing groundwater quality trend
Westside	(1) 1,000 mg/L TDS (upper SMCL) (2) Variable TDS, dependent on location in the Subbasin, historical trends, and maximum historical deviation	(1) Municipal/Domestic: 500 mg/L TDS (rec. SMCL) Ag: 800 mg/L TDS (2) TDS constituents concentrations related to historical trends observed in the wells or nearby areas
Merced	1,000 mg/L TDS (upper SMCL)	500 mg/L (recommended SMCL)
Eastern San Joaquin	1,000 mg/L TDS (upper SMCL)	600 mg/L TDS (recommended SMCL + 100 mg/L buffer)

PRELIMINARY CONSTITUENTS OF CONCERN

Potential COCs identified for Delta-Mendota Subbasin by SWRCB in letter dated 22 November 2022

- 1,2,3-TCP
- Arsenic
- Hexavalent Chromium [Cr(VI)]
- Gross Alpha radioactivity
- Nitrate (NO_3)
- Total Dissolved Solids (TDS)



Water Boards

State Water Resources Control Board

November 22, 2022

Monica Salais
GSP Review Section Manager
Sustainable Groundwater Management Office
Department of Water Resources
Monica.Salais@water.ca.gov

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GSP Review Section Manager
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GROUNDWATER QUALITY CONSIDERATIONS FOR HIGH AND MEDIUM PRIORITY GROUNDWATER BASINS

The State Water Resources Control Board (State Water Board) staff is providing this letter in support of the Department of Water Resources' (DWR) review pursuant to the Sustainable Groundwater Management Act (SGMA) (Water Code § 10720 et seq.) and the regulations implementing SGMA (SGMA regulations) (Cal Code Regs., tit. 23, § 350 et seq.) of groundwater sustainability plans (GSPs) submitted by groundwater sustainability agencies (GSAs) in high and medium priority groundwater basins subject to SGMA.

This letter is to inform you that, based on an assessment of more than 24 GSPs, State Water Board staff have identified that many of the GSPs do not comprehensively describe or set appropriate sustainable management criteria (SMC) for groundwater quality.

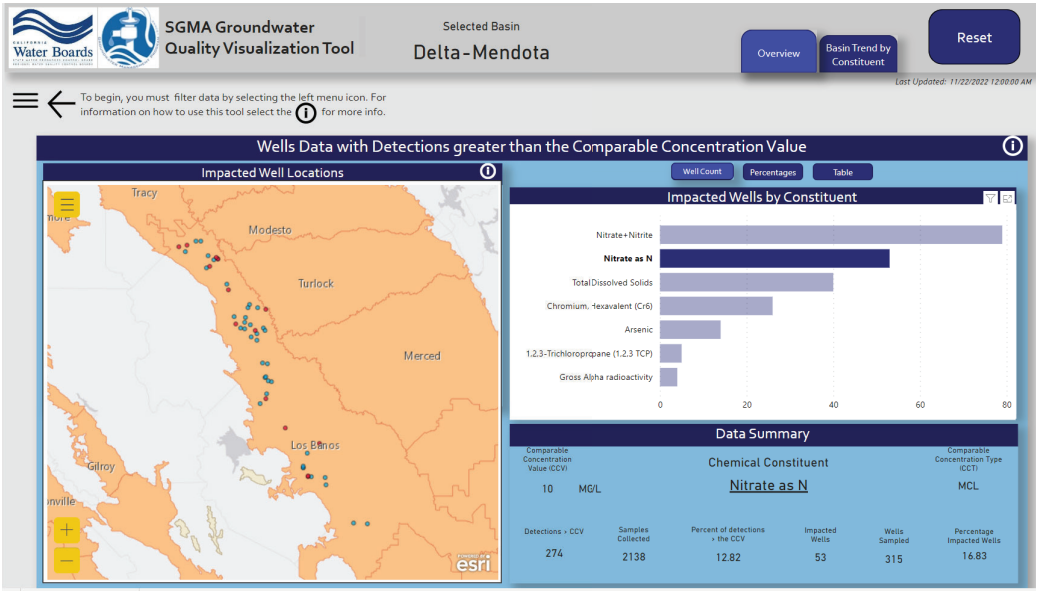
Water Quality Impacts on Groundwater and Requirements for GSAs under SGMA
SGMA is not a remedial statute and does not attempt to resolve all groundwater quality issues but requires that operation of a basin within its sustainable yield, as defined by SGMA, does not cause undesirable results, including water quality degradation. Water Code Section 10727.2 and the SGMA regulations require GSAs to characterize groundwater quality and identify associated undesirable results in the GSPs for their basins. In addition, any projects or management actions adopted by a GSA within their GSP should not cause degradation of water quality that could lead to an undesirable result.

E. Joaquin Esquivel, chair | Eileen Sobeck, executive director

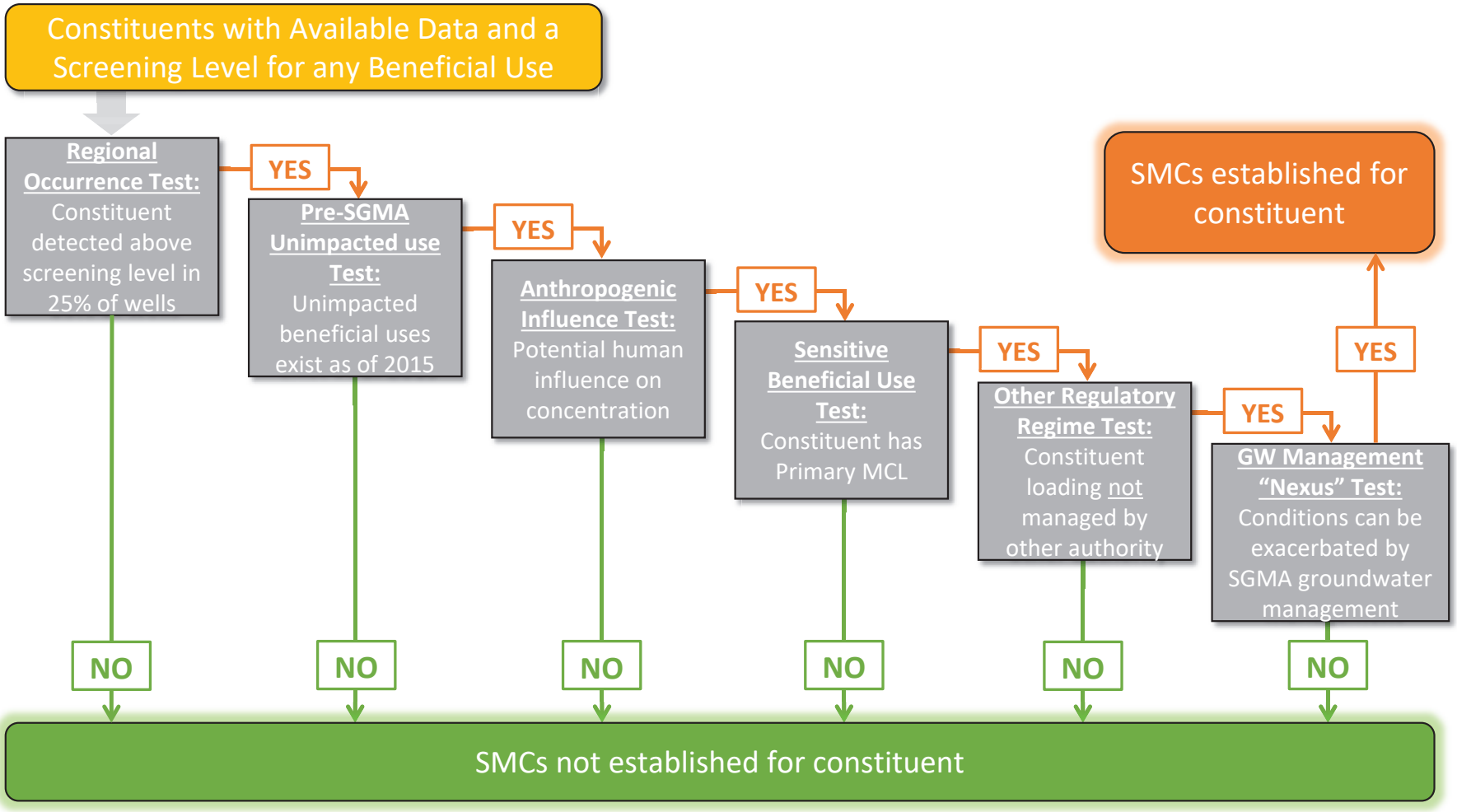
1001 I Street, Sacramento, CA 95814 | Mailing Address: P.O. Box 100, Sacramento, CA 95812-0100 | www.waterboards.ca.gov

POTENTIAL PATHWAYS FORWARD

- Option 1: Develop SMCs for all constituents identified by the SWRCB in their 2022 Letter
- Option 2: Justify development of SMCs for a small number of constituents



POTENTIAL SCREENING/WINNOWING OF COCs



SUMMARY: SWRCB COCS RELATIVE TO SCREENING TESTS

Potential COC (SWRCB)	Regional Occurrence (% exceedance)	Pre-SGMA Unimpacted Use	Anthropogenic Influence (source)	Sensitive Beneficial Use	Other Regulatory Regime	GW Mgmt. "Nexus"
Arsenic	Muni: 18% Domestic: insufficient data	Yes	Primarily Naturally Occurring	Primary MCL	Muni: CA Title 22 Domestic: none	
Cr(VI)	Muni: 47% Other supply: 43% Domestic: insufficient data	Yes	Primarily Naturally Occurring	Primary MCL	Muni: CA Title 22 Domestic: none	
Gross Alpha	Muni: 4% Domestic: no data	Yes	Primarily Naturally Occurring	Primary MCL	Muni: CA Title 22 Domestic: none	
Nitrate	Muni: 12% Other supply: 13% Dom: 22%	Yes	Anthropogenic	Primary MCL	IRLP, CV-SALTS Muni: CA Title 22 Domestic: IRLP	Recharge
TDS	Muni: 29% Other supply: 43% Domestic: 53%	Yes	Both	Secondary MCL	IRLP, CV-SALTS Muni: CA Title 22 Domestic: none	Yes
1,2,3-TCP	Muni: 15% Domestic: insufficient data	Yes	Anthropogenic	Primary MCL	Muni: CA Title 22 Domestic: none	Recharge

PROPOSED WATER QUALITY URs AND MTs/MOs

- **Undesirable Results:** UR occurs if MTs are exceeded at **25%** or more of RMS for two consecutive years.
- **Minimum Thresholds:**
  - For RMS/COC where pre-2015* conc. is less than MCL: **MT = MCL**
  - For RMS/COC where pre-2015* conc. is greater than MCL: **MT = 20% above pre-2015 conc.**
- **Measurable Objectives:**
  - For RMS/COC where pre-2015* conc. is less than MCL: **MO = MCL**
  - For RMS/COC where pre-2015* conc. is greater than MCL: **MO = maintain or improve COC concentrations**
- **Interim Milestones:** Glide path between current concentration and MO

* For RMS/COC that do not have pre-SGMA data, set interim MTs/MOs at MCL, and conduct monitoring to establish baseline based on at least 2 years of monitoring data and use to set permanent MTs/MOs.

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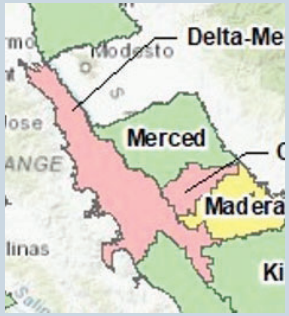
WATER QUALITY SMC DEVELOPMENT PROCESS

ID Beneficial Users	Impacts to Beneficial Users	Consideration of Adjacent Basins	Relationships with Other Sustainability Indicators	State, Federal, and Local Standards
• Drinking water GW users • Agricultural GW users • Environmental users	• Increased cost to treat; potentially economically prohibitive to continue to use for drinking water	• Compare MOs/MTs to those in adjacent basins to assess potential impacts to GW quality 	• GW Levels	• MCLs • Basin Plan

DEFINE UNDESIRABLE RESULTS CRITERIA

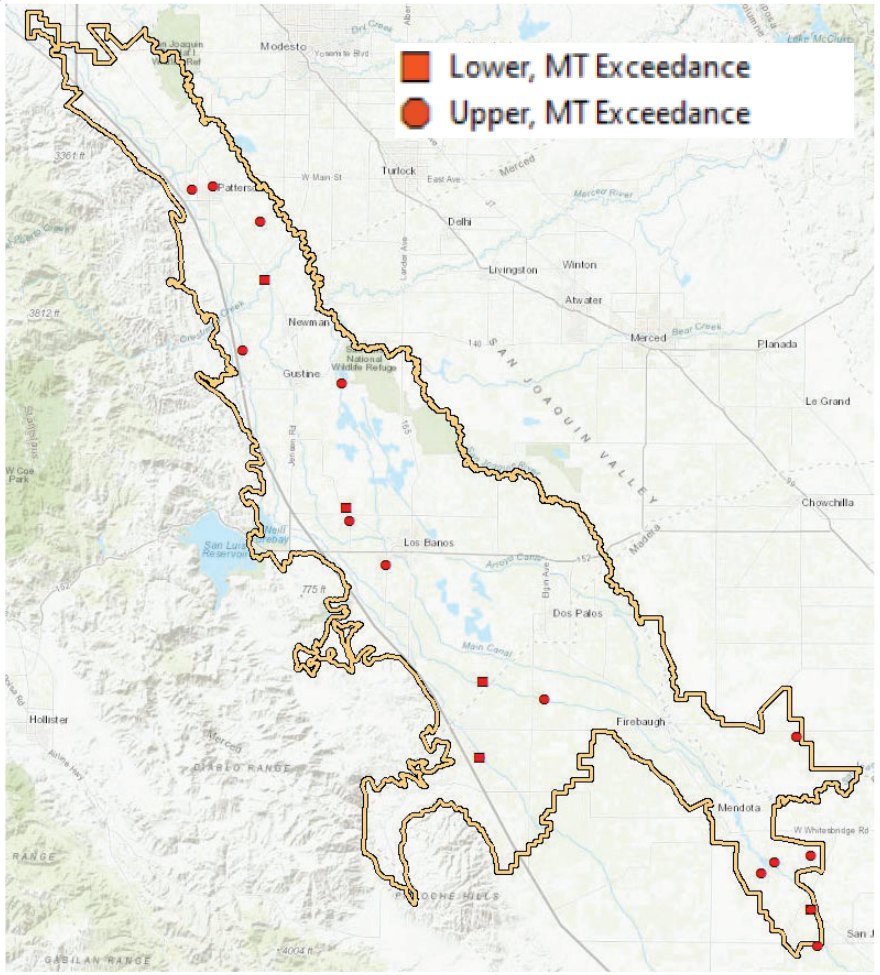
Sustainability Indicator	Beneficial Uses/Users			
	Agricultural/ Industrial Users	Domestic / Small Community Users	Municipal Users	Environmental Users
Degradation of Water Quality	Questions: • **How much water quality degradation is significant & unreasonable?** • **In other words, what percentage of wells being contaminated is significant & unreasonable, and why?** Translate answer to MT exceedances at RMS locations: MT exceedances at X% of RMS locations over XX period			

Need justification for choices

POTENTIAL RISK TO BASIN / GSAs

- Can the GSAs maintain COC concentrations below the proposed SMCs?

- In the past two years there would have been MT exceedances for TDS
  - In WY 2021: **12 MT exceedances** out of 48 RMS wells with data (25%)
  - In WY 2022: **20 MT exceedances** out of 57 RMS wells with data (35%)
  - **2** RMS wells with consecutive exceedances out of 14 with data (14%)



Wells Exceeding proposed TDS MTs – WY 2022

Draft Timeline: 2025 Plan Update for Coordination Committee

January 9, 2022:	~~Staff submits draft of example "simplified language" (from Common Chapter) for possible adjustments to 2025 Plan update.~~ ~~Review updated draft budgets for fund 63.~~ ~~Review of items needed for Annual Report.~~ Review statutory requirements for the 2025 Plan updates and DWR's latest Plan update recommendations.
February 13, 2023:	~~Continue GSP draft simplified language review and make recommendations.~~ Begin discussions on how to address public comments received on GSP and revisions in the 2025 Plan Updates. ~~Review of any released DWR GSP Determinations on other Subbasins for possible relevance to D-M Subbasin.~~ Draft a workplan for 2025 GSP updates including assignments to specific GSAs and consultants. ~~Begin review of Annual Report Data for the 2025 Plan Updates. Refine 2025 GSP update workplan.~~
March 13, 2023	~~Continue GSP draft simplified language review and recommendations.~~ ~~Refine workplan for 2025 GSP updates~~. ~~Review and approve WY 2022 Annual Report.~~ Begin to analyze data from annual report for the 2025 Update.
April 10, 2023:	~~Finalize review of DWR comments and recommended actions and incorporate into 2025 GSP update workplan. Finalize workplan including specific assignments for individual GSAs, GSP groups, and consultant tasks.~~ Draft RFP for selecting Plan Update consultant. Schedule meeting with DWR to discuss Plan Update process and procedures.
May 1, 2023:	Issue RFP for Northern & Central Delta-Mendota Subbasin GSP 2025 Update. ~~Staff/GSA/group analysis of "Basin" and "Setting" Chapters and DWR recommended actions. Further review of staff "simplified" text approach. Solicit feedback from DWR on simplified approach.~~
May 31, 2023:	Deadline for 2025 Update RFP Responses from Consultants. Continue discussions on Coordination Agreement revisions.
June 1-15 2023:	Subcommittee meets to select consultant(s) to interview for 2025 NCDMS Plan Update. Interview consultant(s) for 2025 NCDM GSP Update.
June 15-30 2023:	Select consultant to perform specific tasks for 2025 NCDM GSP Update. Execute Fiscal Year task order. Consultant performs analysis of (any) DWR Plan Update guidance documents, recommended actions, and task/subtask lists and assignments including responses to comments. If needed, schedule meeting with DWR staff to discuss Plan Update items.

July 10, 2023:	Deadline for consultant data adjustments for 2025 CC Update "Plan Area" and "Settings" Chapters. Begin outline of responses to "general comments." Begin review and discussions of Subbasin Water Budget and Sustainable Yield with Coordination Committee/TWG. Review of staff "simplified language" proposed changes. Review GSA/GSP group, staff, and consultant task list and timelines.
August 14, 2023:	Continue Water Budget and Sustainable Yield discussions with CC/TWG. Address DWR recommended actions. Finalize WQ section if able and begin discussions on CC Interconnected Surface Water SMC and Table. Meet with DWR to discuss Update progress and proposed changes.
September 11, 2023:	Finish water budget and sustainable yield with CC/TWG and incorporate into NCDM GSP. Incorporate WQ SMC and Table (if not already done) and/or Interconnected Surface Water SMC and table (see above). If able, begin discussions on Chronic Lowering of Groundwater. Address DWR recommended actions.
October 9, 2023:	Finalize Interconnected Surface Water SMC and Table (if not already done) and/or Chronic Lowering of Groundwater SMC and Table. Review tasks lists for GSAs, GSP groups, staff, and consultants for schedule. Review and identify any new priorities for next fiscal year's budget. Address DWR recommended actions. Meet with DWR to discuss Update progress and proposed changes. Review GSA/GSP group, staff, and consultant task list and timelines.
November 13, 2023:	Finalize Chronic Lowering of groundwater SMC and table. Begin discussions of Reduction in Groundwater Storage SMC and Table. Continue review of budget. Address DWR recommended actions. Review items needed for Annual Report.
December 11, 2023:	Continue discussions of Reduction in Storage SMC and Table. Approve next fiscal year's budget. Continue to review simplified language efforts. Address DWR recommended actions (if needed). Meet with DWR to discuss Update progress and changes.
January 8, 2024:	Finalize Reduction in Storage SMC and Table. Begin discussions of SMC and Table for Subsidence. Address DWR recommended actions (if needed). Review staff edits for simplified language. Review GSA/GSP group, staff, and consultant task list and timelines.
February 12, 2024:	Continue discussions of SMC and Table for Subsidence. Address DWR recommended actions (if needed). Meet with DWR to discuss Update progress and changes.

March 11, 2024:	Finalize SMC and Table for Subsidence. Begin planning public meetings on 2025 update. Finalize action on DWR recommended actions (if needed). Create draft presentation on Update changes. Meet with DWR to discuss Update progress and changes.
April 8, 2024:	Buffer month for tying up loose ends. Possibly begin public meeting roadshow. Review simplified language changes and refine draft presentation. Review GSA/GSP group, staff, and consultant task list and timelines.
May 13, 2024:	Begin holding public meetings on 2025 GSP update in Cooperation with the Coordination Committee. Note attendance and comments. Final review of GSA/GSP group task assignments and completion.
June 10, 2024:	Continue public meetings. Finalize draft Coordination Agreement revisions. Continue GSP simplified language revisions. Meet with DWR to discuss Update progress and changes.
July 8, 2024:	Continue Public Meetings. Continue individual GSP revisions. Coordination agreement out for GSA/GSP approval.
August 12, 2024:	Deadline for final review of CC, GSPs, and response to comments. Continue public meetings.
September 9, 2024:	Final approval of GSP 2025 Update.
Sept./Oct. 2024:	Begin public notices, public hearings, and formal approval at GSA level for final 2025 Common Chapter and individual GSP updates.
January 23, 2025:	Submit 2025 GSP Updates including Common Chapter, other appendices, and Coordination Agreement.

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]
1	**Update/refine monitoring network as new wells are constructed and well construction information is obtained**						
1a	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 as additional wells were removed from the RMN during 2022 sampling events.
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 depletions**						
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. Consultant contracting in progress for ISW network design. Funding for additional ISW wells in NCDM was included in SGMA Round 2 Grant Application submitted on 12/16/22.
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**						
3a	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 studies**						
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. 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 in March 2023. Model likely not available for formal release until later in 2023.
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.	--
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.	--
4f	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**						
5a	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.	--
5b	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 are planned through Response to Inadequate Determination and upcoming 2025 GSP Update.
5c	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.	--
6	**Update Sustainable Management Criteria**						--
6a	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 is planned through Response to Inadequate Determination and upcoming 2025 GSP Update.

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 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.	$1,000,000 awarded in SGMA Round 1 Implementation Grant.	SGMA Round 1 Funding Agreement executed with DWR on 10/7/22.
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 complete in October 2022.
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 for 2023-2025, construction planned to start in 2025.	--	--
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.	$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 late 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	30% preliminary design anticipated to be complete in 2022; CEQA completed in October 2020; NEPA to be completed fall 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 CLIBP project.	--	--
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.	--	--
2	West Stanislaus Irrigation District Lateral 4-South Recapture and Recirculation Reservoir	West Stanislaus Irrigation District	January 2026	$1,500,000	Preliminary design complete in September 2021.	Partially funded under IRWM grant.	--
2	Ortigalita Creek Groundwater Recharge and Recovery Project	San Luis Water District	January 2026	TBD	N/A	Partially funded under IRWM grant.	Funding request was included in SGMA Round 2 Grant Application.

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):
Tier 1 – 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.

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 Subsidence**			
	Central Delta-Mendota GSA	Developed draft administrative policy for well metering and reporting. Adopted policy in January 2023.	GSAs have coordinated on developing Lower Aquifer pumping rules. A few GSAs do not extract from Lower Aquifer.	Limited/no analysis or discussion to date. GSA efforts to require metering and reporting of pumping are continuing. This pumping data, coupled with the Well Census and Inventory Report, could be used to better understand the location and distribution of pumping.
	City of Patterson GSA			
	DM-II GSA	DPWD: developed draft groundwater well registration and metering policy.		
	Northwestern Delta Mendota GSA	Stanislaus & Merced County permits for new extraction wells require metering and reporting.		
	Oro Loma Water District GSA			
	Patterson Irrigation District GSA	Adopted ordinance requiring the registration of wells and reporting of pumping.		
	West Stanislaus Irrigation District GSA	Adopted ordinance requiring the registration of wells and reporting of pumping.		
	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.	--
	City of Patterson GSA	Evaluating stormwater recharge project (tied to development).		
	DM-II GSA	DPWD: developed draft Policy to maximize other water supplies.		
	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 of surface water.		
	Widren Water District GSA			
1	**Increasing GSA Access to and Input on Well Permits**			
	Central Delta-Mendota GSA	Merced updated its well permitting process.	GSAs have coordinated on increasing GSA participation in well permitting process.	Governor's EO N-7-22 regarding well permitting provides some clarity and authority. Merced County and Stanislaus County have updated their well permitting process and requirements.
	City of Patterson GSA			
	DM-II GSA			
	Northwestern Delta Mendota GSA	Merced updated its well permitting process. Stanislaus well permitting process being updated.		
	Oro Loma Water District GSA			
	Patterson Irrigation District GSA			
	West Stanislaus Irrigation District GSA			
	Widren Water District GSA			
1	**Drought Contingency Planning in Urban Areas**			
	City of Patterson GSA	Conducted contingency planning described in adopted 2020 UWMP.	Conducted as part of UWMP.	--
1	**Fill Data Gaps**			
	Central Delta-Mendota GSA		Funding was awarded in April 2022 to fill data gaps in interconnected surface water and subsidence monitoring under the SGMA Round 1 Implementation grant. Consultant contracting in progress.	See "Implementation Activities" tab for specific data-gap filling efforts. Additional ISW wells in NCDM included in SGMA Round 2 Grant Application submitted on 12/16/22.
	City of Patterson GSA	Conducted subsidence monitoring and added well to monitoring network. Improving well metering.		
	DM-II GSA	DPWD serving as grantee for SGMA Round 1 Implementation Grant.		
	Northwestern Delta Mendota GSA			
	Oro Loma Water District GSA			
	Patterson Irrigation District GSA	Improving pumping data collection. Lead for ISW component of SGMA Round 2 Grant Application.		
	West Stanislaus Irrigation District GSA			
	Widren Water District GSA			

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	SGM	= Sustainable Groundwater Management
EO	= Executive Order	USBR	= United Stated Bureau of Reclamation
GSA	= Groundwater Sustainability Agency	UWMP	= Urban Water Management Plan
GSP	= Groundwater Sustainability 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):
Tier 1 – 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.

(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 County....The 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 District	Draft Groundwater Well Metering Policy	15 June 2022	Covers well registration, metering, access, costs, semi-annual reporting, maintenance, and exclusions. Packets to be sent to customers explaining the new well registration and metering policy requirements in the near future.
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-Mendota GSA	Central GSA Resolution Nos. 2021-01 and 2021-02	25 January 2021	Adopted two Resolutions on 25 January 2021: require registration of all wells by 4/1/2021, impose fee for late registration. Developed draft 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. Developed draft Well Access and Indemnity Agreement for property owners with groundwater wells in April 2023.
Widren Water District	N/A	N/A	N/A. The two operational supply wells in WWD are equipped with meters.

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.

GSP Implementation Schedule

Northern & Central Delta-Mendota GSP Region

3-MONTH LOOK-AHEAD SCHEDULE

TASK	RESPONSIBLE PARTY	START	END
BASIN-SCALE COORDINATION			
Intra-Basin Coordination			
Subbasin Coordination Committee	Basin GSAs	Semi-Monthly	
Subbasin Technical Working Group	Basin GSAs	Monthly	
Respond to Inadequate Determination from DWR	Basin GSAs / EKI	3/2/23	9/29/23
SGM Implementation Grant			
Perform SGM Round 1 Grant Approved Activities	Basin GSAs	10/7/22	4/30/25
N-C REGION COORDINATION / ADMINISTRATION			
N-C Coordination Meetings			
Northern and Central Region Mngmt Committees Meetings	GSAs	Monthly	
Northern Region Management Committee Meetings	GSAs	As-needed	
Central Region Management Committee Meetings	GSAs	As-needed	
Technical/Finance Working Group Meetings	GSAs	TBD	
GSP Progress Checks			
GSP Implementation Progress Reports (Tracking Tools)	GSAs	Semi-Annual	
N-C REGION GSP IMPLEMENTATION			
Water Level Monitoring			
Collect Spring Water Level Data	GSAs / SLDMWA	2/1/23	4/30/23
Data QA/QC	GSAs / W&C	4/30/23	5/31/23
Upload Spring Water Level Data to DWR MNM	GSAs / W&C	6/1/23	6/30/23
Water Quality Monitoring			
Collect Water Quality Data	GSAs	5/1/23	8/31/23
Data QA/QC	GSAs / W&C	7/31/23	9/30/23
Data Consolidation/Upload to DMS	GSAs / W&C	7/31/23	9/30/23
Interconnected Surface Water Monitoring			
Install/Identify New Monitoring Wells	WSID / PID / NWDM	3/1/20	9/30/23
Meet with Adjoining GSP Groups	WSID / PID / NWDM	As-needed	
Projects[a]			
Los Banos Creek Recharge and Recovery Project	SLWD	In design	TBD
Kaljian Drainwater Reuse Project	SLWD	PD in 2022	TBD
Orestimba Creek Recharge and Recovery Project	DPWD	In design	12/31/23
NVRRWP – Increased Modesto and Turlock Portions[b]	DPWD	Complete	
Percolation Ponds for Stormwater Capture and Recharge	City of Patterson	PD in 2023	TBD
WSID Lateral 4-North Recapture and Recirculation Reservoir[c]	WSID	Design in 2023	Est. 2024
Revision to TRID Lower Aquifer Pumping[d]	TRID	On-going	

APR				MAY				JUNE					JULY			
WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 1	WEEK 2	WEEK 3	WEEK 4

GSP Implementation Schedule

Northern & Central Delta-Mendota GSP Region

3-MONTH LOOK-AHEAD SCHEDULE

TASK	RESPONSIBLE PARTY	START	END	APR				MAY				JUNE					JULY			
				WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 1	WEEK 2	WEEK 3	WEEK 4
Management Actions[a]																				
Lower Aquifer Pumping Rules for Minimizing Subsidence	GSAs	6/25/20	12/31/23																	
Maximize Use of Other Water Supplies	GSAs	6/25/20	10/31/24																	
Increasing GSA Access to and Input on Well Permits	GSAs	6/11/20	12/31/23																	
Drought Contingency Planning in Urban Areas	GSAs	Complete																		
Fill Data Gaps	GSAs	2/1/20	4/30/25																	
Additional GSP Activities																				
USGS / Basin Model	USGS/USBR	3/1/20	TBD																	
Develop 2025 GSP Update	GSAs / TBD	1/1/23	10/31/24																	
Project Management and Communication	SLDMWA / EKI	3/1/23	2/29/24																	
As-Needed Technical Support	EKI / W&C	3/1/23	2/29/24																	

Abbreviations

DMS = Data Management System
DM = Delta Mendota
DPWD = Del Puerto Water District
EKI = EKI Environment & Water, Inc.
FS = Feasibility Study
GSA = Groundwater Sustainability Agency
GSP = Groundwater Sustainability Plan
NVRRWP = North Valley Regional Recycled Water Program
P&MA = Projects and Management Actions
PD = Preliminary Design
PID = Patterson Irrigation District
P&P = Provost & Pritchard
QA/QC = Quality Assurance/Quality Control
SLDMWA = San Luis & Delta-Mendota Water Authority
SLWD = San Luis Water District
TBD = to be determined
TRID = Tranquillity Irrigation District
TWG = Technical Working Group
USBR = United States Bureau of Reclamation
USGS = United States Geological Survey
W&C = Woodard & Curran
WSID = West Stanislaus Irrigation District
WY = Water Year

Notes

(a) Projects and Management Actions extend through 2025.
(b) Portion of project is complete. Increased supply of recycled water expected.
(c) Needs to be coordinated with Orestimba and Del Puerto Creek projects.
(d) In operation starting in 2017.

Key Dates

April 1, 2023: WY 2022 Consolidated Annual Report Submitted to DWR
April 10, 2023: Subbasin Coordination Committee Meeting
April 20, 2023: Northern & Central Delta-Mendota Management Committees Special Meeting
April 24, 2023: Central GSA Quarterly Meeting
April 24, 2023: Subbasin Coordination Committee and Technical Working Group Meeting
April 27, 2023: Northern & Central Delta-Mendota Management Committees Meeting
April 28, 2023: Subbasin Coordination Committee Policy Committee Meeting
May 8, 2023: Subbasin Coordination Committee and Technical Working Group Meeting
May 22, 2023: Subbasin Coordination Committee and Technical Working Group Meeting
May 25, 2023: Northern & Central Delta-Mendota Management Committees Meeting
June 5, 2023: Subbasin Coordination Committee and Technical Working Group Meeting
June 19, 2023: Subbasin Coordination Committee and Technical Working Group Meeting
June 22, 2023: Northern & Central Delta-Mendota Management Committees Meeting