#### Regular Meeting of the Delta-Mendota Subbasin Coordination Committee and Technical Working Group Monday, April 10, 2023, 1:00 PM DRAFT SLDMWA Boardroom, 842 6th Street, Los Banos, CA

#### Coordination Committee and Technical Working Group Members and Alternates Present

Ric Ortega, Member – Grassland Water District John Wiersma, Member – San Luis Canal Company/San Joaquin River Exchange Contractors (SJREC) 2 Jarrett Martin, Member – Central California Irrigation District/SJREC 1 Vince Lucchesi, Member – Patterson Irrigation District/Northern Delta-Mendota Region Augie Ramirez, Alternate – Fresno County Jim Stilwell, Member – Farmers Water District Will Halligan, Alternate – Farmers Water District/LSCE Joe Hopkins, Member – Aliso Water District/Provost & Pritchard Chase Hurley< Member – Pacheco Water District/Central Delta-Mendota Region Christy McKinnon, Alternate – Stanislaus County

#### San Luis & Delta-Mendota Water Authority Staff Present

Scott Petersen\* John Brodie Lauren Viers

#### Others Present

Steve Stadler – San Luis Water District Aaron Barcellos –Pacheco Water District Anthea Hansen – Del Puerto Water District Andrew Francis – Luhdorff & Scalmanini\* Lauren Layne – Baker Manock & Jensen\* Rick Iger – Provost & Pritchard\* Anona Dutton – EKI Environment & Water, Inc. Sarah Gerenday – EKI Environment & Water, Inc.\* Leslie Dumas – Woodard & Curran\* Ellen Wehr – Grassland Water District\* Allen Barros – Advanced Ag Appraisers

\* Denotes telephonic/Zoom participation.

#### 1. Call to Order/Roll Call

John Wiersma/SLCC called the meeting to order at 1:00 PM.

#### 2. Opportunity for Public Comment

No public comments were made.

#### 3. Committee to Review and Take Action on Consent Calendar, Wiersma/Brodie

- a) Minutes for the March 21, 2023 Special Meeting of the Delta-Mendota Subbasin Coordination Committee
- b) Minutes for the March 27, 2023 Special Joint Meeting of the Delta-Mendota Subbasin Coordination Committee and Technical Working Group
- c) Budget-to-Actual Report (through February 2023)
- d) Grant Reimbursement Summary Report

Ric Ortega/Grassland provided the motion to approve the Consent Calendar and Augie Ramirez/Fresno County seconded. The motion was passed unanimously by those present.

#### 4. Committee to Discuss Water Year (WY) 2022 Annual Report Submissions, Brodie (Policy)

John Brodie/SLDMWA provided an update on the recently submitted Delta-Mendota WY 2022 Annual Report. Water budget numbers did not indicate significant overdraft; however, the estimated change in storage was still negative. The Department of Water Resources (DWR) is expected to review the annual reports thoroughly. Leslie Dumas/Woodard & Curran pointed out that DWR publishes the data submitted with annual reports on one of their online Sustainable Groundwater Management Act (SGMA) tools.

#### 5. Committee to Discuss April 4, 2023 State Water Resources Control Board (SWRCB) Meeting, Martin/Dutton (Policy/Technical)

Jarrett Martin/CCID/SJEC reported on the SWRCB meeting, in which the SWRCB discussed potential approaches for the six subbasins whose Groundwater Sustainability Plans (GSPs) determined "Inadequate" by DWR. Jarrett attended the meeting on behalf of the Subbasin. Delta-Mendota was the only subbasin with a representative at the meeting. The SWRCB indicated that they would be giving strong consideration to DWR's recently published guidelines on domestic well impacts.

Anona Dutton/EKI added that the SWRCB is focusing on dry wells, subsidence, and risk of water quality degradation (particularly due to nitrate) in determining priorities.

Scott Petersen/SLDMWA pointed out that all six subbasins are expected to receive a probationary hearing, though the timeline is currently unclear.

#### 6. Committee to Discuss Grant Funding Availability for GSP Revisions and 2025 Plan Update, Brodie (Policy)

John Brodie provided an update on the combined amounts for the first two invoices for the SGMA Round 1 Implementation Grant funding. These numbers will be revised for the next meeting.

7. Committee to Discuss Revisions to EKI Agreement to provide additional staff augmentation support for Response to Inadequate Determination in the Delta-Mendota Subbasin, Brodie (Policy)

The Committee directed EKI to prepare an amended Task Order for Sustainable Management Criteria (SMC) justification and water budget efforts as part of the response to DWR's inadequate determination. This work will also be incorporated into the 2025 GSP Update.

## 8. Committee to Discuss RFP for GSP Revisions/2025 GSP Update, Brodie/Wiersma (Policy/Technical)

John Brodie will begin drafting a Request for Proposals (RFP) for consultants to prepare the 2025 GSP Update. The RFP is scheduled to be open from May 1, through May 31, 2023. A subcommittee was identified to support John develop the RFP.

## 9. Committee to Discuss Response to Inadequate Determination for the Delta-Mendota Subbasin GSPs, Dutton (Technical)

Anona Dutton gave a presentation on progress towards addressing DWR's Inadequate Determination for the Delta-Mendota Subbasin GSPs. EKI proposed keeping the existing Minimum Thresholds (MTs) and Measurable Objectives (MOs) for groundwater levels while providing increased justification.

#### 10. Committees to Discuss Potential Additional Funding Opportunities, Brodie

A list of available funding opportunities was included in the meeting materials.

#### 11. Next Steps

- EKI will be provided with the existing well census and inventory report.
- GSAs will evaluate MT exceedances at the RMS within their jurisdictions and consider acceptable undesirable results thresholds and consider what possible actions might be required if conditions persist.
- The next Coordination Committee meeting will include revised grant funding data and an update on the status of CVHM2-SJV groundwater model.
- The RFP for GSP updates will be released on Monday, May 1, 2023.
- John will get an update on the release of data used to inform the CVHM2-SJV model.

#### 12. Conference with Legal Counsel – Anticipated Litigation

A conference with legal counsel was not held.

#### 13. Conference with Legal Counsel – Existing Litigation

A conference with legal counsel was not held.

#### 14. Report out of Closed Session

No report was made, as there was no closed session.

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

No reports were made.

#### 16. Future Delta-Mendota Subbasin Coordination Committee and Technical Working Group Regular Meetings

Combined Coordination Committee and Technical Working Group meetings will be held biweekly on the second and fourth Mondays, with the next meeting to be held on Monday, April 25, 2023. The next Coordination Committee policy discussion will be determined by Doodle Poll.

#### 17. Adjournment

John Wiersma adjourned the meeting at 4:06 PM.

#### Special Meeting of the Delta-Mendota Subbasin Coordination Committee and

#### Technical Working Group

#### Monday April 24, 2023, 1:00 PM DRAFT

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

Coordination Committee Members and Alternates Present John Wiersma, Member – San Luis Canal Company/San Joaquin River Exchange Contractors 2 (SJREC) Jarrett Martin, Member – Central California Irrigation District (CCID)/SJREC 1 Jim Stilwell, Member – Farmers Water District Chase Hurley, Member – Pacheco Water District/Central Delta-Mendota Region Management Committee Ric Ortega, Member – Grassland Water District Augie Ramirez, Member – Fresno County Christy McKinnon, Alternate – Stanislaus County/Northern Delta-Mendota Region Management Committee (NDMC) Joe Hopkins, Member – Aliso Water District Vince Lucchesi, Member – Patterson Irrigation District/NDMC

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

John Brodie Scott Petersen\*

#### Others Present

Steve Stadler – San Luis Water District Anthea Hansen – Del Puerto Water District Lauren Layne\* – Baker Manock & Jensen Andrew Francis – Luhdorff & Scalmanini, CE Anona Dutton – EKI Environment & Water (EKI) Christopher Heppner\* – EKI Sarah Gerenday\* – EKI Natalie Cochran\* – Woodard & Curran

\* denotes participation via Zoom

#### 1. Call to Order/Roll Call

John Wiersma called the meeting to order at 1:02 PM.

#### 2. Opportunity for Public Comment

No public comment was shared under this agenda item.

#### 3. Committee to Consider Amending the Scope of Work and Budget for EKI, Brodie (Policy)

Ric Ortega/Grassland provided the motion to approve the amended scope of work and budget for EKI, and Jarrett Martin/SJREC 1 seconded. The motion was passed unanimously by those present.

#### 4. Committee to Discuss Adopting Revised Water Level SMC Methodology, Brodie (Policy)

Jarrett Martin/CCID shared his evaluation of water level Minimum Threshold (MT) exceedances in the existing Representative Monitoring Network (RMN). Following questions about the proposed UR criteria, Anona Dutton/EKI clarified that two consecutive years of MT exceedances would require exceedances in four consecutive seasons (fall and spring of water year 1, then fall and spring of water year 2). Anona suggested that new RMN wells lacking pre-Sustainable Groundwater Management Act (SGMA) water level data, a simulated water level determined by modeling could be used to set Sustainable Management Criteria (SMC).

#### 5. Committee to Discuss Grant Funding Availability for GSP Revisions and 2025 Plan Update, Brodie (Policy)

Updated funding and expense numbers were included in the meeting packet. The numbers were revised from the ones presented at the April 10, 2023 meeting. Further discussion is needed regarding the reimbursement of subbasin-wide expenses.

## 6. Committee to Discuss RFP for GSP Revisions/2025 GSP Update, Ramirez/Martin/Hopkins (Policy/Technical)

The RFP subcommittee received the completed first draft of the Request for Proposals (RFP) on April 21, 2023 and are working on revisions. The final RFP is scheduled for release on May 1, 2023. Any suggestions for specific consultants to receive the RFP should be submitted to the subcommittee.

#### 7. Committee to Discuss Public Release of CVHM2-SJV Model and Data, Brodie (Technical)

John Brodie reported that the United States Bureau of Reclamation and United States Geological Survey have agreed to share the CVHM2-SJV model and data while it is under review andwere setting up a file transfer protocol (FTP) for him to download the files. The model files will remain preliminary and confidential until published; however, they may be shared with consultants working on the response to DWR's inadequate determination for the Subbasin GSPs. It is expected that the model will be publicly released by 2025 and therefore could potentially be used for the updated GSP.

## 8. Committee to Provide Direction on Development of Water Quality SMCs, Dutton (Technical)

Anona Dutton gave a presentation on EKI's analysis and proposal regarding water quality SMCs. EKI proposed a screening process to determine which of the Constituents of Concern (COCs) identified by the SWRCB need SMCs based on regional occurrence, pre-SGMA impacts, anthropogenic influence, sensitive beneficial use, overlap with other regulatory regimes, and a nexus with groundwater management.

In discussion, it was pointed out that while boron was not a COC identified by SWRCB, it is relevant for agriculture, and data on it is available for some RMN wells. Also, while nitrate was screened out due to its regulation by the Irrigated Lands Regulatory Program, it is generally a high priority for SWRCB, which might not accept nitrate's exclusion as a COC.

## 9. Committee to Discuss Minimum Thresholds/Measurable Objectives for Representative Monitoring Network Wells, Brodie (Technical)

Example hydrographs with MTs and MOs noted were included in the meeting packet. Anona Dutton recommended that MOs/MTs be accompanied by a well exceedance policy and a policy for missed measurements, such as those included in Kern's GSP.

#### 10. Committee to Discuss Use of Well Census and Inventory Report in the 2025 Update/Determination Response, Dutton (Technical)

Results and next steps regarding the well census and inventory report were discussed. Information on some de minimis wells is available, particularly within the Northern and Central GSP area, but not for all GSP areas. Individual GSP groups will study their portion of the monitoring network and determine where wells should be added or removed.

#### 11. Committee to Discuss Participation in Panel on Conflict Resolution at the SGMA Implementation Summit and Workshop, Martin (Policy)

The Groundwater Resources Association (GRA) and Association of California Water Agencies (ACWA) are hosting a joint summit and workshop in June on SGMA implementation. The organizers have extended an invitation for someone from the Delta-Mendota subbasin to participate in a panel on conflict resolution. Jarrett Martin was nominated and agreed to represent the Delta-Mendota GSAs on the panel.

#### 12. Next Steps

- Double check wells recently added to the RMN and establish MOs and MTs for those that don't have them.
- Screen boron as a potential constituent of concern to be included in SMC development.
- Send well census shapefiles to EKI.
- Jarrett Martin will notify GRA of his ability to participate in the panel on conflict resolution at the June Groundwater Conference.

#### 13. Conference with Legal Counsel - Anticipated Litigation

No discussion was held under this agenda item.

#### 14. Conference with Legal Counsel – Existing Litigation

No discussion was held under this agenda item.

#### 15. Report out of Closed Session

No report under this agenda item was necessary, as there was no closed session.

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

No report was made under this agenda item.

#### 17. Future Delta-Mendota Subbasin Coordination Committee Meetings

- a. Friday April 28, 2023: 8:00 AM (Policy Only Discussion)
- b. Monday May 8, 2023: 1:00 PM (with Technical Working Group)
- c. Monday May 22, 2023: 1:00 PM at Grassland Water District Office (with Technical Working Group)
- d. Other policy only discussion meetings may be scheduled after April 28, 2023

18. Discussion was held on the possibility of an online option for future meetings where individuals who are not consultants could listen to the meeting without actively participating. It was reiterated that the Coordination Committee and Technical Working Group want all active participants to be physically present, with the exception of necessary staff and consultants as defined by the Brown Act.

#### 19. ADJOURNMENT

John Wiersma adjourned the meeting at 3:25 PM.

#### Special Meeting of the Delta-Mendota Subbasin Coordination Committee Friday, April 28, 2023, 8:00 AM DRAFT SLDMWA Boardroom, 842 6th Street, Los Banos, CA

#### Coordination Committee Members and Alternates Present

Ric Ortega, Member – Grassland Water District John Wiersma, Member – San Luis Canal Company/San Joaquin River Exchange Contractors (SJREC) 2 Jarrett Martin, Member – Central California Irrigation District/SJREC 1 Augie Ramirez, Alternate – Fresno County Jim Stilwell, Member – Farmers Water District Joe Hopkins, Member – Aliso Water District/Provost & Pritchard Chase Hurley, Member – Pacheco Water District/Central Delta-Mendota Region Management Committee

#### San Luis & Delta-Mendota Water Authority Staff Present

Scott Petersen\* John Brodie

#### Others Present

Steve Stadler – San Luis Water District Anthea Hansen – Del Puerto Water District Maria Encinas – City of Patterson Lauren Layne – Baker Manock & Jensen Ethan Andrews – Provost & Pritchard Anona Dutton – EKI Environment & Water, Inc.\*

\* Denotes telephonic/Zoom participation.

#### 1. Call to Order/Roll

John Wiersma/SJREC 2 called the meeting to order at 8:01 AM.

#### 2. Opportunity for Public Comment

No public comments were made.

## 3. Committee to Consider Approving the Methodology for Revised Water Level Sustainable Management Criteria, Brodie/Dutton

John Wiersma provided the motion to approve the methodology and Ric Ortega/Grassland seconded. The motion was passed unanimously by those present.

## 4. Committee to Consider Approving the Methodology for Revised Water Quality Sustainable Management Criteria, Brodie/Dutton

Ric Ortega provided the motion to approve the methodology and Joe Hopkins/Aliso seconded. The motion was passed unanimously by those present.

#### 5. Committee to Discuss Subbasin Water Budget, Wiersma

John Wiersma asked Committee members to begin thinking about how the Subbasin will react to exceedances of minimum thresholds in the future, especially under a scenario with a subbasin-

wide water budget. Those present discussed a framework for intra-basin evaluation and discussions of issues. Items where more clarity is needed includes:

- What are the known challenges if demand reduction is required?
- How does the Delta-Mendota Subbasin react to exceedances caused by actions outside the subbasin?
- Are adjustments needed to the Representative Monitoring Network (RMN) under a single GSP?
- How will the Subbasin manage disagreements on implementation?
- Members agreed annual analyses of the Annual Report data should be held approximately 30 days after submission of the report.

## 6. Committee to Discuss the Organizational Structure Needed for a Single GSP, Hopkins/Ramirez/Stilwell/Layne

Lauren Layne highlighted work of a subcommittee examining possible changes to the Coordination Agreement. Under a single GSP, the need for an official Coordination Agreement as defined in SGMA goes away, but the groups should work together under a Memorandum of Understanding (MOU) with the existing Coordination Agreement serving as a framework for the MOU. What then happens to the Current Committee/future decision-making structure without the GSP groups? This process will require further engagement with all the individual GSAs.

#### 7. Committee to Discuss Monitoring Network Responsibilities, Hopkins/Ramirez/Stilwell/Layne

The Committee discussed the need to evaluate the existing RMN to see if adjustments will be needed for SGMA compliance under a single GSP structure. Will each GSA now be required to monitor for each sustainability indicator? If we add new monitoring wells/facilities, how do we bring those on? How do we establish MOs and MTs for those new facilities? We need to organize a workshop for landowners in white areas to give them an understanding of what's coming. The Subbasin must speak with a unified voice.

#### 8. Committee to Discuss the Role of SLDMWA in the New Single GSP Framework, Hopkins/Ramirez/Stilwell/Petersen

Committee members discussed possibly altering SLDMWA's role as Plan Manager. SLDMWA currently serves as the Basin Point of Contact. Members will have to think about whether they want SLDMWA to have a bigger or smaller role in the GSP implementation process moving forward. Scott Petersen acknowledged that the SLDMWA Board is currently going through a Strategic Planning process, which should be finished in about September. Committee members acknowledged that may influence the type of role SLDMWA plays in SGMA moving forward.

#### 9. Next Steps

- Lauren will work on an exceedance policy rubric for actions, looking at both inter and intra-basin exceedances. She will work with EKI to develop a flow chart that reflects the rubric recommendations. She will also work on an MOU with terms based on the existing Coordination Agreement and adding changes discussed during this meeting.
- John will survey all GSAs for workshop dates to discuss the Committee structure, including additional seats and cost share.

- John will schedule a meeting with State Board Staff to discuss items related to the parallel timelines for the response to DWR's Determination letter and 2025 Plan Update.
- Jarrett and staff will meet with EKI to discuss Interbasin Coordination efforts that occurred as part of the GSP submission process for our and adjoining subbasins.
- John will send out a doodle poll for another policy-only meeting and discussion.
- 10. Conference with Legal Counsel Anticipated Litigation

A conference with legal counsel was not held.

11. Conference with Legal Counsel - Existing Litigation

A conference with legal counsel was not held.

12. Report out of Closed Session

No report was made, as there was no closed session.

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

No reports were made.

14. Future Delta-Mendota Subbasin Coordination Committee and Technical Working Group Regular Meetings

Combined Coordination Committee and Technical Working Group meetings will be held biweekly on the second and fourth Mondays, with the next meeting to be held on Monday, May 8, 2023.

15. Adjournment

John Wiersma adjourned the meeting at 11:41 AM.

#### 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

	Annual	Paid/		Amount	% of Amt	Expenses
EXPENDITURES	Budget	Expense	R	emaining	Remaining	Through
<u>Legal:</u>		-				
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%	
<u>Other:</u>						
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%	

	А		В		С	D	E	F
1	Grant Summary R	epo	rt					
2	IRWM	Pro	position 1 Round	1		Through FY 2022	FY 2023	FY 2024
3		Gra	ant Amount	An	nount Paid			
4	Administration	\$	10,000.00	\$	9,000.00	\$ 9,000.00		
5	City of Huron	\$	650,000.00	\$	649,974.57	\$ 649,974.57		
6	NVRRWP-Turlock	\$	45,000.00	\$	45,000.00	\$ 45,000.00		
7	WSID Pumping Plant	\$	809,264.00	\$	728,337.60		\$728,337.60	
8	Orestimba Creek	\$	809,264.00	\$	404,632.00	\$ 404,632.00		
9	Broadview Aquifer	\$	809,263.00	\$	279,820.41	\$ 122,800.45	\$157,019.96	
10	Total	\$	3,132,791.00	\$	2,116,764.58			
11								
12		Am	ount Remaining					
13	Administration	\$	1,000.00	\$	-			
14	City of Huron	\$	25.43	\$				
	NVRRP-Turlock	\$	-	\$	-			
16	WSID Pumping Plant	\$	80,926.40	\$				
17	Orestimba Creek	\$	404,632.00	\$	-			
18	Broadview Aquifer	\$	529,442.59	\$	-			
19	Total	\$	1,016,026.42	\$	-			
20								
21		SGN	1A Implementati	on	Round 1			
22	Amount Paid	Gra	nt Amount	An	nount Paid			
23	Component 1	\$	2,000,000.00	\$	-			
24	Component 2	\$	1,000,000.00	\$	-			
25	Component 3	\$	1,000,000.00	\$	-			
26	Component 4	\$	228,030.00	\$	-			
27	Component 5	\$	272,270.00	\$	-			
28	Component 6	\$	791,300.00	\$	-			
29	Component 7	\$	600,000.00	\$	-			
30	Component 8	\$	929,400.00	\$	-			
31	Component 9	\$	561,500.00	\$	-			
32	Component 10	\$	172,500.00	\$	-			
33	Component 11	\$	45,000.00	\$	-			
34	Total	\$	7,600,000.00	\$	-			
35								
36			ount Remaining					
37	Component 1	\$	2,000,000.00	\$	_			
38	Component 2	\$	1,000,000.00	\$	-			
39	Component 3	\$	1,000,000.00	\$	-			
40	Component 4	\$	228,030.00	\$	-			
41	Component 5	\$	272,270.00	\$	-			
42	Component 6	\$	791,300.00	\$	-			
43	Component 7	\$	600,000.00	\$	-			
44	Component 8	\$	929,400.00	\$	-			
45	Component 9	\$	561,500.00	\$				
46	Component 10	\$	172,500.00	\$	-			
47	Component 11	\$	45,000.00	\$	-			
48	Total	\$	7,600,000.00	\$	-			



CALIFORNIA DEPARTMENT OF WATER RESOURCES SUSTAINABLE GROUNDWATER MANAGEMENT OFFICE

715 P Street | Sacramento, CA 95814 | P.O. Box 942836 | Sacramento, CA 94236-0001

May 2, 2023

John Brodie Delta-Mendota Subbasin Point of Contact San Luis & Delta-Mendota Water Authority P.O. Box 2157 Los Banos, CA 93635 john.brodie@sldmwa.org

#### Re: Periodic Evaluation Requirements for Inadequate Basins

Dear John Brodie,

The Department of Water Resources (Department) is clarifying the requirements for groundwater sustainability agencies (GSAs) in basins where groundwater sustainability plans (Plans) have been determined by the Department to be inadequate.

On March 2, 2023, the Department determined that the Plan for the Delta-Mendota Subbasin was inadequate. On March 29, 2023, the Department transmitted its determination and assessment to the State Water Resources Control Board (SWRCB). As indicated in my previous letter, the Department's inadequate determination triggers state intervention procedures in Sustainable Groundwater Management Act (SGMA) Chapter 11 (Water Code §10735 *et seq.*), which are administered by the SWRCB. Questions regarding procedures and processes under Chapter 11 should be directed to the SWRCB.

Since our inadequate determinations, the Department has received numerous inquiries from GSAs regarding the SGMA requirement for GSAs to periodically evaluate their GSPs, sometimes referred to as 5-year updates (see Water Code §10728.2, 23 CCR §356.4). This periodic evaluation was previously referenced in the Department's March 2, 2023, letter to you. To be clear, however, DWR will <u>not</u> require basins with GSPs that have been determined inadequate to submit a periodic evaluation by January 2025. DWR will only conduct periodic plan reviews for basins with approved Plans. (23 CCR §355.6.)

The primary intent and purpose of periodic evaluations is to track Plan implementation to ensure GSAs are managing groundwater as described in their Plans and evaluate whether basins are on track to achieve their sustainability goals within 20 years. To meet this deadline, the Department recommends that GSAs continue to implement parts of their Plans while subject to state intervention. However, the Department anticipates that addressing deficiencies may involve significant revisions, additions, and amendments to Plans. The Department does not want preparation and submission of the 2025 periodic evaluation to detract resources or focus from the efforts of GSAs to develop adequate Plans to retain or regain local control. Accordingly, GSAs with inadequate Plans should concentrate their efforts on resolving deficiencies in their Plans as directed by the SWRCB. Under SGMA Chapter 11, the SWRCB can consult with and request additional assessments from the Department on any amended Plans that are prepared and submitted by GSAs to the SWRCB to avoid or discontinue state intervention procedures. (Water Code §10735.2(b).)

Mr. John Brodie Page 2 May 2, 2023

Although the Department will not require or review periodic evaluations from inadequate basins, SGMA imposes other requirements that the Department expects GSAs to fulfill regardless of Plan status, including the following:

- Submission of annual reports by April 1 of each year following Plan adoption. (Water Code §10728; 23 CCR §356.2.)
- GSAs should ensure that information on the SGMA Portal remains accurate and up to date. This includes, for instance, changes regarding local and basin points of contact, GSA boundaries, membership or governance structure, public outreach and engagement plans, and other relevant information or actions.
- GSAs should continue with Plan implementation including carrying out the 2022 grant awards.

If you have any questions, please contact the Sustainable Groundwater Management Office by emailing <u>sgmps@water.ca.gov</u>.

Sincerely,

faul Gosselin Paul Gosselin Deputy Director Sustainable Groundwater Management

cc: Natalie Stork, State Water Resources Control Board, Natalie.Stork@Waterboards.ca.gov

## SAN JOAQUIN RIVER EXCHANGE CONTRACTORS GROUNDWATER SUSTAINABILITY AGENCY

Post Office Box 2115 Los Banos, CA 93635 (209) 827-8616

On March 2<sup>nd</sup>, 2023, the Department of Water Resources announced decisions for Groundwater Sustainability Plans (GSPs), finding that numerous subbasins were found to be inadequate. One of these subbasins—the Delta-Mendota Subbasin in San Joaquin, Stanislaus, Merced, Fresno, Madera, and San Benito counties—includes a region for which the Exchange Contractors are responsible for developing the GSP. Our GSP for our region was one of six plans for the larger Subbasin of which we are a part.

## Q: Why was the GSP plan that the Exchange Contractors worked on found to be "inadequate"?

The Exchange Contractors developed one of the six Groundwater Sustainability Plans for the Subbasin in our area, which encompasses the region from San Joaquin/Stanislaus County lines in the north to Tranquility in the south.

DWR did not review the plan for our section of the Subbasin individually. Rather, they reviewed the entire Subbasin—that is the combination of the six plans that cover the Subbasin—as one overall plan. What they found was that taken as a whole, the plan contained inconsistent findings and varied too widely in methodologies and groundwater strategies. In essence, since the plan was developed by multiple different entities, they found a lack of overall cohesion in the plan and how it would be implemented. It was therefore deemed "inadequate."

#### Q: What are the next steps?

We are working closely with our partner organizations within our Subbasin to address this finding. Here are the steps we are taking:

Step 1: We have developed an Executive Committee of three representatives, one of whom represents the Exchange Contractors, to meet with State Water Board staff to understand how to correct the deficiencies.

Step 2: We have hired a new consultant to standardize the methodologies and findings within our Subbasin's plan.

Step 3: We are scheduling meetings with the State Water Board and will be involved in an iterative process with them to come to a resolution over the coming months.

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Step 4: Following these revisions, the State Water Board will rule if the plans are adequate or inadequate. If our plans are determined to be adequate, the subbasin will work on updating plans for the next updated submittal in 2025. If they are found to be inadequate, they will declare the subbasin to be in Probationary status.

#### Q: What does Probationary status entail?

If the plan is found to be inadequate and the Subbasin is put on Probationary status, the Subbasin will have one year to fix the deficiencies. During this time, the current groundwater management policies will remain the same as they have historically.

If the deficiencies are not fixed after one year, the State Water Board can adopt its own plan to manage the Subbasin and impose their own strategies to manage groundwater.

#### Q: What costs will this entail?

The Exchange Contractors will continue to use our consultant team for the specific management of our plan. We have, however, transitioned to new consultants for coordination amongst the entire subbasin and are already noticing some cost savings to this updated approach.

There is a risk that the State Water Board would choose to charge a fee on groundwater pumping. The current understanding is the State Board will not charge a groundwater pumping fee during the one-year period if the Subbasin is on Probationary status. If after one year the plan is still deficient, we expect groundwater pumping fees to start. We are focused though on rectifying the issues in the plan before ever reaching that status.

#### Q: Will this impact my pumping?

The State Board has indicated that we will continue to operate under our current program even during a potential year probationary status. If the State Board must adopt its own plan, everyone will be subject to restrictions imposed by the State Board.

Knowing this, our Subbasin has a renewed sense of urgency to achieve a sustainable plan over the next year. We expect some limitations on groundwater pumping to occur in the Subbasin. The Exchange Contractors are not in a state of overdraft, and we will be pursuing consistent standards across the Subbasin to provide the flexibility we need to farm and supplement our surface water supply.

## Q: How long will it take before we know if our plan is deemed to be adequate and this is resolved?

This is unchartered territory. The State Board can take the first action to review our plan, after providing at least a 90-day noticing window. This gives us at a minimum three months to make significant progress, though it could be longer. We are focused on resolving the issue as quickly as we can.

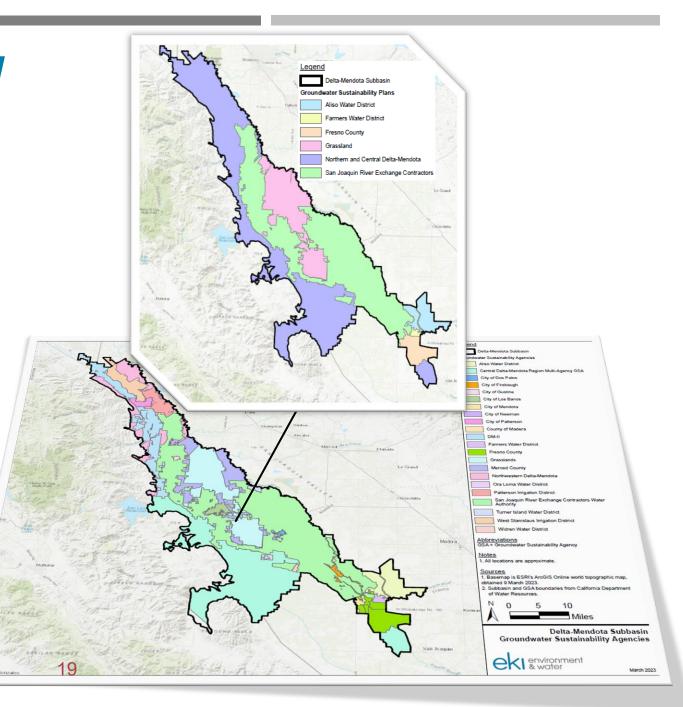
# DELTA-MENDOTA SUBBASIN RESPONSE TO INADEQUATE DETERMINATION

8 MAY 2023 TECHNICAL MEETING #5



# **PRESENTATION OVERVIEW**

- Results to be Achieved Today:
  - Action on Water Quality SMCs
- Water Budget/Model Update
- Next steps





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# MEETING OBJECTIVES

# **Objective #1:**

Action on Water Quality SMC Approach



# PRELIMINARY CONSTITUENTS OF CONCERN

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

- I,2,3-TCP
- Arsenic
- Hexavalent Chromium [Cr(VI)]
- Gross Alpha radioactivity
- Nitrate (NO<sub>3</sub>)
- Total Dissolved Solids (TDS)
- Boron\*





#### State Water Resources Control Board

November 22, 2022

Monica Salais GSP Review Section Manager Sustainable Groundwater Management Office Department of Water Resources <u>Monica Salais@water ca.gov</u> Shane Edmunds GSP Review Section Manager Sustainable Groundwater Management Office Department of Water Resources Shane Edmunds@water.ca.gov

#### 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

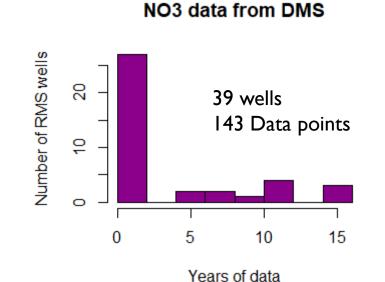
1001 | Street, Sacramento, CA 95814 | Mailing Address: P.O. Box 100, Sacramento, CA 95812-0100 | www.waterboards.ca.gov

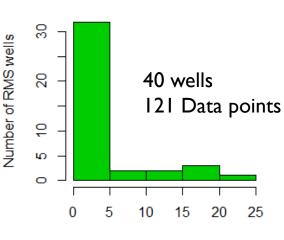


# DATA SOURCES USED TO ASSESS POTENTIAL COCs

## Delta-Mendota DMS

- 3 constituents (B, NO<sub>3</sub>, and TDS)
- I,004 data points
- 77 wells
- 40 years





B data from DMS

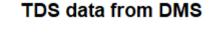
Years of data

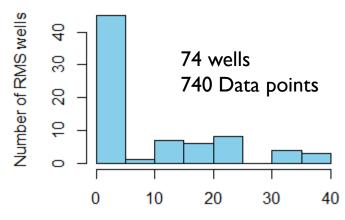
## GAMA

- All constituents
- ~39,800 data points
- ~ 2,700 wells
- ~ 90 years

# SWRCB GW Quality Visualization Tool

- All constituents except B
- ~19,650 data points
- I,961 wells
- 82 years

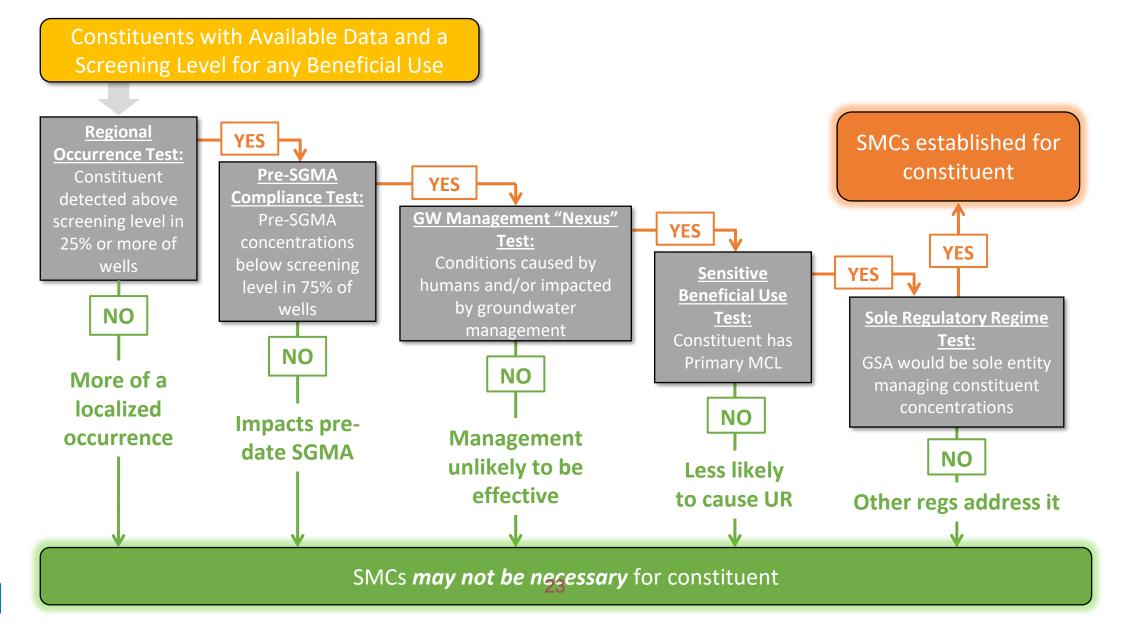






Years of data

# **REVISED SCREENING/WINNOWING OF COCs**



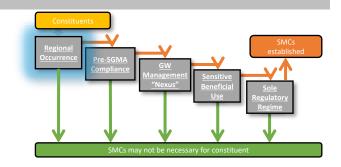
# POTENTIAL TESTS TO SCREEN OUT COCs

- Regional occurrence Screening level/MCL exceeded in >15% of GAMA wells in last 10 years of data? ["...effects caused by groundwater conditions occurring throughout the basin" (CWC § 10721(x))]
- Pre-SGMA compliance At least 50% of wells in compliance with screening level/MCL prior to SGMA? [SGMA does not require GSPs to address URs that occurred before, and have not been corrected by, January 1, 2015. (CWC § 10727.2(b)(4))]
- **GW management nexus** Is it anthropogenic, and/or is there a correlation between groundwater levels and concentrations? [Department staff recognize that GSAs are not responsible for improving existing degraded water quality conditions. GSAs are required; however, to manage future groundwater extraction to ensure that groundwater use subject to its jurisdiction does not significantly and unreasonably exacerbate existing degraded water quality conditions. ... the analysis should be on whether groundwater extraction is causing the degradation in contrast to only looking at whether a specific project or management activity results in water quality degradation. Department staff recommend that the SVBGSA coordinate with the appropriate water quality regulatory programs and agencies ... to understand and develop a process for determining when groundwater management and extraction is resulting in degraded water quality in the Subbasin 180/400-Ft Aquifer, page 26-27]
- Sensitive beneficial use Does it have a primary MCL? [23 CCR § 354.28 directs that "the Agency shall consider local, state, and federal water quality standards applicable to the basin"]
- Sole regulatory regime Would the GSA be the only entity regulating the constituent in groundwater or well water?

"NO" answers indicate constituent can potentially be screened out on basis of test

# **REGIONAL OCCURRENCE TEST (GAMA)**

Screening Level/MCL exceeded in >15% of GAMA wells 2013 – 2023?



8

	% of GAMA Wells Exceeding Screening Level/MCL for Given Constituent								
Well Category	Gross Alpha	Arsenic	Boron	Cr (VI)	Nitrate	I,2,3-TCP	TDS		
Municipal	4%	18%	44%	47%	12%	>15%*	29%		
Water Supply, Other	no data	13%	57%	43%	13%	insufficient data	43%		
Domestic	no data	0%	44%	0%	22%	insufficient data	53%		
Irrigation / Industrial	no data	0%	18%	33%	0%	insufficient data	36%		

## Yes (may need SMC) / No (may not need SMC)

#### <u>Notes</u>

1. \* Reporting limits for some 1,2,3-TCP data points are higher than the MCL. In these cases, NDs may or may not have MCL exceedance. GAMA used reporting limit as the reported values.

2. "Insufficient data" indicates data quality or quantity not supporting regional occurrence test. For example, reporting limit is greater than MCLs.

# **REGIONAL OCCURRENCE TEST (SWRCB)**

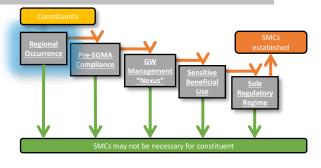
Screening level/MCL exceeded in >15% of SWRCB-reported wells 2013 – 2023?

	% of SWRCB-Reported Wells Exceeding MCL for Given Constituent										
Well Category	Gross Alpha	Arsenic	Boron	Cr (VI)	Nitrate	I,2,3-TCP	TDS				
Municipal	4%	18%	no data	31%	12%	5%	29%				
Water Supply, Other	-	-	no data	-	-	-	43%				
Domestic	-	-	no data	-	22%	-	50%				
Irrigation / Industrial	-	-	no data	-	-	-	36%				

## Yes (may need SMC) / No (may not need SMC)

#### <u>Notes</u>

- I. Screening levels set at MCLs except for Cr(VI) which uses a HBSL of 20  $\mu$ g/L.
- 2. -- indicates either no exceedances or no measurements. SWRCB's SGMA Groundwater Quality Visualization Tool does not distinguish between constituents with no measurements or no exceedances. https://www.waterboards.ca.gov/sgma/water-quality-visualization-tool.html
- 3. Boron not included in SWRCB data set.



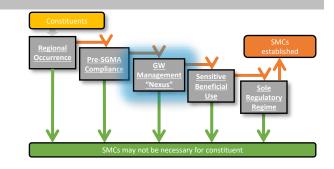
## **GROSS ALPHA REMOVED BY REGIONAL OCCURRENCE TEST**

Potential COC	Regional Occurrence (% exceedance)	Pre-SGMA Compliance	GW Management Nexus	Sensitive Beneficial Use	Other Regulatory Regime
Arsenic	Muni: 18% Other supply: 3% Domestic: 0%	>			
Boron	Muni: 44% Other supply: 57% Domestic: 44%	$\Rightarrow$			
Cr(VI)	Muni: 47% Other supply: 43% Domestic: 0%	$\Rightarrow$			
Gross Alpha	Muni: 4% Other supply: insufficient data Domestic: insufficient data	\$			
Nitrate	Muni: 12% Other supply: 13% Dom: 22%	>			
TDS	Muni: 29% Other supply: 43% Domestic: 53%	\$			
I,2,3-TCP	Muni: >15% Other supply: insufficient data Domestic: insufficient data	$\Rightarrow$			
		27			

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# PRE-SGMA COMPLIANCE TEST (GAMA)

# At least 50% of GAMA wells in compliance with screening level/MCL Pre-SGMA?



	% of GAMA Wells in Compliance with Screening Level/MCL for Given Constituent								
Well Category	Gross Alpha	Arsenic	Boron	Cr (VI)	Nitrate	I,2,3-TCP	TDS		
Municipal	88%	84%	61%	55%	92%	18%	64%		
Water Supply, Other	0%	88%	41%	78%	87%	insufficient data	55%		
Domestic	no data	100%	no data	100%	87%	insufficient data	25%		
Irrigation / Industrial	no data	86%	no data	33%	86%	insufficient data	57%		

### Yes (may need SMC) / No (may not need SMC)

#### <u>Notes</u>

Reporting limits (0.12 ug/L) for some 1,2,3-TCP data points are higher than the MCL. In these cases, NDs may or may not have MCL exceedance.

. "Insufficient data" indicates data quality or quantity not supporting regional occurrence tes provide reporting limit is greater than MCLs.

Data from 2005-2014 are used for this analysis.

# PRE-SGMA COMPLIANCE TEST (SWRCB)

# At least 50% of SWCRB-reported wells in compliance with MCL PRE-SGMA?



	% of SWRCB-Reported Wells in Compliance with MCL for Given Constituent									
Well Category	Gross Alpha	Arsenic	Boron	Cr (VI)	Nitrate	I,2,3-TCP	TDS			
Municipal	88%	83%	no data	73%	92%	-	64%			
Water Supply, Other	no data	88%	no data	78%	87%	-	55%			
Domestic	-	-	no data	-	-	-	-			
Irrigation / Industrial	no data	no data	no data	no data	no data	no data	no data			

### Yes (may need SMC) / No (may not need SMC)

#### <u>Notes</u>

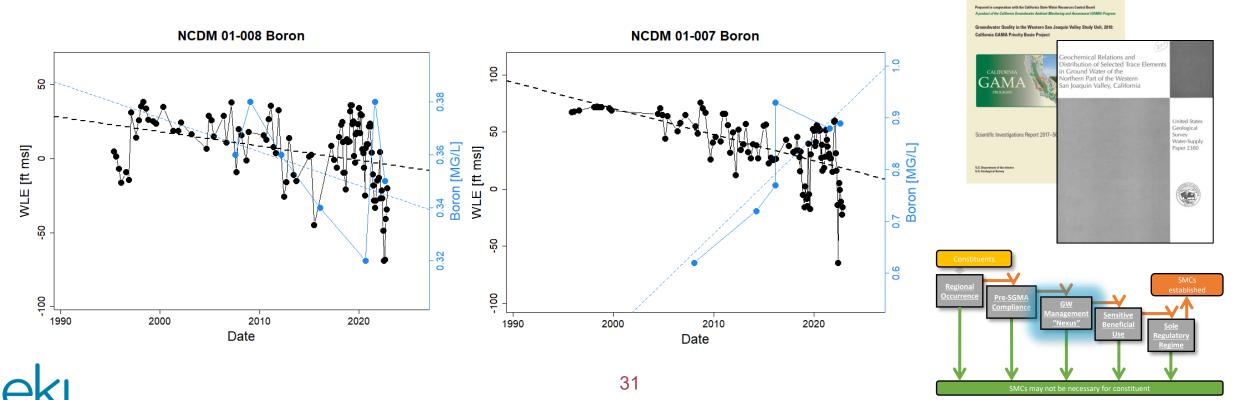
- 1. Screening levels set at MCLs except Cr(VI) which uses a HBSL of 20 µg/L.
- 2. Data from 2005-2014 are used for this analysis.
- 3. -- indicates either no exceedances or no measurements. SWRCB's SGMA Groundwater Quality Visualization Tool does not distinguish between constituents with no measurements or no exceedances. https://www.waterboards.ca.gov/sgma/water-quality-visualization-tool.html
- 4. 35 domestic wells sampled with no detected exceedances. Constituents tested for are not specified.
- 5. No irrigation/industrial or monitoring wells measured.
- 6. Boron is not included in SWRCB data set.

# **COCs REMAINING AFTER PRE-SGMA COMPLIANCE TEST**

Potential COC	Regional Occurrence (% exceedance)	Pre-SGMA Compliance	GW Management Nexus	Sensitive Beneficial Use	Other Regulatory Regime
Arsenic	Muni: 18% Other supply: 3% Domestic: 0%	Muni: 84% Other supply: 88% Domestic: 100%	$\Rightarrow$		
Boron	Muni: 44% Other supply: 57% Domestic: 44%	Muni: 61% Other supply: 41% Domestic: no data	\$		
Cr(VI)	Muni: 47% Other supply: 43% Domestic: 0%	Muni: 55% Other supply: 78% Domestic: 100%	$\Rightarrow$		
Gross Alpha	Muni: 4% Other supply: insufficient data	Muni: 88% Other supply: 0% Domestic: no data			
Nitrate	Muni: 12% Other supply: 13% Dom: 22%	Muni: 92% Other supply: 87% Dom: 87%	⇒		
TDS	Muni: 29% Other supply: 43% Domestic: 53%	Muni: 64% Other supply: 55% Domestic: 25%	$\Rightarrow$		
I,2,3-TCP	Muni: >15% Other supply: insufficient data Domestic: insufficient data	Muni: 18% Other supply: insuff. data Domestic: insuff. data	\$		

# **GW MANAGEMENT NEXUS TEST: BORON**

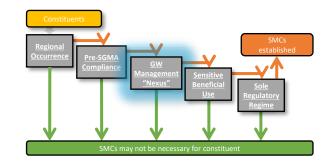
- Boron primarily from Coast Range marine shale and hydrothermal fluids.
- Where DMS data are available, correlation between Water Level (WL) and Water Quality (WQ) trends not statistically significant or clear result of groundwater recharge or extraction



# GW MANAGEMENT NEXUS TEST: CHROMIUM AND ARSENIC

- Chromium and Arsenic primarily related to sediment source and redox conditions.
- GAMA wells show few significant trends which do not appear spatially correlated with RMS water levels.







# WATER LEVEL VS CONC TRENDS – UPPER AQUIFER

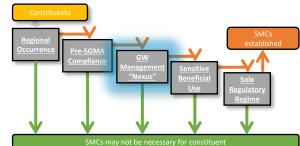
Water Level



Cr(VI)

Sources/Notes:

- I. Water level data from RMS network.
- 2. Water quality data from GAMA database.
- 3. For water quality data, 'Monitoring' wells are assumed as upper aquifer wells.



As

# WATER LEVEL VS CONC TRENDS – LOWER AQUIFER

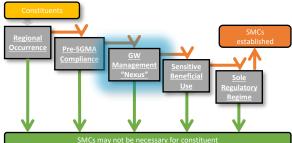
### Water Level



Cr(VI)

Sources/Notes:

- I. Water level data from RMS network.
- 2. Water quality data from GAMA database.
- 3. For water quality data, "Municipal" and "Water Supply, Others" wells are assumed as lower aquifer wells.



As

# **GW MANAGEMENT NEXUS TEST: GROSS ALPHA**

- Gross alpha radioactivity primarily caused by decay of uranium in sediments.
- GAMA wells show few significant trends which do not appear spatially correlated with RMS water levels.

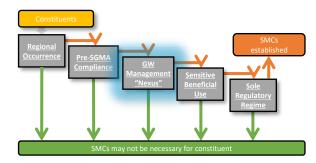
Water Level



## **Gross Alpha Radioactivity**



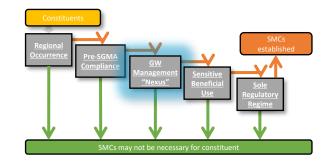




# **GW MANAGEMENT NEXUS TEST: TDS**

- TDS primarily originates from marine sediments and hydrothermal fluids; however,
  - Additional anthropogenic point sources e.g., Steffens/ Spreckels plume
  - May migrate due to regional groundwater levels and pumping patterns – e.g., Western Saline Front



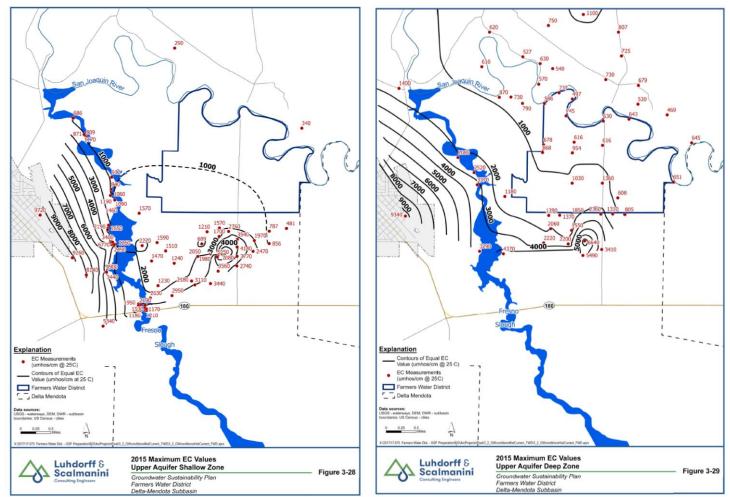




# GW MANAGEMENT NEXUS TEST: TDS - WESTERN SALINE FRONT

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- Zone of high salinity water in upper aquifer in southern end of Basin
- Originally due to marine sediments
- Migrating westward due groundwater pumping in Madera County
- EC increases of ~40 µmhos/cm/yr in some areas



#### ARSENIC, BORON & CR(VI) REMOVED BY GW MANAGEMENT NEXUS TEST

Potential COC	Regional Occurrence (% exceedance)	Pre-SGMA Compliance	GW Management Nexus	Sensitive Beneficial Use	Other Regulatory Regime
Arsenic	Muni: 18% Other supply: 3% Domestic: 0%	Muni: 84% Other supply: 88% Domestic: 100%	Primarily naturally occurring. No relationship to water levels.	3	
Boron	Muni: 44% Other supply: 57% Domestic: 44%	Muni: 61% Other supply: 41% Domestic: no data	Primarily naturally occurring. No relationship to water levels.	3	
Cr(VI)	Muni: 47% Other supply: 43% Domestic: 0%	Muni: 55% Other supply: 78% Domestic: 100%	Primarily naturally occurring. No relationship to water levels.	3	
Gross Alpha	Muni: 4% Other supply: insufficient data	Muni: 88% Other supply: 0% Domestic: no data	Primarily naturally occurring. No relationship to water levels.		
Nitrate	Muni: 12% Other supply: 13% Dom: 22%	Muni: 92% Other supply: 87% Dom: 87%	Anthropogenic. May be affected by recharge.	>	
TDS	Muni: 29% Other supply: 43% Domestic: 53%	Muni: 64% Other supply: 55% Domestic: 25%	Natural and anthropogenic. May be affected by pumping.	>	
I,2,3-TCP	Muni: >15% Other supply: insufficient data	Muni: 18% Other supply: insuff. data	Anthropogenic. May be affected by recharge.	>	

#### **SENSITIVE BENEFICIAL USE TEST**

Constituent	Screening Level	Screening Level Type
I,2,3-TCP	0.005 µg/L	Primary MCL
Arsenic	I0 μg/L	Primary MCL
Boron	I mg/L	Notification Level
Hexavalent Chromium	10 µg/L	Draft Primary MCL
Gross Alpha Radioactivity	I5 pCi/L	Primary MCL
Nitrate (as N)	10 mg/L	Primary MCL
Total Dissolved Solids	500 mg/L "recommended" 1,000 mg/L "upper"	Secondary MCL



Presence of MCL = Potable use deemed sensitive by OEHHA and SWRCB

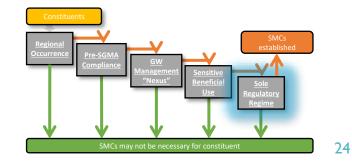


#### **COCs REMAINING AFTER SENSITIVE BENEFICIAL USE TEST**

Potential COC	Regional Occurrence (% exceedance)	Pre-SGMA Compliance	GW Management Nexus	Sensitive Beneficial Use	Other Regulatory Regime
Arsenic	Muni: 18% Other supply: 3% Domestic: 0%	Muni: 84% Other supply: 88% Domestic: 100%	Primarily naturally occurring. No relationship to water levels.	Srimary MCL	
Boron	Muni: 44% Other supply: 57% Domestic: 44%	Muni: 61% Other supply: 41% Domestic: no data	Primarily naturally occurring. No relationship to water levels.	Votification Level	
Cr(VI)	Muni: 47% Other supply: 43% Domestic: 0%	Muni: 55% Other supply: 78% Domestic: 100%	Primarily naturally occurring. No relationship to water levels.	Srimary MCL	
Gross Alpha	Muni: 4% Other supply: insufficient data	Muni: 88% Other supply: 0% Domestic: no data	Primarily naturally occurring. No relationship to water levels.	Primary MCL	
Nitrate	Muni: 12% Other supply: 13% Dom: 22%	Muni: 92% Other supply: 87% Dom: 87%	Anthropogenic. May be affected by recharge.	Primary MCL	>
TDS	Muni: 29% Other supply: 43% Domestic: 53%	Muni: 64% Other supply: 55% Domestic: 25%	Natural and anthropogenic. May be affected by pumping.	Secondary MCL	>
I,2,3-TCP	Muni: >15% Other supply: insufficient data	Muni: 18% Other supply: insuff. data Domestic: insuff. data		Primary MCL	>

#### **OTHER REGULATORY REGIME TEST**

- Drinking Water Quality:
  - Public Water Systems water quality served to customers is regulated by the SWRCB Division of Drinking Water and required to meet all drinking water standards
    - Local governments must be notified of boron in excess of notification level, but additional action is not required.
  - Domestic Wells water quality is unregulated
- Groundwater Quality related to Agricultural Land Use Management
  - Irrigated Lands Regulatory Program (IRLP)
    - Addresses monitoring and mitigation of NO<sub>3</sub> in domestic wells, but does not address migration in groundwater
  - Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) / Basin Plan





#### **COCs REMAINING AFTER OTHER REGULATORY REGIME TEST**

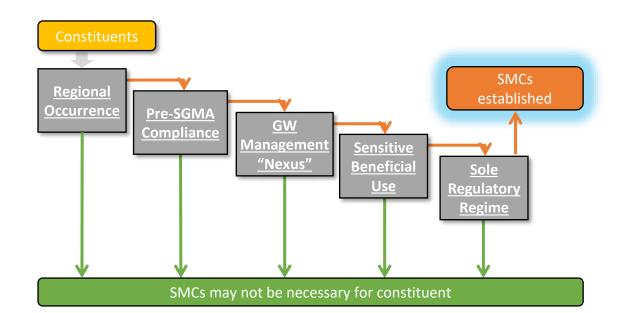
Regional Occurrence (% exceedance)	Pre-SGMA Compliance	GW Management Nexus	Sensitive Beneficial Use	Other Regulatory Regime
Muni: 18% Other supply: 3% Domestic: 0%	Muni: 84% Other supply: 88% Domestic: 100%	Primarily naturally occurring. No relationship to water levels.	Rrimary MCL	Muni: CA Title 22 Domestic: none
Muni: 44% Other supply: 57% Domestic: 44%	Muni: 61% Other supply: 41% Domestic: no data	Primarily naturally occurring. No relationship to water levels.	Notification Level	Muni: H&S Code §116455 (notification) Domestic: none
Muni: 47% Other supply: 43% Domestic: 0%	Muni: 55% Other supply: 78% Domestic: 100%	Primarily naturally occurring. No relationship to water levels.	Primary MCL	Muni: CA Title 22 Domestic: none
	2	Primarily naturally occurring. No relationship to water levels.	Primary MCL	Muni: CA Title 22 Domestic: none
Muni: 12% Other supply: 13% Dom: 22%	Muni: 92% Other supply: 87% Dom: 87%	Anthropogenic. May be affected by recharge.	Primary MCL	IRLP, CV-SALTS Muni: CA Title 22 Domestic: none
Muni: 29% Other supply: 43% Domestic: 53%	Muni: 64% Other supply: 55% Domestic: 25%	Natural and anthropogenic. May be affected by pumping.	Secondary MCL	IRLP, CV-SALTS Muni: CA Title 22 Domestic: none
Muni: >15% Other supply: insufficient data Domestic: insufficient data	Muni: 18% Other supply: insuff. data Domestic: insuff. data	Anthropogenic. May be affected by recharge.	Primary MCL	Muni: CA Title 22 Domestic: none
	(% exceedance) Muni: 18% Other supply: 3% Domestic: 0% Muni: 44% Other supply: 57% Domestic: 44% Muni: 47% Other supply: 43% Domestic: 0% Muni: 4% Other supply: insufficient data Domestic: insufficient data Muni: 12% Other supply: 13% Dom: 22% Muni: 29% Other supply: 43% Domestic: 53% Muni: >15% Other supply: insufficient data	(% exceedance)ComplianceMuni: 18% Other supply: 3% Domestic: 0%Muni: 84% Other supply: 88% Domestic: 100%Muni: 44% Other supply: 57% Domestic: 44%Muni: 61% Other supply: 41% Domestic: no dataMuni: 47% Other supply: 43% Domestic: 0%Muni: 55% Other supply: 78% Domestic: 100%Muni: 47% Other supply: insufficient dataMuni: 55% Other supply: 78% Domestic: 100%Muni: 47% Other supply: insufficient dataMuni: 88% Other supply: 0% Domestic: no dataMuni: 12% Other supply: 13% Dom: 22%Muni: 92% Other supply: 87% Domestic: 53%Muni: 29% Other supply: 43% Domestic: 53%Muni: 64% Other supply: 55% Domestic: 25%Muni: >15% Other supply: insufficient dataMuni: 18% Other supply: insufficient data	(% exceedance)ComplianceNexusMuni: 18% Other supply: 3% Domestic: 0%Muni: 84% Other supply: 88% Domestic: 100%Primarily naturally occurring. No relationship to water levels.Muni: 44% Other supply: 57% Domestic: ro dataMuni: 61% Other supply: 41% Domestic: no dataPrimarily naturally occurring. No relationship to water levels.Muni: 44% Other supply: 57% Domestic: 44%Muni: 55% Other supply: 41% Domestic: no dataPrimarily naturally occurring. No relationship to water levels.Muni: 47% Other supply: 43% Domestic: insufficient dataMuni: 88% Other supply: 87% Domestic: no dataPrimarily naturally occurring. No relationship to water levels.Muni: 12% Other supply: 13% Dom: 22%Muni: 64% Other supply: 55% Domestic: 53%Muni: 64% Other supply: 55% Domestic: 25%Muni: 18% Anthropogenic. May be ffected by recharge.Muni: >15% Other supply: insufficient dataMuni: 18% Other supply: insufficient dataAnthropogenic. May be affected by recharge.	(% exceedance)ComplianceNexusBeneficial UseMuni: 18% Other supply: 3% Domestic: 0%Muni: 84% Other supply: 88% Domestic: 100%Primarily naturally occurring. No relationship to water levels.Rrimary MCLMuni: 44% Other supply: 57% Domestic: 44%Muni: 61% Other supply: 41% Domestic: no dataPrimarily naturally occurring. No relationship to water levels.Notification Level Notification LevelMuni: 47% Other supply: 43% Domestic: 0%Muni: 55% Other supply: 78% Domestic: 100%Primarily naturally occurring. No relationship 

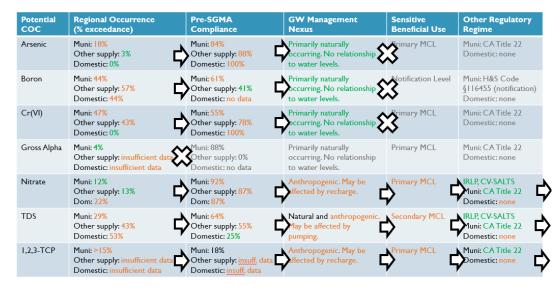
### PRIORITY COCs REMAING AFTER SCREENING

NO<sub>3</sub>

**TDS** 

- I,2,3-TCP
- Screen GAMA for additional COCs for each 5-year update





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#### 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 as a result of groundwater recharge or extraction.

#### Minimum Thresholds:

- For RMS/COC where pre-2015\* conc. is less than MCL:
- For RMS/COC where pre-2015\* conc. is greater than MCL: MT = Greater of:
  - 20% above pre-2015 conc.

MT = MCL

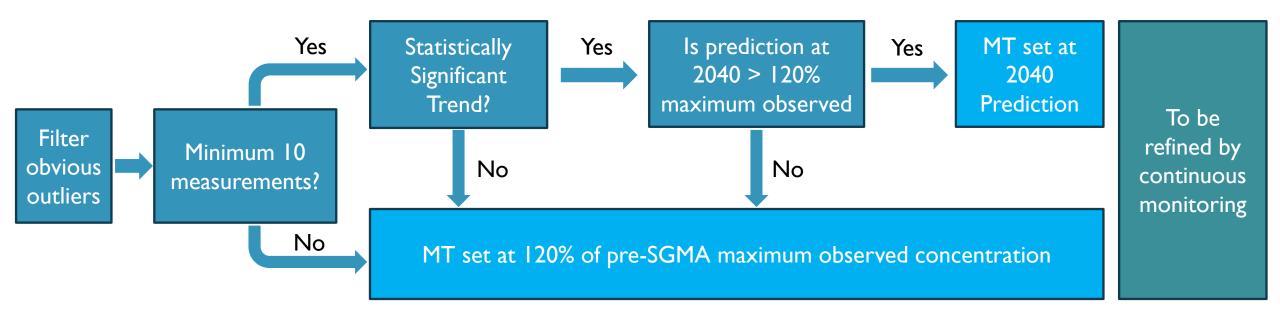
 Projected 2040 concentration (if sufficient data available)

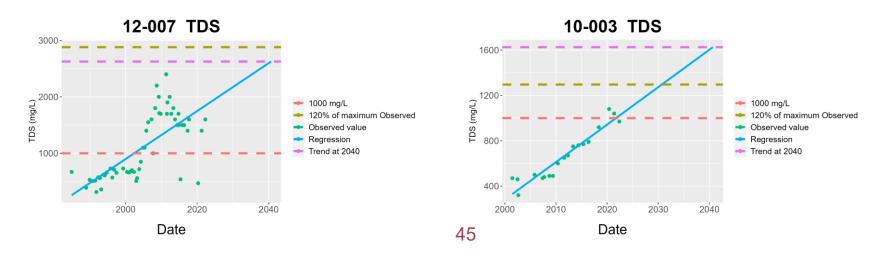
#### Measurable Objectives:

- 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 = 10% above pre-2015 concentrations to address data variability and uncertainty
- Interim Milestones: Glide path between current concentration and MO

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

#### **PRE-SGMA CONDITION EXCEEDING MCL**





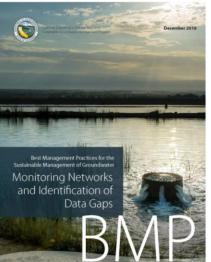
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#### **FUTURE EVALUATION OF ADDITIONAL COCs**

Basin	Evaluation Procedure
Delta Mendota (Common Chapter)	Not mentioned.
Kings	Not mentioned.
Westside	Not mentioned.
Merced	<ul> <li>Review other monitoring programs' data relative to MCLs and SMCLs and meet annually with relevant authorities.</li> <li>Summarize reviews in annual reports and 5-year updates.</li> <li>Consider need for MTs for additional COCs in 5-year updates.</li> </ul>
Eastern San Joaquin	<ul> <li>Monitor additional COCs on an informational basis.</li> <li>If water quality violates regulations or concerning trends are detected <ul> <li>Coordinate with regulatory agencies</li> <li>Consider establishing SMCs for additional COCs.</li> </ul> </li> </ul>

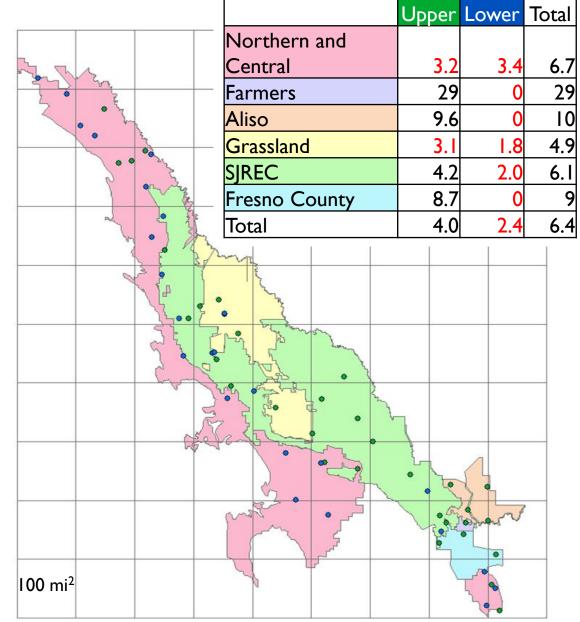


#### **RMS-WATER LEVEL DENSITY**



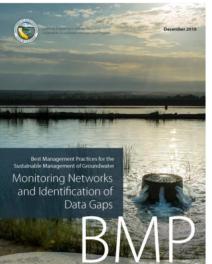
Delta-Mendota pumps ~37,000 AFY/ 100 mi<sup>2</sup>

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



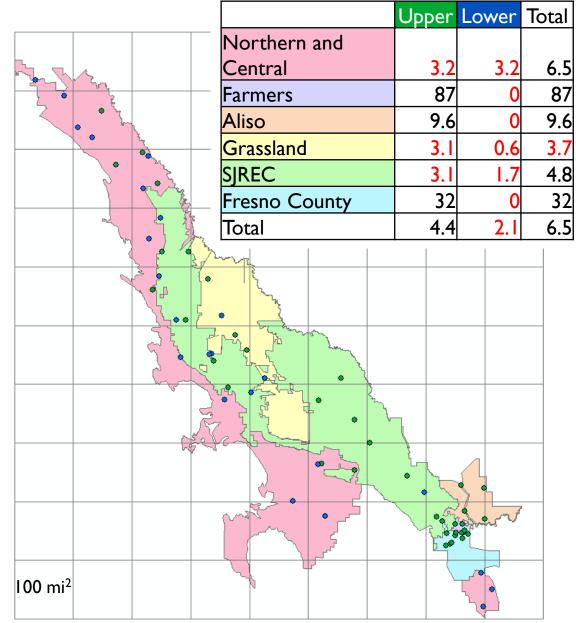
Wells per 100 mi<sup>2</sup>

#### **RMS-WATER QUALITY DENSITY**



Delta-Mendota pumps ~37,000 AFY/ 100 mi<sup>2</sup>

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



Wells per 100 mi<sup>2</sup>

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## MEETING OBJECTIVES

## **Objective #2:**

#### Water Budget / Model Update



### **USGS/USBR MODEL STATUS UPDATE**

- CVHM2-SJV has been released to SLDMWA and was transferred to EKI on May 2<sup>nd</sup>
- EKI has downloaded the model and is actively working on assessing its performance within Delta Mendota Subbasin and post-processing its results.



#### **NEXT STEPS**

- Initiate other SMC development efforts
- Produce water budget results using CVHM2-SJV Model



# QUESTIONS



