



TEJON-CASTAC
WATER
DISTRICT



South of Kern River Executive Committee Regular Meeting

Thursday, May 9, 2024

9:00 a.m. to 11:00 a.m.

Meeting Information Posted:

www.sokrgsp.com

<http://www.aewsd.org> * <http://www.wrmwsd.com>

<http://www.tejoncastacwd.com> * <https://www.arvincsd.com>

In Person: Arvin-Edison Water Storage District Headquarters
20401 E. Bear Mountain Blvd. Arvin, CA 93203

Via Remote (**Microsoft Teams**): <https://www.microsoft.com/microsoft-teams/join-a-meeting>

[Click here to join the meeting](#)

Meeting Number: **289 619 843 830**

Meeting Password: **ko5K35**

Phone: **1.213.437.9052**

Phone Meeting Number (access code): **276 512 496#**

NOTICE: Members of the public interested in participating by teleconference may do so using the call-in information above or by following [this link](#). Please note that this teleconference option is provided as a courtesy and at the participant's own risk. The Committee cannot guarantee that there will be no loss of connectivity or other technological obstacle to full participation through teleconferencing. By participating in this way, participants confirm that they understand this risk and that the Committee is not obliged to delay any portion of the meeting due to such technological obstacles and thus that teleconference participants may be unable to participate.

1. CALL TO ORDER
2. ROLL CALL
3. PLEDGE OF ALLEGIANCE
4. APPROVAL OF THE AGENDA
5. APPROVAL OF APRIL 11, 2024 MEETING MINUTES
6. PUBLIC COMMENT
7. REPORT ITEMS
 - a. GSP Manager Report (*Muhar*)
 - i. Basin Coordination
 - b. Technical Consultant Report (*EKI*)
 - i. Final Draft Revised Groundwater Sustainability Plan
 - ii. SGMA Monitoring Network performance and sustainable management criteria (SMC) compliance
 - c. Finance Report (*Nicholas*)

d. California Aqueduct Subsidence Program (CASP) update (*Nicholas*)

e. Management Area updates (*Muhar, Nicholas, Martin, Barraza*)

8. CLOSED SESSION

a. Potential Litigation (Government Code §54956.9(d)(2), (e)(1); 1 item).

9. ACTION ITEM(S)

a. Discussion and possible action to recommend each GSA home board (a) approve final draft amendments to the Kern Subbasin Groundwater Sustainability Plan and supporting appendix of projects and management actions for its GSA, (b) authorize their submission by the Kern County Subbasin Point of Contact to the State Water Resources Control Board before May 29 for review by SWRCB staff, and (c) authorize their release for public review and comment.

b. Discussion and possible action to recommend each GSA home board authorize execution of amended and restated Kern County Subbasin Coordination Agreement among Subbasin GSAs.

c. Discussion and possible action to recommend each GSA home board authorize execution of Third Amended and Restated Joint Powers Agreement for Kern Non-Districted Land Authority (formerly Kern Groundwater Authority).

d. Discussion and possible action to recommend each GSA home board authorize updated notification to cities and counties of intention to adopt a new or amended GSP.

10. CORRESPONDENCE

a. Letter from Basin Point-of-Contact to Friant Water Authority

b. Response letter from Friant Water Authority to Basin Point-of-Contact

11. ADJOURNMENT

**MINUTES OF THE MEETING OF THE
SOUTH OF KERN RIVER EXECUTIVE COMMITTEE
April 11, 2024**

CALL TO ORDER

Director Yurosek called the meeting to order at 9:00 a.m., and determined a quorum was present with attendance by:

Executive Committee Directors

Derek Yurosek – Arvin-Edison Water Storage District (AEWSD; Arvin GSA) (present)
Mark Valpredo – Tejon-Castac Water District (TCWD; Tejon-Castac Water District GSA) (present)
Michael Blaine – Wheeler Ridge-Maricopa Water Storage District (WRMWSD; Wheeler Ridge-Maricopa GSA) (present)
Rafael Gallardo – Arvin Community Services District (ACSD) (present)

District Staff

Jeevan Muhar – AEWSD (present)
Sheridan Nicholas – WRMWSD (present)
Angelica Martin – TCWD (remote)
Raul Barazza – ACWD (present)

PLEDGE OF ALLEGIANCE

APPROVAL OF THE AGENDA

Director Valpredo moved to approve the agenda as amended. Director Blaine seconded. The motion passed 4-0-0.

APPROVAL OF FEBRUARY 20, 2024 MEETING MINUTES

Director Valpredo moved to approve the February 20, 2024 SOKR Executive Committee meeting minutes. Director Gallardo seconded. The motion passed 4-0-0.

PUBLIC COMMENT

There were no public comments.

REPORT ITEMS

GSP Manager Report

Basin Coordination

Mr. Muhar reported on the Subbasin GSAs' efforts to coordinate on tasks related to revising the Groundwater Sustainability Plan(s) (GSPs) to respond to the deficiencies identified in the Department of Water Resources (DWR) Inadequate Determination by spring 2024. Mr. Muhar identified ongoing work efforts including the Plan Manager

contract, ongoing coordination for future white lands coverage, and Friant Kern Canal mitigation considerations.

Technical Consultant Report

Basin coordinated GSP and response to California Department of Water Resources (DWR) deficiencies

EKI reported a summary of the Subbasin-wide technical work undertaken to address DWR-identified GSP deficiencies. These efforts included the development of revised methodology for Sustainable Management Criteria (SMCs) for Chronic Lowering of Groundwater Levels, Land Subsidence, and Degraded Water Quality and ongoing work to update the Subbasin-wide water budget and planned Projects and Management Actions (P/MAs). Additionally, the Subbasin GSAs have developed a Subbasin-wide MT exceedance policy and Well Mitigation Program to address ongoing impacts to water users during GSP implementation. The Technical Working Group (TWG) is on schedule to have fully revised common GSP chapters completed by May 15th. It is anticipated the Subbasin GSAs would then release revised GSPs for public review.

Report on March 6, 2024 and April 3, 2024 technical meetings with State Water Resources Control Board (SWRCB) Staff

EKI reported on the March 6, 2024 and April 3, 2024 technical meetings with SWRCB staff where the TWG presented the Subbasin's approach to well mitigation, SMCs, and monitoring. Work is ongoing to address SWRCB staff comments.

SGMA Monitoring Network performance and SMCs compliance

EKI reported on March groundwater conditions within the SOKR Plan Area compared to the existing Minimum Thresholds (MTs) and Measurable Objectives (MOs).

Finance Report

Mr. Nicholas reported on finances to date. WRMWSD continues to submit invoices to Buena Vista Water Storage District for reimbursement of EKI's work on Subbasin GSP development efforts. Buena Vista Water Storage District has reported no issues on the subbasin-wide finance management.

California Aqueduct Subsidence Program (CASP) update

Mr. Nicolas reported that there were no updates from CASP.

Management Area Updates

Mr. Muhar reported no updates beyond Subbasin-wide coordination activities previously discussed.

Mr. Nicholas reported no updates.

Ms. Martin reported no updates.

Mr. Barazza reported on ongoing work that ACSD has been participating in with AEWSD regarding involvement in the expansion of AEWSD's spreading facilities.

CLOSED SESSION

Conference with Legal Counsel pursuant to Government Code §54956.9(d)(2), (e)(1) (potential litigation; 1 item). There was no action to report out of closed session.

ACTION ITEMS

Discussion and potential action to recommend INTERA's Proposal for Additional Data Collection and Modeling to Support Subsidence Mitigation Cost Analysis for the Friant-Kern Canal for approval by SOKR GSA boards. Mr. Muhar presented the INTERA's Proposal for Additional Data Collection and Modeling to Support Subsidence Mitigation Cost Analysis for the Friant-Kern Canal.

Following discussion, Director Blaine made a motion, seconded by Director Valpredo, to recommend that the SOKR GSA boards approve INTERA's Proposal for Additional Data Collection and Modeling to Support Subsidence Mitigation Cost Analysis for the Friant-Kern Canal. The Motion passed 4-0-0.

Discussion and potential action to recommend SOKR GSA boards' participation in the proposed Third Amended and Restated Joint Exercise of Powers Agreement for the Kern Non-districted Lands Authority. Mr. Muhar presented that the JPA is still being negotiated. The Directors unanimously agreed to table the item until the May Executive Committee meeting.

CORRESPONDENCE

1. Letter from Basin Point of Contact to SWRCB Vice Chair D'Adamo.
2. Letter from Tina Cannon Leahy, Attorney Supervisor, SWRCB Office of Chief Counsel to Basin Point of Contact.

Next meeting will be held May 9th.

ADJOURNMENT

Director Yurosek adjourned the South of Kern River Executive Committee meeting at 10:51 a.m.

Mark Valpredo, South of Kern River
Executive Committee Secretary

April 16, 2024

Jason R. Phillips, CEO
Friant Water Authority
856 North Harvard Avenue
Lindsay, CA 93247
Via email: jphillips@friantwater.org

Subject: Kern Subbasin Progress Report on Friant-Kern Canal Lower Reach Subsidence Mitigation Studies and Request for Letter of Support from Friant Water Authority

Dear Mr. Phillips:

As you may be aware, the Kern Subbasin (Subbasin) Groundwater Sustainability Plans (GSPs) were deemed incomplete by the Department of Water Resources (DWR) in 2020 and inadequate in 2022. Since the receipt of the Inadequate Determination, the Subbasin Groundwater Sustainability Agencies (GSAs) have been diligently working to address the DWR-identified deficiencies in the Inadequate Determination, so as to avoid entering probation under the State Water Resources Control Board (SWRCB). At a very high level, the Subbasin GSAs need to address issues related to coordination and consistency of methodologies and set Sustainable Management Criteria that are consistent with SGMA regulations – including subsidence. The Subbasin has been making significant progress in addressing the issues in the Inadequate Determination, and the current schedule indicates the submittal of revised GSPs to the SWRCB in May 2024.

Regarding subsidence, the Subbasin has greatly appreciated the numerous meetings held with the staff and consultants of the Friant Water Authority (FWA). During those meetings, FWA staff has made it very clear that “any unmitigated subsidence beyond 2020 is unacceptable”. Analysis has shown that our proposed groundwater level Minimum Thresholds (MTs) will lead to some amount of subsidence in the future along the lower reach of the Friant-Kern Canal (FKC), which is that portion that is covered by Kern Subbasin GSAs. As such, the Subbasin has been conducting analyses hand-in-hand with FWA staff and consultants to estimate the amount of potential future subsidence and estimate the cost to mitigate that potential subsidence. Through that work, the Subbasin has conservatively estimated a potential of up to 3 feet of subsidence along the aforementioned lower reach of the FKC, and a preliminary cost estimate of \$40M attributable to Kern County GSAs.

Three tasks need to take place to move forward on this analysis and ultimately begin mitigating subsidence on the FKC:

1. Finalize the estimated amount of future potential subsidence caused by groundwater management in the Subbasin
2. Finalize the cost estimate to mitigate the potential subsidence, and determine how it will interact with the capacity correction projections FWA is currently working on
3. Conduct an attribution analysis to determine how mitigation costs may be split between Kern County GSAs

Unfortunately, none of the three tasks above will be completed prior to the May 2024 submittal of the revised GSPs to the SWRCB.

This letter has two goals: Firstly, the Subbasin GSAs wish to clearly state to FWA that the Subbasin GSAs are committed to working with FWA to expeditiously complete the above three tasks and mitigate post-2020 potential subsidence. Secondly, the Subbasin GSAs are requesting a letter of support from FWA for the Subbasin to include within their GSPs with regards to how the Subbasin is handling potential subsidence along the FKC. Since the above three tasks cannot be completed prior to submitting revised GSPs to the SWRCB, the hope is that the work the Subbasin has done to date with

FWA (several technical meetings, cost estimates, impacts analyses, installation of an extensometer along the FKC at Kimberlina Road) combined with the proposed path forward will be sufficient to assure FWA that post-2020 subsidence along the FKC will be mitigated.

To emphasize the Subbasin's commitment to this process, please find attached a scope of work and a cost-share agreement between most Subbasin GSAs to fund the model calibration necessary to complete tasks 1 and 3 above. The aim is to complete this work in 2024, and the Subbasin GSAs look forward to working with FWA to determine how mitigation will fit into the grand scheme of FKC Capacity Correction projects.

Please don't hesitate to contact Kristin Pittack if you have any questions or concerns.

Sincerely,

A handwritten signature in black ink that reads "Kristin Pittack". The signature is written in a cursive style with a large initial "K".

Kristin Pittack, MS
Kern County Subbasin Plan Manager/Point-of-Contact
kpittack@rinconconsultants.com
(760) 223-5602

CC:

Johnny Amaral, COO/Chief of External Affairs
jamaral@friantwater.org

Attachments

Attachment 1 INTERA Scope of Work

Proposal for Additional Data Collection and Modeling to Support Subsidence Mitigation Cost Analysis for the Friant Kern Canal

Additional data-collection, analysis, and modeling is necessary to evaluate future impacts on water levels and subsidence along the Friant Kern Canal (FKC) from groundwater pumping in different GSAs within the Kern Subbasin. This data collection and analysis was not included in the original scope and budget to support GSP revisions, as the previous sustainable management criteria for the FKC had not accounted for conveyance loss from future subsidence. Any unmitigated conveyance loss due to subsidence along the FKC has been deemed an “undesirable result” under SGMA by the Friant Water Authority (FWA). Hence, mitigation alternatives to raise the liner (and associated infrastructure) along the sagging sections of the canal are being evaluated currently. A cost-sharing framework is being developed to fund these future mitigation efforts. The cost-sharing framework will entail attributing costs based on future impacts on water levels and subsidence along sagging sections of the FKC from groundwater pumping in different GSAs. This proposal outlines the approach and cost involved with the data-collection, analysis, and modeling for this effort.

Task 1. Recover and survey elevations at selected benchmarks

Perform GPS RTK survey methods at eight benchmark sites near the FKC to obtain ellipsoid and orthometric elevations processed through NOAA's Online Positioning User Service (OPUS). For benchmarks located in areas where direct GPS observations are not possible, a nearby reference mark will be established, and conventional leveling will be used to determine the elevation of the benchmark.

Estimated Cost: \$12,000

Task 2. Analyze and prepare long-term groundwater level and subsidence time series data and figures

Evaluate water-level data from the current period and historical water-level data near the FKC to provide a time series of data for the 1D model (Task 3) and to determine the pre-consolidation head and current critical head at eight selected locations of geodetic control (benchmarks). A time series of leveling data from benchmarks monumented by the National Geodetic Survey, U.S. Geological Survey, U.S. Bureau of Reclamation, and California Department of Transportation will be constructed from blue-booked leveled elevations and recoveries. Data compiled from the CASGEM, DWR water data library, and USGS will be used near the benchmark sites to construct a time series of water level data at various depth intervals. Approximately 75% of this data has already been collected as part of the development of the subsidence sustainable management criteria (SMCs). The cost below is for *additional* data collection and analysis to support the 1D modeling under Task 3.

Estimated Cost: \$10,000

Task 3. Subsidence analysis using the Stanford 1D model

Use the Stanford 1D model to forecast subsidence through 2040 or other desired planning timeframe to connect water levels and subsidence along the Friant Kern Canal (FKC). The model will be calibrated to the long-term subsidence and groundwater level data from Task 2. Well-log data will be compiled for each of the 8 sites to estimate the number and thickness of clay interbeds.

Estimated Cost: \$35,000

Task 4. Updated model analysis of water level changes by GSA

Use updated IWFM-Kern model (currently being updated by Todd Groundwater to support the GSP revisions) to evaluate change in groundwater levels through 2040 or other desired planning timeframes to simulate future change in water levels under a range of different scenarios with GSAs within the Kern subbasin pumping at different rates to assess impacts on future water levels along the Friant Kern Canal. INTERA will work with Todd Groundwater to perform the water level scenarios. Water level results from the scenarios will be linked to the 1D subsidence model (Task 3) to translate water level impacts to subsidence impacts along the FKC. The 1D subsidence model is necessary since the IWFM-Kern model has not been calibrated to subsidence. This task assumes multiple iterations to support the determination of potential attribution of water level and subsidence impacts along the FKC. Relative contribution to future water level declines and subsidence along the most vulnerable reaches of the FKC would be the basis for the cost-sharing framework between the GSAs determined to be contributing to water level declines and subsidence along the FKC.

Estimated Cost: \$60,000

Task 5. Meetings and Presentations

Results from the evaluation will be presented to the Kern Subbasin subsidence sub-committee, GSA managers, and coordination committee. The analysis will also be presented to the Friant Water Authority to get their buy-in on the approach and results. The analysis will be documented in a technical memorandum that may be used as an attachment to the Kern Subbasin revised GSP to document the FKC mitigation alternative.

Estimated Cost: \$3,000

Total Cost and Schedule

The total cost for the scope above is estimated to be **\$120,000**. Tasks 1-3 can be completed within 3 months of notice to proceed. Task 4 and 5 will require 3 additional months (including the time for presentation at various committee meetings) from receiving revised IWFM-Kern model files from Todd Groundwater. It is anticipated that the IWFM-Kern model will be ready for the modeling analysis by the late summer (August, 2024) timeframe.



Jim Erickson
Madera I.D.
Chairman of the Board

Rick Borges
Tulare I.D.
Vice Chairman

Josh Pitigliano
Lower Tule River I.D.
Secretary-Treasurer

Edwin Camp
Arvin-Edison W.S.D.

Roger Schuh
Chowchilla W.D.

Jerry Dyer
City of Fresno

Kelley Hampton
Delano-Earlimart I.D.

George Porter
Fresno I.D.

Loren Booth
Hills Valley I.D.

Chris Tantau
Kaweah Delta W.C.D.

Michael Brownfield
Lindmore I.D.

Cliff Loeffler
Lindsay-Strathmore I.D.

Kent H. Stephens
Kern-Tulare W.D.

Arlen Miller
Orange Cove I.D.

Bill De Groot
Pixley I.D.

Brett McCowan
Porterville I.D.

Mark Merritt
Saucelito I.D.

Craig Fulwyler
Shafter-Wasco I.D.

Matt Leider
Tea Pot Dome W.D.

Kurt Parsons
Terra Bella I.D.

Jason R. Phillips
Chief Executive Officer

854 N. Harvard Ave.
Lindsay, CA 93247
(559) 562-6305

April 30, 2024

Kristin Pittack, MS Kern County Subbasin Plan Manager
Rincon Consultants
4825 J St Ste 200
Sacramento, CA 95819

Subject: Kern Subbasin Progress Report on Friant-Kern Canal Lower Reach
Subsidence Mitigation Studies and Request for Letter of Support from Friant
Water Authority

Dear Ms. Pittack and Kern Subbasin GSPs:

We are in receipt of your letter dated April 16, 2024. The letter accurately outlined the history of coordination and communication between Kern Subbasin GSAs and Friant Water Authority (FWA) with regards to subsidence along the lower reach of the Friant-Kern Canal (FKC). As the letter stated, numerous meetings have been held with the goal of estimating projected future subsidence and estimating the cost to mitigate that subsidence.

As you recalled, one of the common points made during the meetings between the Kern Subbasin GSAs and FWA was related to FWAs "zero-tolerance absent proper mitigation" position for future subsidence that impacts the carrying capacity of the Friant-Kern Canal. Given the severity of the carrying capacity impacts as well as the harm done to contractors and communities whose livelihoods depend on a fully functioning canal, FWA has no other choice than to rigorously adhere to this policy, by any means necessary.

With that said, we very much appreciate the candor and transparency of those meetings and that the Kern Subbasin GSAs are committed to adhering to FWA's policy. We also understand that more time is needed to further analyze and finalize subsidence projections, finalize cost amounts, and conduct an attribution analysis to ultimately determine a cost allocation between the Kern GSAs. Given the coordination thus far, we have confidence that this additional work will be completed expeditiously and that the GSPs in the Kern Subbasin will properly mitigate impacts to the FKC.

Sincerely,

Jason Phillips, CEO
Friant Water Authority