



MEMORANDUM

TO: SLDMWA Board of Directors, Alternates

FROM: John Brodie, Water Resources Programs Manager

Joe McGahan, Regional Drainage/Westside Watershed Coalition Coordinator

DATE: October 5, 2023

RE: Activity Agreements – Staff Report for September, 2023

This memorandum serves as the Staff Report for September 2023 regarding specified¹ Water Authority activities not separately addressed on the Board meeting agenda.

1. Integrated Regional Water Management (IRWM) Activity Summary

General Westside-San Joaquin Integrated Regional Water Management Plan (IRWMP)

Staff is working with water agencies in the West Side San Joaquin IRWM Region to get a better understanding of existing efforts to assist Disadvantaged Communities (DACs) in the region with drinking water concerns. It's part of a larger project that will be a collaboration with the non-profit Self Help Enterprises to update water needs assessments for those communities. A volunteer project steering committee has been formed and will meet with staff from the Authority and Self-Help Enterprises to guide the work.

The California Department of Water Resources granted an extension request for the Proposition 1, Round 1 IRWM Implementation grant. The Orestimba Creek Recharge and Recovery project, sponsored by the Central California Irrigation District, and the Broadview Aquifer Recharge and Recovery Project, sponsored by Westlands Water District, each experienced delays in getting to final construction activities. The agreement end date was extended to December 31, 2024.

2. Sustainable Groundwater Management Activity (SGMA) Activity Summary

General SGMA Activities

Fall groundwater level monitoring is underway. GSAs have until the end of October to collect groundwater level data. Water quality data collected this summer has been submitted to DWR as required by the regulation.

¹ For the sake of completeness, this includes those Activity Agreements that have been approved by the Board of Directors, but not yet signed by all interested members and/or participants (i.e., the Los Vaqueros Expansion Project Activity Agreement, the Exchange Contractors 2019-2023 Transfer Program Activity Agreement, and the Westside-San Joaquin Integrated Regional Water Management Activity Agreement).

Memo to SLDMWA Board of Directors October 5, 2023

Work continues throughout the Subbasin on various projects funded by the SGMA Round 1 Implementation Grant. All six Groundwater Sustainability Plan (GSP) groups received funding for a variety of groundwater enhancement projects, efforts to fill data gaps, and public outreach about SGMA compliance activities. The Subbasin received a total of \$7.6 million dollars, more than half of that total is earmarked for groundwater enhancement projects.

Coordinated Activities

GSAs continue efforts to consolidate the GSPs into one as the Subbasin's strategy to achieve "approved" status under SGMA. DWR ruled the Subbasin's previously submitted six GSPs as "inadequate" in March, triggering State Water Resources Control Board (SWRCB) oversight of the GSP amendment process. SWRCB staff had a favorable reaction to the Subbasin's intention to develop a single GSP. Coordination Committee members and technical consultants are meeting with SWRCB staff on a regular basis in an attempt to receive guidance on a proposed document.

GSPs for six of the critically over-drafted Subbasins in the San Joaquin Valley must be amended to SWRCB standards. The Delta-Mendota Subbasin faces a potential September 2024 probationary hearing before the SWRCB, according to a draft schedule released in June. Based on the draft schedule, Delta-Mendota would be the fifth subbasin to face a possible probationary hearing. GSAs intend to submit the single GSP to the SWRCB in July 2024 to possibly avoid the scheduled probationary hearing.

Under the process as outlined at a June SWRCB meeting, if a basin is placed on probation, all well owners must register wells with the state and report extractions based on meters that will be required. Extractions must be reported annually, and well owners (excepting *de minimus* domestic wells) will pay fees to the SWRCB based on extractions. Subbasins will have one year from being placed on probation to correct GSPs, at which time the SWRCB may impose its own management actions.

3. Drainage Activity Summary

Grassland Basin Drainage Management Steering Committee Activity Summary

The Grassland Bypass Channel gates were closed on March 24th, ending the discharge of storm-induced drainage from the Grassland Drainage Area. Remaining drainage flows have been managed internally by the San Joaquin River Improvement Project since that time. No significant storms are forecasted and it is not anticipated the gates will be opened again in the near future.

GBP Activities

- <u>General administration:</u> Review and approve consultant billing. Field review of drainage conditions and correspondence with SJRIP manager.
- Mud Slough Restoration Project: The intent of this project is to restore Mud Slough in accordance with the 2010 MOU between the Authority and California Department of Fish and Wildlife (CDFW). The Water Authority adopted the CEQA for the project in December 2021, which was not challenged. GBP management staff had a meeting with CDFW on

- August 15th during which CDFW committed to providing a revised MOU that would outline the specific tasks required to complete restoration of Mud Slough.
- Grassland Water District Monitoring Wells: A total of 10 observation wells are planned to
 be installed to monitor groundwater levels and quality within the San Joaquin River
 Improvement Project and in a portion of Grassland Water District to the north. All 10
 observation wells have been installed, with the last well completed in June. The GBD are
 working on developing a monitoring plan to measure groundwater levels and quality.
- Compliance Monitoring: Monitoring in compliance with the 2019 revised WDRs and 2019
 Use Agreement is a continuous and daily effort. Regular flow, water quality and toxicity
 monitoring is required at eight locations at a frequency that varies from monthly to daily.
 Special monitoring for fish and invertebrate selenium levels has occurred annually, along
 with efforts to collect particulate samples for selenium analysis.
- <u>Grassland Drainage Area Coalition:</u> Work continues to provide coverage for farmers within the Grassland Drainage Area for the Irrigated Lands Regulatory Program. Reporting forms were sent to farmer members in late 2022 for reporting 2022 nitrogen application.
- <u>Proposition 84 Grant:</u> Work is ongoing to support the Prop 84 Grant administered by Panoche Drainage District for improvements to the San Joaquin River Improvement Project. The Short Term Storage Basins construction is in progress but will take some time to complete. Other projects are in design phase.
- 13267 Order Report Part 2: The Authority received a 13267 Order from the Central Valley Regional Water Quality Control Board (Regional Board) in February 2020. This order required the Authority to submit two reports on water quality and fish tissue data, the first of which was submitted in July of 2021. The second, and final report, is in progress and will be submitted this fall.

San Joaquin Valley Drainage Authority Activity Summary

- Participated in conference calls with the Regional Board to respond to their questions on surface water quality management plans and required follow up. Working with the Regional Board to formulate a more efficient focused outreach program to address sediment and surface water quality impacts to receiving waters.
- Westside San Joaquin River Watershed Coalition: Work continues to provide coverage under the Irrigated Lands Regulatory Program for farmers within the Westside San Joaquin River Watershed Coalition. The work includes managing the monitoring program, assisting farmers with the necessary reporting to comply with the program and preparing reports for the Regional Board. Coalition staff submitted membership roll to the Regional Board on July 31, 2023. Sent out follow-up MPIR forms to growers for 2020 Nitrogen outliers and 2022 pyrethroid exceedances. Prep for upcoming pyrethroid Focused Outreach meeting for the Salt Slough watershed.
- Groundwater Protection Formula, Values and Targets: Coalitions have developed a
 methodology to establish nitrogen loading Values and Targets as required by the WDRs.
 Approval of the targets was granted June 30,2023 with two conditions that must be met
 by April 2024 and July 2024 respectively. Conduct strategy meetings on methods to
 inform growers about the program and their needed cooperation to meet the
 watershed's targets.

- Management Practices Effectiveness Program: Attend conference call meetings of the MPEP group. Developing work schedules to implement nitrogen control measures for farmer member compliance. Work with other Coalitions to produce the required final report.
- <u>Central Valley Groundwater Monitoring Collaborative:</u> Attend conference call meetings to give direction to program. Work with other coalitions and staff to develop an updated groundwater monitoring CQAP.
- Management Zones: Work continued to develop plan for compliance within the Westside Coalition. Attend Valley Water Collaborative budget committee meetings to establish SJVDA FY25 Management Zone budget. Prepare the contracts and agreements that will used going forward. Contact non-ag Permittees to inform them of the program. Attend Central Valley Salinity Coalition meetings to inform SJVDA Management Zone formation.
- <u>Salt Control Program:</u> Phase I of the Salt Control Program involves the development of a
 Prioritization and Optimization Study (P&O Study). Consultants are compiling data in
 order to characterize current salinity conditions of both surface and groundwater across
 the Central Valley. This work is being supported through the SJVDA budget.
- Prop 84 Real Time Program Grant: Work continues on maintaining the stations, gathering monitoring data, and computer modeling to determine and manage salt discharges to the San Joaquin River. As of March 2023, grant funds billed is \$595,942 with \$259,058 remaining. The project has been extended to December of this year.



SAN JOAQUIN VALLEY DRAINAGE AUTHORITY

Box 2157, Los Banos, Ca 93635 Phone: 209-826-9696 Fax: 209-826-9698

DATE:

September 27, 2023

SUBJECT:

THE OCTOBER 3, 2023 MEETING OF THE SJVDA BOARD OF DIRECTORS HAS BEEN CANCELLED

TO:

BOARD OF DIRECTORS

Del Puerto Water District Adam Scheuber, Director/Chair

Jarod Lara, Alternate

Pacheco Water District Chase Hurley, Director

Vacant, Alternate

Panoche Drainage District

Vacant, Director Vacant, Alternate

Patterson Irrigation District

Dan Robinson, Director Vince Lucchesi, Alternate

San Joaquin River Exchange Contractors Water Authority

Chris White, Director John Wiersma, Alternate

FROM:

Orvil Mckinnis (by Cheri Worthy)

San Luis Water District

Janet Roy, Director/Vice-Chair

Lon Martin, Alternate

Tranquillity Irrigation District

Jerry Salvador, Director Alternate Danny Wade, Alternate

Twin Oaks Irrigation District

Mark Child, Director Ryan Vieira, Alternate

West Stanislaus Irrigation District

Bobby Pierce, Director Lee Deldon, Alternate

SJVDA Board of Directors Meeting Scheduled October 3, 2023 HAS BEEN CANCELLED

NOTICE IS HEREBY GIVEN that the regular October meeting of the SAN JOAQUIN VALLEY DRAINAGE AUTHORITY BOARD OF DIRECTORS, <u>HAS BEEN CANCELLED</u>.

Please give us a call if you have any questions. Thank you!

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Special Meeting of the Delta-Mendota Subbasin Coordination Committee

Thursday September 21, 2023, 1:00 PM

AGENDA

- 1. Call to Order/Roll Call
- Opportunity for Public Comment

Report Items

- Committee to Discuss September 13, 2023 Meeting with State Water Board Staff, Martin/Stilwell/Dutton
 - a) SWRCB Staff Input on Water Quality Monitoring, Constituents of Concern, and SMCs
 - b) SWRCB Staff Input on Well Mitigation Program(s)
 - c) Discussion of Next Steps for October 11, 2023 Meeting
- 4. Committee to Discuss Future Workshop(s) with SWRCB Board Members and Staff in the Subbasin, Martin/Ortega
- 5. Committee to Discuss EKI Requests for Information (RFI)s, Dutton
- 6. Committee to Review Monitoring Exceedances, Dumas/Dutton
- 7. Next Steps
- 8. Reports Pursuant to Government Code Section 54954.2(a)(3)
- 9. Future Delta-Mendota Subbasin Coordination Committee Meetings
 - a. Monday October 9, 2023: 1:00 PM
 - b. Monday November 13, 2023 1:00 PM
 - c. Special Meetings May Be Scheduled at the Request of the Committee.

10. ADJOURNMENT

Persons with a disability may request disability-related modification or accommodation by contacting Cheri Worthy or Sandi Ginda at the Water Authority Office, 842 6th Street, P.O. Box 2157 Los Banos, CA 93635, via telephone at (209) 826-9696, or via email at cheri.worthy@sldmwa.org or sandi.ginda@sldmwa.org. Requests should be made as far in advance as possible before the meeting date, preferably 3 days in advance of regular meetings or 1 day in advance of special meetings/workshops.

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Meeting of the Delta-Mendota Subbasin Coordination Committee ad hoc Technical Subcommittee

Monday September 25, 2023, 1:00 PM

https://us02web.zoom.us/j/82646493319?pwd=MitzYTZrYk93NHJFbVRYKzh4QlloUT09

Meeting ID: 826 4649 3319 Passcode: 438982

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AGENDA

- 1. Subcommittee to Discuss Requests for Information One through Three Review, Dutton
- 2. Subcommittee to review Current Proposal for Subsidence SMCS, Dutton
- 3. Subcommittee to Discuss Strategies for Water Quality SMCs, Dutton
- 4. Subcommittee to Discuss a Framework for a Subbasin Well Mitigation Program, Dutton
- 5. Next Steps/Report to the Full Coordination Committee, Brodie
- 6. Next Meeting

Book



Meeting of the Northern Delta-Mendota Region Management Committee

Wednesday, October 4, 2023, 2:00 PM

AGENDA

- 1. Call to Order/Roll Call
- 2. Committee to Consider Corrections or Additions to the Agenda of Items, as authorized by Government Code Section 54950 et seq.
- 3. Opportunity for Public Comment

Consent Calendar

- 4. Committee to Review and Take Action on Consent Calendar, Pierce/Brodie
 - a. Minutes for the September 6, 2023 Meeting of the Northern Delta-Mendota Region Management Committee
 - b. Budget-to-Actual Report (through July 2023)
 - c. Grant Reimbursement Summary Report

Action Items

- 5. Committee to Consider Authorizing Its Representative to the Coordination Committee to Approve the Special Projects Agreement and Cost Share Split for Preparation of a Single GSP for the Subbasin, Pierce/Brodie/Layne
- 6. Committee to Consider Authorizing Its Representative to the Coordination Committee to Approve the Memorandum of Agreement for the Subbasin Under a Single GSP, Pierce/Layne/Brodie

Report Items

- 7. Committee to Discuss FY 2025 Budget Process, Brodie
- 8. Committee to Discuss Special Coordination Committee-GSA Information Meeting, Lucchesi/Brodie
- Committee to Discuss Coordination Committee Ad hoc Technical Subcommittee Meeting,
 Schueber, Dumas

- 10. Committee to Discuss Potential Subbasin Tours for State Water Board Members, Brodie
- 11. Committee to Discuss Well Mitigation Program in Development of the Single GSP, Lucchesi/Brodie/Dutton
- 12. Committee to Discuss EKI Requests for Information for the Single GSP, Dutton
- 13. Committee to Discuss Representative Monitoring Network Wells, Dutton/Dumas/Brodie
- 14. Report of the Northern Delta-Mendota Representative to the Coordination Committee, Lucchesi
- 15. Committee to Discuss 2023 GSP Implementation
 - a. 2023 GSP Implementation Activities Review, Dutton
 - b. 3-Month Look-Ahead Schedule, Dutton
 - c. Fall 2023 Water Level Monitoring, Dumas
 - d. Stakeholder Outreach and Engagement, Brodie
- 16. Committee to Discuss Potential Additional Funding Opportunities, Brodie
- 17. Next Steps
- 18. Reports Pursuant to Government Code Section 54954.2(a)(3)
- 19. Future Meetings
 - a. Northern Delta-Mendota Region Management Committee
 - i. Wednesday, November 1, 2023 at 2:00 PM
 - ii. Wednesday, December 6, 2023 at 2:00 PM
 - b. Delta-Mendota Subbasin Coordination Committee
 - Monday, October 9, 2023 at 1:00 PM
 - ii. Monday, November 13, 2023 at 1:00 PM
 - iii. Monday, December 11, 2023 at 1:00 PM
 - iv. Additional Coordination Committee Meetings may be scheduled

20. ADJOURNMENT

Persons with a disability may request disability-related modification or accommodation by contacting Cheri Worthy or Sandi Ginda at the San Luis & Delta-Mendota Water Authority Office, 842 6th Street, P.O. Box 2157, Los Banos, California 93635, via telephone at (209) 826-9696, or via email at cheri.worthy@sldmwa.org or sandi.glnda@sldmwa.org. Requests should be made as far in advance as possible before the meeting date, preferably 3 days in advance of regular meetings or 1 day in advance of special meetings/workshops.



Meeting of the Delta-Mendota Subbasin Coordination Committee

Monday October 9, 2023, 1:00 PM

AGENDA

- 1. Call to Order/Roll Call
- Committee to Consider Corrections or Additions to the Agenda of Items, as Authorized by Government Code Section 54950 et seq.
 - 3. Opportunity for Public Comment

Consent Calendar

- 4. Committee to Review and Take Action on the Consent Calendar (Hopkins/Brodie)
 - a) Minutes of the September 11, 2023 Meeting of the Committee
 - b) Minutes of the September 21, 2023 Special Meeting of the Committee
 - c) Coordination Committee Budget to Actual Report (July 2023)
 - d) Grant Reimbursement Summary Report

Action Items

- 5. Committee to Consider Approval of the Special Projects Agreement and Cost Share Split for Preparation of a Single GSP for the Subbasin, Brodie/Layne
- 6. Committee to Consider Approval of the Memorandum of Agreement for the Subbasin Under a Single GSP, Layne/Brodie

Report Items

- 7. Committee to Discuss FY 2025 Budget Process, Brodie
- 8. Committee to Discuss September 25, 2023 Ad Hoc Technical Committee Meeting, Brodie/Dutton
- 9. Committee to Discuss Subsidence Data, Data Gaps, and SMCs, Dutton
- 10. Committee to Discuss Subbasin Water Budget, Brodie/Martin
- 11. Committee to Discuss October 11 Technical Issues Meeting with State Water Board Staff, Hurley/Martin/Stilwell/Dutton

- 12. Committee to Discuss October 11 Subbasin Tour for SWRCB Member D'Adamo, Hurley/Martin/Stilwell/Petersen
- 13. Committee to Discuss Future Subbasin Tours for SWRCB Members and Staff, Hurley/Martin/Stilwell
- 14. Committee to Discuss Well Mitigation Policy, Brodie/Dutton/Layne
- 15. Committee to Discuss EKI Requests for Information (RFI) #s Two and Three, Dutton
- 16. Committee to Discuss Revision of the Representative Monitoring Network, Dutton
- 17. Committee to Discuss Design of Interconnected Surface Water Monitoring Network for the Delta-Mendota Subbasin, Halligan/Francis
- 18. Committee to Discuss Other Tasks in the SGMA Round 1 Implementation Grant, Brodie
- 19. Committee to Review Monitoring Exceedances, Dumas/Dutton
- 20. Committee to Discuss GSP Implementation Schedule, Dutton
- 21. Committee to Discuss Available Funding Opportunities, Brodie
- 22. Next Steps
- 23. Reports Pursuant to Government Code Section 54954.2(a)(3)
- 24. Future Delta-Mendota Subbasin Coordination Committee Meetings
 - a. Monday November 13, 2023 1:00 PM
 - b. Monday December 11, 2023 1:00 PM
 - c. Future Special Meetings May Be Scheduled at the Request of the Committee.

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RESPONSE TO INADEQUATE DETERMINATION DELTA-MENDOTA SUBBASIN

9 OCTOBER 2023

COORDINATION COMMITTEE

EX environment & water

AGENDA

9. Subsidence Data, Data Gaps, and SMCs

10. October 11th Technical Issues Meeting with SWRCB Staff

14. Request for Information Status

15. Representative Monitoring Network Revisions

20. GSP Implementation Schedule

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CONTEXT - WHAT OTHER BASINS ARE DOING

Chowchilla Subbasin

■ Tule Subbasin

Merced Subbasin

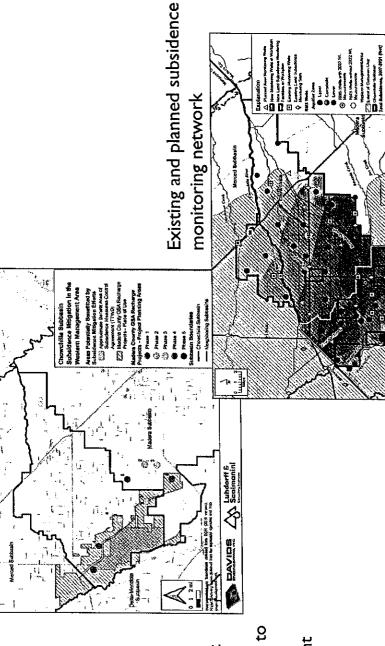


CHOWCHILLA SUBBASIN'S APPROACH TO

SUBSIDENCE

- Subbasin is divided into Western (significant subsidence concerns) and Eastern (lesser subsidence concern) management areas.
- Conducted Infrastructure Sensitivity Assessment
- MT is 0 ft/year subsidence (after 2040)
- UR if 75% of RMS in either management area exceed MTs for 2 years
- Existing subsidence monitoring network to be expanded
- Subsidence Control Measures Agreement provides surface water in exchange for Lower Aquifer pumping restrictions
- Planned groundwater banking in Upper Aquifer to shift extractions away from Lower Aquifer

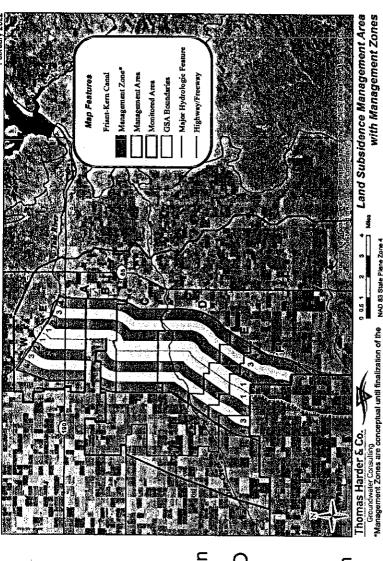
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TULE SUBBASIN'S APPROACH TO SUBSIDENCE

- Participating in settlement with Friant Water Authority
- UR is more than 3 ft of subsidence near FKC
- SMCs based on subsidence predicted by numeric groundwater flow model
- Yearly allocations that ramp down from current pumping to sustainable yield by 2035
- Land Subsidence Management and Monitoring Plan in place for Eastern Tule GSA and promised by Delano-Earlimart ID GSA and Lower Tule River ID
- Management zones defined by position along and proximity to FKC
- Fiered reductions in allocations and limitations on within management zones based on subsidence water extractions and transfers implemented observed in the past year



MERCED SUBBASIN'S APPROACH TO SUBSIDENCE

UR could include reduced capacity in Eastside Bypass and damage to community infrastructure in El Nido

■ MT is 0 ft/year subsidence (after 2040)

P/MAs include

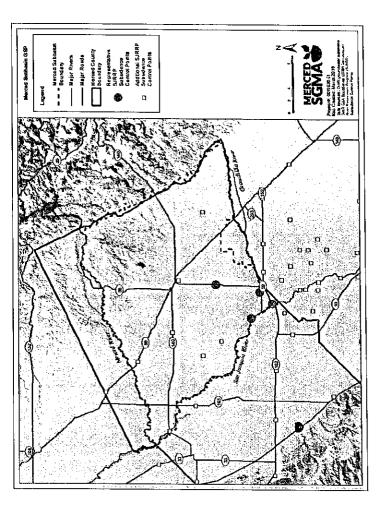
■ Groundwater allocations

Demand reduction programs

Streamlined permitting to replace Lower Aquifer wells with Upper Aquifer wells

In-Lieu recharge

□ Increased data collection



49

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UNDESIRABLE RESULTS – LAND SUBSIDENCE

Basin GSAs are committed to...

Chowchilla Bypass) that assume 2.0 feet of additional subsidence will occur Avoiding significant and unreasonable land subsidence as a result of GW extraction (GSA management actions) infrastructure (i.e., Delta-Mendota Canal, California Aqueduct, and within the Basin that exceeds protective design standards for critical by 2040.

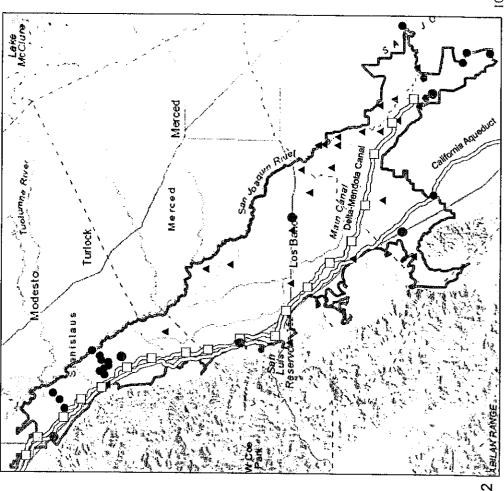


REVISED SMCs

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EXISTING SUBSIDENCE MONITORING SITES



Subsidence Monitoring Locations

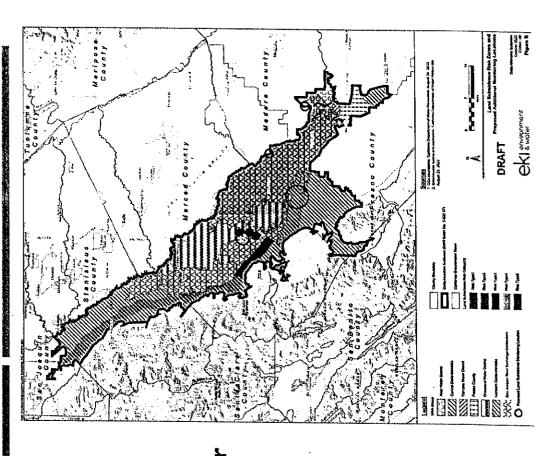
- GSA Survey Points
- UNAVCO CGPS Sites
- □ Delta-Mendota Canal Checkpoints
- USGS Extensometer
- San Joaquin River Restoration Program GPS Stations 52

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SUBSIDENCE PLAN PROVIDES POTENTIAL FRAMEWORK TO **ACHIEVE SMCs**

Basin developed a Conceptual Master Plan for Subsidence Monitoring and Management in 2022

Identified areas of potential subsidence risk and recommendations for monitoring and management



53



SUBSIDENCE MANAGEMENT RECOMMENDATIONS

Risk category 1 (NCDM, SJREC, FWD, Aliso) and 3 (NCDM, SJREC & Grassland)

- Regularly re-evaluate water level MTs to determine if they are protective of subsidence.
- Cross-validate GPS stations with InSAR every 6 years
- Install pressure transducers in wells near subsidence monitoring sites
- Inventory and track major groundwater extraction wells on an ongoing basis
- Establish tiered groundwater extraction management triggers based on level of subsidence tolerated by infrastructure
- Collect yearly mid-summer groundwater elevation measurements at all monitoring wells, in addition to spring and fall levels

Risk category 2 (all GSA groups)

- Regularly re-evaluate water level MTs to determine if they are protective of subsidence.
- Cross-validate GPS stations with InSAR every 6 years
- Install pressure transducers in wells near subsidence monitoring sites
- Estimate GSA-level total pumping relative to projections. Evaluate for management if excessive extractions or subsidence observed

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SUBSIDENCE MANAGEMENT **RECOMMENDATIONS**

Risk category 4 (All GSA groups)

- Estimate GSA-level total pumping relative to projections. Evaluate for management if excessive extractions or subsidence observed
- Regularly re-evaluate water level MTs to determine if they are protective of subsidence.
- Cross-validate GPS stations with InSAR every 6 years

Risk category 5 (NCDM & SJREC)

Inventory wells if subsidence rates increase

Risk category @ areas (NCDM, SJREC, Grassland)

Estimate extractions if subsidence rates increase

Basin-wide

- Establish additional water level and subsidence monitoring sites
- Survey DMC and critical infrastructure every three years

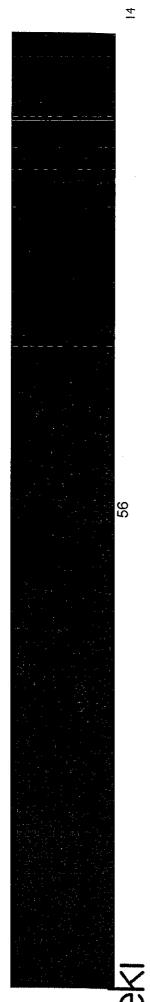
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10. PRESENTATION TO THE SWRCB

OCTOBER II 2023

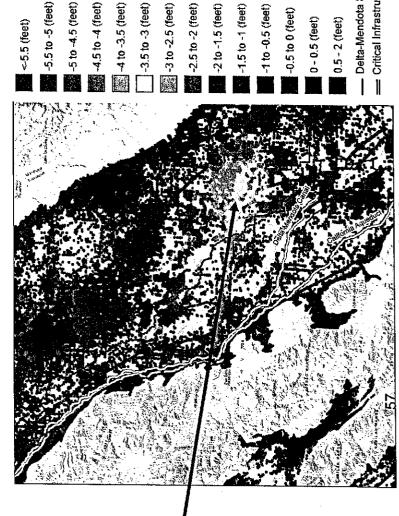




INSAR DATA IDENTIFIES SUBSIDENCE HOTSPOT **LOCATION OUTSIDE OF BASIN**

Subsidence hotspot is located OUTSIDE of the Delta-Mendota (DM) Subbasin and impacting conditions in the DM Subbasin.

This issue is outside of DM GSA control



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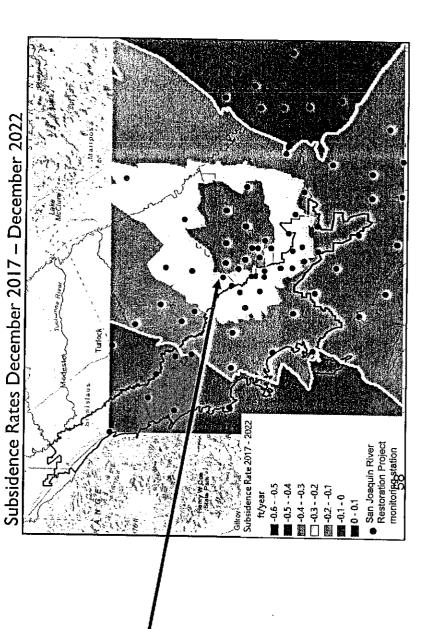
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USBR SURVEY DATA IDENTIFIES SUBSIDENCE HOTSPOT LOCATION OUTSIDE OF BASIN

Subsidence hotspot is located OUTSIDE of the Delta-Mendota (DM) Subbasin and impacting conditions in the DM Subbasin.

This issue is outside of DM GSA control







DWR DEFICIENCIES FOR SUBSIDENCE

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

(they) do not explain what are now considered to be significant and unreasonable conditions. For example, ... no examples of what are considered an unmitigated and unmanageable reduction of design capacity for conveyance structures are

Planned GSP Revision: Revised definition of URs now clearly ties back to the design standards for the critical infrastructure that accounts for an additional 2 ft of subsidence by 2040



DWR DEFICIENCIES FOR SUBSIDENCE

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

- GSP Regulations ... require the minimum threshold to be expressed as a rate and extent of subsidence and the new minimum threshold is only expressed as a total amount of subsidence.
- the Plan does not indicate when the period for calculation a total of two feet of additional subsidence begins

Planned GSP Revision: Revised definition of MTs to clarify both the rate and extent and to clarify the period of calculation for the 2.0 ft of additional subsidence



PROPOSED LAND SUBSIDENCE SMCS

Undesirable Results:

- UR occurs if MTs are exceeded at 25% or more of RMS as a result of groundwater extraction in the basin, based on a 5-year moving average.
 - Critical Infrastructure includes the California Aqueduct, Delta-Mendota Canal, and Chowchilla Bypass.
- Significant and Unreasonable definitions tied to existing mitigation plans (i.e., DMC Subsidence Correction Project)

Minimum Thresholds:

Set as 2 ft total (cumulative) subsidence between 2020 and 2040, maximum 5-year average rate of 0.2 feet per year

Interim Milestones:

- No more than 1.0 ft cumulative subsidence by 2025; 5-year average rate ≤ 0.2 ft/yr; starting point is 2020 (same as for MTs and all other IMs)
 - No more than 1.5 ft cumulative subsidence by 2030; 5-year average rate ≤ 0.1 ft/yr
- No more than 1.75 ft cumulative subsidence by 2035; 5-year average rate < 0.05 ft/yr
- No more than 2.0 ft cumulative subsidence by 2040; 5-year average rate ≤ 0.05 ft/yr

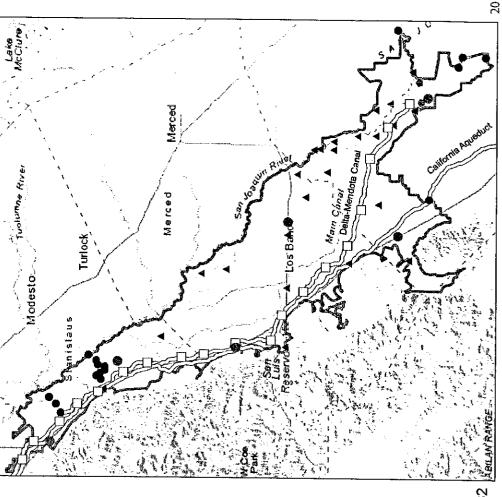
Measurable Objectives:

No additional cumulative subsidence beyond 2040; 5-year average rate = 0 ft/yr



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EXISTING SUBSIDENCE MONITORING SITES



Subsidence Monitoring Locations

- GSA Survey Points
- UNAVCO CGPS Sites
- Delta-Mendota Canal Checkpoints
- USGS Extensometer
- San Joaquin River Restoration Program GPS Stations 62 💹



Additional monitoring

GSAs ACTIVELY WORKING TO

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MANAGEMENT ACTIONS TO

ADDRESS SUBSIDENCE

DEVELOP PROJECTS AND

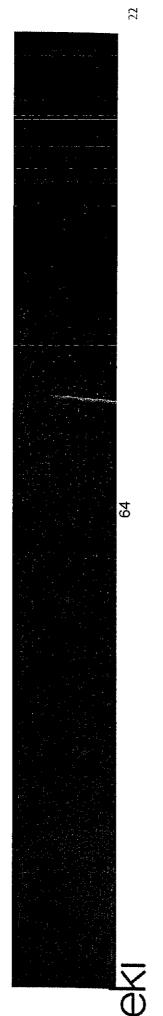
- Consideration of pumping restrictions/allocations in areas with pumping-induced subsidence and critical infrastructure
- Additional groundwater recharge projects

| Market |

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14. REQUEST FOR INFORMATION STATUS



RFI #1 TO #3 STATUS

2022 GSP Materials – received Common Chapter (CC) and map packages for selected CC Figures

■ Data to support RMN – in progress, see Agenda item 15

Received stakeholder engagement records from West Stanislaus ID, NCDM, Madera County, Patterson ID, Farmers WD

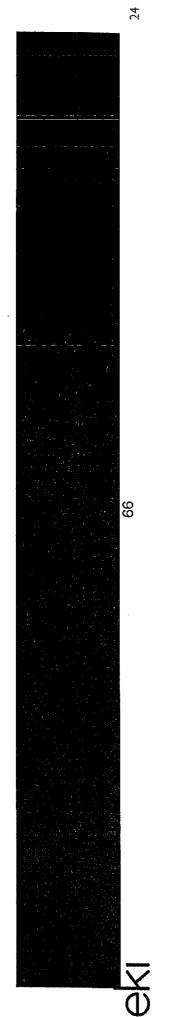
Received land use data from Patterson ID, Farmers WD, Fresno County, NCDM

Received water budget information from NCDM, Fresno County, Farmers WD, Madera County, SJREC, Aliso WD, Fresno County, Grasslands, WSID

Not yet received



15. REPRESENTATIVE MONITORING NETWORK **REVISIONS**



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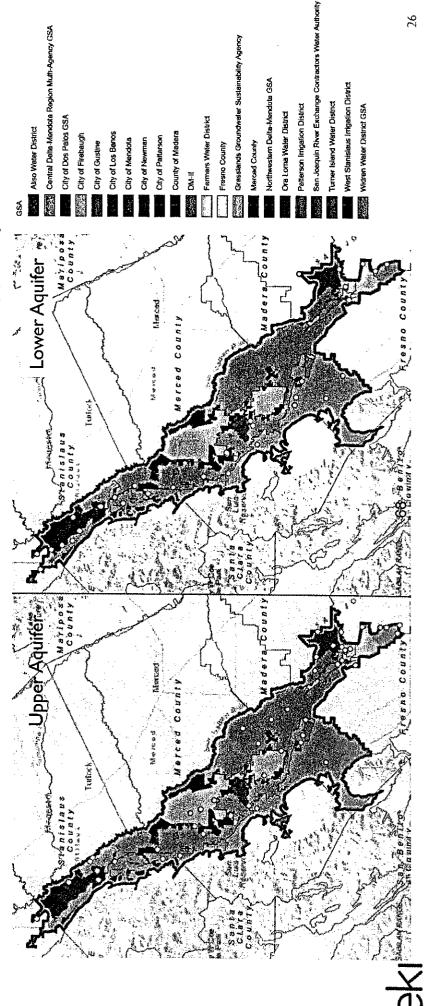
RFI #1 - RMN REVISION

RMWs with confirmed coordinates and depths

	Upper KMW-	LOWer KINIW-	Upper Kiviw- Lower Kiviw- Upper Kiviw- Lower Kiviw-	Lower Kiviw-
GSA_Name	WL Count	WL Count	WQ Count	WQ Count
Central Delta-Mendota GSA	80	8	5	7
Aliso Water District GSA	4	2	4	2
Grasslands GSA	80	2	4	2
County of Merced GSA - Delta-Mendota	1	5	3	7
San Joaquin River Exchange Contractors GSA	6	3	6	8
County of Fresno GSA - Delta-Mendota Management Area B	4	H	11	1
County of Fresno GSA - Delta-Mendota Management Area A	1	0	1	0
City of Mendota	0	O TO SERVE OF	0	D
Oro Loma Water District GSA	1		П	0
Farmers Water District GSA	3	1	Ω	1
Patterson Irrigation District GSA	2	0	2	0
DM-II GSA	T	6	F	9
City of Patterson GSA	2	1	ਜ	FFI
Northwestern Delta-Mendota GSA	2	1	1	1
West Stanislaus Irrigation District GSA	2	7	2	4
City of Los Banos	0	0	0	0
City of Dos Palos GSA	O . 10 mg February 1 1 1 1	() () () () () ()	0	0
City of Firebaugh GSA	0. 30. 30. 30. 30.	6 Sec. 50	0	0
City of Gustine GSA	O (0 34000	0	0
City of Newman GSA	0	0 7	O	0
County of Madera GSA - Delta-Mendota	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	0	0	0
Turner Island Water District GSA - Delta-Mendota	0.80	SS 2 S 2 C 0	0	0
Widren Water District GSA	П	0	1	0
67				25

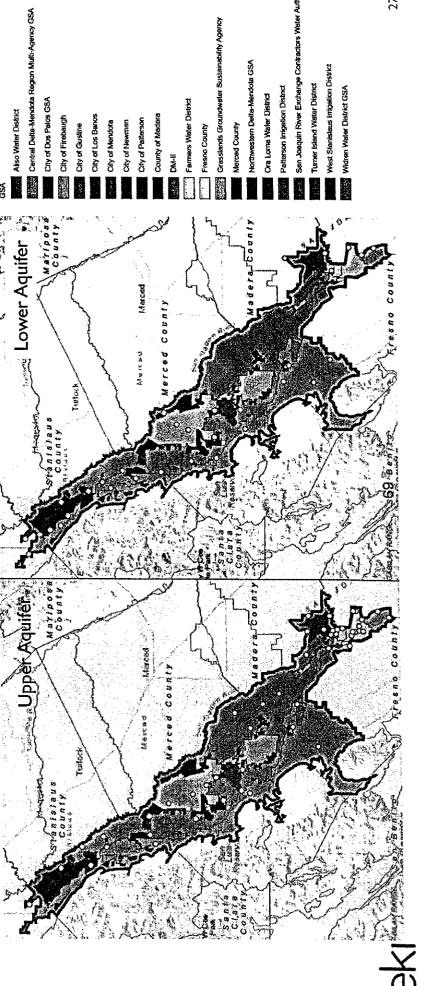
RMN-WL REVISION (AS OF 10/6/23)

49 upper and 35 lower RMWs with confirmed coordinates mapped by GSA



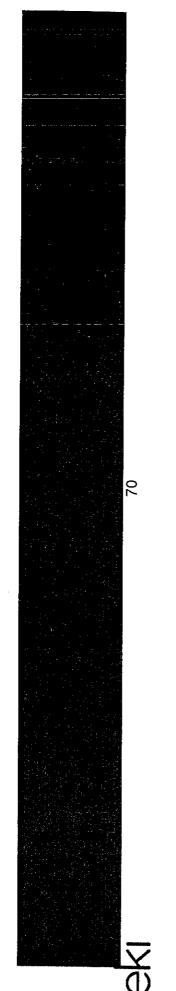
RMN-WQ REVISION (AS OF 10/6/23)

51 upper and 35 lower RMWs with confirmed coordinates mapped by GSA



20. GSP IMPLEMENTATION: THREE-MONTH LOOK AHEAD

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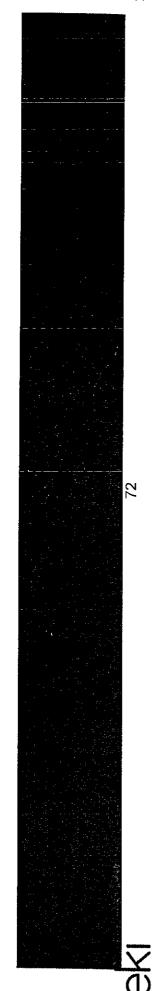
THREE-MONTH LOOK AHEAD

- October / November 2023
- SWRCB Meeting and basin tour 10/11/2013
- RFI #3 responses due 10/27/23
- Draft Introduction and Plan Area chapters provided for GSA review
- MOA adoption
- Potential SWRCB Meeting in November (TBD)
- December 2023
- Draft Hydrogeologic Conceptual Model (HCM) and Groundwater Conditions (GWC) chapters provided for GSA review
- Potential SWRCB Meeting in December (TBD)



POTENTIAL REVISED APPROACH TO WATER QUALITY SMCs

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MAIN SWRCB STAFF CRITICISMS OF PROPOSED **WQ APPROACH**

SMCs should be set for all COCs identified in 2022 letter

MTs should not be set higher than MCLs

Exceedance at 25% of wells for UR seems very high

constituents should be discussed in the basin setting (Cal. Code Regs., tit. 23, § 354.14, consider the attached list of constituents derived from this methodology when evaluating or updating GSPs. While it may not be appropriate for a GSP to set minimum thresholds and measurable objectives for all constituents identified for the basin, most or all of the subd. (b) (4) (D) and § 354.16, subd. (d)), since these constituents are present in the State Water Board staff encourage DWR, GSAs, and other interested parties to basin at concentrations that can impact begeficial users of groundwater.



TWG RECOMMENDED REVISED WATER QUALITY APPROACH

- Monitor all SWRCB Constituent of Concern (COCs) in all RMW-WQ wells annually, then gradually reduce monitoring frequency if data aren't changing / no relationship shown to GSA management
- Set MTs at Maximum Contaminant Levels (MCLs) for all SWRCB COCs
- Will have to create a more nuanced definition of Undesirable Results:
 - Focus only on impacts due to GSA management (extraction or recharge)
- Wells with exceedances may be "Significant but not unreasonable"



COST ESTIMATES FOR WATER QUALITY ANALYSIS

■ Analytical cost for SWRCB COCs

- I,2,3-TCP \$100
- Arsenic \$20 to \$27 (depends on method)
- Gross alpha radioactivity \$110
- Nitrate as N \$25
- Nitrate + nitrite \$45
- Hexavalent chromium \$90
- **■** TDS \$23
- Waste disposal fee (per Sample): \$2.50

per well is approximately \$420.

Total sampling cost is TBD but would have to happen regardless of COC list.

2

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DATA SOURCES AND TRENDS

■ Compiled data for the Basin from: GAMA, DMS*

Evaluated concentrations pre SGMA (2015) / post-SGMA

	i.	/ 0%	%0	5%	<u>7%</u>	7%	5%	3%	34
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Lower Aquifer Upper Aquifer All Data GROSS ALPHA ACTIVITY Pre-SGMA Post-SGMA 41/34 <u>172</u> / <u>52</u> | <u>52</u> / <u>52</u> 3%/ [[% 14% / 4% Lower 150 / 150 150 / 150 %0 / %0 31/24 Upper + Trend #Wells v MCL



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ARSENIC

Lower Aquifer

Upper Aquifer

All Data

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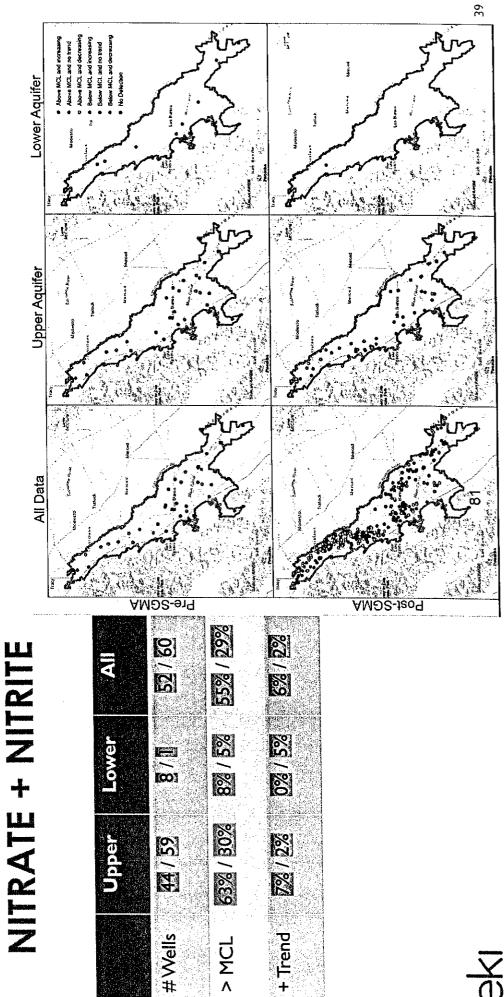
d) //9

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Ę Lower Aquifer Upper Aquifer All Data MSS-929 AMDS-929 <u>8%</u> / <u>113%</u> 28% / 43% AII 7% / 20% 29/30 Lower 14%/ **NITRATE** 30% / 47% 202 5% / [[4% Upper 789 #Wells > MCL







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123

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Lower Aquifer

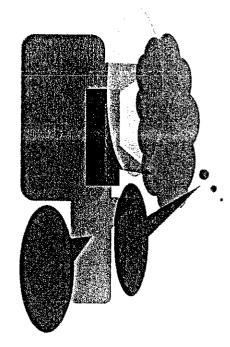
Upper Aquifer

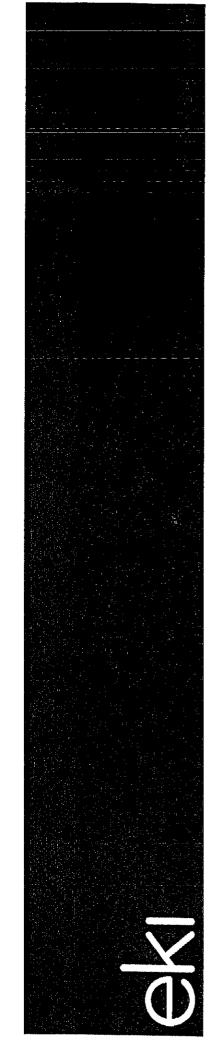
All Data

<u>V</u> 123

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QUESTIONS







Representative Groundwater Level Network Northern and Central Delta-Mendota Regions

				· 1.00
DMS ID	Local ID	Aquifer	Responsible Monitoring Entity	Comments
01-001	MP030.43R	Lower	Del Puerto WD	
01-002	MP033.71L	Lower	Del Puerto WD	Noted during 2022 GWQ sampling event that well destroyed but spring 2023 GWLs collected
01-003	MP045.78R	Lower	Del Puerto WD	
01-004	MC10-2	Upper	Del Puerto WD	
01-005	MP058.28L	Upper	Del Puerto WD	
01-006	91	Lower	Del Puerto WD	
01-007	MP021.12L	Lower	Del Puerto WD	
01-008	MP051.66L	Lower	Del Puerto WD	
02-002	WELL 02 - NORTH 5TH ST	Lower	City of Patterson	
02-009	Keystone well	Upper	City of Patterson	
03-001	MW-2	Upper	Patterson ID	
03-002	MW-3	Upper	Patterson ID	
03-003	WSJ003	Upper	Patterson ID	Popiar well
04-001	121	Lower	West Stanislaus ID	
04-006	Grayson Well 274	Upper	West Stanislaus ID	New this year as part of single GSP
04-007	Grayson Well 274A	Lower	West Stanislaus ID	
04-008	ARRA 28	Lower	West Stanislaus ID	
06-001	P259-1	Lower	Stanislaus County	
06-002		Upper	Stanislaus County	
07-002		Lower	San Luis WD	
07-003	MC15-2	Upper	San Luis WD	
07-005	MP091.68R	Lower	Pacheco WD	
07-007	MC18-1	Lower	Panoche WD	
07-009	KRCDTID03	Upper	Tranquility ID	
07-010	KRCDTID02	Upper	Tranquillity ID	
07-014	TW-4	Lower	Tranquillity ID	
07-015	TW-5	Lower	Tranquility ID	
07-016	Well 01	Lower	Santa Nella County WD	
07-017	Well 1	Upper	SLDMWA	
07-018	WSJ001	Upper	Tranquillity ID	
07-028	ell 500)	Lower	Eagle Field WD	
07-031	CDMGSA-01C	Lower	San Luis WD	
07-032	CDMGSA-01D	Lower	San Luis WD	
07-033	omponent)	Upper	Tranquillity ID	New this year as part of single GSP
07-035		Upper	Panoche WD	
07-036	PWD Well 20	Lower	Panoche WD	New this year as part of single GSP
08-002	Well M-1/MP102.04L	Upper	Widren WD	

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October 16, 2023

Department of Water Resources

Maria Jochimsen

Division of Regional Assistance

P.O. Box 942836 Sacramento, CA 94236-001

Subject: Sustainable Groundwater Management Act Implementation Agreement No. 4600014644 Changes to Invoice 1

Dear Maria,

There were various errors found in the Invoice 1 Submittal. The original reimbursement request was for \$377,523.79, however, after review, it was found that there was an overbilling of \$30,291.02. Therefore, the invoice total should have been \$347,232.77. After further discussion with DWR, it was decided that DPWD would hold the over-charges in their non-interest bearing account and will offset that with charges from the appropriate component and category in subsequent submittals. The following changes were made to the Invoice 1 Submittal:

Component 9 Changes

- 1. \$44,701.87 under Component 9, Category E should have been classified as Component 9, Category B.
- 2. There was a correction of a rate increase that was implemented in March 2022 but wasn't reflected in the calculations until July 2022. Originally, 40 hours of John's time were submitted under the hourly rate of \$93.95 when it should have been 34 hours.
- 3. John Brodie's expenses are considered subbasin-wide expenses, which are to be divided evenly among the GSP Groups. Since Northern & Central Delta-Mendota GSP Group opted to fund these expenses using a different source, the grant reimbursement is to be divided among the five remaining GSP Groups. Therefore, the reimbursement for each GSP Group is (\$19,322.91/6)*5, which with rounding per GSP group amounts to a total of \$16,102.45. Previously, \$19,886.61 was submitted for reimbursement as part of the subbasin-wide expenses, which resulted in an overbilling of \$3,784.16.
- 4. After shifting the \$44,701.87 from Category E to Category B and subtracting the \$3,784.16, the new total Component 9, Category B is \$249,687.70. Invoices that add up to \$3,784.16 under Component 9, Category B will be collected from the correct GSP participants and submitted to DWR but will be reimbursed by the grant funds held by Del Puerto from the overcollection on the invoice 1 submittal. This will be reflected in the revisions for Invoice 2. A total of \$249,687.70 is to be reimbursed to the GSAs under Component 9, Category B.

Component 10 Changes

- 1. The Woodard & Curran invoice 202597 for \$651.00 was originally submitted as \$651.50, which resulted in an overbilling of \$0.50. This invoice is considered part of the subbasin-wide expenses.
- 2. Since Northern & Central Delta-Mendota GSP Group opted to fund these expenses using a different source and the Aliso WD GSA does not have budget under Component 10, the grant reimbursement for the subbasin-wide expenses is to be divided among the four remaining GSP Groups. Therefore, the reimbursement for each GSP Group is broken out in the following way:
 - a. The total Baker Manock & Jensen invoices amount to \$17,691.50; (\$17,691.50/6)*4 = \$11,794.33. To make the cents divisible by four, \$0.01 was subtracted for a total of \$11,794.32.
 - b. The total EKI Environment & Water invoices amount to \$13,803.92; (\$13,803.92/6)*4 = \$9,202.61. To make the cents divisible by four, \$0.01 was subtracted for a total of \$9,202.60.

- c. The total Woodard & Curran invoices amount to 48,023.50; (48,023.50/6)*4 = 32,015.67. To make the cents divisible by four, 0.03 was subtracted for a total of 32,015.64.
- d. The total subbasin-wide expense to be reimbursed is \$53,012.56.
- 3. Previously, \$79,519.42 (made up of Baker Manock & Jensen, EKI Environment & Water, and Woodard & Curran invoices) was submitted for reimbursement as part of the subbasin-wide expenses, which resulted in an overbilling of \$26,506.86 for Component 10, Category E.
- 4. After subtracting the \$26,506.86 that was overbilled, the new total for Component 10, Category E is \$79,577.17. Invoices that add up to \$26,506.86 under Component 10, Category E will be collected from the correct GSP participants and submitted to DWR but will be reimbursed by the grant funds held by Del Puerto from the overcollection on the invoice 1 submittal. This will be reflected in the revisions for Invoices 2 and 3. A total of \$79,577.17 is to be reimbursed to the GSAs under Component 10, Category E.

The new total for Invoice 1 to be reimbursed is \$347,232.77.

Thank you for your patience with the reconciliation of the Invoice 1 Submittal errors.

Sincerely,

Del Puerto Water District

Summary Table Invoice 1 (2022Q3)

Component Name/Number	Page	Total this Invoice	Total from Original	Variance (Credit)
Component 1 – Los Banos Creek Recharge and Recovery	2	\$	€9	\$
Component 2 - Flood Water Capture	4	- -	·	- \$
Component 3 - Chowchilla Bypass Recharge	9	- ·	÷	-
Component 4 – Lateral 4N Reservoir Recapture and Recirculation	80	\$	\$	-
Component 5 – North Valley Regional Recycled Water	10	· \$	\$	· ග
Component 6 – Farmers Water Disctrict Water Bank	12	\$ 17,967.90	\$ 17,967.90	-
Component 7 – Los Banos Creek Detention Reservoir Regulation and Storage	33	\$	\$, \$
Component 8 - Data Gaps and Monitoring	35	\$	\$	\$
Component 9 – GSP Revisions, Updates, and Modifications	37	\$ 249,687.70	\$ 253,471.86	\$ (3,784.16)
Component 10 - Outreach and Education	161	\$ 79,577.17	\$ 106,084.03	\$ (26,506.86)
Component 11 – Studies and Investigations	218	- \$	-	৽
	Total	\$ 347,232,77	\$ 377,523,79	\$ (30,291,02)

\$44,701.87 under Component 9, Category E should have been classified as Component 9, Category B. After shifting the \$44,701.87 from Category E to Category B and subtracting the \$3,784.16, the new total Component 9, Category B is \$249,687.70. In addition \$106,084.03 was charged to Component 10, Category E when it should have been \$79,577.17. \$3,748.16 will remain in the Component 9, Category B budget and \$26,506.86 will remain in the Component 10, Category E budget for future reimbursements, which will be reflected in Invoice 2.

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As of 10/18/23

Well Registrations Not Yet Received

VIII. E.

	Name
Borges, Frank J.	
Borges & Machado	
Tatla, Jasbir	
Tatla & Singh	

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VIII F

DEL PUERTO WATER DISTRICT STAFF REPORT

DATE OF MEETING:

October 18, 2023

October 18, 2023

TO: Board of Directors

FROM: Adam Scheuber, Deputy General Manager - Water Resources

SUBJECT: Groundwater Well Telemetry Grant Program

DESCRIPTION:

In April 2022 the District applied for a WaterSMART Small Scale Water Efficiency Grant to install up to 45 flowmeters and telemetry systems on groundwater wells throughout the District. On January 5, 2023 the Bureau of Reclamation put out a press release listing the District grant application as one of the selected projects for funding. On August 2, 2023 the District received the agreement for the Grant and will move forward with the environmental work and equipment acquisition. On October 11, 2023, the District received the revised cost estimate for the site equipment and installation.

FUNDING:

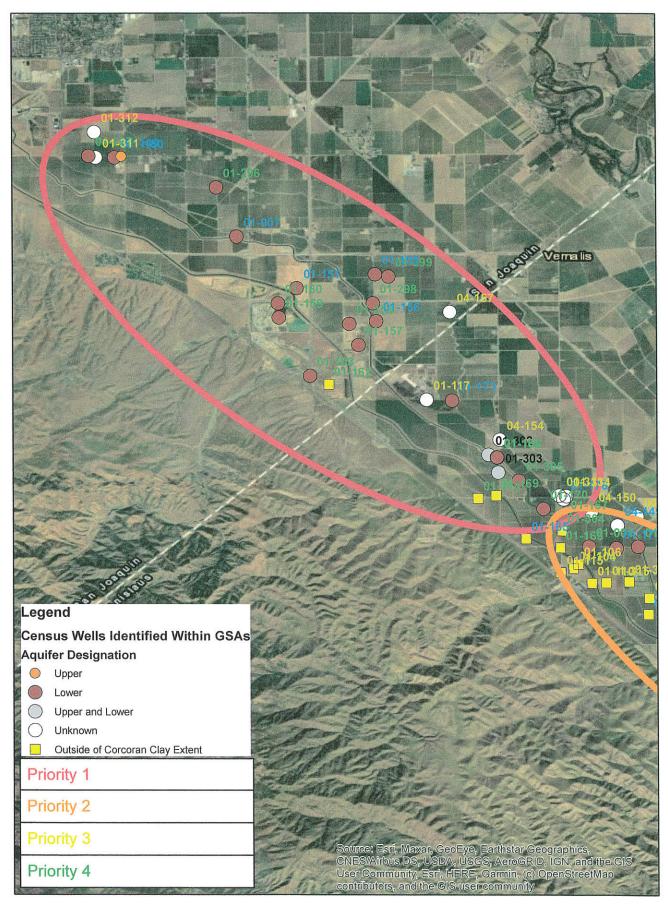
Project received a \$99,750 50% match WaterSMART Grant.

UPDATE:

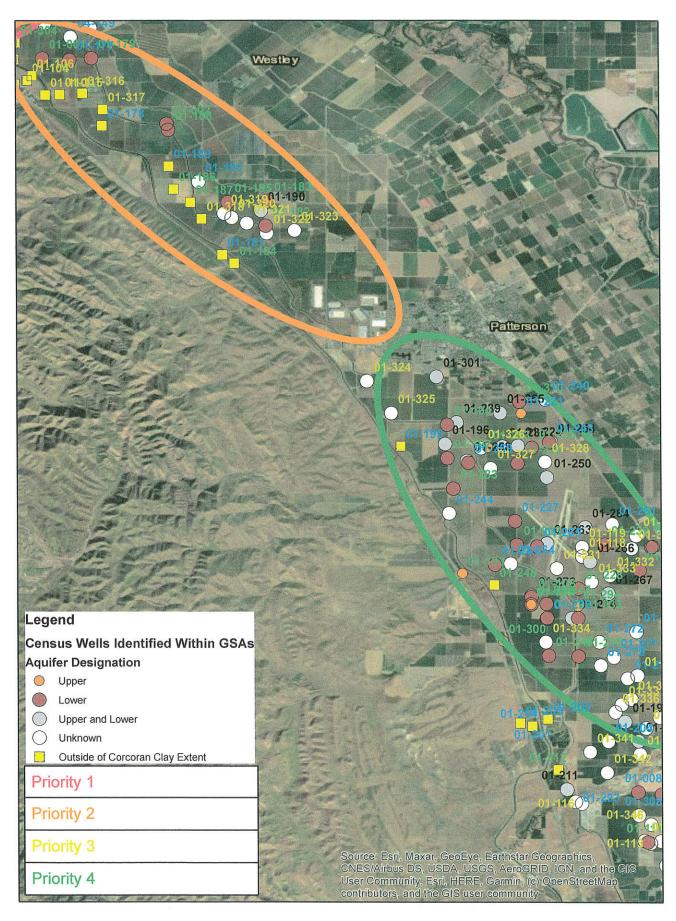
Per previous Board guidance, staff has developed a priority list of wells targeting the areas under the most scrutiny for impacts to subsidence along critical infrastructure for inclusion in this program. The District selected 4 priority zones based on the results of USBR's subsidence surveys and planned subsidence correction projects. Maps of the priority wells are included with this report. Staff will take this priority list and compare the wells included in this list with the data received from the well registration forms to determine how many wells need new/upgraded meters and how many can be upgraded using the digital conversion kits from McCrometer the District has used previously. Meter upgrade costs will be split between the grant funding and the customers. The cost estimates provided by Sierra Controls include the costs to upgrade the customer and District side of the software, perform signal surveys of the selected sites, and provide materials and programming for regular antenna sites and sites that need external antennas. Staff will take this data and begin reaching out to customers to schedule meter upgrades and perform site installations once USBR completes the NEPA portion of the environmental requirements.

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Remote Telemetry Priority Maps

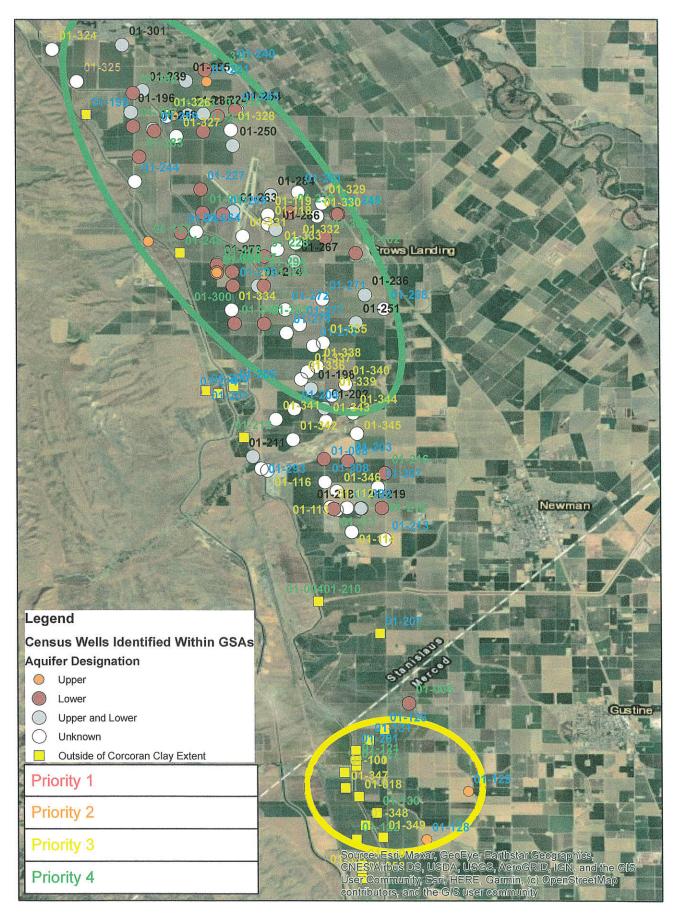


Remote Telemetry Priority Maps



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Remote Telemetry Priority Maps



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Budgetary Figures

Sierra Controls, LLC

Quote / Project #: 22-6655

5470 Louie Lane Ste. 104

Date: 10/11/2023

Reno, NV 89511 (775) 236-3350 Project Manager: Mark Crossett

Est. Start Date: TBD

To: Del Puerto Water District

Attention: Adam Schueber

Project: Well Monitoring Project

Sierra Controls LLC (SC) is pleased to provide this proposal for Del Puerto Water District in support of the Well Monitoring Project.

These budgetary figures provide pricing for two types of sites, sites that have an internal antenna, and sites that have an external antenna. A site survey will determine which sites need to have an external antenna to establish a good communication link and which sites establish adequate communication links with the internal antenna.

The intent is to give the district the ability to multiply the types of sites by the per site and to inform SC as to the quantity of sites that are to be included in this phase. When SC has recieved this information SC will provide a firm proposal with the scope as defined by the district.

Item#	Description	Quantity	U	nit Price	Es	t. Tax	Li	ne Total
Item 1	Materials - Internal Antenna	1	\$	2,455.00	\$	115.86	\$	2,570.86
	Pricing Includes:							
	(1) SignalFire Ranger: Internal Antenna, Battery, 3-Year							
	Verizon							
	(1) Antenna Mast Hardware							
	Pricing also Includes:							
	HMI Development							
Item 2	Installation - Internal Antenna	1	\$	3,060.00	\$		\$	3,060.00
	Pricing also Includes:							
	Travel, Installation							
			Pri	ce	Est	. Тах	To	tal Price
	Per Site Total:		\$	5,515.00	\$	115.86	\$	5,630.86
Item 3	Materials - External Antenna	1	\$	2,685.00	\$	126.71	\$	2,811.71
	BOLL TO A STATE OF THE STATE OF							

Pricing Includes:

- (1) Antenna Mast Hardware
- (1) SignalFire Ranger: External Antenna, Battery, 3-Year

Verizon

- (1) CABLE N MALE TO SMA MALE 40 IN
- (1) DIRECTIONAL CELLULAR ANTENNA

Pricing also Includes:

HMI Development



Installation - External Antenna 3,690.00 3,690.00 Item 4 **Pricing Includes:** Travel, Installation Price Est. Tax **Total Price** Per Site Total: \$ 6,375.00 Ś 126.71 6,501.71 815.00 **Existing SignalFire - Battery Replacement Parts** \$ \$ 38.42 \$ 853.42 Item 6 **Pricing Includes:** (7) Signalfire A2 Replacement batt(s) **Ignition Upfront Programming** 9,670.00 456.75 \$ 10,126.75 Item 8 **Pricing Includes:** This line item includes modernizing the existing Ignition HMI deployment to enhance the following: System Security · User Interface Enhancements Trend Inprovements Statistics Graphics and Enhancements System Architecture Improvements **On Site Survey** 11,490.00 Item 9 **Pricing Includes: Onsite System Survey** • Estimated at 40 Hours of labor, including travel and onsite survey. **Pricing also Includes: Project Management** Price Est. Tax **Total Price Project Total:** 45,755.00 980.31 \$ 46,735.31

Notes & Disclaimers:

Additional T&M Work: This proposal represents the complete scope of work to be performed by SC. Any additional requirements, specifications or construction details outside of this proposal are not included and will be billed on a T&M basis as mutually agreed upon by all parties.

Wage Rates: Pricing is based upon SC standard wage rates and does not include any provisions for any type of Prevailing Wage Requirements. Client to notify SC prior to the beginning of work if different or indemnify SC for any loss or penalties assessed if determined otherwise after the execution of this agreement.

Warranty: All equipment manufactured by SC to be under a Limited (1) Year Warranty based upon SC Standard Warranty Terms & Conditions beginning at the time of installation or delivery to client. (Whichever comes first) unless noted otherwise. Warranty is void where no Remote Access is provide or available. Additional Terms & Conditions apply. SC will provide complete warranty terms and conditions upon request. Extended warranties available upon request.

Delivery: Scheduled ARO

Terms: NET 30 FOB: RENO, NV RESPECTFULLY SUBMITTED, SIERRA CONTROLS, LLC

D. Andrew Ward - President

This quote is valid for 30 days.

To proceed with this order please sign below with an authorized signature and return.

Signed PO Number Date