

MITIGATION PROGRAM FRAMEWORK
KAWEAH COORDINATION AGREEMENT APPENDIX 6
Groundwater Levels and Land Subsidence

Introduction

Sustainable Management Criteria identified in each of the Kaweah Subbasin GSAs have been developed to avoid significant and unreasonable impacts to domestic, municipal, agricultural, and industrial beneficial uses and users of groundwater. However, analysis based on available data suggests that numerous wells may be impacted during the implementation period between 2020 and 2040 as a result of continued lowering of groundwater levels.¹ Wells, land use, property and infrastructure may also be impacted from land subsidence during this period.

As a result of the foregoing, the Kaweah Subbasin GSAs agree to each individually implement a Mitigation Program (Mitigation Program) subject to the following minimum requirements and subject to the schedule provided herein. The purpose of the Mitigation Program is to mitigate for continued overdraft pumping for groundwater levels and land subsidence. Each Kaweah Subbasin GSA will adopt and implement a Mitigation Program to identify impacts caused by pumping within the GSA's boundaries that may require mitigation. Each Mitigation Program will separately identify the impacts to beneficial uses that the Mitigation Program is intended to address. Each Mitigation Program will include a claim process to address impacts to: (i) domestic and municipal wells; (ii) agricultural wells; and (iii) critical infrastructure. Because the Mitigation Program will resolve impacts from groundwater management, significant and unreasonable results to wells and land uses that may occur prior to reaching Minimum Thresholds will be avoided.

Mitigation Program Framework

Each GSA shall include a Mitigation Program as a project or management action identified in that GSA's GSP, describing the following elements:

Identification of Need for Mitigation

The Mitigation Program will begin with a plan to establish the process for identification of wells or land uses in need for mitigation. The process may include: 1) an application process by the landowner or well user; or 2) data collection by the GSA and outreach to the affected user. The GSPs in the Subbasin set Measurable Objectives and Minimum Thresholds based on 2015 groundwater levels and land elevation. Impacts from that point further will be evaluated as potentially affected due to the allowance of some level of continued overdraft.

¹ See Technical Appendix 5A, Technical Approach for Developing Chronic Lower of Groundwater Levels Sustainable Management Criteria in the Kaweah Subbasin for a detailed description of the establishment of MT; Technical Appendix 5C, Potential Well Impact Summary.

Evaluation

Once a potential well or land use has been identified as possibly impacted, an evaluation will occur by the GSA to determine whether the well has been adversely impacted by declining groundwater levels or by land subsidence which have been identified as occurring because of allowable continued overdraft conditions.

Qualifications

GSAs may qualify mitigation based on a user's compliance with the GSA's GSP, Rules & Regulations, and other laws or regulations. For example, a user who has caused or contributed to overdraft may not qualify for the Mitigation Program.

Mitigation

Once a well has been identified as adversely impacted due to declining groundwater levels or land subsidence, the proper mitigation to alleviate impacts must be determined. This could be any of the following:

For groundwater level impacts, this could include any of the following:

- 1) Repairing the well;
- 2) Deepening the well;
- 3) Constructing a new well;
- 4) Modifying pump equipment;
- 5) Provide temporary or permanent replacement water;
- 6) Coordinate consolidation with existing water systems; or
- 7) With the consent of the affected user, providing other acceptable means of mitigation.

For land use impacts, this could include any of the following:

- 1) Increased restrictions in groundwater extractions for certain regional areas;
- 2) Repair to canals, turnouts, stream channels, water delivery pipelines, and basins;
- 3) Repair to damaged wells;
- 4) Addressing flood control;
- 5) Repair to other damaged infrastructure including highways, roads, bridges, utilities, and buildings; or
- 6) With the consent of the affected user, providing other acceptable means of mitigation.

Various factors may reflect the proper mitigation methods for the specific well or land use at issue. For example, age, location, the financial impact to the beneficial user as a result of mitigation, and the beneficial user of the well may reflect which mitigation measures are optimal.

Outreach

Public outreach and education will be provided during development of the Mitigation Program and prior to implementation by each GSA. Prior to implementation, extensive outreach will be geared toward notifying landowners of the Mitigation Program requirements, facilitate how to qualify for the Mitigation Program, and how to apply for assistance. Outreach will be offered in multiple languages as appropriate for the GSA. Outreach methods could include workshops, mailings, flyers, website postings, Board meeting announcements, etc.

Common elements developed at the Kaweah Subbasin level shall be shared with the public through coordinated workshops and public meetings. As material and data become available, the Kaweah Subbasin GSAs will coordinate workshops for the public to attend. While special workshops can be utilized, the Kaweah Subbasin GSAs will utilize the quarterly Kaweah Subbasin Management Committee (Management Committee) meetings as a resource to share Workplan updates. The Management Committee is a coordinated meeting between representatives from each GSA, and the public is invited to attend and participate in the meetings. Meetings shall be noticed on GSA websites and shall be sent to interested parties. Interested parties are collected on an ongoing basis in the Kaweah Subbasin. Individual outreach plans specific to each GSA Mitigation Program shall be developed and shared with the public via individual outreach efforts at each.

Mitigation Program Adoption Schedule

Each GSA will formulate and implement a mitigation claims process for domestic and municipal use impacts within the first quarter of 2023, and complete all other aspects of the Mitigation Program by June 30, 2023. The initial claims process shall include reference to local programs and resources from the County, State, non-profit organizations, and the Kaweah Water Foundation (local CV-SALTS Management Zone).

As the Kaweah Subbasin GSAs anticipate that the individual Mitigation Programs will require time to be developed and established in a public and transparent fashion, in the interim, the Kaweah Subbasin GSAs will coordinate the development of an Interim Domestic Well Mitigation Program at a yet to be determined funding level and emergency criteria to make the limited funding available for drinking water well mitigation.

Mitigation Program Funding Source

Each GSA will develop a funding mechanism for the Mitigation Program, which is dependent on the specific GSA needs for specific expected impacted wells, critical infrastructure, and land uses within each GSA. Funding is anticipated to be available for each GSA's Mitigation Program through implementation of assessments, fees, charges, and penalties. In addition, the GSAs will explore grant funding. The State has many existing grant programs for community water systems and well construction funding. County, state, and federal assistance will be needed to successfully implement the respective Mitigation Programs. Each GSA may, separately or in coordination with other GSAs, also work with local NGOs that may be able to provide assistance or seek grant

monies to help fund the Mitigation Program. GSAs may act individually or collectively to address and fund mitigation measures.

Below is a list of funding being sought within the Kaweah Subbasin:

- The Safe and Affordable Funding for Equity and Resilience (SAFER) Program through the California State Water Resources Control Board
- Household Water Well Program through the United State Department of Food and Agriculture
- Household Water Well System Grant Program through the United State Department of Food and Agriculture

Annual Reporting and Mitigation Evaluations

The Kaweah Subbasin GSAs intend to utilize the Annual Report submitted to DWR to report on and update progress on the Mitigation Program(s).

With the information presented, the Kaweah Subbasin GSAs anticipate pursuing locating and refining the potential number of wells impacted by lowering of groundwater levels to the MTs in the Kaweah Subbasin. The Kaweah Subbasin GSAs intend to leverage new tools developed by the California Department of Water Resources such as the Dry Domestic Well Susceptibility Tool and well surveys to establish a refined estimate of drinking water well impacts. The Kaweah Subbasin GSAs will continue to evaluate impacts to beneficial uses and users of Land Subsidence.