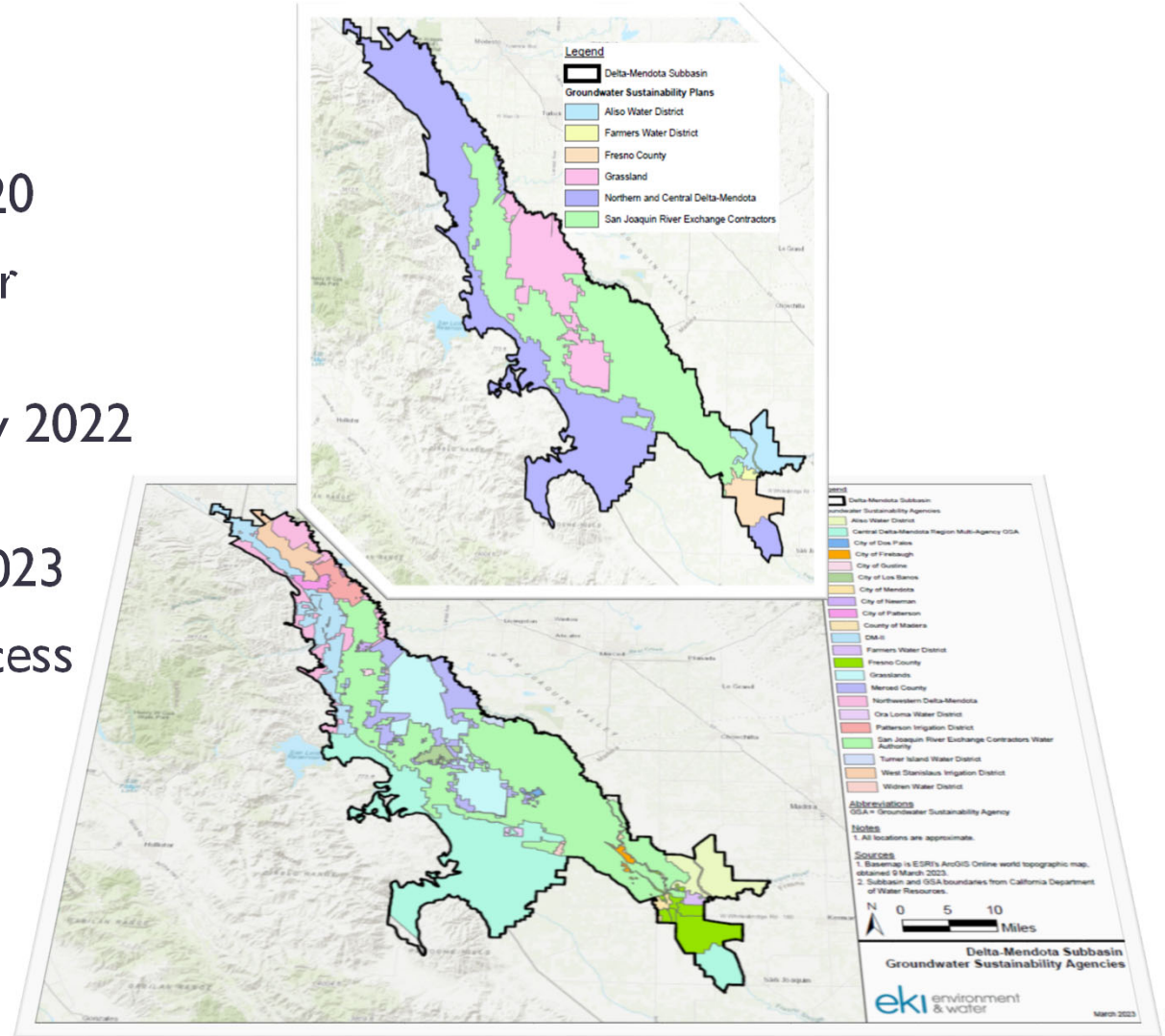

DELTA-MENDOTA SUBBASIN RESPONSE TO INADEQUATE DETERMINATION

12 JUNE 2023

GSA WORKSHOP

BACKGROUND

- 6 GSPs submitted January 2020
- DWR issued incomplete letter January 23, 2022
- 6 Revised GSPs submitted July 2022
- DWR issued Inadequate Determination on March 2, 2023
- State Board Intervention process triggered



SWRCB INTERVENTION PROCESS AND TIMELINE

- **Authorities:** The Board expects the GSAs to continue to revise and implement the GSPs.
- **Schedule and Process:**
 - Minimum 90-day notice for a public hearing and a minimum 60-day notice to all Basin pumpers.
 - Notice of an Interim Plan will be a minimum of one year.
- **Fees:** Within 90 days of a Basin entering into Probation pumpers will be required to begin collecting production data and will be required to submit that information to the Board at the end of each year.
- **Review /Consultation Process:** The SWRCB will participate in meetings with the Basin as the GSP is revised. DWR will serve as technical advisor to the SWRCB.
- **Additional Deficiencies:** The Board will give strong deference to the DWR findings on the sufficiency of the GSPs; however, they reserve the right to identify additional deficiencies.

SWRCB INTERVENTION PROCESS AND TIMELINE*



SUBBASIN GSA ACTIONS TO DATE

- Active engagement with the State Board and DWR
- Meeting near weekly of CC and TWG on Technical and Policy Issues
- Retained EKI to begin to address technical deficiencies
- Draft MOA to address on-going SGMA implementation
- Issued RFP in May 2023 to:
 - Address GSP Inadequate determination
 - Address GSP Periodic Review requirements

SUMMARY OF DWR DETERMINED DEFICIENCIES

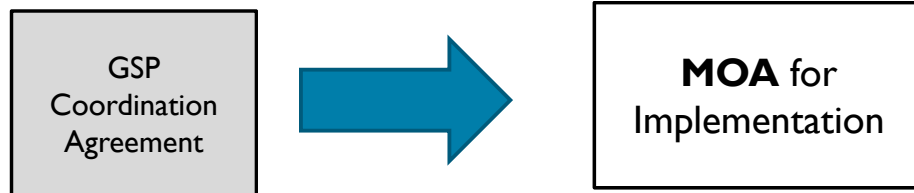
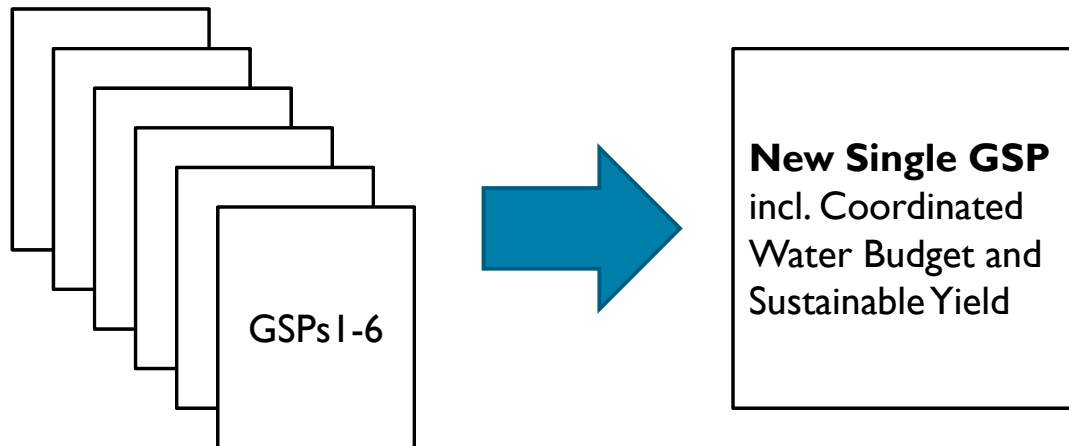
Deficiency #1: *“The GSPs do not use the same data and methodologies”*

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

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

Deficiency #4: *“The management areas established in the Plan have not sufficiently addressed the requirements specified in 23 CCR § 354.20”*

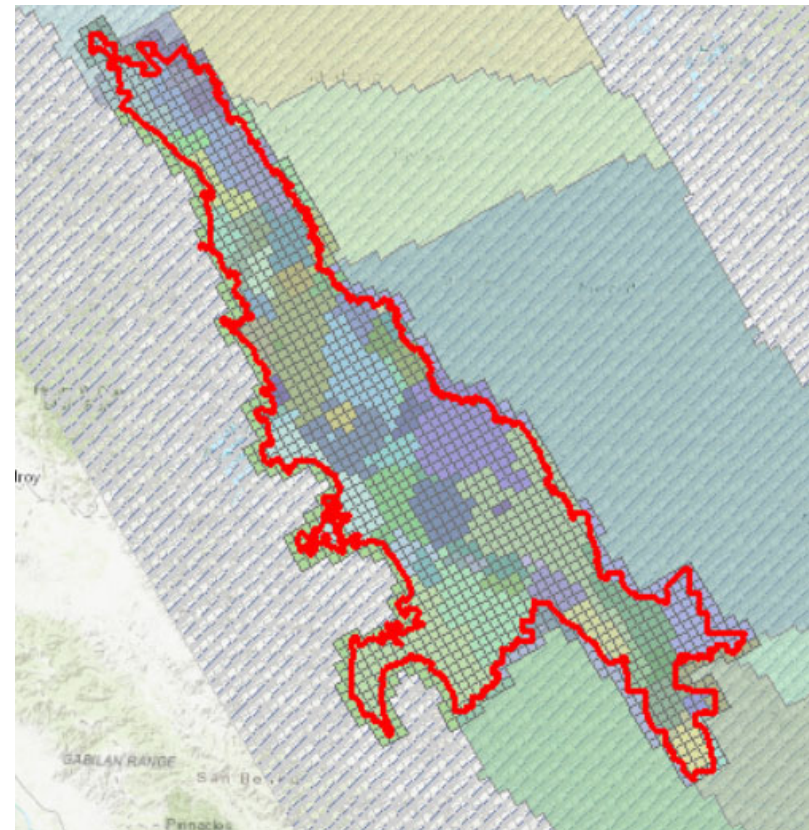
ADDRESS DEFICIENCY #1 & #4 - PREPARE SINGLE GSP AND ELIMINATE MANAGEMENT AREAS



- + Highest chance to avoid probation. Simplifies process/coordination/impl.
- ! Eliminates multiple GSP structure

ADDRESS DEFICIENCY #1 - PREPARE SINGLE BASIN WIDE WATER BUDGET

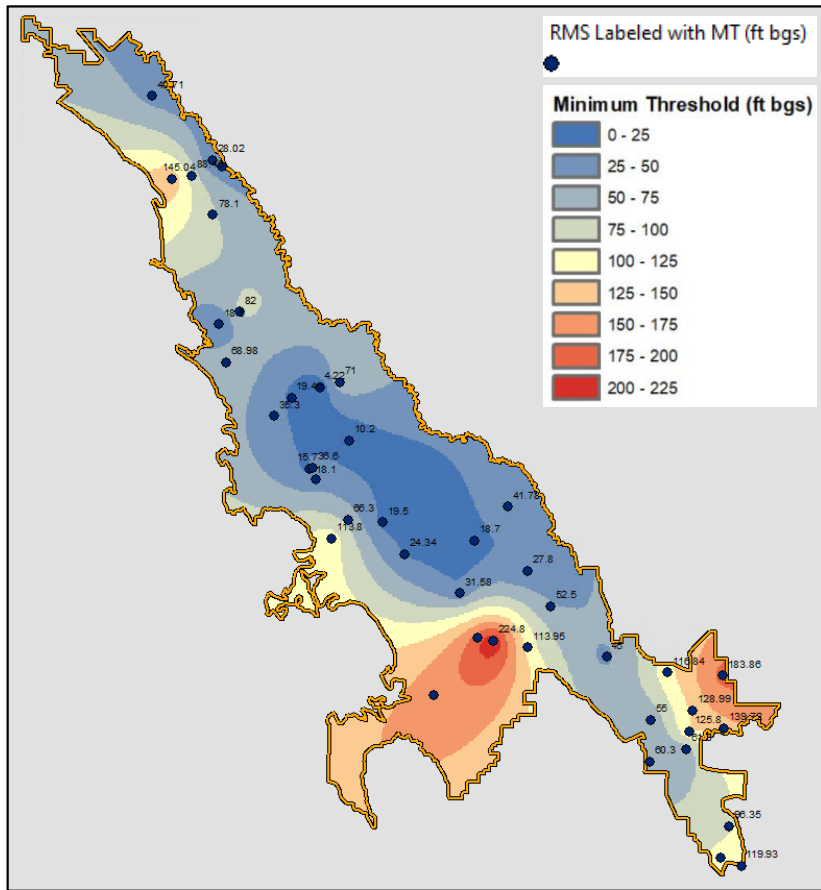
- Central Valley Hydrological Model V2 - Draft information from CVHM2-SJB update
- Water Budget time periods
 - Historical (2000-2018)
 - Current (2019)
 - Future (2019-2070)



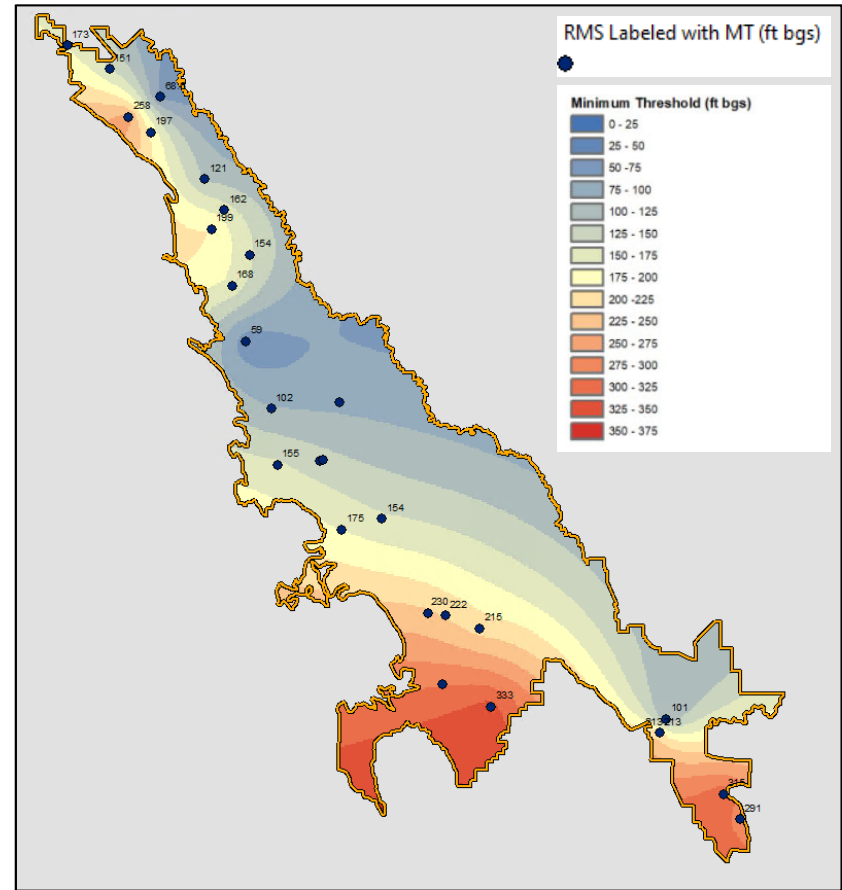
ADDRESS DEFICIENCIES #2 & 3 – REFINE SUSTAINABLE MANAGEMENT CRITERIA (SMCs)

Sustainability Indicator	MT	MO	Undesirable Result
Water Levels	Historic Low	2015	MTs are exceeded at <u>25%</u> or more of RMS for two consecutive years.
GW Storage	Water Levels as a proxy		
Water Quality	MCLs, unless already degraded	MCLs, unless already degraded	MTs are exceeded at <u>25%</u> or more of RMS for two consecutive years.
Subsidence	2 feet	0 after 2040	In Development
Inter-Connected Surface Water	In Development		
Sea Water Intrusion	Not Applicable		

WATER LEVEL SMC CONTOURS



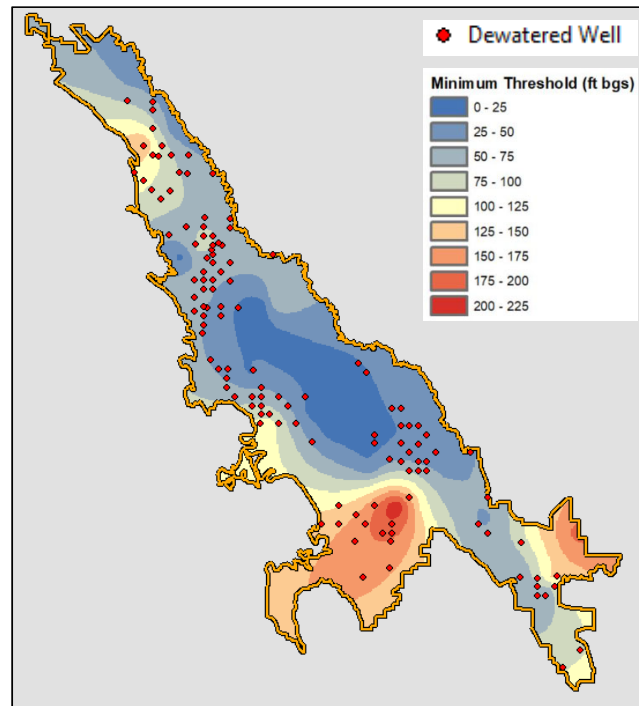
MT Contours – Upper Aquifer



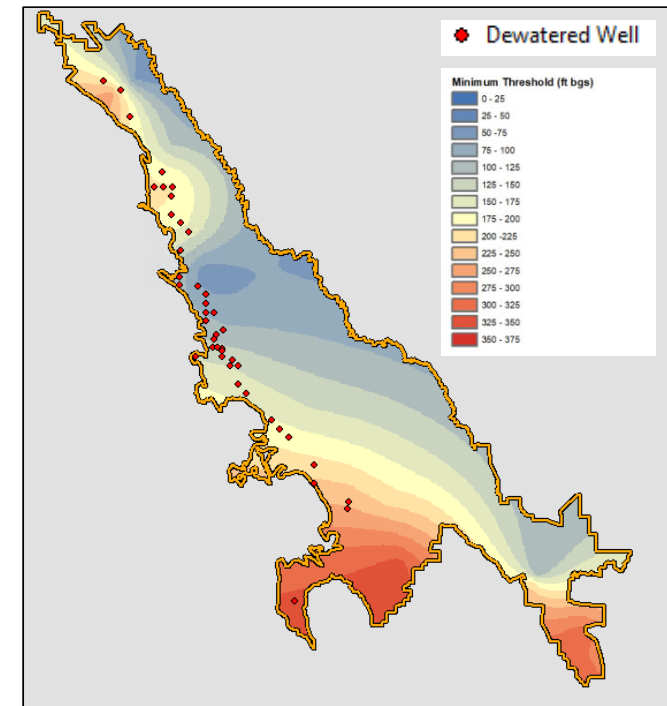
MT Contours – Upper Aquifer

WELL IMPACTS ANALYSIS AT SMCs

- Upper Aquifer
 - 5.4% of wells dewatered
 - 128 out of 1,739 domestic wells (7.4%)
- Lower Aquifer
 - 2.4% of wells dewatered
 - 32 out of 683 domestic wells (4.7%)
- GSAs will implement Well Mitigation Program



Wells Dewatered at MTs – Upper Aquifer

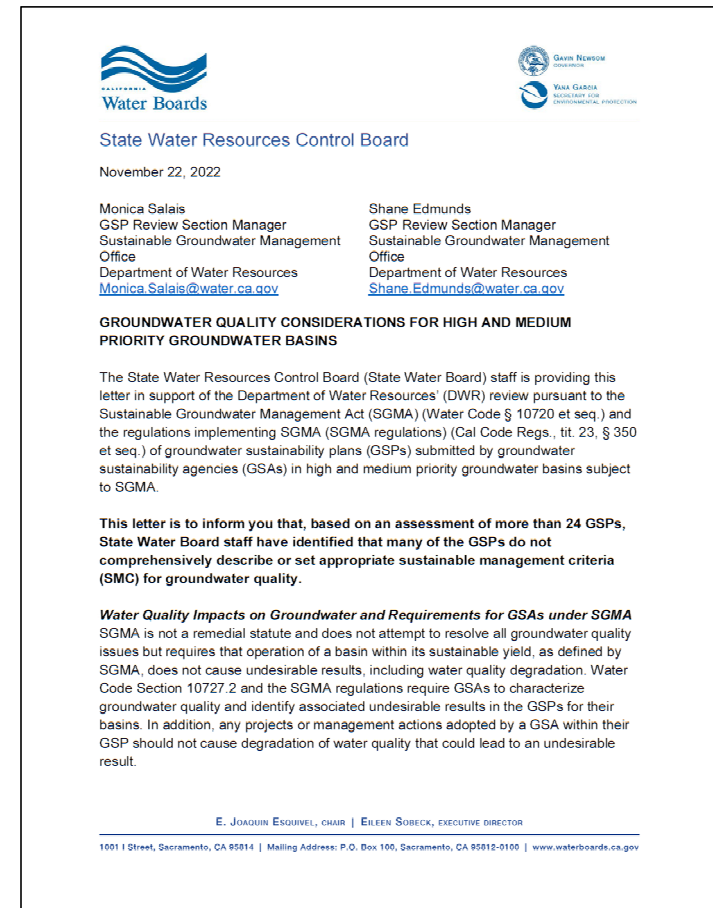


Wells Dewatered at MTs – Lower Aquifer

WATER QUALITY - PRELIMINARY CONSTITUENTS OF CONCERN (COCs)




















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

- 1,2,3-TCP
- Arsenic
- Boron*
- Gross Alpha radioactivity
- Hexavalent Chromium [Cr(VI)]
- Nitrate (NO₃)
- Total Dissolved Solids (TDS)



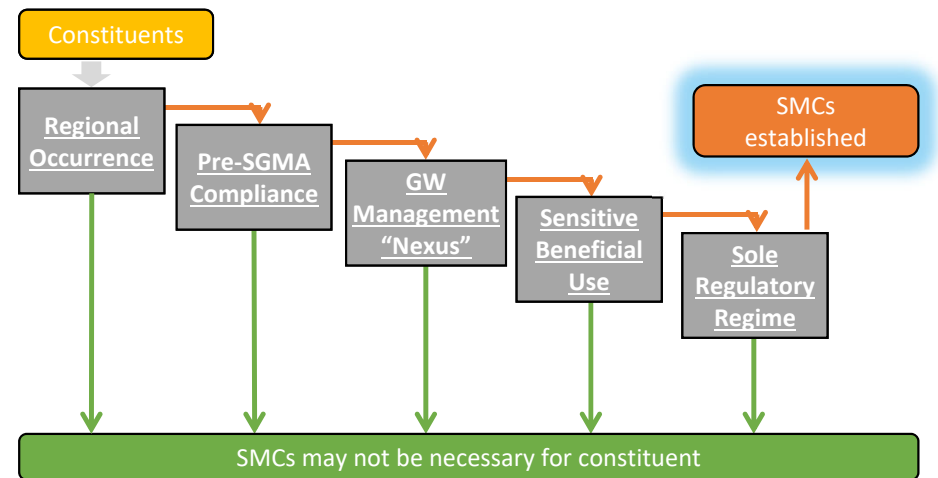
* Prior COC from 2020 GSP

COCs REMAINING AFTER OTHER REGULATORY REGIME 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.	Primary MCL	Muni: CA Title 22 Domestic: none
Boron	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
Cr(VI)	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
Gross Alpha	Muni: 4% Other supply: insufficient data Domestic: insufficient data	 Muni: 88% Other supply: 0% Domestic: no data	Primarily naturally occurring. No relationship to water levels.	Primary MCL	Muni: CA Title 22 Domestic: none
Nitrate	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 
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	 IRLP, CV-SALTS Muni: CA Title 22 Domestic: none 
1,2,3-TCP	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

PRIORITY COCs REMAINING AFTER SCREENING

- Nitrate
- TDS



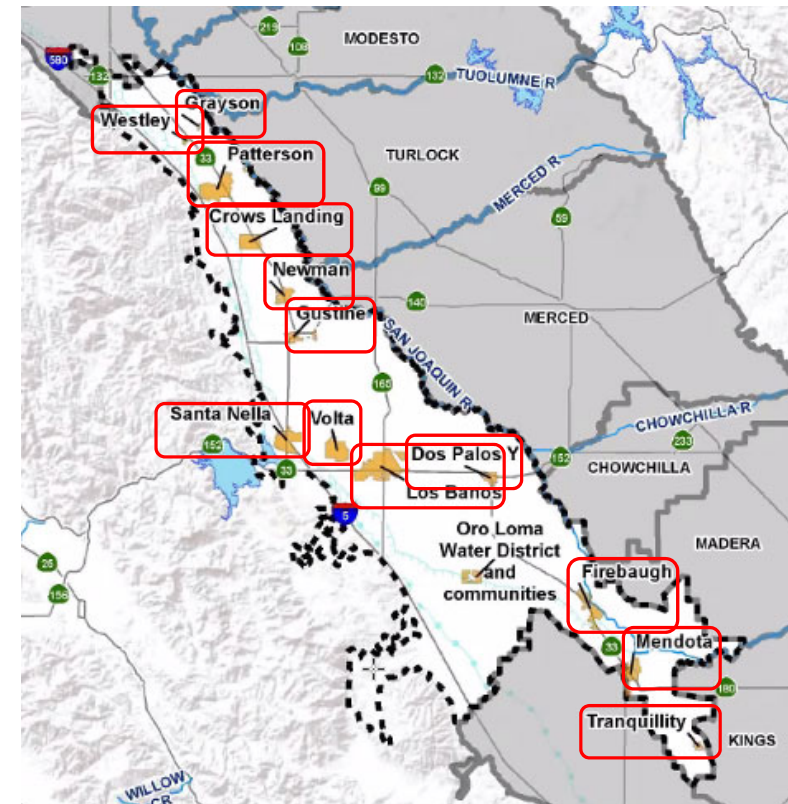
Potential COC	Regional Occurrence (% exceedance)	Pre-SGMA Compliance	GW Management Nexus	Sensitive Beneficial Use	Other Regulatory Regime
Arsenic	Muni: 18% Other supply: 3% Domestic: 0%	✘ Muni: 84% Other supply: 88% Domestic: 100%	Primarily naturally occurring. No relationship to water levels.	Primary MCL	Muni: CA Title 22 Domestic: none
Boron	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
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1,2,3-TCP	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

GENERAL APPROACH TO WATER QUALITY COCs

SWRCB COCs	GSP Monitoring & Management Plan
Nitrate	Basin-wide issues for all beneficial users; GSAs will establish SMCs and Conduct Monitoring & Reporting as part of SGMA Process
TDS	
Arsenic	Naturally occurring; Already monitored by PWS and regulated by SWRCB for drinking water beneficial users; GSAs will coordinate with PWS to evaluate data
Hexavalent Chromium	
Gross Alpha radioactivity	
1,2,3-TCP	Localized occurrence; Already monitored by PWS and regulated by SWRCB for drinking water beneficial users; GSAs will coordinate with PWS to evaluate data
Boron	Naturally occurring; Issue for agricultural beneficial users; GSAs will coordinate with PWS to evaluate data

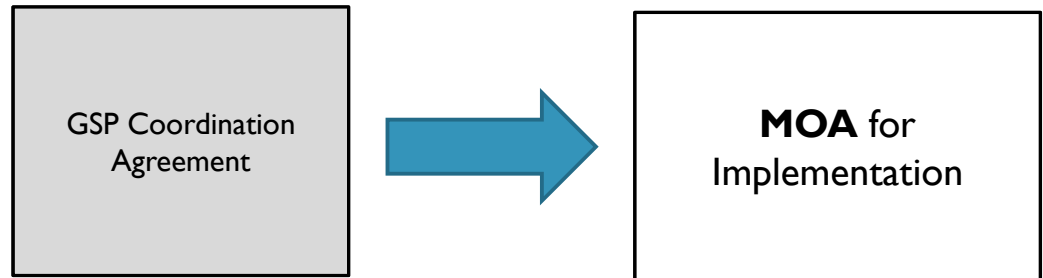
DESIGN PRINCIPLES FOR REVISED MONITORING NETWORKS

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



NEXT STEPS / ON-GOING EFFORTS

- Continue to meet with State Board and DWR
- Continue GSA/stakeholder outreach
- Keep working to address deficiencies
- Prepare updated GSP by ~September 2024



Coordination Agreement To Memorandum Of Agreement (MOA)

COORDINATION AGREEMENT TO MEMORANDUM OF AGREEMENT (MOA)

- Delta-Mendota Subbasin GSAs adopted a Coordination Agreement for the 6 GSPs on December 12, 2018.
- If the Subbasin adopts a single GSP, then a Coordination Agreement (as defined by SGMA) is no longer needed, but will remain in effect until one GSP is adopted
- Memorandum of Agreement – meant to lay out the terms of agreement between all GSAs in the Subbasin upon the adoption of a single GSP

MOA

- Effective upon adoption of a single GSP
- SLDMWA is still the Secretary and Plan Manager
- Coordination Committee remains
 - Currently 8 seats and Cost Sharing split 6 ways
 - 8 or 9 seats moving forward? Cost sharing equal based on number of Coordination Committee voting seats.
 - Note: Cost Sharing amongst GSP Groups or future GSA Groups is separate and apart from the MOA
 - Voting slightly adjusted – unanimous of members present or simple majority, based on action item

MOA (CONTINUED)

- Emphasizes the powers of the individual GSAs
- Describes the commitment by the GSAs to have a Subbasin-wide monitoring network
- Adaptive Management Process for addressing MT exceedances
 - Location based on GSA, but can determine if intra- or inter-basin impacts
 - Plan to address exceedances and brainstorming amongst the Coordination Committee
 - Implement P&MAs

ADOPTION OF MOA

- Goal is for each GSA to adopt the MOA by October 1, 2023
 - Coordination Agreement stays in effect until a single GSP is adopted
 - MOA goes into effect at the time the single GDP is adopted, but we are asking that all GSAs approve the MOA by October 1st.