

# KERN COUNTY SUBBASIN STAFF REVIEW OF 2025 DRAFT GSPS EXECUTIVE SUMMARY

September 2025

State Water Resources Control Board (State Water Board or Board) staff developed the Staff Review of the 2025 Draft Groundwater Sustainability Plans for the Kern County Subbasin (subbasin) to help inform the Board's decision pursuant to the [Sustainable Groundwater Management Act](#) (SGMA or Act) as to whether to designate the Kern County Subbasin a probationary basin.

## SGMA Background

SGMA authorizes local public agencies to form Groundwater Sustainability Agencies (GSAs) and develop Groundwater Sustainability Plans (GSPs) to manage groundwater basins. The California Department of Water Resources (DWR) is responsible for reviewing GSPs. If DWR determines a GSP (or GSPs) developed for a basin is inadequate, it will refer that basin to the State Water Board, which initiates the state intervention process. The Board may return the basin to DWR's oversight if subsequent revisions to the GSP(s) adequately address groundwater management issues. Otherwise, the Board may designate the basin as "probationary" through a public hearing process.

## Kern County Subbasin

The Kern County Subbasin (subbasin or basin) is a critically overdrafted subbasin in the southern portion of the San Joaquin Valley with an area of about 1.78 million acres. The subbasin is currently managed by 20 GSAs. DWR determined the subbasin's 2022 GSPs were inadequate and referred the subbasin to the State Water Board in March 2023, which initiated the state intervention process. The subbasin GSAs submitted their revised, adopted GSPs to the Board in December 2024, and Board staff determined that these updated GSPs did not resolve all the deficiencies identified by staff in the

previous GSPs. On February 20, 2025, the State Water Board held a hearing to determine whether to designate the subbasin as probationary. In recognition of the substantial progress the subbasin made, the Board continued the hearing to September 17, 2025, giving the GSAs additional time to resolve the remaining deficiencies and directing the GSAs to submit revised draft GSPs to the Board by June 20, 2025 for review. On June 20, 2025, the GSAs submitted seven amended draft GSPs to the Board (2025 Draft GSPs). Board staff reviewed the 2025 Draft GSPs and conclude that the GSAs substantially, though not completely, address the deficiencies identified in the previous GSPs. Staff recommends returning the subbasin to DWR for review of the updated GSPs pursuant to Water Code section 10733.4 if the GSAs resolve three of the remaining issues: (1) providing an adequate mitigation program for drinking water wells impacted by any constituent for which a minimum threshold is established in the GSPs, including 1,2,3-TCP, where groundwater management activities cause concentrations to exceed those minimum thresholds; (2) providing an adequate mitigation program for state small water system wells (or domestic wells with more than four service connections) impacted by groundwater management activities; and (3) eliminating the Kern Non-Districted Land Authority GSA Joint Exercise of Powers Agreement May 2026 sunset provision, which would result in unmanaged areas of the subbasin that are a potential basis for state intervention.

## Improvements in 2025 Draft Groundwater Sustainability Plans

Some of the improvements in the 2025 Draft GSPs include:

- The GSAs use basin-wide, coordinated approaches to establish minimum thresholds and measurable objectives (collectively known as sustainable management criteria) for all applicable sustainability indicators.
- The GSAs identify gaps in groundwater level and groundwater quality representative monitoring networks and commit to addressing all identified data gaps by the end of 2026.
- The GSAs set most of the water level minimum thresholds at levels that are protective of groundwater uses and users in the subbasin. The GSAs commit to mitigating potential impacts to drinking water wells due to declining water levels before or after exceeding these thresholds.
- The GSAs commit to mitigate dry wells impacted by GSA-related activities after January 1, 2015. The GSAs have a revolving reserve fund of \$3.5 million per year for well mitigation. The mitigation plan has two tracks for assistance: a mitigation track for domestic wells with less than five service connections (up to \$90,000 per well) and a technical assistance track for public supply wells (up to \$50,000 per well). The GSAs will collaborate with Self-Help Enterprises to administer the well mitigation program. The mitigation of dry domestic wells

includes emergency drinking water supplies within 24 hours of notification and hauled tank water within 72 hours.

- The GSAs set minimum thresholds that are designed to protect water quality from impacting beneficial uses and users (or from further degradation where water quality was already degraded by January 1, 2015). Of the 330 individual thresholds set at 55 representative monitoring wells across the subbasin for arsenic, nitrate, nitrite, uranium, 1,2,3-trichloropropane (1,2,3-TCP), and total dissolved solids concentrations, 308 were set at the drinking water standard. The remaining 22 minimum thresholds were set above the drinking water standard due to water quality degradation that was already occurring when SGMA took effect in 2015, which GSAs are not required to address under SGMA.
- The GSAs commit to mitigate domestic wells impacted by degraded groundwater quality caused by GSA-related activities in most instances. Mitigation may include installation of point of use or point of entry treatment systems with filter replacement for three years.
- The GSAs have plans to ramp down subsidence (the sinking of land caused by groundwater removal) prior to 2040 with no additional subsidence to occur after 2040. The GSAs expect that only a section along the Friant Kern Canal could be impacted by future subsidence. Applicable GSAs are collaborating with the Friant Water Authority on establishing a subsidence mitigation cost-sharing framework to address the impacts of post-2020 subsidence in the area of the Friant Kern Canal. Some potential impacts to local canals will be managed by the GSAs through ongoing maintenance and improvements to facilities.
- After a single reported exceedance of any sustainable management criterion at a representative monitoring site, the GSAs will follow the newly developed minimum threshold exceedance policy. The GSAs will investigate the cause of the exceedance, notify potentially impacted groundwater users (for groundwater quality exceedances), and implement the well mitigation program, if necessary. The exceedance investigation report(s) will be included in the GSP Annual Reports submitted to DWR.

## Remaining Issues in 2025 Draft Groundwater Sustainability Plans

The following is a summary of deficiencies that were not adequately addressed in the 2025 Draft GSPs.

- The current Joint Exercise of Powers Agreement between the Kern County Water Agency and member agencies of the Kern Non-Districted Land Authority, which intends to be the GSA to manage groundwater in the non-districted areas in the subbasin, will expire in May 2026. This could result in certain areas in the subbasin becoming unmanaged, which is a potential basis for state intervention. Board staff recommends amending the Joint Exercise of Powers Agreement to ensure the GSA has proper authorities to implement SGMA within its management areas throughout the planning and implementation horizon of SGMA.
- Water level minimum thresholds for all five monitoring wells in the Henry Miller Water District GSA appear too deep for local conditions and are not supported by historical trends and projected water demand of the subbasin. Staff recommends raising water level minimum thresholds to account for local conditions.
- Mitigation for state small water system wells that could be impacted due to GSA-related activities is not adequate. Staff recommends that the GSAs: (1) place state small water system wells on the mitigation track rather than the technical assistance track, and (2) consider funding, in an amount at least equivalent to well replacement, for consolidation of impacted state small water systems with existing public water systems, where that option is available and feasible.
- GSAs are not yet able to separately quantify subsidence caused by GSA from non-GSA activities, which is required to determine undesirable results for land subsidence. Board staff recommends that the GSAs improve methodologies for characterizing GSA and non-GSA contributions to subsidence.
- Many of the subsidence mitigation and implementation plans are pending guidance from DWR (DWR's final Land Subsidence Best Management Practices document and California Aqueduct Subsidence Program's framework for California Aqueduct long-term rehabilitation). Board staff recommends that the GSAs develop infrastructure mitigation programs with clear initiation thresholds, eligibility requirements, actionable timelines, and funding sources.
- GSPs do not clearly state how they will address impacted wells if the cause of groundwater quality degradation is either partially attributed to groundwater management or attribution is inconclusive. Board staff recommends that the GSAs provide additional information on how they plan to address impacts if the cause of degradation is partially attributed to GSA groundwater management or attribution is inconclusive.

- Proposed mitigation for wells impacted by high concentrations of 1,2,3-TCP appears to be inadequate. Board staff recommends the GSAs describe a plan for mitigating wells impacted by increasing concentrations of 1,2,3-TCP due to GSA-related activities.

## Staff Recommendations and Next Steps

Board staff concludes that the GSAs have substantially, though not completely, resolved the previously identified deficiencies and that with the substantial resolution of deficiencies the GSPs are likely to achieve the sustainability goal for the basin. Therefore, Board staff recommends that the Board return the Kern County Subbasin to DWR for review of the updated GSPs pursuant to Water Code section 10733.4 if the GSAs resolve three of the remaining issues: (1) providing an adequate mitigation program for drinking water wells impacted by any constituent for which a minimum threshold is established in the GSPs, including 1,2,3-TCP, where groundwater management activities cause concentrations to exceed those minimum thresholds; (2) providing an adequate mitigation program for state small water system wells (or domestic wells with more than four service connections) impacted by groundwater management activities; and (3) eliminating the Kern Non-Districted Land Authority GSA Joint Exercise of Powers Agreement May 2026 sunset provision, which would result in unmanaged areas of the subbasin that are a potential basis for state intervention.