



TECHNICAL ADVISORY COMMITTEE MEETING February 19, 2026 MEETING MINUTES

1. CALL TO ORDER

Chair Dennis Mills called the meeting to order at 1:30 p.m. at The Greater Kaweah GSA office located at 227 N West St. Visalia Ca 93291.

2. ROLL CALL

Committee Members' Present:

Dennis Mills, PE – Chair, Kings County Water District
Larry Dotson, PE – Vice-Chair, Kaweah Delta Water Conservation District
Dennis Keller, PE – St. Johns Water District
Scott Wagner, PE – California Water Service Company (via video)
Aaron Bock, County of Tulare

Committee Members Absent:

David DeGroot, Lakeside Irrigation Water District
(Don attended in his place)

Others Present:

Mark (GKGSA Staff)
Tom Harder – Thomas Harder & Company
Ben Lewis – GKGSA Consultant
Additional staff and stakeholders
A quorum was established.

3. PUBLIC COMMENT

Chair Mills opened the floor for public comment.
No public comments were received.

4. CORRESPONDENCE AND ANNOUNCEMENTS

a. Recent Correspondence and General Announcements

Staff provided an update regarding recent coordination with the California Department of Water Resources (DWR) and ongoing GSA administrative activities.

- GKGSA participated in an initial meeting with DWR on January 15-16, 2026 regarding the revised Kaweah Subbasin Groundwater Sustainability Plan (GSP). Staff described the meeting as a high-level overview of the revisions made in response to the areas of concern previously identified by DWR and the State Water Resources Control Board. The discussion included the revised approach to land subsidence, groundwater quality, and interconnected surface water.
- The January meeting was approximately two hours and was intended to orient DWR to the revised GSP rather than resolve individual technical issues. Staff advised DWR that additional, more focused discussions could be held on subsidence, groundwater quality, and interconnected surface water if requested. DWR indicated it

Greater Kaweah GSA TAC Meeting

would begin its review and contact the Subbasin if questions or additional meetings were needed. No additional DWR meetings had been scheduled as of the TAC meeting.

- Staff also reported that Water Year 2025 GSA invoices were being prepared. The initial goal had been to distribute invoices sooner; however, staff anticipated issuance during the first week of March, with the possibility of releasing them earlier if processing could be completed.

No formal action was taken.

5. MINUTES

a. Consider Approval of September 18, 2025 Meeting Minutes

b. Consider Approval of December 18, 2025 Meeting Minutes

Chair Mills explained that minor revisions had been incorporated into the draft minutes, including corrections to dates and consistency edits. He also noted that the September minutes had been held while the Committee transitioned to a revised minutes format and completed the updated draft.

Motion

MOTION: Approve the September 18, 2025 and December 18, 2025 Technical Advisory Committee Meeting Minutes as revised.

Moved by: Larry Dotson

Seconded by: Dennis Keller

Vote:

- Ayes: Mills, Dotson, Keller, Bock
- Abstentions: Wagner (not present at the September meeting), DeGroot (absent)

RESULT: Motion carried (4-0, with 2 abstentions).

6. GREATER KAWEAH SUBSIDENCE MONITORING AND MANAGEMENT

a. Status Report

b. Review - Subsidence and Management Area Establishment Options

(Presentation by Thomas Harder & Company)

Staff introduced the item by explaining that subsidence, particularly in the lower aquifer, is becoming an increasingly important management concern because of the potential effects on groundwater conditions and critical infrastructure. The GSP has long contemplated the use of management areas as a way to group locations with similar conditions, prioritize areas of concern, and apply management actions more precisely. Earlier in February, staff presented the management-area concept to the Board, which expressed conceptual support for beginning the process. Staff emphasized that the framework is intended to provide a transparent structure that the Board, committees, landowners, and the public can follow as management decisions are developed.

Presentation Summary - Tom Harder

Tom Harder stated that the presentation expanded on the introductory discussion previously provided to the Board. The presentation addressed land subsidence management concepts, possible performance criteria that could trigger changes in management, mechanisms available to control subsidence, and an initial concept for incorporating management areas into GKGSA implementation.

1. Relationship Between Groundwater Levels and Subsidence

Harder reviewed the SGMA regulatory concept that land subsidence minimum thresholds are based on the rate and extent of subsidence that substantially interferes with surface land uses. He noted that the two principal hydrogeologic factors controlling subsidence are groundwater levels and geology, particularly the presence and thickness of compressible clay layers.

Greater Kaweah GSA TAC Meeting

- InSAR and groundwater-level data from a monitoring location near the Kaweah/Tule Subbasin boundary were presented to demonstrate that higher subsidence rates generally coincide with lower groundwater levels. When groundwater levels recover, subsidence rates tend to decline.
- A second example from a Mid-Kaweah nested lower-aquifer monitoring well near Waukena showed a groundwater-level recovery of roughly 100 feet during 2023, accompanied by little or no measured subsidence for a period between approximately March 2023 and January 2024.
- Harder cautioned that pumping and subsidence do not correlate perfectly at every location because local geology, surface-water deliveries, boundary conditions, and climatic conditions also influence the observed response.

2. Pumping, Recharge, and Short-Term Management

Harder identified two primary mechanisms for managing groundwater levels: reducing or managing groundwater pumping and increasing groundwater recharge. Recharge is expected to remain an essential long-term strategy; however, in many areas the necessary infrastructure and water supplies are not immediately available at a scale sufficient to address near-term subsidence. For that reason, short-term subsidence management will likely rely heavily on groundwater-pumping management.

The Committee discussed the importance of improving the correlation between estimated pumping and measured subsidence. Updated pumping estimates from the Montgomery & Associates groundwater model were still pending while the model was being recalibrated. Harder stated that the ultimate objective is to estimate how much pumping can occur in a given area while keeping subsidence rates low enough to remain above minimum thresholds through 2040.

3. Potential Subsidence Performance Criteria

Harder presented several possible approaches for determining when management actions should become more restrictive. The options are not final and may ultimately be used individually or in combination:

- A percentage-based trigger tied to the amount of allowable subsidence already used. As an example, a management change could be required after 50 percent of the available minimum-threshold margin has been consumed.
- An absolute subsidence trigger, such as a specified number of feet of cumulative subsidence.
- A rate-based trigger that compares the measured annual subsidence rate to a conceptual glide path needed to remain above the minimum threshold through 2040.

Committee members noted that any performance metric will need to be interpreted in the context of actual significant and unreasonable conditions. Because minimum thresholds are established at representative monitoring sites and then applied or interpolated spatially, a mapped percentage of threshold consumed may not by itself demonstrate that a damaging condition is occurring at every location. The Committee discussed the potential value of a decision framework that considers both the numerical threshold and the actual infrastructure or land-use condition being protected.

4. Residual Subsidence and DWR Direction

A substantial portion of the discussion focused on residual subsidence - continued compaction that may occur because of historic groundwater-level declines even after pumping is reduced or groundwater levels recover. Current groundwater modeling indicates some residual subsidence may continue into the future.

Committee members questioned how DWR will treat residual subsidence in relation to the GSP minimum thresholds. Members observed that if DWR requires all projected residual subsidence to be counted within the existing minimum-threshold allowance, the remaining management margin could be significantly smaller than previously assumed and the urgency of corrective action would increase.

Harder stated that a strict DWR interpretation could result in little or no allowable overdraft in some locations because continued pumping would create additional risk of exceeding the minimum threshold even when a portion of future subsidence is already embedded in the aquifer system from historic conditions.

Greater Kaweah GSA TAC Meeting

Staff advised that obtaining clarity from DWR is a high priority. DWR is expected to hold several levels of subsidence-focused meetings during the year, including broader discussions of the new subsidence Best Management Practice (BMP), individual subbasin discussions, and regional discussions among neighboring subbasins where subsidence effects cross boundaries. Those meetings are expected to provide additional direction regarding DWR expectations and implementation of the BMP.

5. Preliminary Management Area Framework

Harder presented an initial "quilt" concept dividing GKGSA into approximately four-square-mile areas. He emphasized that the map was an opening concept rather than a final boundary proposal. The smaller areas were generally aligned with section boundaries and were intended to support geographically targeted monitoring and management rather than requiring the same response across the entire GSA.

- The preliminary map displayed the remaining subsidence allowance by area as of approximately October 2025. Green areas generally represented locations with more than 75 percent of the minimum-threshold allowance remaining; yellow represented approximately 50-75 percent remaining; and darker tan areas represented approximately 25-50 percent remaining. The Committee noted that some areas east of Visalia appeared to have relatively little remaining margin and should be evaluated further.
- Harder also overlaid existing hydrogeologic zones and precipitation/allocation zones. The Committee discussed the possibility of eventually aligning the management-area framework with existing allocation, surface-water, and precipitation structures so the management system is understandable and administratively workable.
- Staff emphasized that management areas could ultimately be used for more than subsidence. Similar geographically based approaches could be developed for groundwater levels, groundwater quality, or other sustainability indicators where conditions and appropriate management actions vary across the GSA.

6. Potential Management Actions

Harder identified several tools that could be incorporated into a future subsidence management plan. The specific application, geographic extent, and timing of these tools remain under development:

- Mandatory well registration. Staff noted that the Board had already approved implementation of well registration effective July 1.
- Well metering, either throughout the GSA or within specified management areas. Well registration and metering were identified as practices included in DWR subsidence guidance.
- Restrictions or limitations on transfers into areas experiencing high subsidence if transferred allocations would increase pumping in locations that need reductions.
- Dry-year pumping limitations or other pumping controls that become more restrictive during drought conditions, when groundwater levels decline and the highest subsidence rates are often observed.
- Ongoing pumping management in management areas, not solely drought-year restrictions, where year-round controls are needed to prevent groundwater levels from reaching conditions associated with unacceptable subsidence.

Committee Discussion - District and Surface-Water-Based Management Areas

Dennis Keller explained that St. Johns Water District has envisioned functioning as its own management area since early in SGMA implementation. He noted that St. Johns recently reorganized its internal boundaries to incorporate much of the Uphill service area, reflecting common ownership and surface-water management interests. Under that concept, the local district could manage within its boundaries while still complying with performance criteria and requirements imposed by GKGSA.

The Committee discussed whether management areas should be based primarily on the proposed four-square-mile grid, public-agency or irrigation-district boundaries, surface-water delivery areas, or a combination of these approaches. Members noted that district boundaries can simplify local administration but may not line up with the smaller areas where subsidence is actually occurring.

A central concern was equity. If a small portion of a large irrigation district exceeded a subsidence trigger, applying the same restriction to the entire district could affect lands that were not contributing to or experiencing the

Greater Kaweah GSA TAC Meeting

problem. Smaller subareas could provide greater flexibility, while larger district-based areas could allow local entities to manage their own internal response. The Committee discussed the possibility of using district boundaries as the overall management area while retaining smaller subareas for monitoring and targeted actions.

Members also noted that being located inside an irrigation district does not necessarily mean every parcel has access to surface-water deliveries. Portions of districts may lack conveyance facilities or receive substantially different levels of surface-water benefit. The management framework will therefore need to distinguish district membership from actual surface-water availability and groundwater dependence.

Harder requested GIS shapefiles for St. Johns Water District, Lakeside Irrigation Water District, and the newly consolidated Peoples-related district area so those boundaries can be overlaid on the preliminary management-area map. Dennis Keller agreed to coordinate provision of the available shapefiles.

Cross-GSA and Regional Coordination

The Committee discussed the need for eventual coordination with neighboring GSAs because aquifer conditions, pumping, subsidence, and critical infrastructure do not stop at GSA boundaries. Particular concern was expressed for the western portion of the GSA, where local conditions may be strongly influenced by pumping and groundwater conditions in neighboring areas.

Members recognized the value of a common regional approach but also acknowledged that the three Kaweah GSAs may not be ready to develop one management framework simultaneously. The Committee generally supported continuing to define what is technically and administratively appropriate for Greater Kaweah first, then using that work as the basis for coordination and feedback with neighboring GSAs. Regional coordination will still be necessary as the framework matures, especially for shared infrastructure and cross-boundary subsidence impacts.

Critical Infrastructure and Monitoring

The Committee discussed whether the existing monitoring network adequately captures subsidence near critical infrastructure. Members specifically raised flood-control channels and highway crossings as locations where differential subsidence could change channel slope, velocity, sediment transport, and flood performance.

- Cross Creek and other channels crossing Highway 99 were identified as examples where subsidence-related changes should be monitored closely, particularly in light of flooding experienced during 2023. Members noted that a channel may not simply experience increased or decreased flood depth; changes in gradient can increase upstream velocities, cause scour or head-cutting, transport sediment downstream, and create flatter reaches where water can pond.
- The Committee discussed the value of adding or prioritizing benchmarks near flood-control facilities, sewer systems, stormwater infrastructure, and other urban facilities. Because many channels and infrastructure corridors cross multiple GSA boundaries, this work may need to be incorporated into the broader regional subsidence management effort.
- Members also cautioned against relying too heavily on a single monitoring location near a GSA or subbasin boundary when developing pumping/subsidence correlations because conditions on the other side of the boundary can materially influence the observed response.

Next Steps for Subsidence Management

Harder summarized the principal technical work that remains before a management plan can be finalized:

- Obtain updated groundwater-pumping estimates from Montgomery & Associates and improve the correlation between pumping, groundwater levels, and subsidence.
- Develop recommended performance criteria and identify where those criteria should be applied spatially. Harder indicated a goal of bringing proposed criteria back for additional TAC review.
- Identify a menu of management actions that would be implemented when performance criteria are not met.
- Refine management-area boundaries using technical conditions, agency boundaries, surface-water availability, allocation zones, and other relevant information.

Greater Kaweah GSA TAC Meeting

- Ultimately revise the GKGSa Rules and Regulations as needed to formally implement an adopted management plan.

Land Use and Evapotranspiration Trends - Ben Lewis

Ben Lewis presented preliminary Land IQ data to help evaluate whether land use and irrigated acreage have changed during the first several years of GSP implementation. Land IQ provides field boundaries, crop classifications, evapotranspiration (ET), and precipitation information. At the time of the meeting, data were available through 2024, with 2025 data expected later in February.

- Total mapped irrigated acreage declined from approximately 152,000 acres in 2021 to approximately 147,000 acres in 2024, a net reduction of roughly 4,800 acres, or a little over 3 percent. Lewis noted that some year-to-year variation is expected in the dataset, but the overall decline was larger than the normal noise in the annual totals.
- When crop types were grouped into broader categories, dairy-support crops declined by approximately 2 percent, tree crops by approximately 4 percent, and other crops by approximately 5 percent. Committee members observed that much of the reduction in tree acreage appears to be associated with walnut removals driven by poor market conditions and high water demand rather than solely by GSA pumping restrictions.
- Land IQ also showed an increase of approximately 2,200 acres classified as idle or fallow. The Committee discussed that this does not account for the entire reduction in irrigated acreage. Some of the remaining change may represent conversion from agriculture to industrial, residential, or other urban development - described during the meeting as conversion to "sticks and bricks."

Committee members emphasized that changes in crop acreage alone do not establish the amount of groundwater conserved. Orchard removals may be followed by annual crops, idle acreage may later return to production, and urban conversion can remove agricultural acreage without necessarily being attributable to groundwater-management actions.

The Committee requested additional evaluation of ET by crop or land-use category. Members acknowledged that ET data contain year-to-year variability because crop water demand changes with temperature, precipitation, and other weather conditions. Lewis stated that a longer record, including the forthcoming 2025 data, would make trend analysis more useful.

The discussion also focused on the need to distinguish actual groundwater extraction from accounting credits. Surface-water credits, recharge credits, Tier 1 and Tier 2 purchases, and other accounting entries can affect bills and allocations without directly showing when or where groundwater was physically pumped. Members suggested comparing land-use and ET data with metered groundwater extraction, surface-water deliveries, recharge credits, groundwater levels, and subsidence to create a more complete system of checks and balances.

Staff noted that gross ET and precipitation reports may provide an additional basin-wide perspective, particularly when preparing for a future dry year. Committee members discussed the importance of understanding crop demand entering a drought because growers may use stored or recharge credits while still pumping substantial groundwater, and the physical effect of that pumping will be reflected in groundwater levels and subsidence even if it is allowable under the accounting system.

Staff will continue refining the land-use and ET analysis and return with additional information, including 2025 Land IQ data when available. No formal action was taken under Item 6.

7. GREATER AND SUBBASIN

a. General Updates

Chair Mills reported that Stanford researcher Rosemary Knight had contacted Kings County Water District seeking groundwater-monitoring data from the western portion of the Kaweah Subbasin, generally along the Cross Creek corridor near the Tulare/Kings County boundary and Highway 99.

The research team was examining groundwater response during flood years, including 2017, 2019, and 2023. Based on the information shared with the District, the researchers observed that groundwater rebound following flood events did not occur uniformly across the area; rather, different locations appeared to recover on different monthly

Greater Kaweah GSA TAC Meeting

time steps. The study was intended to investigate why those spatial differences occurred and how recharge or subsurface conditions may have influenced the timing of groundwater recovery.

Kings County Water District agreed to provide available monitoring-well information to support the research. The Committee discussed the limited number of long-term monitored locations along Cross Creek and noted that some past monitoring points in the area are no longer available. Members indicated that available records from wells with data extending through the requested flood years could still be useful. Staff will remain aware of the work so that local hydrogeologic and water-management conditions are accurately understood when the results are interpreted.

The Committee also briefly discussed current snowpack and runoff projections. Members referenced changing Kings River runoff expectations as winter conditions developed and noted that projected water availability can shift materially between early-season snow surveys and later runoff forecasts. The discussion reinforced the need to continue monitoring hydrologic conditions when evaluating likely surface-water supplies, recharge opportunities, and groundwater demand for the coming year.

No formal action was taken.

8. FUTURE AGENDA ITEMS AND MEETING DATES

The next Technical Advisory Committee meeting is scheduled for Thursday, March 19, 2026 at 1:30 p.m.

Topics anticipated for continued TAC discussion include refinement of the management-area framework, development of subsidence performance criteria and management actions, incorporation of irrigation-district and surface-water boundaries, additional land-use/ET analysis including 2025 data when available, and updates from DWR regarding implementation of the land subsidence BMP and related coordination meetings.

9. ADJOURNMENT

There being no further business, Chair Mills adjourned the meeting at approximately 3:31 p.m.

Respectfully Submitted,

Dennis Mills, Committee Chair