TECHNICAL ADVISORY COMMITTEE
MEETING
May 15, 2025
MEETING MINUTES

At approximately 1:30 p.m. on May 15, 2025, at the office of the Kaweah Delta Water Conservation District("District"), Dennis Mills, Chair of the Technical Advisory Committee, called to order a meeting of the Committee Members.

Members Present:	Dennis Mills - *Chair*	Larry Dotson
	Scott Wagner	Dennis Keller
	David DeGroot	Mark Larsen

Absent: Aaron Bock

Staff and Agency consultants presented an agenda packet that followed the agenda. Attached hereto and incorporated by reference is the packet.

PUBLIC COMMENT:

Following calling the meeting to order, Chairman Dennis Mills conducted Committee member roll call (documented above) and then opened the meeting for public comment.

No public comment was received.

CORRESPONDENCE AND ANNOUNCEMENTS:

General Manager, Larsen discussed the well registration system, which has been fully designed and is expected to go live around June 3, 2025. It will collect data on well locations, depths, and usage to better understand lower aquifer conditions.

State Water Source Control Board Hearing: Larsen noted an upcoming June 3 hearing on the Chowchilla Subbasin. The outcome could be precedent setting for other subbasement management situations.

General Manager Larsen reported ongoing issues with Sundale School's drinking water well. The school is seeking GSA support to address pump and electrical issues. Self Help Enterprises and other stakeholders are collaborating to find a solution.

The committee discussed efforts to secure state funding and partner with other subbasins to install extensometers for monitoring land movement and subsidence.

Greater Kaweah GSA TAC Meeting

MINUTES:

Minutes from January 23, 2025, meeting were reviewed and approved by Member Keller and seconded by Member Dotson with minor edits.

MITIGATION PLAN:

General Manager Larsen provided an update on collaboration with Self Help Enterprises to drill wells in over drafted communities. One well has been completed; another is underway. Interim solutions such as land fallowing and recharge projects are being explored, along with long-term community water systems.

HYPERICUM WELL INVENTORY:

Ben presented a detailed analysis of recharge potential in the Hypericum area, using modeling tools developed by Montgomery & Associates to evaluate how different recharge volumes could influence groundwater levels and reduce the risk of wells going dry.

Study Design and Methodology:

- The study utilized a calibrated groundwater flow model to simulate various recharge scenarios at a proposed recharge basin site adjacent to Hypericum.
- Three recharge volumes were modeled to reflect low, moderate, and high recharge inputs.
- The analysis accounted for local hydrogeology, historical groundwater levels, and the spatial distribution of domestic wells in the area.

Key Findings:

- **Groundwater Level Response:** The model demonstrated that even modest recharge volumes could positively impact groundwater levels in nearby domestic wells. The highest recharge volume scenario showed a significant water level rise.
- **Risk Reduction:** Areas with previously high risk of well failure—especially wells between 140 and 160 feet deep—showed substantial reductions in risk under increased recharge scenarios.
- **Residual Mounding Effect:** One important outcome was the observation that recharge benefits persisted beyond the active recharge period. This "residual mounding" helped sustain groundwater levels during dry months.
- **Community Resilience:** By improving water availability in shallow aquifer zones, the recharge project could enhance drought resilience and support long-term groundwater sustainability goals in Hypericum.

Next Steps and Recommendations:

- Refine and expand the modeled scenarios to evaluate alternative recharge locations and volumes.
- Consider land acquisition or agreements for constructing recharge basins.
- Collaborate with stakeholders to identify implementation pathways, secure funding, and integrate the recharge strategy into broader mitigation efforts.

Ben concluded by emphasizing the importance of integrating recharge planning with domestic well risk assessments and GSA's overall mitigation strategy.

- **Recommendation 1:**
  Evaluate feasibility of **recharge basin projects** adjacent to Hypericum to support subsidence mitigation and groundwater recovery
- **Recommendation 2:**
  Consider installing dedicated **monitoring well** in the Hypericum area for more accurate tracking of groundwater levels and subsidence

FARMERSVILLE WATER DISCHARGE IMPACT:

The cessation of water discharge from the City of Farmersville into Deep Creek may have contributed to declining groundwater levels in Hypericum post-2011. This historical practice had previously helped stabilize the water table.

SUBSIDENCE MONITORING AND MANAGEMENT:

Jim presented an in-depth proposal for establishing Management Zones to address ongoing land subsidence issues within the Greater Kaweah GSA. His presentation was grounded in recent subsidence and groundwater elevation data and included practical recommendations for improved monitoring and management.

Management Zone Concept:

Jim introduced the idea of delineating specific Management Zones based on observed rates of subsidence since 2020.

These zones would enable targeted interventions, allowing the GSA to prioritize areas experiencing the greatest land surface loss for additional monitoring, regulation, and potential project investment.

Zones were mapped using InSAR satellite data and correlated with well density, groundwater decline, and land use.

Use of Groundwater Elevation as a Management Metric:

Jim emphasized the strong correlation between declining groundwater elevations and increased subsidence rates.

He presented historical data from 2015 to 2024 showing that when groundwater levels dropped below certain thresholds, subsidence accelerated; conversely, when water levels recovered, subsidence slowed or stabilized.

He recommended that groundwater elevation thresholds be used as an early-warning indicator or trigger point for management actions within each zone.

Data and Monitoring Needs:

Jim stressed the need for high-resolution, continuous groundwater monitoring, ideally through dedicated monitoring wells and meter installations within critical areas.

He recommended expanding metering and registration requirements specifically in the highest-subsidence Management Zones.

Comments from the Committee:

Committee members expressed support for the zone-based approach and the use of groundwater elevation as a practical, data-driven metric.

Concerns were raised about the accuracy and availability of well data in high-risk areas and the need for additional outreach to landowners.

One member highlighted the importance of integrating these management zones into ongoing GSP (Groundwater Sustainability Plan) implementation efforts and project prioritization.

Another member emphasized the opportunity to align this approach with future state funding requests by demonstrating proactive, science-based groundwater management.

Public Comments:

No formal public comments were recorded specific to this agenda item during the meeting, but the broader context of subsidence management had been discussed earlier in the meeting with members of the public.

Recommendations:

1. Develop and Adopt Subsidence Management Zones:
2. Create defined geographic zones based on subsidence severity for targeted management.

Use Groundwater Elevation Thresholds as Triggers:

3. Establish zone-specific groundwater level thresholds that, when crossed, would trigger mitigation actions.

Expand Registration and Metering Requirements:

4. Require all wells in high-subsidence zones to be registered and metered to ensure accurate groundwater use data.

Install Monitoring Infrastructure:

5. Consider installing new dedicated monitoring wells in subsidence-prone areas to support real-time data collection and trend analysis.

Stakeholder Engagement and Outreach:

Host grower meetings and conduct direct outreach to explain the purpose of Management Zones and encourage voluntary compliance with metering and data reporting.

Jim's presentation was well received by the Committee, and several of his recommendations were noted for follow-up action and future agenda development.

FUTURE AGENDA ITEMS AND MEETING DATES:

The next meeting was scheduled for June 19, 2025, at 1:30 p.m.

ADJOURNMENT:

There being no further business to discuss, the meeting was adjourned.

Respectfully Submitted,

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Dennis Mills, Committee Chair