

Mid-Kaweah Groundwater Sustainability Agency

# Mitigation Plan

Version 1.0  
October 2024



Prepared by



**MONTGOMERY  
& ASSOCIATES**

Water Resource Consultants

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## Acronyms & Abbreviations

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Ag	Agriculture
bgs	below ground surface
CV-SALTS	Central Valley Salinity Alternatives for Long-Term Sustainability
DWR	Department of Water Resources
EKGSA	East Kaweah Groundwater Sustainability Agency
GKGSA	Greater Kaweah Groundwater Sustainability Agency
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
MKGSA	Mid-Kaweah Groundwater Sustainability Agency
MO	Measurable Objective
MT	Minimum Threshold
PPAP	Small Community Well Proactive & Protective Action Program
SAFER	Safe and Affordable Funding for Equity and Resilience
SHE	Self-Help Enterprises
SGMA	Sustainable Groundwater Management Act
Subbasin	Kaweah Groundwater Subbasin



If you have experienced a loss of drinking water, please contact **Self-Help Enterprises** at **(559) 802-1685**. Self-Help Enterprises is available to assist with accessing emergency drinking water and interim drinking water supplies.

For claims regarding drinking water wells (including agricultural wells used for drinking water purposes), please fill out the online intake form on Self-Help Enterprises' website:

<https://www.selfhelpenterprises.org/programs/emergency-services/water-sustainability/>

For claims regarding non-drinking water wells (such as agricultural wells) and critical infrastructure, please contact your respective Groundwater Sustainability Agency (GSA):

**East Kaweah GSA**

315 E. Lindmore Ave

Lindsay, CA 93247

Phone Number: (559) 697-6095

Website: [ekgsa.org](http://ekgsa.org)

Email: [groundwater@ekgsa.org](mailto:groundwater@ekgsa.org)

General Manager: Mike Hagman

**Greater Kaweah GSA**

2975 N. Farmersville Rd

Farmersville, CA 93223

Phone Number: (559) 302-9987

Website: [greaterkaweahgsa.org](http://greaterkaweahgsa.org)

Email: [info@greaterkaweahgsa.org](mailto:info@greaterkaweahgsa.org)

General Manager: Mark Larsen

**Mid-Kaweah GSA**

6826 Ave 240

Tulare, CA 93274

Phone Number: (559) 686-3425

Website: [midkaweah.org](http://midkaweah.org)

Email: [midkaweah@gmail.com](mailto:midkaweah@gmail.com)

General Manager: Aaron Fukuda



Si experiencia pérdida de agua potable, comuníquese con **Self-Help Enterprises** al **(559) 802-1685**. Self-Help Enterprises está disponible para ayudarle con el acceso a agua potable de emergencia y suministros provisionales de agua potable.

Para reclamos relacionados con pozos de agua potable (incluidos los pozos agrícolas utilizados para fines de agua potable), complete el formulario de admisión en línea en el sitio web de Self-Help Enterprises:

<https://www.selfhelpenterprises.org/programs/emergency-services/water-sustainability/>

Para reclamos relacionados con pozos de agua no potable (como pozos agrícolas) e infraestructura crítica, comuníquese con su respectiva Agencia de Sostenibilidad de Aguas Subterráneas (GSA) a través de la información de contacto anterior.

**KAWEAH SUBBASIN  
MITIGATION PROGRAM VERSION 1.0**

Available  
June 2024

**DRINKING WATER WELL MITIGATION TRACK**

The Kaweah Subbasin Mitigation Program’s Drinking Water Well Mitigation Track is intended to provide emergency and interim drinking water supplies and long-term mitigation for those experiencing a loss of access to drinking water due to groundwater overdraft conditions such as chronic lowering of groundwater levels, subsidence, and/or water quality induced by groundwater management in the Kaweah Subbasin. If translation services are needed, please contact Self-Help Enterprises to arrange.

If your household has lost access to drinking water, please call Self-Help Enterprises at your earliest convenience to arrange emergency bottled water supplies within 24-hours and an interim measure (such as a water tank) within 72-hours. Tenants or well owners may call to arrange access to emergency and interim supplies; however, well owners are required to submit claims to receive long-term solutions.



**(559) 802-1685**



[www.selfhelpenterprises.org](http://www.selfhelpenterprises.org)



8445 W Elowin Ct, Visalia CA



**WHO CAN SUBMIT A CLAIM?**



**CRITERIA FOR A CLAIM TO QUALIFY**

- 1** The well was impacted after January 1, 2015, and has undergone the on-site assessment via the Kaweah Subbasin Mitigation Program claims process.
- 2** The well or critical infrastructure impact was induced by overdraft conditions associated with the GSA’s groundwater management.
- 3** The well or system of wells shall not have contributed to overdraft by pumping in excess of their individual prorata share of the sustainable yield for the GSA or contributed to other undesirable results. *\*This criterion does not apply to domestic (house) wells*

**CLAIMS PROCESS**

- Well user (owner or tenant) contacts Self-Help Enterprises (SHE) upon loss of drinking water supplies to receive emergency bottled water within 24 hours and interim supplies system within 72 hours.
- The well owner then fills out an online intake form or calls SHE for assistance <https://www.selfhelpenterprises.org/programs/emergency-services/water-sustainability/>
- SHE staff perform site assessment and gather information from well owner.
- SHE, GSA staff, and technical committee(s) evaluate the likely causation of well failure to determine if the claim qualifies for funding via the Mitigation Program or an alternative program.
- If the claim qualifies for any program that SHE administers, then SHE will arrange for long-term a solution and serve as the lender.
- If the claim qualifies for the Mitigation Program, then the GSA will reimburse SHE for all materials and administrative, technical, and mitigation services associated with the claim.

# KAWEAH SUBBASIN MITIGATION PROGRAM VERSION 1.0

## TECHNICAL ASSISTANCE TRACK

Available  
June 2024 for  
EKGSA

Available  
June 2025 for  
MKGSA & GKGSA  
Contact MKGSA or GKGSA to  
arrange interim technical support  
before June 2025.

The Kaweah Subbasin Mitigation Program’s Technical Assistance Track is intended to provide GSA funding and/or technical resources to identify meaningful solutions to non-drinking water well and/or critical infrastructure (pipelines, canals, etc) that are impacted by overdraft conditions within the Kaweah Subbasin.

### EAST KAWEAH GSA

(559) 697-6095

www.ekgsa.org

315 E Lindmore Ave, Lindsay, CA

### GREATER KAWEAH GSA

(559) 302-9987

www.greaterkaweahgsa.org

2975 Farmersville Rd, Farmersville, CA

### MID-KAWEAH GSA

(559) 686-3425

www.midkaweah.org

6826 Ave 240, Tulare, CA

### WHO CAN SUBMIT A CLAIM?



### CRITERIA FOR A CLAIM TO QUALIFY

- 1** The well or critical infrastructure was impacted after January 1, 2015, and has undergone the on-site assessment via the Kaweah Subbasin Mitigation Program claims process.
- 2** The well or critical infrastructure impact was induced by overdraft conditions associated with the GSA’s groundwater management.
- 3** The well or system of wells shall not have contributed to overdraft by pumping in excess of their individual prorata share of the sustainable yield for the GSA or contributed to other undesirable results.  
*\*This criterion does not apply to claims for critical infrastructure*

### CLAIMS PROCESS

- Well or critical infrastructure owner contacts their respective GSA staff to set up a meeting to fill out the claim application together and discuss the program.
- Following the initial meeting, GSA staff and/or a technical contractor will perform a site assessment and analyses to determine the likely causation of well or infrastructure impacts.
- GSA staff and technical committee review findings of assessment and determine if the claim qualifies for technical assistance funding via the Mitigation Program.
- If the claim qualifies via the Mitigation Program, the GSA and Claimant (well/infrastructure owner) will enter an agreement and the GSA will fund technical assistance to support long-term solution(s) to the impacted well or critical infrastructure.



# 1 Introduction

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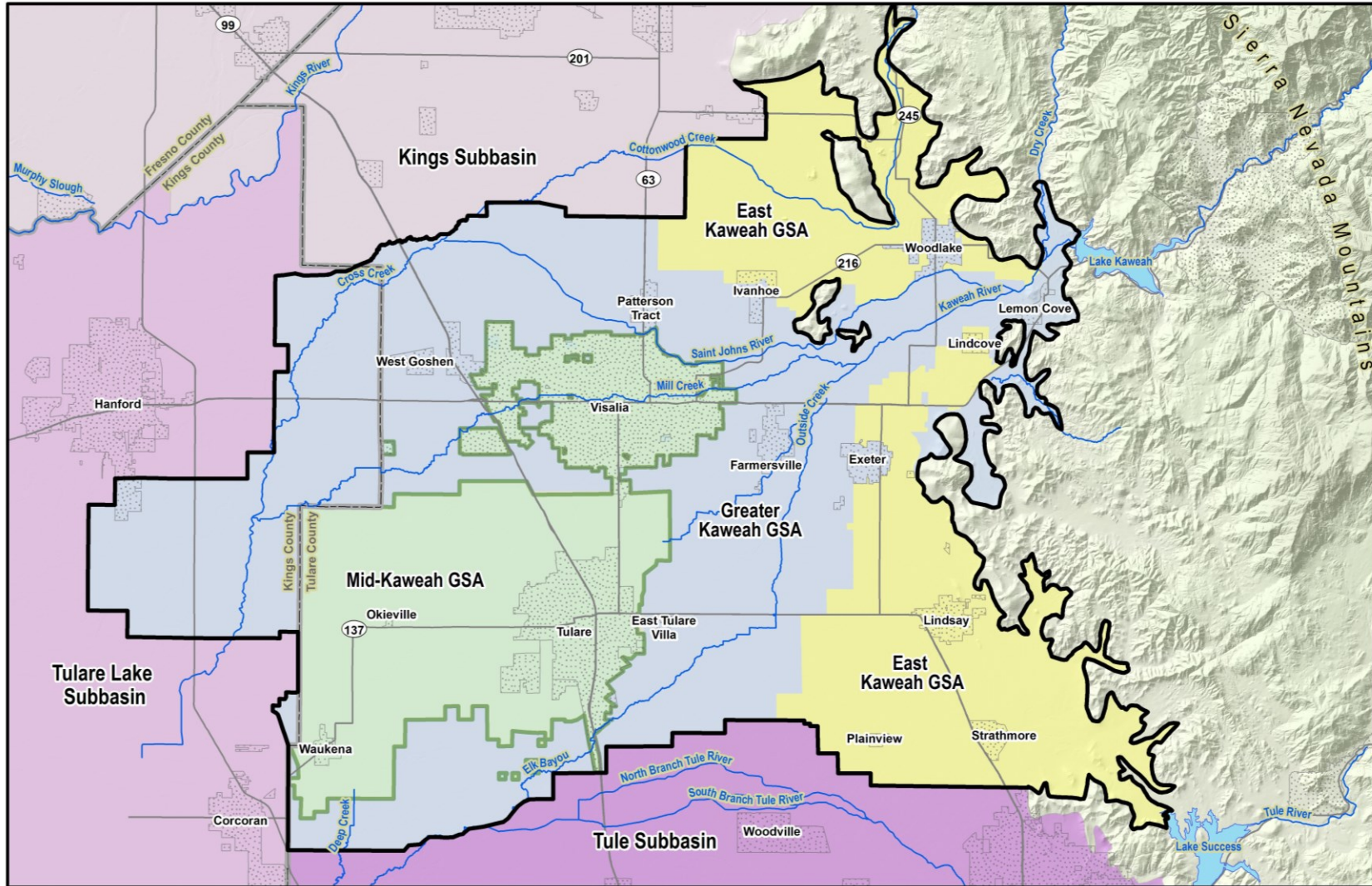
## 1.1 Sustainable Groundwater Management Act Background

The 2014 Sustainable Groundwater Management Act (SGMA) set forth a statewide framework to help protect groundwater resources over the long-term. SGMA is comprised from a three-bill legislative package, including AB 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley), and subsequent statewide Regulations. SGMA required local agencies to form groundwater sustainability agencies (GSAs) for high and medium priority basins. GSAs have the responsibility to develop and implement groundwater sustainability plans (GSPs) to avoid undesirable results and mitigate overdraft within 20 years of submitting a GSP. For critically overdrafted basins, including the Kaweah Subbasin of which the Mid-Kaweah Groundwater Sustainability Agency (MKGSA) is part of, the deadline for achieving sustainability is 2040.

## 1.2 Mid-Kaweah Groundwater Sustainability Agency Background

The City of Visalia, the City of Tulare, and the Tulare Irrigation District (TID) formed the Mid-Kaweah Groundwater Sustainability Agency (MKGSA) through a Joint Powers Authority (JPA) Agreement. Under the JPA Agreement, the MKGSA was granted the authority to “do all acts necessary for the exercise of all the powers authorized under SGMA as necessary to satisfy the requirements of SGMA while allowing the Members of the GSA to maintain control and autonomy over the surface and groundwater assets to which they are currently legally entitled”.

The MKGSA is located entirely within the Kaweah Subbasin, as defined in DWR Bulletin 118, in the Tulare Lake Hydrologic Region of the San Joaquin Valley Groundwater Basin (Figure 1). The Kaweah Subbasin is bounded by the Kings River Subbasin to the north, the Tulare Lake Subbasin to the west, the Tule Subbasin to the south, and the Sierra Nevada Mountains to the east. The MKGSA’s jurisdictional area is roughly bisected by California State Highway 99. The MKGSA’s area is 163 square miles and represents approximately 23% of the area within the Kaweah Subbasin (696 square miles).



**EXPLANATION**

- |                 |                        |                    |                      |
|-----------------|------------------------|--------------------|----------------------|
| Kaweah Subbasin | Counties               | Greater Kaweah GSA | Tulare Lake Subbasin |
| Rivers          | Cities and Communities | East Kaweah GSA    | Tule Subbasin        |
| Lakes           | Mid-Kaweah GSA         | Kings Subbasin     |                      |



Figure 1. Mid-Kaweah Groundwater Sustainability Agency Boundary within the Kaweah Subbasin

### 1.3 Mitigation Plan Purpose

The Subbasin has been in overdraft for many years, resulting in significantly lowered regional and local groundwater levels. The MKGSA GSP includes projects and management actions that allow for the Subbasin to reach sustainability by 2040. However, until sustainability is achieved, continued groundwater level declines and land subsidence are expected in areas of the Subbasin during the time the GSAs implement projects and management actions to achieve sustainability by 2040. The Kaweah Subbasin GSAs are each managing their respective areas to achieve sustainability, however, until then, groundwater levels in parts of the Subbasin will continue to decline and land subsidence will continue to occur while the GSAs implement projects and management actions to achieve sustainability by 2040. Declining groundwater levels created by allowable overdraft during the implementation phase of the GSPs may also induce unintended, post-2015<sup>1</sup> groundwater quality impacts. Therefore, the Kaweah Subbasin GSAs are committed to mitigating such impacts.

Recognizing the importance of mitigation, the three Kaweah Subbasin GSAs committed to a Mitigation Framework that was included in Section 6 of the Kaweah Subbasin Coordination Agreement contained in the MKGSA First Amended GSP (July 2022). The 2022 Mitigation Framework coordinates the development of individual GSA mitigation plans. In the First Amended GSP, the MKGSA committed to developing a Mitigation Plan by June 30, 2023. Included in the commitment was the creation of an Interim Well Mitigation Program by December 31, 2022, which the MKGSA established by providing \$50,000 in funding to provide replacement water between January 1, 2023 and for the completion and adoption of the full Mitigation Plan.

A Kaweah Subbasin Mitigation Program was developed jointly by the Kaweah GSAs as an amendment to the 2022 Mitigation Framework to provide clarification on the process, funding opportunities, and role of the GSAs in the Program. The Mitigation Program is a component of larger efforts that the Kaweah Subbasin GSAs have accomplished and are engaged in to achieve sustainability and avoid significant and unreasonable impacts induced by unsustainable groundwater conditions. This Program compliments the GSAs' groundwater extraction allocations, groundwater recharge projects, on-farm recharge surface water storage projects, and a water marketing program which have all shown promising contributions to achieving the Kaweah Subbasin's sustainability goal.

The purpose of the MKGSA Mitigation Plan (Plan) is to describe a detailed process for mitigating impacts on domestic and small community water system wells adversely affected by declining groundwater levels, land subsidence, and degraded groundwater quality caused while MKGSA is implementing the GSP. Domestic well owners and small community water systems reliant on groundwater are the most vulnerable groundwater users in the MKGSA since their wells are generally shallower than municipal, industrial, and agricultural wells. A description of the vulnerabilities of these wells are discussed in Section 1.5.

The Kaweah Subbasin Mitigation Program requires mitigation be awarded for qualifying drinking water wells following adoption of this Mitigation Plan. The Mitigation Program also allows GSAs to elect to include technical assistance funding to be awarded to qualifying non-drinking water wells and/or critical infrastructure. The MKGSA Mitigation Plan is adaptive and will be implemented as incremental versions. This Plan is the first version and only currently offers mitigation to drinking water wells. In June 2025, the MKGSA will offer technical assistance to non-drinking water wells and critical infrastructure to owners of non-drinking water wells impacted by overdraft conditions or subsidence, and critical

infrastructure impacted by land subsidence. The Plan includes the complete claims process, investigation methodology, evaluation criteria, mitigation options, and funding plan for impacted drinking water wells, non-drinking water wells, and critical infrastructure. A description of the unique vulnerabilities of each is detailed in Section 1.5.

## 1.4 Partnerships with Existing Mitigation Programs

Two local programs offer mitigation support for those affected by impaired access to drinking water within the Kaweah Subbasin, (1) The Kaweah Water Foundation (KWF) and (2) Self-Help Enterprises (SHE). The KWF supplies free drinking water and water testing, and SHE offers emergency drinking water supplies, long-term mitigation support, and well stewardship educational resources for those that qualify under their program. Both local programs have been consulted for their feedback and recommendations in developing this Mitigation Program.

The KWF and SHE have recommended the Kaweah Subbasin GSAs partner with their existing services rather than develop additional overlapping mitigation efforts. Accordingly, the Kaweah Subbasin GSAs have entered into an agreement to financially support SHE's existing well mitigation, interim supplies, bilingual communications, and well stewardship educational services to implement the Kaweah Subbasin Mitigation Program most effectively. The agreement between the Kaweah Subbasin GSAs and SHE is such that the GSAs will reimburse SHE for costs associated with program administration, groundwater quality sampling, interim drinking water supplies, and long-term mitigation measures for all drinking water well claims that qualify for Kaweah Subbasin mitigation. SHE serves as a contract mediator and lender for the claimants to arrange mitigation with well drillers to perform the long-term physical mitigation.

There are many reasons why a well may experience operational failure. The GSAs are responsible for mitigating wells that have been impacted by overdraft conditions since January 1, 2015. Impacts from overdraft may be reflected by chronic lowering of groundwater levels dewatering a well, land subsidence causing structural damage to a well, and/or declining water levels introducing new groundwater quality contamination to a well. Therefore, the GSAs are reimbursing SHE for addressing claims in which the impact was induced by groundwater overdraft after January 1, 2015 (see Section 3.1 Drinking Water Well Mitigation Claims Process for more information). SHE offers emergency drinking water assistance and mitigation for households who have lost drinking water supplies due to non-groundwater overdraft induced well failure, and the funding for those activities are sourced by other state initiatives in the spirit of protecting the human right to water.<sup>1</sup>

All claims for non-drinking water wells and critical infrastructure, will be administered, investigated, and if applicable, funded directly by the MKGSA as will be defined in Version 2.0 of the MKGSA Mitigation Plan anticipated in June 2025.

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<sup>1</sup> In instances in which a drinking water well may not meet the criteria above, the well user is encouraged to contact Self-Help Enterprises to access mitigation assistance via alternative programs. Website: [www.selfhelpenterprises.org](http://www.selfhelpenterprises.org) SHE's Phone Number: (559) 651-1000

## 1.5 Well and Critical Infrastructure Vulnerabilities within MKGSA

### 1.5.1 Domestic Drinking Water Well Vulnerabilities

Where available from drillers' well completion reports available from the California Department of Water Resources (DWR) Online System of Well Completion Report (OSWCR) dataset, the average depths of domestic wells are shown on Figure 2. On average, domestic drinking water wells in the MKGSA are drilled to a shallower depth than agricultural or municipal wells. Shallower wells are more vulnerable to declining groundwater levels. Domestic wells extracting groundwater from below the Corcoran Clay also may be vulnerable to land subsidence damage to the well casing described in Section 4.2.

Public well data available to the MKGSA used for GSP development and for mitigation planning is from the OSWCR dataset. The OSWCR dataset relies on requirements of California Water Code Section 13751 that anyone who constructs, alters, or destroys a water well, cathodic protection well, groundwater monitoring well, or geothermal heat exchange well must file with the DWR a report of completion within 60 days of the completion of the work. Where available from Well Completion Reports (WCRs), the average depths of wells within one-mile square sections are shown on Figure 2 through Figure 4. It is acknowledged that not all existing and active drinking water wells may be documented in available resources from DWR. To better identify drinking water wells, the Second Amended GSP and Kaweah Subbasin Mitigation Program includes a commitment to implement a Well Registration Program by June 2025 in conjunction with ongoing outreach within the MKGSA's communities. The Mitigation Program and MKGSA's focused mitigation outreach is described in Section 2.2. More information on the Well Registration Program is described in Section 2.4.4.

### 1.5.2 Public Drinking Water Supply Well Vulnerabilities

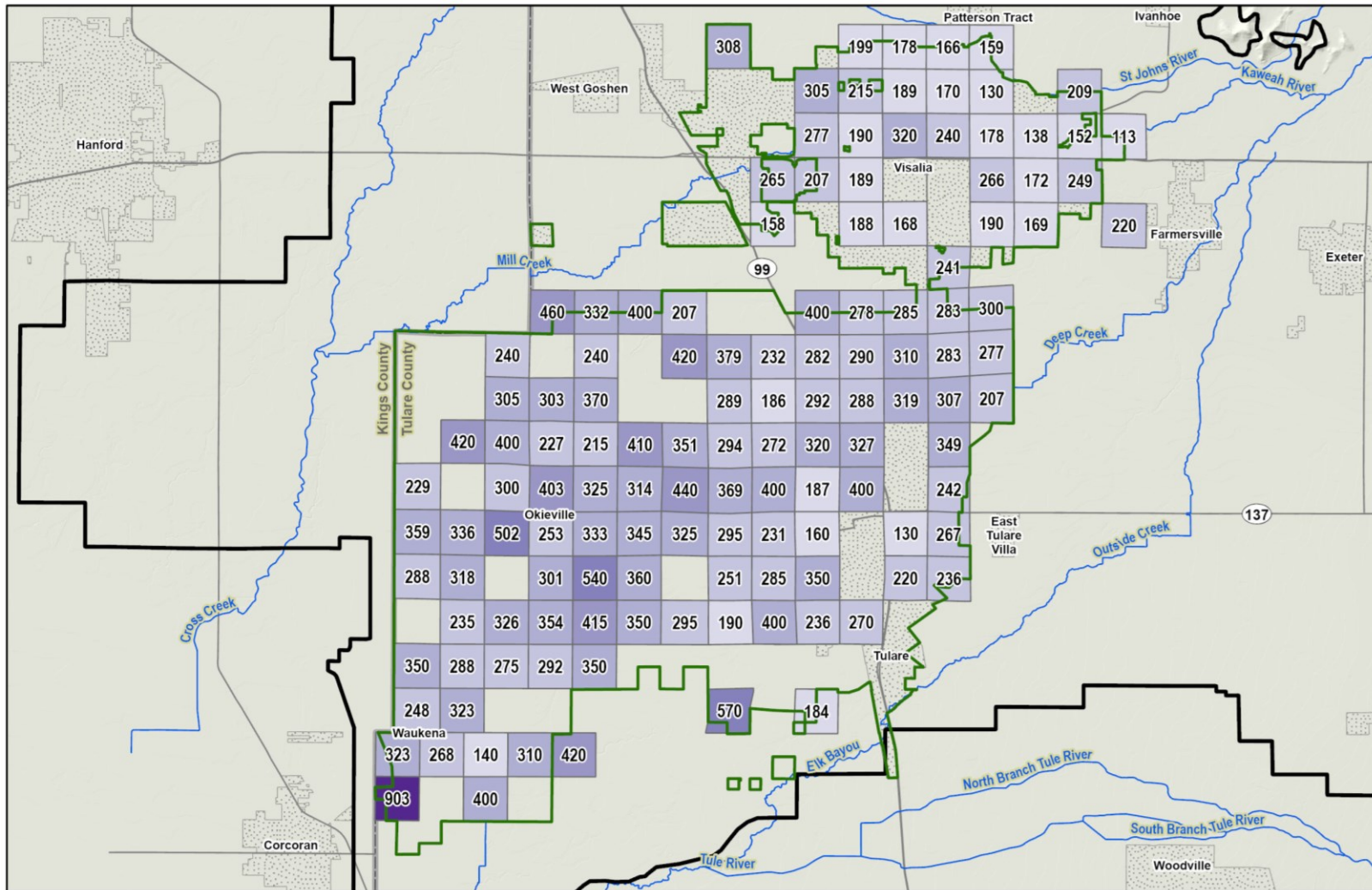
Public water supply wells are typically drilled deeper than domestic wells (Figure 3) but there are some small and community water systems wells that are shallower like domestic wells. Conditions that induce vulnerabilities for domestic wells are comparable to the vulnerabilities for public supply wells. The vulnerability of wells to declining groundwater levels is strongly correlated with a well's depth. Wells drilled shallower are more vulnerable to adverse groundwater conditions. The average depths of public supply wells are depicted in Figure 3.

### 1.5.3 Industrial Well Vulnerabilities

Typically, industrial wells are used for processing and not for drinking water. Conditions that induce vulnerabilities for wells used for industrial purposes are comparable to the vulnerabilities for public water supply wells.

### 1.5.4 Agricultural (Ag) Water Well Vulnerabilities

Agricultural wells in the MKGSA are typically drilled deeper than domestic wells (Figure 4). Shallower agricultural wells are more vulnerable to declining groundwater levels above the Corcoran Clay, and wells screened below the Corcoran Clay in the lower aquifers are vulnerable to well casing damage from land subsidence described in Section 4.2. The average depths of agricultural wells are shown in Figure 4.



**EXPLANATION**

- |                        |  |           |
|------------------------|--|-----------|
| Kaweah Subbasin        | Domestic Well Average Completed Depth (ft) | 401 - 500 |
| Mid-Kaweah GSA         | 113 - 200                                  | 501 - 600 |
| Rivers and Creeks      | 201 - 300                                  | 601 - 700 |
| Cities and Communities | 301 - 400                                  | 701 - 800 |
| Counties               |  | 801 - 903 |

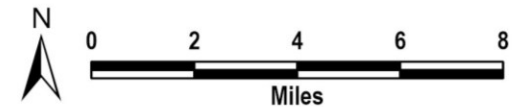
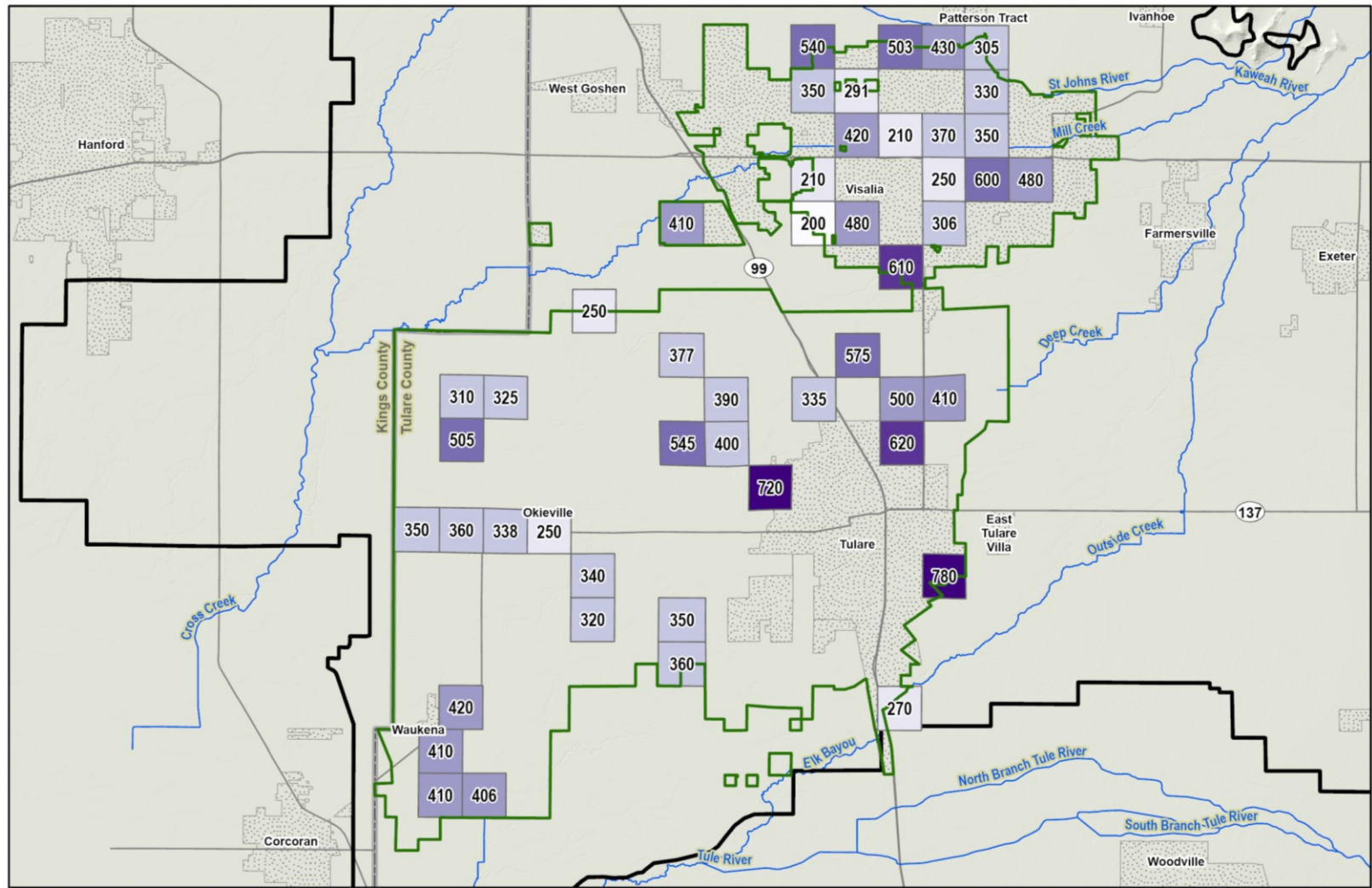


Figure 2. Average Depth of Domestic Wells in MKGSA



**EXPLANATION**

- Kaweah Subbasin
- Mid-Kaweah GSA
- Rivers and Creeks
- Cities and Communities
- Counties

- Public Supply Well Average Completed Depth (ft)
- 200
  - 201 - 300
  - 301 - 400
  - 401 - 500
  - 501 - 600
  - 601 - 700
  - 701 - 800

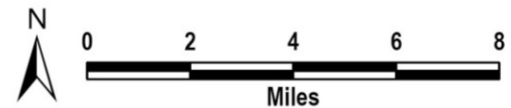
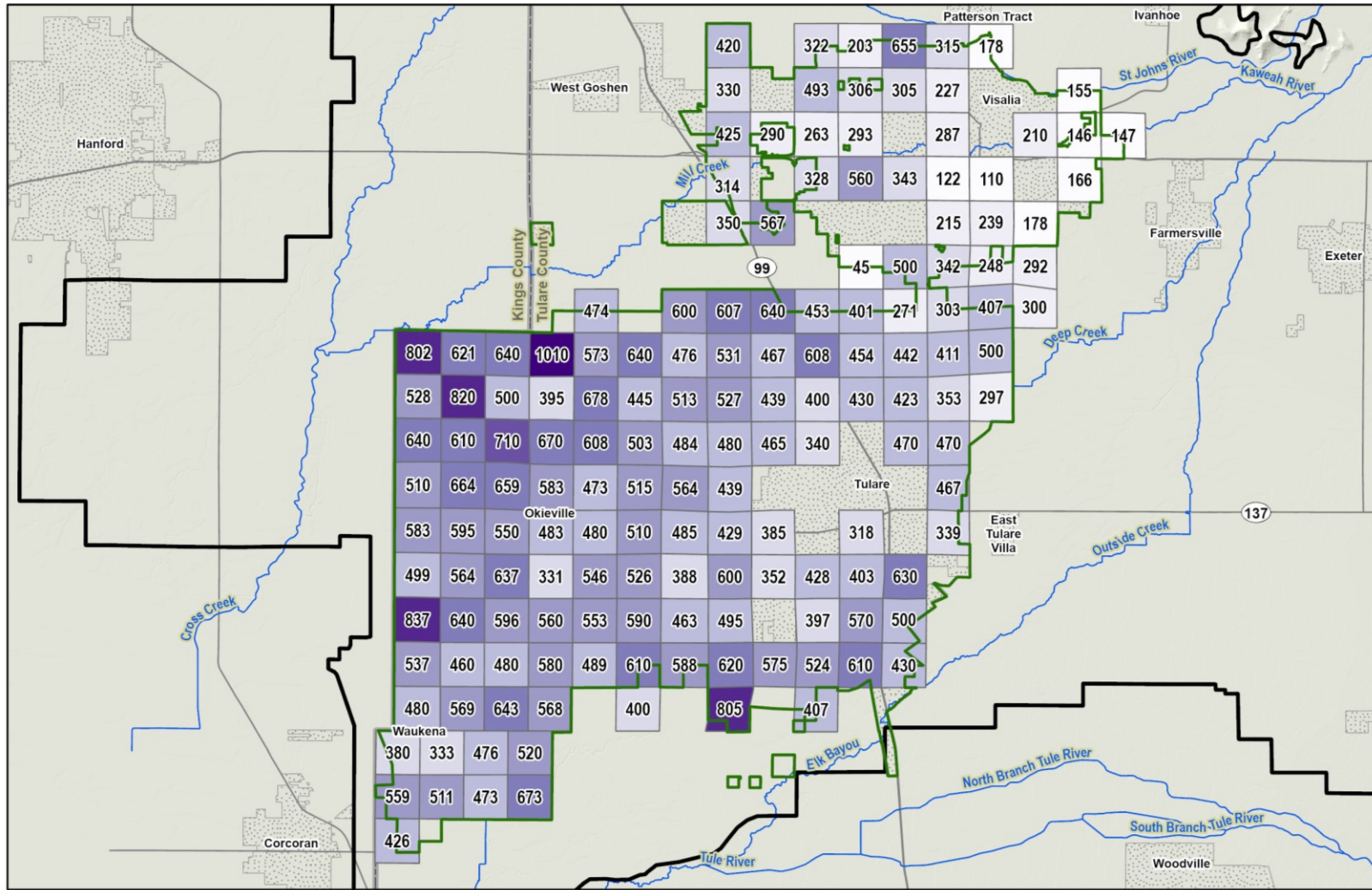


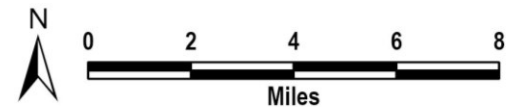
Figure 3. Average Depth of Public Water Supply in MKGSA



**EXPLANATION**

- Kaweah Subbasin
- Mid-Kaweah GSA
- Rivers and Creeks
- Cities and Communities
- Counties

- |  |           |            |
|--|-----------|------------|
| Agricultural Well Average Completed Depth (ft) | 45 - 200  | 501 - 600  |
|  | 201 - 300 | 601 - 700  |
|  | 301 - 400 | 701 - 800  |
|  | 401 - 500 | 801 - 900  |
|  |           | 901 - 1010 |



**Figure 4. Average Depth of Agricultural Wells in MKGSA**



### 1.5.5 Critical Infrastructure Vulnerabilities

The greatest vulnerability to critical infrastructure within the Kaweah Subbasin includes land subsidence induced structural damage that may impair function and, in some cases, increase flood risk. Critical infrastructure includes flood channels, regional and local canals, water supply wells, railroads, natural gas pipelines, roads, and bridges. Parts of the MKGSA have experienced subsidence. Subsidence in the MKGSA is associated with over-extraction of groundwater in aquifers below the Corcoran Clay which underlies much of the MKGSA. The fine-grained nature of the Corcoran Clay makes it susceptible to subsidence. When long-term groundwater overpumping occurs, the aquifer system can become depressurized, and water originally deposited within the fine-grained clay units, such as the Corcoran Clay, can be released. This depressurization allows for the permanent collapse and rearrangement of the structure, or matrix, of particles in the Corcoran Clay and fine-grained layers that results in land subsidence. Differential subsidence, where subsidence occurs at different rates, along the length of linear infrastructure, such as canals, flood control levees, pipes, railways and roads can cause tilting, cracking, and other structural damage. Subsidence of the ground can cause compression and breakage of well casing and lower flood control infrastructure thereby reducing its effectiveness for flood prevention.

## 2 Mitigation Plan Description

The Kaweah Subbasin Mitigation Program establishes subbasin-wide criteria for the three GSAs to implement in the GSA-specific Mitigation Plans (Figure 5). The intention of the Mitigation Program guidance is to standardize information, processes, and logistics to minimize confusion for impacted parties and stakeholders alike. The Mitigation Program establishes requirements for mitigation of wells and critical infrastructure demonstrated to have been adversely affected by declining groundwater levels, land subsidence, and groundwater quality degradation associated with groundwater overdraft. Figure 8 clarifies the types of assistance available through the Mitigation Program and qualification criteria.

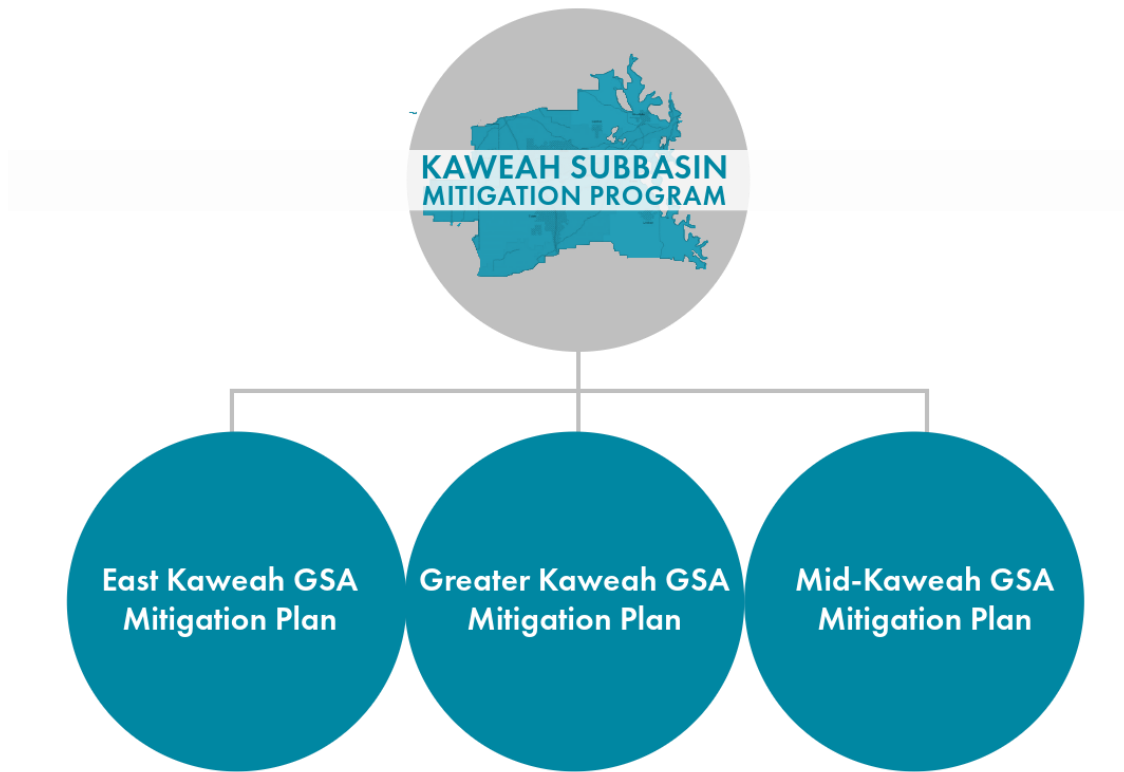



Figure 5. Kaweah Subbasin Mitigation Program Coordination


## Kaweah Subbasin Mitigation Program Qualification Criteria

To qualify for mitigation or technical assistance via the Kaweah Subbasin Mitigation Program, the following impact noted in the claim must meet the following criteria:


- 1** The impact shall have occurred after January 1, 2015.
- 2** The impact shall have been induced by groundwater overdraft conditions, such as:



chronic lowering of groundwater levels



land subsidence



degraded groundwater quality induced by pumping-related changes in groundwater levels
- 3** **Domestic wells are exempt from the following qualification criteria**  
 The Claimant's well or system shall not have contributed to overdraft by pumping in excess of their individual prorata share of the sustainable yield for the GSA or contributed to other undesirable results.

Figure 6. Kaweah Subbasin Mitigation Program Qualification Criteria

There may be cases where a well is used for multiple purposes, such as agriculture and domestic. These wells shall be treated as drinking water wells in the Mitigation Program. Drinking water wells include any well that is used for supplying potable drinking water to a household.

In instances in which a drinking water well may not meet the criteria described in Figure 6, the well user is encouraged to contact Self-Help Enterprises to access mitigation assistance via alternative programs.

The Mitigation Plan starts with outreach to communities and individuals at risk of having detrimental impacts to their wells from declining groundwater levels. Also part of outreach is voluntary registration of drinking water supply wells in the MKGSA area to be able to improve knowledge of where drinking water supply wells are located and to provide baseline information on the well condition. Mitigation Plan outreach and registration will continue throughout GSP implementation. A Well Registration Program will start to be developed in the second half of calendar year 2024 (see Section 2.4.4).

To notify the MKGSA of an impacted well, the well owner (Claimant) will complete and file a claim application. The MKGSA will review the claim application to first determine if the claimant pre-qualifies for mitigation, provides an interim water supply if requested, and then investigates whether the impact is attributed to allowable continued overdraft conditions expressed as declining groundwater levels,

land subsidence, and/or degraded groundwater quality, and what the most suitable mitigation solution may be.

## 2.1 Mitigation Program Tracks

The MKGSA recognizes that multiple different types of wells and infrastructure may be impacted from groundwater management activities within the GSA area. Furthermore, differences in well types and infrastructure may warrant different responses and mitigation. The Kaweah Subbasin Mitigation Program offers two tracks for assistance, Drinking Water Well Mitigation and Technical Assistance for non-drinking water wells and critical infrastructure. Drinking water wells include all wells used for potable supply including private domestic wells, agricultural wells also used for domestic potable supply, and community wells. Non-drinking water wells are wells used solely for irrigation or industrial uses (including agricultural wells). These differences are reflected in the track descriptions below.

### 2.1.1 Drinking Water Well Mitigation Track

The Drinking Water Well Mitigation Track of the Kaweah Subbasin Mitigation Program is intended for claims related to drinking water wells. Drinking water wells are defined as any well used to supply drinking water to household. This may include but is not limited to domestic, small community water systems, and multi-purpose potable wells, such as wells that supply for irrigation and domestic purposes. The Drinking Water Well Mitigation Track becomes active upon all three GSA Board of Directors' adoption of this Mitigation Program in June 2024.



**Kaweah Subbasin constituents who are experiencing impacts to their drinking water well are encouraged to contact Self-Help Enterprises (SHE) at their earliest convenience to initiate the mitigation process and secure emergency drinking water supplies.**

#### Self-Help Enterprises

(559) 802-1685  
8445 W Elowin Ct  
Visalia, CA 93291

An online intake form is available on SHE's website:  
<https://www.selfhelpenterprises.org/programs/community-development/safe-drinking-water/>

More information on the partnership between SHE and the Kaweah Subbasin GSAs is available under Section 1.4 (Partnerships with Existing Programs).

### Who is covered by the Drinking Water Well Mitigation Track?

#### Private Domestic Well Owners

As stated in the California Water Code Section 106.3, "every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes." In the MKGSA, many private residences in the small communities and rural portions of the area rely on private wells to meet their domestic water supply needs. As these wells are typically shallow, they are vulnerable to, among other things, lowered groundwater levels from overdraft conditions. A primary objective of the MKGSA Mitigation Plan is protection of the human right to water for the most

vulnerable populations, which are residents who rely on individual domestic wells for their water supply. The MKGSA Mitigation Plan is structured to ensure a drinking water supply for domestic well owners impacted by Kaweah Subbasin groundwater management.

### **Agricultural Well Owners Using Their Agricultural Well for Domestic Supply**

Some private well owners use their wells for both domestic potable supply and irrigation. For these well owners, the MKGSA Mitigation Plan provides for mitigation and funding for impacts attributed to GSA groundwater pumping.

### **Small Community Water System Owners**

Small community wells/systems identified as being at-risk by the State Water Resources Control Board's metrics for small community wells will receive proactive mitigation via the Small Community Well Proactive & Protective Action Program (Attachment A).

Interim and emergency supplies are available for community wells that serve a max of 300-connections. This limit is based on the State Water Resources Control Board's contract with the existing mitigation service agency within the San Joaquin Valley. This limit was based on the feasibility capabilities of local water supply deliveries and the extent to which federal support is needed. The GSAs have goal to avoid impacts to these small community wells and after consultations with local community well mitigation providers, it was determined the most effective and helpful mitigation for small community wells is to avoid the need for mitigation altogether. That said, the GSAs intend to avoid impacts to these community wells through a series of site-specific proactive measures, which may include but are not limited to the options listed below. The proactive measure(s) implemented will vary on a case-by-case basis.

1. Assess what next steps are needed to avoid or mitigate impacts to support Contingency Plan development and/or improvement
2. Develop or support development of Preliminary Engineer Reports for small community wells that have been stuck with lack of funding or resources to take the next steps in their own contingency plans
3. Implement groundwater pumping restriction policies near at-risk community wells
4. Host Financial Empowerment Workshops to map out long-term planning for resiliency and maintenance, with a focus on prioritizing future access to affordable drinking water
5. Support grant writing and cost-share, when funding and opportunities allow
6. Consider additional technical assistance that meets the unique needs of the at-risk small community well.

Although the claims process is designed more for private domestic and multi-use drinking water well owners, community well owners may still notify Self-Help Enterprises in the event of potential impacts to their well.

This process will establish continued trust-building with the leaders within these at-risk communities. Before proactive technical assistance/mitigation is underway, the GSAs are committed to meeting with

community leaders to understand their unique challenges to map out the best strategy for contingency plans and supplemental assistance.

More information on the technical assistance/mitigation services available for small community water wells is available in Attachment A.

### 2.1.2 Technical Assistance Track

The Technical Assistance Track of the Kaweah Subbasin Mitigation program is intended to award funding for Technical Assistance for qualifying claims related to non-drinking water wells and critical infrastructure. Non-drinking water wells are defined as any water supply well used exclusively for non-potable purposes, such as agricultural or industrial wells, etc. Critical infrastructure is defined as canals, levees, pipelines, roads, bridges, and railways. Critical infrastructure impacts from land subsidence generally correlates with the extent of the Corcoran Clay, which is exclusively within MKGSA and GKGSA. EKGSA has not experienced subsidence and is not underlain by geologic materials conducive to inelastic subsidence.

Additional analyses associated with subsidence impacts on critical infrastructure are not available at this time and are needed for a holistic Mitigation Program that addresses all beneficial users, uses and property interests that may be impacted by overdraft conditions in the Kaweah Subbasin. While the Kaweah Subbasin GSAs implemented the Drinking Water Well Mitigation Track in June 2024 to avoid delays in supporting community members' access to safe and reliable drinking water, GKGSA and MKGSA are implementing the Technical Assistance Track in June 2025 to perform analyses noted above. EKGSA elected to implement the Technical Assistance Track in June 2024 because land subsidence is not an issue for critical infrastructure. In the interim, the MKGSA and GKGSA may offer basic technical assistance by sharing groundwater level, subsidence, and any other available data that may be helpful. If interested in interim technical assistance in MKGSA, please contact the MKGSA to schedule a meeting to discuss further:

#### **Mid-Kaweah GSA**

(559) 686-3425

[midkaweah@gmail.com](mailto:midkaweah@gmail.com)

Per the Kaweah Subbasin Mitigation Program, technical assistance funding is currently capped at \$25,000 per qualifying claim.

- For subsidence impacted non-drinking water wells, the MKGSA will provide technical assistance funds to offset the costs of designing and installing new wells with appropriate compression sleeves.
- For subsidence impacted critical infrastructure, the MKGSA will use technical assistance funds to assess the degree to which groundwater activities caused the infrastructure damage and agree with impacted landowners or public agencies on a mitigation approach. Because potential infrastructure costs cannot be estimated now, it is impossible to estimate ultimate mitigation costs. These technical assistance funds are intended to initiate the critical infrastructure mitigation process.

## Who is covered by the Technical Assistance Track?

When the Technical Assistance Track is available in June 2025, the owners of wells and critical infrastructure described below may apply for technical assistance.

### Non-Potable Agricultural (Ag) Well Owners

Agricultural wells used exclusively for non-potable irrigation water supply that are impacted by overdraft conditions may be eligible for technical assistance from the MKGSA to identify the cause of the impact, management actions to prevent further impacts, and mitigation options. Agricultural irrigation supply well owners (non-potable) will not be eligible for full mitigation (e.g. well replacement, lowering pumps, wellhead treatment, etc.).

### Industrial Well Owners

Industrial wells used for non-potable water supply that are impacted by overdraft conditions may be eligible for technical assistance from the MKGSA to identify the cause of the impact, management actions to prevent further impacts, and mitigation options. Industrial non-potable water supply well owners will not be eligible for full mitigation (e.g. well replacement, lowering pumps, wellhead treatment, etc.).

### Critical Infrastructure Well Owners

Critical infrastructure (canals, levees, pipelines, roads, bridges, electrical lines, and railways) impacted by overdraft conditions may be eligible for technical assistance from the MKGSA to identify the cause of the impact, management actions to prevent further impacts, and mitigation options. Critical infrastructure owners will not be eligible for full mitigation (e.g., canal replacement, pipeline repair, etc.).

## 2.2 Mitigation Plan Outreach

The MKGSA has conducted and will continue to conduct an outreach program to promote the MKGSA Mitigation Plan to individuals and communities. The outreach strategy is multi-phased to reflect outreach during development of the Plan and outreach following adoption and implementation of the Mitigation Plan. Phase 1 outreach for the Mitigation Plan began during the Mitigation Plan development.

### 2.2.1 Outreach Phase 1 – Mitigation Plan Development

MKGSA has completed Phase 1 of outreach with the following actions:

1. A 60-day public comment period for the first draft version of the MKGSA Mitigation Plan. The public comment period was followed by a public workshop held in Waukena (August 31, 2023 at 5:30 pm). Spanish translation was provided during the workshop.
2. MKGSA mass-emailed an English and Spanish flyer to all interested parties signed up to receive MKGSA general communications notifying of the MKGSA Mitigation Plan public workshop on

August 31, 2023 and public comment period. Four emails were sent out: August 21, August 24, August 28, and August 31.

3. MKGSA hand delivered and/or publicly posted flyers in both English and Spanish at 37 public locations to ensure Severely/Disadvantaged Communities were reached in the most effective manner.
4. MKGSA launched a Mitigation webpage on their website, available in English and Spanish (<https://www.midkawah.org/mitigation>).

### 2.2.2 Outreach Phase 2 – Mitigation Plan Implementation

Phase 2 outreach will disseminate information on the final Mitigation Plan including when and how to submit a claim and will encourage registration of domestic and small community water system drinking water supply wells. During this more intensive outreach phase, a minimum of two public workshops will be held: one for City of Tulare and the other for the communities of Okieville and Waukena. MKGSA will coordinate with SHE to collaborate on Phase 2 outreach to maximize accessibility of information, including translation services.

In addition to the workshops, the MKGSA will have a dedicated webpage on their website that outlines the Kaweah Subbasin Mitigation Program and provides detailed information on the MKGSA Mitigation Plan, accessible in both English and Spanish. The webpage may be used to register drinking water wells or to file a claim. For those who don't have access to the internet, forms and assistance filling out the forms will be provided by the MKGSA located at Tulare Irrigation District's office at 6826 Avenue 240 in Tulare.

The Phase 2 outreach effort started in July 2024. Stakeholder outreach will continue throughout GSP implementation. In accordance with the Kaweah Subbasin Mitigation Program, continued outreach will also include:

1. The MKGSA's Advisory Committee will hold an agenda item to discuss Mitigation Plan implementation every quarter.
2. The MKGSA will develop a notification-trigger criteria and system, intended to notify well users of groundwater conditions nearing the possibility of potential impacts to their wells.
3. The MKGSA will keep the Mitigation Plan webpage updated on their website. Materials explaining the process, mitigation and the application will be housed on this website page and accessible in English and Spanish.
4. The MKGSA will provide updates on mitigation efforts in the Kaweah Subbasin Annual Reports submitted on April 1<sup>st</sup> of each year.



## 2.3 Evolving Program

As the GSAs gather data and understanding from changes in demand management, projects, improved analysis tools, (including the Kaweah Subbasin model and Well Registration Program, opportunities to refine the Mitigation Program are expected. In addition to improved data and analytics, lessons will be learned through the implementation of the Mitigation Program and associated Mitigation Plans. Costs to mitigate wells, provide interim supplies, and administration may also evolve over the 15+ year implementation horizon. The Kaweah Subbasin GSA’s intend the Mitigation Program to evolve as new information, funding, and efficiencies are understood. Do note, this initial Mitigation Program is identified as “Version 1.0” with the expectation of future revisions. Figure 7 clarifies the Mitigation Program schedule and plans for Version 2.0.

### June 2024

#### Upon adoption of Mitigation Program Version 1.0

- Drinking Water Well Mitigation Track initiated
- Emergency drinking water supplies available (within 24-hours of request)
- Interim drinking water supplies available (within 72-hours of request)
- Long-term physical mitigation available for qualifying drinking water well claims
- Continued demand management and implementation of projects to reduce future mitigation circumstances

### June 2025

#### Upon adoption of Mitigation Program Version 2.0

- Technical Assistance Track added to the Mitigation Program
- Technical assistance funding available for qualifying non-drinking water wells claims
- Technical assistance funding available for qualifying critical infrastructure claims
- Well Registration Program near completion (full roll-out in Summer 2025)
- Improved claims dispute process added to the Mitigation Program
- Phases 1-4 of the Small Community Well Proactive & Protective Action Program complete (see Attachment A)

### June 2026

- Well Registration Program active and available for all well users within the Kaweah Subbasin to voluntarily participate in. Phase 2 and 3 completed (usable database and active notification protocol).
- Phase 5 of the Small Community Well Proactive & Protective Action Program (Attachment A) completed/ongoing

**Figure 7. Kaweah Subbasin Mitigation Program Schedule**

## 2.4 Proactive Mitigation to Avoid the Need for Mitigation

In addition to the mitigation measures detailed in the Claims Process section below, the MKGSA Mitigation Plan also implements proactive measures to avoid installing wells that may cause or contribute to undesirable results in the Kaweah Subbasin.

### 2.4.1 Small Community Well Proactive & Protective Action Plan

The Small Community Well Proactive & Protective Action Program (PPAP) is in development to address at-risk small community well current and future challenges through contingency planning, strategic demand management policies, and resource sharing with the GSAs through strengthened relationships with small community well operators and administrators. The small community wells identified as being at-risk by the State Water Resources Control Board's metrics for small community wells will receive mitigation in the form of proactive technical assistance/mitigation via the PPAP which is developed in conjunction with the Kaweah Subbasin Mitigation Program and GSA Mitigation Plans.

The GSAs have goal to avoid impacts to these small community wells and after consultations with local community well mitigation providers, it was determined the most effective and helpful mitigation for small community wells is to avoid the need for mitigation altogether. That said, the GSAs intend to avoid impacts to these community wells through a series of site-specific proactive measures, which may include but are not limited to the options listed below. The proactive measure(s) implemented will vary on a case-by-case basis.

1. Contingency plans to assess what next steps are needed to avoid or mitigate impacts
2. Preliminary Engineer Reports or other technical process documentation for small community wells that have been stuck with lack of funding or resources to take the next steps in their own contingency planning
3. Groundwater pumping restriction policies near at-risk community wells
4. Additional technical assistance that meets the unique needs of the at-risk small community well

This process will require continued trust-building with the leaders within these at-risk communities. Before proactive technical assistance/mitigation is underway, the GSAs are committed to meeting with community leaders to understand their unique challenges to map out the best strategy for contingency plans and supplemental assistance. The first phase, initial engagement, The five phases and their respective schedule is summarized in Figure A-1 of Attachment A.

### 2.4.2 Well Permit Application Review

The Kaweah Subbasin GSAs are working towards entering a Memorandum of Agreement (MOA) with Tulare County. A component of this agreement is GSAs will review all new well permit applications before they are approved by the County. The review may include:

- The proposed location of the new well.
- The planned depth and perforated interval of the new well; GSA will determine which aquifer (Upper, Lower, or Single) the well is planned to extract from.
- The planned use of the water from the well (domestic supply, agricultural irrigation, etc.).

- Identifying the closest Representative Monitoring Sites to the proposed well to determine minimum thresholds for groundwater levels, water quality and subsidence.
- Identifying existing domestic wells and critical infrastructure in the area.
- Estimating current groundwater levels around the proposed well.
- Following review of permit application, inform existing well owners of the level of risk that their well could go dry or experience issues associated with water levels declining to the minimum threshold and allow well owners to take proactive measures.
- Recommend owners and drillers of new wells to drill to a depth which would continue to provide an adequate supply should groundwater levels fall to minimum thresholds.

### 2.4.3 Notification Process

The effectiveness of the Plan will be improved with a notification activation process, intended to notify well users and owners of groundwater conditions nearing the possibility of potential adverse impacts to their well. Table 1 provides the MKGSA's notification and mitigation activation process. The process demonstrates MKGSA's commitment to sustainability and addressing impacts based on monitored groundwater levels in representative monitoring wells before they fall to undesirable levels. MKGSA's approach is multi-dimensional, acknowledging that mitigation and sustainable management must be addressed from various angles, such as through GSA's implementation of groundwater allocations, new recharge and supply projects, educational outreach, and this Mitigation Plan.

The notification activation process will be improved as the MKGSA implements a well registration program, which will improve data and analyses on wells outside of the MKGSA's existing database, particularly domestic wells. By having the necessary details on domestic well existence, location, and construction, the GSAs can then compare the site-specific information to groundwater levels, groundwater quality, and subsidence monitoring results to identify where at-risk wells exist and have the contact information available to notify the landowner and/or tenants. The well registration program is scheduled to be rolled out in a later iteration of the MKGSA Mitigation Plan by Spring 2025. More information on the upcoming Well Registration Program is available below in Section 2.4.4

### 2.4.4 Well Registration Program

The Kaweah Subbasin GSAs have committed to developing a Well Registration Program to be completed in phases and available for full implementation in Summer 2025. The purpose of voluntary registration of wells is to create a baseline record for each well in the event of a future claim and to have the necessary information on file to identify at-risk domestic wells for notification and advance mitigation purposes. The Well Registration Program is designed to gather as much data on well construction, location, ownership, use, groundwater levels, and groundwater quality.

This can be particularly beneficial for drinking water wells, as many of these wells' construction, maintenance, exact location, site-specific groundwater levels and quality are considered a data gap. SGMA noted wells that extract less than 2 acre-feet per year were deemed De Minimis, and not required to participate in the GSP process. Existing domestic well records through the DWR include inactive and abandoned wells and documentation errors. The exact locations of most domestic wells are not well understood. The registration will require the well owner to provide information on well location, construction, water quality, and well maintenance history. Having a well registered will not be a

prerequisite for Mitigation Plan qualification, but it should speed up the GSAs' assessment of claims, should it arise, because there is already background information on the well. Additionally, if a well is registered it may be possible to apply for mitigation before the well goes dry. Although there is an emphasis on domestic wells, all well types will be asked to voluntarily enroll in the program, as the more data and information available can improve water management, planning, and proactive efforts.

This management action requires considerable time and resource commitments to make usable. The upfront effort is for the GSAs to continue efforts to build trust in the local communities and communicate the benefits that well users will receive if enrolling (early notification and early processing). The GSAs are expecting there to be initial hesitation out of concern for the landowners' private data to become public and impact property values and future economic opportunities. That said, the Well Registration Program entails three primary phases listed below. Additional phases may be added as the program is being developed and implemented.

**Phase 1 (Spring 2025):** Initial outreach campaign and development of data and information forms (consider online submittal options). The initial outreach phase will require several months to continue trust building as there is expected to be an initial hesitance with landowner's sharing their private data and information to a public agency. The outreach campaign will highlight the benefits of voluntarily enrolling, such as early risk notifications, reduced risk as GSAs will use this information to adapt management policies, and improvements in the GSAs' groundwater level and quality analyses which inform sustainability planning. Ongoing outreach is not clarified as a specific phase; however, it is a critical component of a successful Well Registration Program.

**Phase 2 (Fall 2025):** The well registration database is structured to receive registrants' data and information and beta tested. This may include incorporation of this database into the existing Data Management System.

**Phase 3 (Spring 2026):** Voluntary well registration active and available for all well owners in the Kaweah Subbasin and risk notification and consideration of management changes proceeds for all at-risk wells.

An important element of the partnership between the Kaweah Subbasin GSAs and SHE is the data, information, and resource sharing across the agencies. This includes the opportunity for existing and future participants of SHE's emergency services to be educated on the importance of SGMA, data sharing, and existing GSA programs.

This management action is still in the conceptual phases and more information on the approach will be made available at GSA public meetings in early 2025.

**Table 1. MKGSA Notification and Mitigation Activation Process**

Activation	Conditions	Investigation	Outreach	Mitigation	Groundwater Management
Green	Groundwater conditions are stable at or above established Measurable Objective (MO). No issues are anticipated	Continued GSP monitoring	Annual Report	<p>None expected (continue existing practices)</p> <p>In the event a Mitigation Claim is approved within a “green” Analysis Zone (formerly referred to as “Threshold Region”), then the GSA will evaluate the efficacy of the sustainable management criteria within that Analysis Zone.</p>	Continue current groundwater management strategies as laid out in the GSP
Yellow	Groundwater conditions below MO and above 50% of operational range and above the established Minimum Threshold (MT)	1. Review monitoring network and results to identify specific conditions that need further investigation	Annual Report to include GSA map indicating impacted and/or vulnerable areas	<p>Impacted wells to undergo Mitigation Claim process via this Mitigation Plan.</p> <p>GSA in conjunction with existing drinking water mitigation agencies to provide effective mitigation measures, outreach, and well stewardship education.</p>	GSA to evaluate annual groundwater allocation amount for the next allocation period
Orange	Groundwater conditions below 50% of the operational range and above the established MT	2. Initiate investigation and vetting of specific conditions 3. Evaluate monitoring frequency	<p>Annual Report to include visualization of impacted areas on GSA map</p> <p>Outreach and communication initiative with impacted well users</p>	<p>Impacted wells to undergo Mitigation Claim process via this Mitigation Plan.</p> <p>GSA in conjunction with existing drinking water mitigation agencies to provide effective mitigation measures, outreach, and well stewardship education. GSA to investigate long-term, larger scale solutions.</p>	GSA to evaluate and implement (if necessary) localized groundwater pumping limits and actions.
Red	Groundwater conditions at or below established MTs	1. Review monitoring network and results to identify specific conditions that need further investigation. 2. Initiate investigation and vetting of specific conditions. 3. Increase monitoring frequency	<p>Annual Report to include visualization of impacted areas on GSA map.</p> <p>Outreach and communication initiative with impacted well users.</p> <p>Local agencies consulted to improve investigation, outreach, and opportunities for improved management.</p>	<p>Impacted wells to undergo Mitigation Claim process via this Mitigation Plan.</p> <p>GSA in conjunction with existing drinking water mitigation agencies to provide effective mitigation measures, outreach, and well stewardship education. GSA to investigate long-term, larger scale solutions.</p>	GSA to evaluate and implement (if necessary) broader groundwater pumping limits or alternative actions.

### 3 Mitigation Claims Process

The process for claims related to impacted drinking water wells are shown on Figure 8 where the claims may qualify for funding for interim drinking water supplies and physical well mitigation.

#### 3.1 Drinking Water Well Mitigation Claims Process

Claimants who have lost access to drinking water shall contact Self-Help Enterprises to initiate the mitigation application process. A mitigation agreement will be made with the landowner; however, tenants shall receive interim drinking water supplies, independent of land/well ownership.

For questions on the claims process or tenant questions on advocating for mitigation support with your landlord(s), please contact MKGSA and/or Self-Help Enterprises.

##### Self-Help Enterprises

(559) 802-1685  
 8445 W Elwin Ct  
 Visalia, CA 93291  
 An online intake form is available on SHE’s website to learn more about assistance with community wells or <https://www.selfhelpenterprises.org/programs/community-development/safe-drinking-water/>

##### Mid-Kaweah GSA

(559) 686-3425  
[midkaweah@gmail.com](mailto:midkaweah@gmail.com)  
 6826 Ave 240  
 Tulare, CA 93274

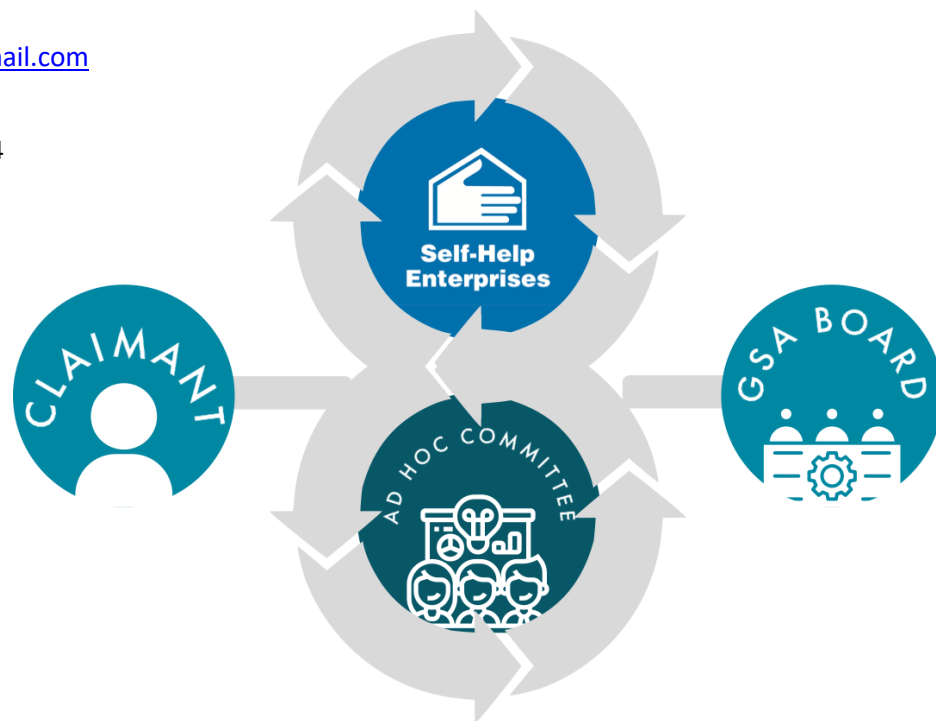


Figure 8. Drinking Water Mitigation Claims Organization

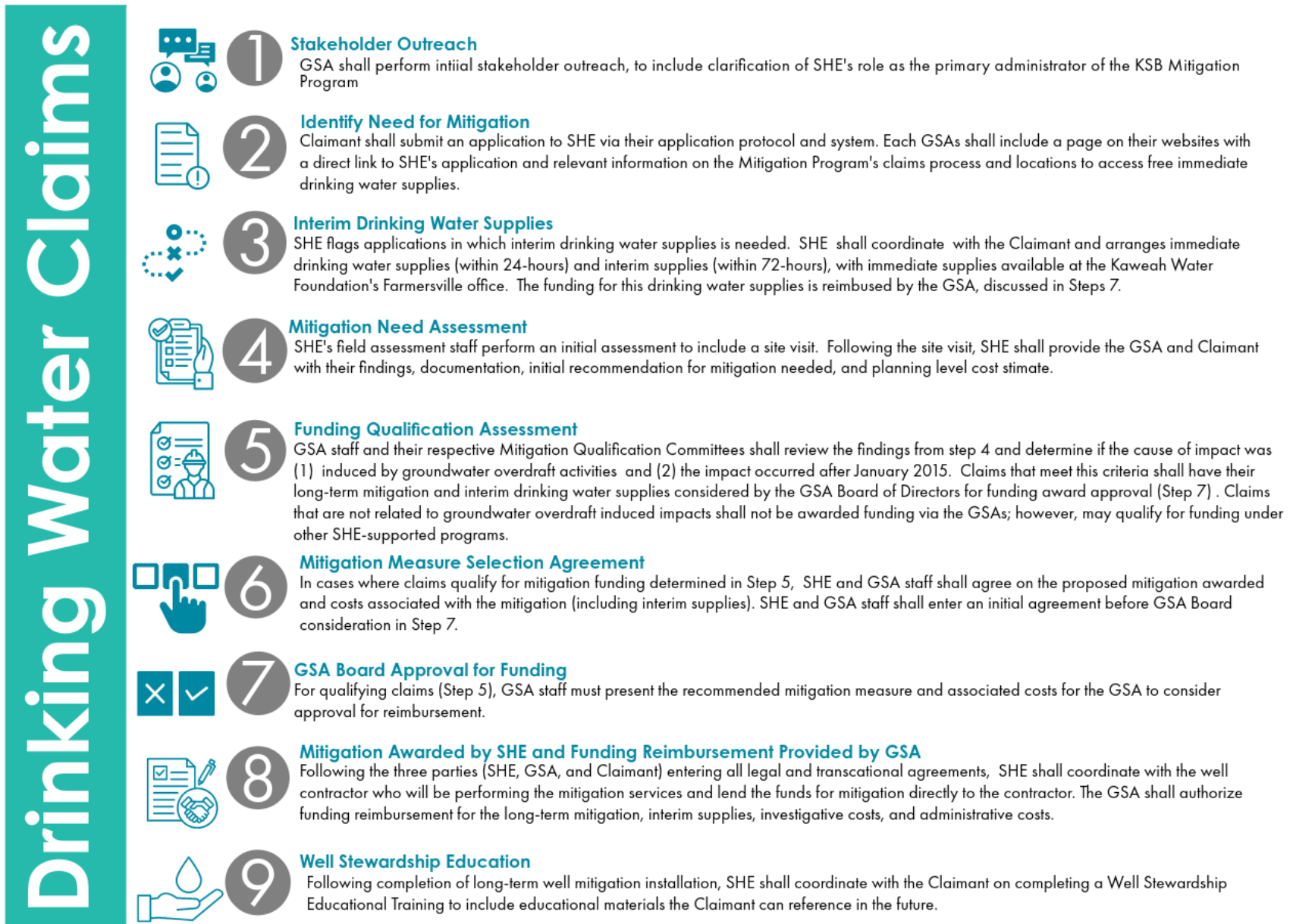


Figure 9. Drinking Water Claims Process

### 3.1.1 Step 1. Stakeholder Outreach

Public participation and communication are critical to implementing an effective Mitigation Program. Upon release of the MKGSA Mitigation Plan, the GSAs will conduct an outreach program to inform domestic well owners and landowners of the availability of the Mitigation Plan and how they can apply for assistance should their wells or land uses be impacted. Outreach will be provided in multiple languages as determined appropriate by the GSA. Outreach will continue throughout the process to maintain stakeholder engagement with the Mitigation Program.

Effective outreach starts with public participation ahead of adoption; therefore, the initial stakeholder outreach must include at a minimum notification of the Mitigation Plan, qualifications, and how to submit a claim via:

1. Update on Mitigation Program and Plan progress at the MKGSA's Advisory Committee and Board meetings (prior to Mitigation Plan adoption).
2. Website notification (prior to Mitigation Plan adoption).
3. Email notification to MKGSA's listed stakeholders (prior to/following Mitigation Plan adoption).
4. Mitigation Program presentation and Q&A at the Kaweah Subbasins' shared community outreach events: (i.e., 2024 Groundwater Day), Dry Well Susceptibility Workshops which cover how the technical analyses informed the Mitigation Program funding feasibility and planning with drinking water advocacy groups, representing disadvantaged communities within the Subbasin.

Continued Stakeholder Outreach must include at a minimum:

1. At least three workshops within 90-days, following adoption of the Mitigation Program to notify the public of the resources, claims process, and opportunities available to support the local communities. At least one workshop shall be held in the MKGSA, preferably in an underrepresented community in English and Spanish translation services available. Self-Help Enterprises shall partner with the MKGSA in workshop outreach.
2. The MKGSA's Advisory Committee and Board of Directors must hold an agenda item to discuss Mitigation Plan implementation at least once every quarter.
3. The MKGSA must implement the notification-proactive warning criteria and notification system, intended to notify well users and critical infrastructure owners of groundwater conditions nearing the possibility of potential impacts to their well/infrastructure. The MKGSA's criteria for defining the proactive warning and notification is provided in Section 2.4.3.
4. GSAs must develop and keep an updated page on their respective websites that outlines the Kaweah Subbasin Mitigation Program and their individual GSA Mitigation Plan. Materials explaining the process, mitigation and the application will be housed on this website page and accessible in English and Spanish.



5. Domestic Well Education materials will be provided by SHE and/or the GSA following mitigation services or by request.

### **3.1.2 Step 2. Identify Need for Mitigation**

Claimants seeking mitigation support for drinking water well impacts shall submit an application consistent with SHE's existing application protocol and system. The MKGSA shall provide information on how to submit a drinking water mitigation claim with SHE with links to their website and contact information for the GSA and SHE. In addition, information on where immediate access to drinking water supplies shall also be available. For example, the Kaweah Water Foundation free drinking water kiosks are available 24 hours a day at the following locations:

- Okieville on the corner of Road 48 & Avenue 229
- Hanford at the transit station at 200 Santa Fe Ave. #A, Hanford, CA 93230
- Farmersville at the Kaweah Delta Conservation District at 2975 N Farmersville Blvd, Farmersville, CA 93223

Claim applications must be submitted by landowners on whose property the adversely impacted well is located; however, in the event a tenant is experiencing loss of access to drinking water, the well user is encouraged to contact the MKGSA, and the MKGSA will work with SHE to notify the well owner how to apply for mitigation and the benefits of the Mitigation Plan.

### **3.1.3 Step 3. Interim Drinking Water Supplies**

Following the Claimant notifying SHE of the need for mitigation, SHE shall arrange emergency drinking water supplies within 24 hours in the form of bottled water. Interim supplies, which may entail water tanks with delivered supplies, or other appropriate interim measures. The MKGSA will fund and/or reimburse SHE for administering and supplying emergency and interim drinking water supplies for qualifying Claimants (see Step 7). Tulare Irrigation District will also stock emergency water supplies.

### **3.1.4 Step 4. Mitigation Need Assessment**

SHE's field staff shall perform an initial assessment, to include a site visit and discussions with the landowner and/or tenants. Translation services for Spanish, Punjabi, and/or Hmong shall be made available by SHE, as needed. Following the assessment, SHE shall provide the GSA and Claimant with their findings, documentation, initial recommendation for mitigation needed, and a planning level cost estimate.

### **3.1.5 Step 5. Funding Qualification Assessment**

Following the receipt of SHE's Mitigation Need Assessment findings, documentation, initial recommendation for mitigation needs, and planning level cost estimate, MKGSA staff and Advisory Committee shall review all materials. The MKGSA Advisory Committee is composed of representatives from disadvantaged communities, agriculture, local government and environmental organizations. The MKGSA Advisory Committee may review additional localized data, such as groundwater level trends, recent-historic subsidence, groundwater quality, land use, and more to determine if the Claim qualifies

for funding reimbursement under the Kaweah Subbasin Mitigation Program. To qualify for GSA funding reimbursement, the well impact must have (1) occurred after January 1, 2015 and (2) been induced by groundwater overdraft conditions (Figure 2).

To determine if an impact was induced by groundwater overdraft conditions, the MKGSA Advisory Committee will compare groundwater level trends local to the impacted well and compared to the well construction information, such as well completion depth, perforated intervals, pump depth, and nearby land use and groundwater extractions. If the impact is physical damage to the well casing and/or screen, recent-historic subsidence shall be evaluated.

If the Claimant's existing groundwater use is contributing to overdraft, such as extracting more than their native yield allocation, they shall not qualify for mitigation support from the GSAs. In these instances, the Claimant may be invited to a meeting with GSA staff to discuss ways the Claimant can improve their demand management and localized groundwater stewardship.

There may be limited data available which may hinder the extent of the qualification assessment. The GSA staff shall coordinate with SHE and the Claimant, as needed, to determine reasonable mitigation solutions and impact attribution determinations.

### **3.1.6 Step 6. Mitigation Measure Selection Agreement**

In cases where the claim meets the qualification criteria of the drinking water well being impacted by groundwater overdraft conditions and the impact occurring after January 1, 2015, SHE and GSA staff shall agree on the proposed mitigation and costs association with administering, assessing, and implementing the mitigation (including interim supplies). The GSA and SHE shall determine the appropriate funding mechanism, which may involve reimbursement following the completion of the long-term mitigation installation with an up-front deposit. The funding transaction protocol shall be assessed on a case-by-case basis until SHE and the GSAs have identified the most effective and efficient method. Lessons are expected to be learned during the first year of Mitigation Program implementation, and intentional flexibility is necessary to facilitate timely adoption of the Mitigation Program.

In case where the claim does not meet the qualification criteria, the Claimant may qualify for mitigation support via other programs that SHE administers. SHE will work directly with those Claimants to discuss what options they may have.

SHE and the GSA staff shall consider each claim on a case-by-case basis to identify the most effective long-term mitigation measure. Long-term mitigation for drinking water wells may include:

1. Deepen the well.
2. Construct a new well.
3. Modify pump equipment, including lowering the pump.
4. Consolidation with an existing water system in the vicinity.
5. Establishment of a new small public water system.
6. With the consent of the affected user, providing other acceptable means of mitigation.

### **3.1.7 Step 7. MKGSA Board Approval for Funding**

Following SHE and MKGSA staff agreement on an appropriate mitigation measure for qualifying claims, GSA staff shall present the recommended mitigation measure and cost estimates for the GSA Board to

consider approval for deposit and reimbursements. The GSA Board shall consider long-term mitigation reimbursement within one GSA Board Meeting cycle, following SHE and GSA staff completion of Step 6.

### 3.1.8 Step 8. Mitigation Funding Award

Following completion of all necessary legal and transactional agreements, SHE shall lend the Claimant funding to implement the agreed upon mitigation measure. SHE does not carry out the mitigation measures but acts as a contract coordinator and lender between the driller/pump contractor and the Claimant. The GSAs shall reimburse SHE for the funding lent to the Claimant for all mitigation support services, including interim supplies and Mitigation Program administration. SHE and the GSAs may agree to deposits to maintain sustainable cashflow for SHE’s administration of the Mitigation Program.

### 3.1.9 Step 9. Well Stewardship Education

After the qualifying claim’s long-term mitigation is implemented and the household is no longer provided interim supplies, the Claimant shall undergo Well Stewardship Training, hosted and coordinated by SHE. Following completion of the training, the Claimant will be supplied with educational resources to reference in the future (translation services available).

## 3.2 Non-Drinking Water Well and Critical Infrastructure Technical Assistance Claims Process

The Kaweah Subbasin Mitigation Program will extend mitigation in the form of technical assistance funding (capping at \$25,000 per qualifying claim) to landowners who have experienced impacts to their non-drinking water wells and/or critical infrastructure in June 2025. GSAs have the discretion to implement the inclusion of technical assistance for non-drinking water well and critical infrastructure claims in their respective Mitigation Plans. To qualify, the impacts must be induced by groundwater overdraft and have occurred after January 1, 2015. If the Claimant is contributing to overdraft by extracting more than their allocated amount (use of transitional groundwater pumping) on any Kaweah Subbasin parcel, then the Claimant shall not qualify for Technical Assistance funding via the Mitigation Program or Plans.

The Non-Drinking Water Well and Critical Infrastructure Technical Assistance Claims Applications shall be made available on each GSA website. For questions, please contact EKGSA.

#### Mid-Kaweah GSA

(559) 686-3425

[midkaweah@gmail.com](mailto:midkaweah@gmail.com)

[www.midkaweah.org/mitigation](http://www.midkaweah.org/mitigation)

6826 Ave 240

Tulare, CA 93274



Figure 10. Technical Assistance Claims Organization

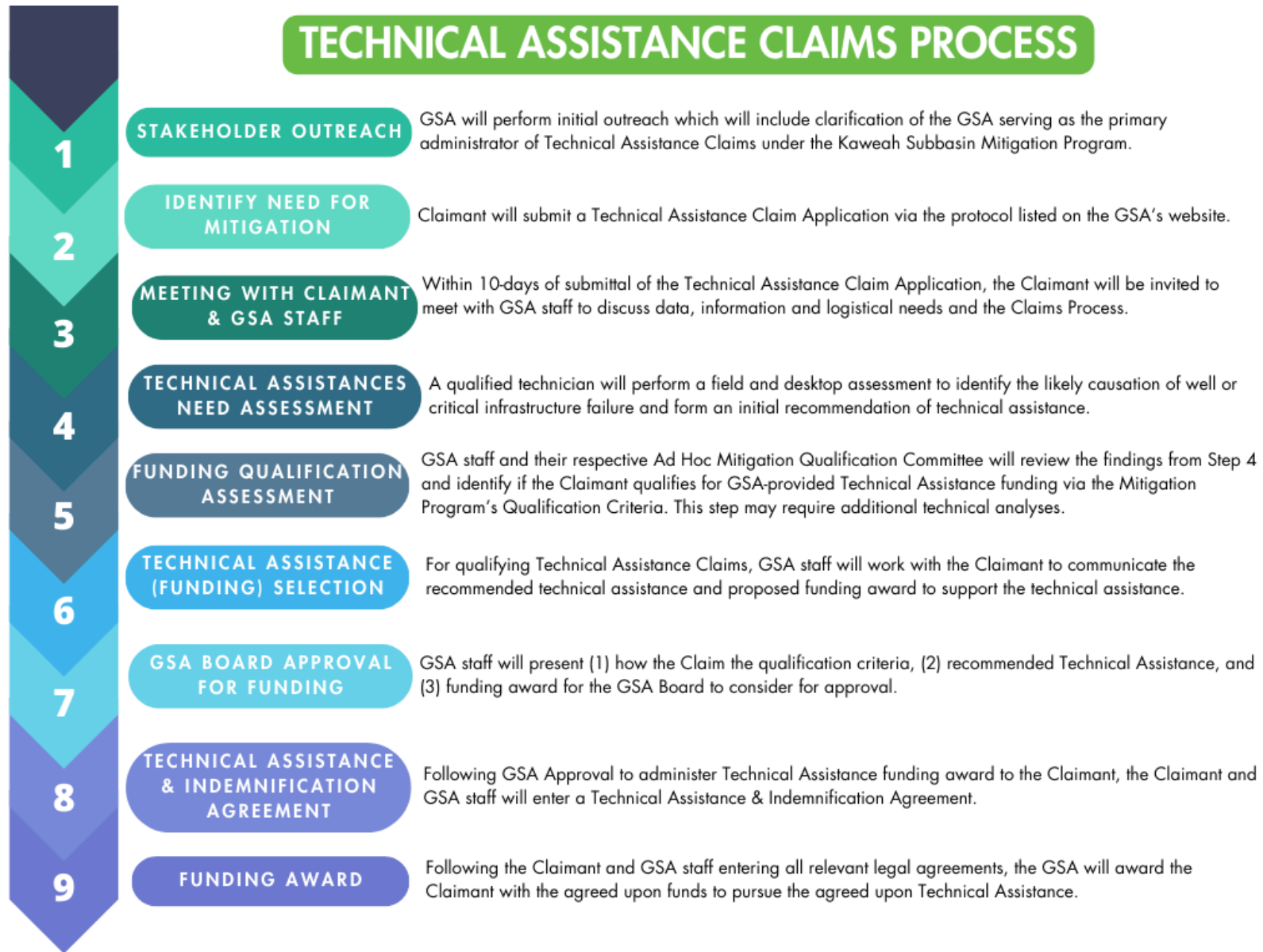


Figure 11. Non-Drinking Water and Critical Infrastructure Technical Assistance Claims Process

### 3.2.1 Step 1. Stakeholder Outreach

Stakeholder outreach for non-drinking water wells and drinking water well mitigation is consistent. For more information, visit **Drinking Water Claims – Step 1. Stakeholder Outreach** above.

### 3.2.2 Step 2. Identify Need for Technical Assistance

Claimants seeking mitigation support for non-drinking water well impacts and/or critical infrastructure must submit an application on the MKGSA website. The MKGSA website will differentiate the application protocols and mitigation award for drinking water wells versus non-drinking water wells and critical infrastructure. The Technical Assistance Claim Application is included as Attachment B to this plan. More information may be obtained and discussed with the Claimant in Step 3 below.

### 3.2.3 Step 3. Meeting with Claimant and GSA Staff

Within 10 days of submittal of the Technical Assistance Claim Application, MKGSA staff shall contact the Claimant to meet and discuss the impact, additional data and information needed, and the Claims process.

### 3.2.4 Step 4. Technical Assistance Needs Assessment

A qualified technician, arranged by the MKGSA, shall perform a field and desktop assessment to identify the likely cause of well or infrastructure failure and make an initial recommendation of whether technical assistance is needed. The information is to be documented in a memorandum with photographs and any other relevant information for the MKGSA's Advisory Committee to review in Step 5. The Advisory Committee is composed of representatives from disadvantaged communities, agriculture, local government and environmental organizations. Attachment C includes considerations that may be made during the assessment.

### 3.2.5 Step 5. Funding Qualification Assessment

Following completion of the Technical Assistance Needs Assessment, the MKGSA staff and Advisory Committee shall review all provided materials. The MKGSA Advisory Committee may review additional localized data, such as groundwater level trends, recent-historic subsidence, groundwater quality, land use, and more to determine if the claim qualifies for funding reimbursement under the Kaweah Subbasin Mitigation Program. To qualify for MKGSA funding reimbursement, the impact must be (1) induced by groundwater overdraft conditions and (2) having occurred after January 1, 2015. In addition, if the Claimant's groundwater use is contributing to or has contributed to overdraft (after January 1, 2015), such as extracting more than their native yield allocation, then they shall not qualify for mitigation support from the MKGSA. In these cases, the Claimant may be invited to a meeting with MKGSA staff to discuss ways the Claimant can improve demand management and localized groundwater stewardship.

To determine if an impact was induced by groundwater overdraft conditions, the MKGSA Advisory Committee will compare groundwater level trends local to the impacted well and well construction information, such as well completion depth, perforated intervals, pump depth, and nearby land use and

groundwater extractions. If the impact is physical damage, recent-historic subsidence shall be evaluated and compared to well construction. Attachment C includes considerations that may be made during the assessment.

There may be limited data available which may hinder the extent of the qualification assessment. The MKGSA staff shall coordinate with the Claimant and original well driller, construction manager, or design engineer, as needed, to determine reasonable mitigation solutions and impact attribution determinations.

### **3.2.6 Step 6. Technical Assistance (Funding) Selection Agreement**

In cases where the claim meets the qualification criteria for technical assistance award, MKGSA staff shall communicate the recommended technical assistance and funding award amount (maximum \$25,000 per qualifying Claim) to the Claimant. During this communication, the MKGSA staff shall reiterate the MKGSA is providing funding for the technical assistance and not administering, arranging, or performing the technical assistance in-house. The MKGSA staff and Claimant shall enter a verbal and written agreement (email documentation is acceptable) confirming both parties agree with the recommended funding amount to be proposed to the MKGSA Board for consideration.

### **3.2.7 Step 7. GSA Board Approval for Funding**

Following an agreement between the Claimant and MKGSA staff (Step 6), GSA staff shall present the recommended technical assistance funding award for MKGSA Board consideration of approval within one MKGSA Board meeting cycle following completion of Step 6.

### **3.2.8 Step 8. Technical Assistance and Indemnification Agreement**

Following MKGSA Board approval for administering funds for qualifying Claims, the MKGSA staff and Claimant shall enter a legal agreement acknowledging the amount of funding, intent of use, and indemnification of liabilities. This step must be completed prior to funding award. A draft concept of the agreement is attached as Attachment D. The actual agreement may vary on a case-by-case basis considering the nuances of every impact and claim.

### **3.2.9 Step 9. Technical Assistance Funding Awarded by GSA**

After the qualifying Claimant and MKGSA enter a Technical Assistance and Indemnification Agreement (Step 8 and Attachment D), MKGSA shall provide the qualifying Claimant with the agreed upon funding award.

## **3.3 Claims Dispute**

In the event a claimant disagrees with the mitigation proposed by the MKGSA, a third party shall be arranged by the MKGSA to perform their own evaluation. The Kaweah Subbasin Mitigation Program Framework requires all GSAs to develop clarified claims dispute processes to be included in a later iteration of their respective Mitigation Plans by Spring 2025.

### 3.4 Claims Privacy

Once a claim application and subsequent information is provided to the GSA, it becomes subjected to the California Public Records Act, which may allow the information provided to become public. If a Claimant is concerned about sensitive information requested in the Mitigation Claim Application, MKGSA requests the Claimant contact the GSA to discuss data and information sharing confidentiality solutions.

## 4 Criteria for Determining GSA-Related Impacts to Drinking Water Wells

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### 4.1 Groundwater Level Impacts

When groundwater levels fall close to the level of the pump, lack of submergence may damage the pump. When groundwater levels fall below the well's pump intake, water can no longer be pumped (Figure 12). The well is considered dry once the groundwater level is below the intake of a pump that cannot be lowered anymore. DWR released a guidance document in March 2023 detailing additional considerations and tactics to identify adverse impacts to drinking water wells. This guidance document has informed both the Kaweah Subbasin Mitigation Program Framework and the MKGSA Mitigation Plan.<sup>2</sup>

During the funding qualification assessment (Step 5 of Section 3), groundwater pumping in overdraft will need to be distinguished from seasonal and longer-term precipitation patterns (i.e. drought). These differences can be distinguished through an analysis of groundwater level hydrographs for representative monitoring wells in the vicinity of the claim of impact. Apart from clear cases of seasonal impact in wells with total depths shallower than 50 feet, the overriding conclusion from claims of impact in the MKGSA during periods when groundwater pumping exceeds the sustainable yield and where the impact is determined to be related to groundwater levels, will be that the impact is caused by MKGSA activities causing ongoing overdraft.

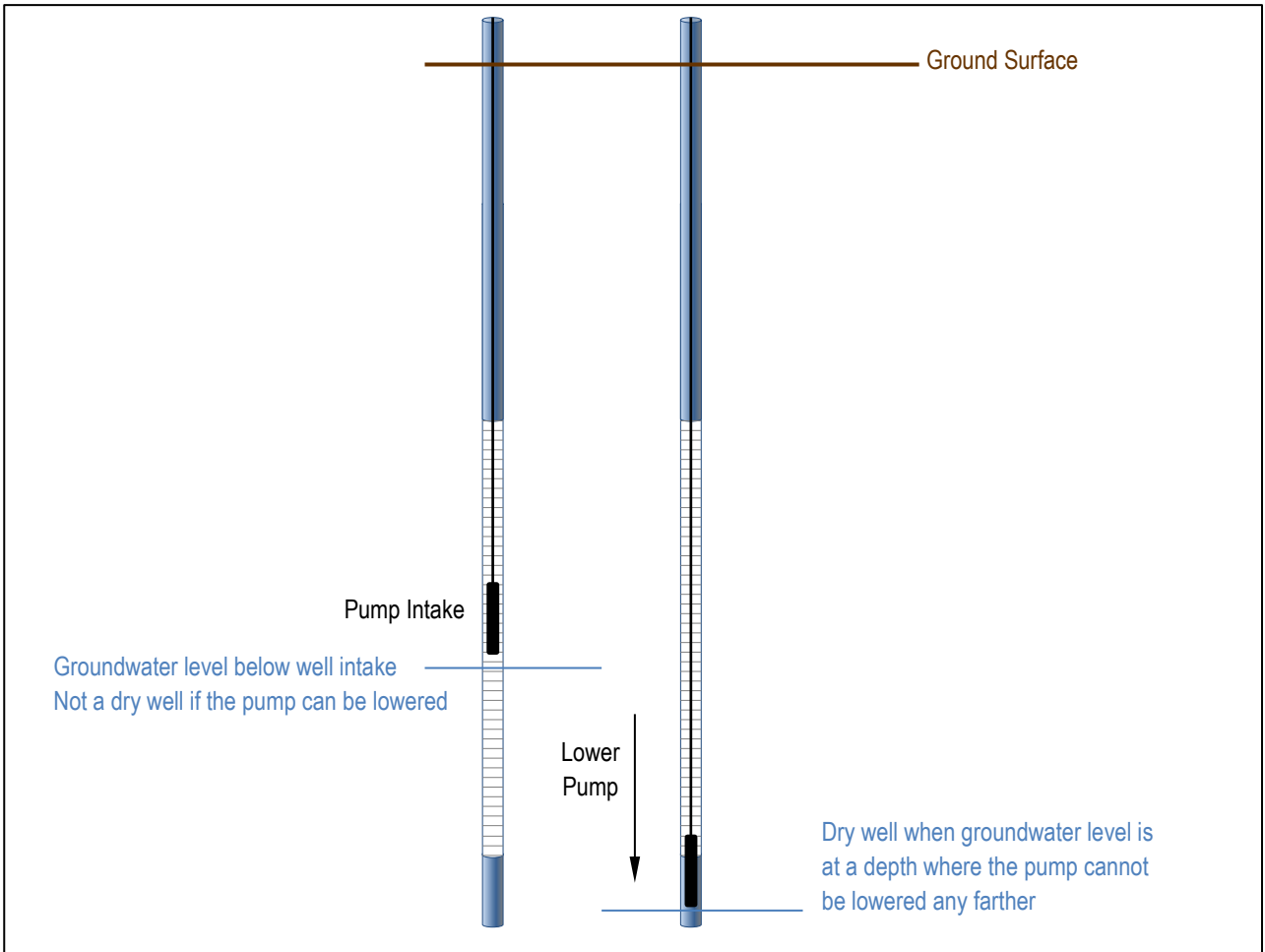
### 4.2 Subsidence Impacts

The most common subsidence-related impact to wells is well casing failure. Subsidence occurs when groundwater overdraft decreases pressure in subsurface clay layers, causing the clays to permanently collapse. Wells installed across subsiding clay layers are subject to compressive forces that can deform and eventually break well casing. Potential damage from subsidence shown on Figure 13 includes breaks or ruptures in casing, spiraling casing, ovaling or out of round casing, and rippling casing. A well can be destroyed by subsidence, but in some less severe cases the damage can be repaired. Often wells can be repaired by installing a sleeve to patch the damaged area, commonly called swaging.

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<sup>2</sup> DWR. March 2023. Considerations for Identifying and Addressing Drinking Water Well Impacts. [https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Files/Considerations-for-Identifying-and-Addressing-Drinking-Water-Well-Impacts\\_FINAL.pdf](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Files/Considerations-for-Identifying-and-Addressing-Drinking-Water-Well-Impacts_FINAL.pdf)





**Figure 12. Groundwater Levels Relative to Pump Intake and Bottom of Well**

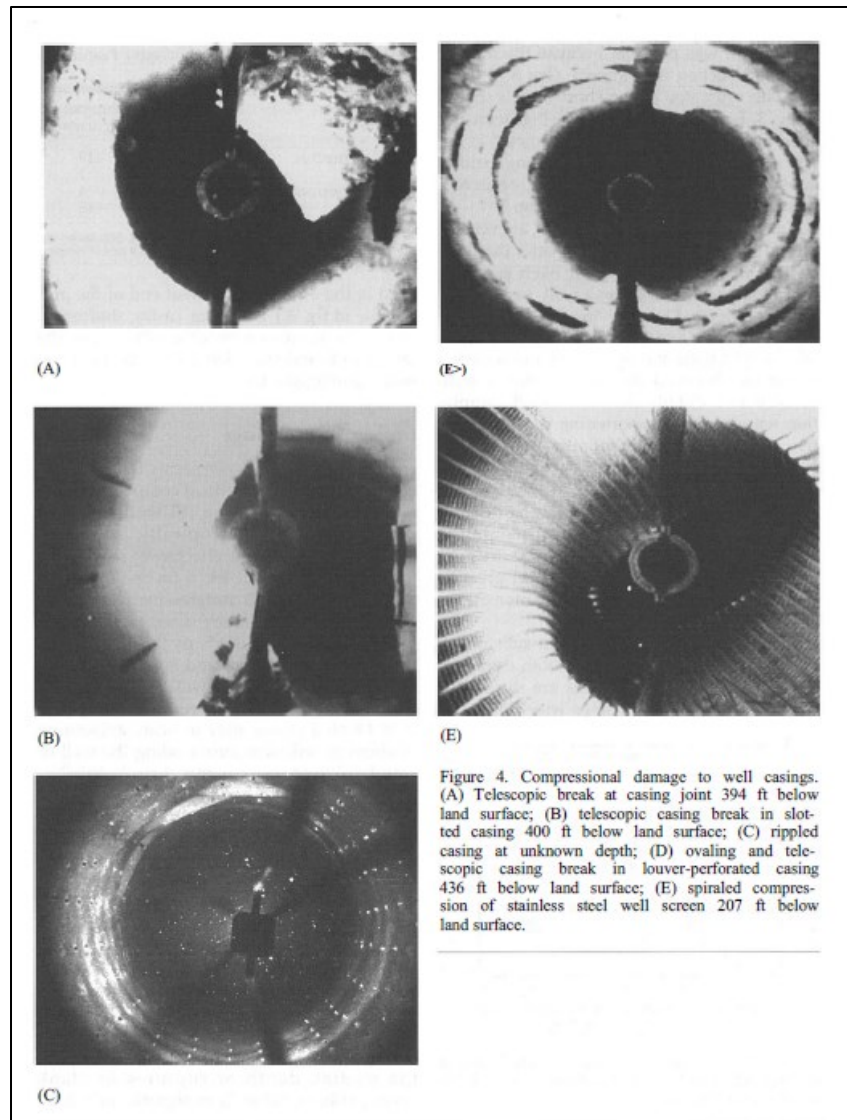


Figure 13. Well Damage Attributed to Subsidence (Borchers et al., 1998)

### 4.3 Groundwater Quality Impacts

While most groundwater in the MKGSA area meets drinking water standards, some groundwater can contain high concentrations of nitrate, arsenic, uranium, pesticides and other contaminants. Declining groundwater levels may cause degradation of groundwater quality by moving poorer quality water either vertically or horizontally towards water supply wells. In the Central Valley, there are reported cases of episodic groundwater quality degradation during drought where increased pumping draws shallow, contaminated groundwater down to depth zones tapped by long-screened production wells (Levy et al., 2021). Additionally, pumping may lower groundwater levels to the point where they may induce horizontal contaminant plume movement towards water supply wells, or intercept groundwater with elevated arsenic as pumps are lowered or wells are deepened. Water quality impacts are all health related and do not damage wells.

Nitrate is the most common groundwater quality constituent found at concentrations higher than regulatory standards in parts of the shallow aquifer. Nitrate application in fertilizer is widespread and it is also released from dairy operations and septic systems throughout the MKGSA. Shallow wells or wells with sanitary seals less than 250 feet tend to have higher nitrate concentrations. High nitrate concentrations can cause health problems for infants that results in a dangerous condition called methaemoglobinaemia, also known as “blue baby syndrome”. State primary drinking water standards are 10 mg/L for nitrate as nitrogen (N); 10 mg/L for nitrate plus nitrite as N; and 1 mg/L for nitrite as N.

Arsenic and uranium are naturally occurring constituents of concern found in the southern San Joaquin Valley’s deeper sediments.

- Arsenic at concentrations between 0.005 and 0.010 mg/L is more likely to occur in wells deeper than 250 feet (Burton, et al., 2012) and in wells below the Corcoran Clay. The drinking water standard for arsenic is 0.010 mg/L. Drinking water with arsenic above the drinking water standard is a known human carcinogen, and ingestion of arsenic has been reported to increase the risk of cancer in the liver, bladder, kidney, lungs, and skin.
- Generally found above the Corcoran Clay, Uranium may be elevated but generally does not exceed the drinking water standard of 20 pCi/L or 0.025 mg/L. Effects of uranium in drinking water above drinking water standards includes increased cancer risk and kidney damage.

In Visalia, there is a city-wide tetrachloroethylene (PCE) plume related to discharges associated with dry cleaning facilities. Cal Water and Department of Toxic Substances (DTSC) have worked together since 2007 to ensure nearby Cal Water wells do not spread the PCE plume. The drinking water standard for PCE is 0.005 mg/L. Long-term exposures in drinking water above the drinking water standard can cause adverse effects to the liver, kidneys, and central nervous system. Prolonged skin exposure can cause irritation, dryness, and dermatitis.

Contaminants of concern related to farming include dibromochloropropane (DBCP) and 1,2,3-Trichloropropane (TCP). Similar to nitrate, these constituents impact shallow aquifers since they are introduced into the ground by land application.

- DBCP is a banned nematicide that is still present in soils and groundwater due to runoff or leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit. If there are DBCP detections, they are typically below the drinking water standard of 0.0002 mg/L. Ingestion of DBCP results in gastrointestinal distress and pulmonary edema. Potential health effects from long-term exposure above the drinking water standard include reproductive difficulties and an increased risk of cancer.
- TCP in California’s Central Valley is believed to be from an impurity in certain 1,3-D soil fumigants used to kill nematodes. TCP is a highly stable compound, which makes it resistant to degradation. Its drinking water standard is 0.000005 mg/L and a known animal and probable human carcinogen.

## 5 Mitigation Funding and Anticipated Costs

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The MKGSA's financial model is designed to avoid making a profit, therefore, the MKGSA Board approved generating funding for the Mitigation Plan via groundwater extraction fees and surface water transfer fees. The funding mechanism is designed to generate over \$1.5 million per year dedicated to implementing the Mitigation Plan, with most of the funds being available before adoption of this Mitigation Plan. Due to early collections from groundwater pumping in 2022 and through 2023, the MKGSA has collected funds that have been approved to be placed into a Reserve Fund. Within the Reserve Fund is a category for Mitigation Cost Reserves. The Mitigation Cost Reserves have a target minimum level of \$1.55 million, which was determined from the Kaweah Subbasin Dry Well Susceptibility Analysis. The Mitigation Cost Reserves will be replenished annually by setting future annual allocations of groundwater to replenish the fund to the minimum target.

The Kaweah Subbasin Technical Team has performed a Dry Well Susceptibility Analysis which provided a conservative cost mitigation cost estimate under different drought scenarios. The mitigation cost estimates include costs to physically mitigate wells, emergency and interim supplies, SHE's administration of the program, GSAs' administration of the program, and contractor assistance during the assessment phase. MKGSA and the other Kaweah Subbasin GSAs' mitigation budgets are designed to be sufficient to address mitigation needs, independent of the positive projects and demand management changes that are being made and have been made, such as EKGSA and MKGSA setting groundwater allocations to sustainable yield. More information on this analysis will be available in the 2024 Amended GSP upon adoption.

In the event the costs to implement the Kaweah Subbasin Mitigation Program require revisions, the Kaweah Subbasin GSAs shall revisit their funding mechanisms and mitigation budgets to meet the mitigation commitments herein this Mitigation Plan. Alternatives may include raising groundwater extraction fees and/or a property-based tax.

The GSAs will explore grant funding at the state and federal levels. The state has many existing grant programs for community water systems and well construction funding; however, the state's SAFER funding is not permitted to be used for Mitigation Program implementation. County, state, and federal assistance may be needed to best maximize the Mitigation Program in conjunction with similar programs that sprout up from similar regulatory programs to SGMA, like CV-SALTS. The GSAs will also work with local non-governmental organizations (NGO) that may be able to aid or seek grant monies to assist Mitigation Program implementation.

## 6 References

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- Burton, C.A., Shelton, J.L., and Belitz, Kenneth, 2012, Status and understanding of groundwater quality in the two southern San Joaquin Valley study units, 2005–2006—California GAMA Priority Basin Project: U.S. Geological Survey Scientific Investigations Report 2011–5218, 150 p.  
<https://pubs.usgs.gov/sir/2011/5218/pdf/sir20115218.pdf>
- DWR. March 2023. Considerations for Identifying and Addressing Drinking Water Well Impacts.  
[https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Files/Considerations-for-Identifying-and-Addressing-Drinking-Water-Well-Impacts\\_FINAL.pdf](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Files/Considerations-for-Identifying-and-Addressing-Drinking-Water-Well-Impacts_FINAL.pdf)
- Levy, Z. F., Jurgens, B. C., Burow, K. R., Voss, S. A., Faulkner, K. E., Arroyo-Lopez, J. A., & Fram, M. S. 2021. Critical aquifer overdraft accelerates degradation of groundwater quality in California's Central Valley during drought. *Geophysical Research Letters*, 48, e2021GL094398.  
<https://doi.org/10.1029/2021GL094398>

# Attachment A

## Small Community Well Proactive & Protective Action Program (PPAP)

*A new Subbasin-wide management action developed in conjunction with the Mitigation Program.*

**Management Action Description and Schedule 354.44(b)(4)**

Small community wells/systems identified as being at-risk by the State Water Resources Control Board's metrics for small community wells will receive proactive mitigation via the Small Community Well Proactive & Protective Action Program.

Interim and emergency supplies are available for community wells that serve a max of 300-connections. This limit is based on the State Water Resources Control Board's contract with the existing mitigation service agency within the San Joaquin Valley. This limit was based on the feasibility capabilities of local water supply deliveries and the extent to which federal support is needed. The GSAs have goal to avoid impacts to these small community wells and after consultations with local community well mitigation providers, it was determined the most effective and helpful mitigation for small community wells is to avoid the need for mitigation altogether. That said, the GSAs intend to avoid impacts to these community wells through a series of site-specific proactive measures, which may include but are not limited to the options listed below. The proactive measure(s) implemented will vary on a case-by-case basis.

- 1) Assess what next steps are needed to avoid or mitigate impacts to support Contingency Plan development and/or improvement
- 2) Develop or support development of Preliminary Engineer Reports for small community wells that have been stuck with lack of funding or resources to take the next steps in their own contingency plans
- 3) Implement groundwater pumping restriction policies near at-risk community wells
- 4) Host Financial Empowerment Workshops to map out long-term planning for resiliency and maintenance, with a focus on prioritizing future access to affordable drinking water
- 5) Support grant writing and cost-share, when funding and opportunities allow
- 6) Consider additional technical assistance that meets the unique needs of the at-risk small community well.

Although the claims process is designed more for private domestic and multi-use drinking water well owners, community well owners may still notify Self-Help Enterprises in the event of potential impacts to their well.

This process will establish continued trust-building with the leaders within these at-risk communities. Before proactive technical assistance/mitigation is underway, the GSAs are committed to meeting with community leaders to understand their unique challenges to map out the best strategy for contingency plans and supplemental assistance.

More information on the schedule and approach of the PPAP is available in Figure A-1.

# Small Community Well Protective & Protective Action Program

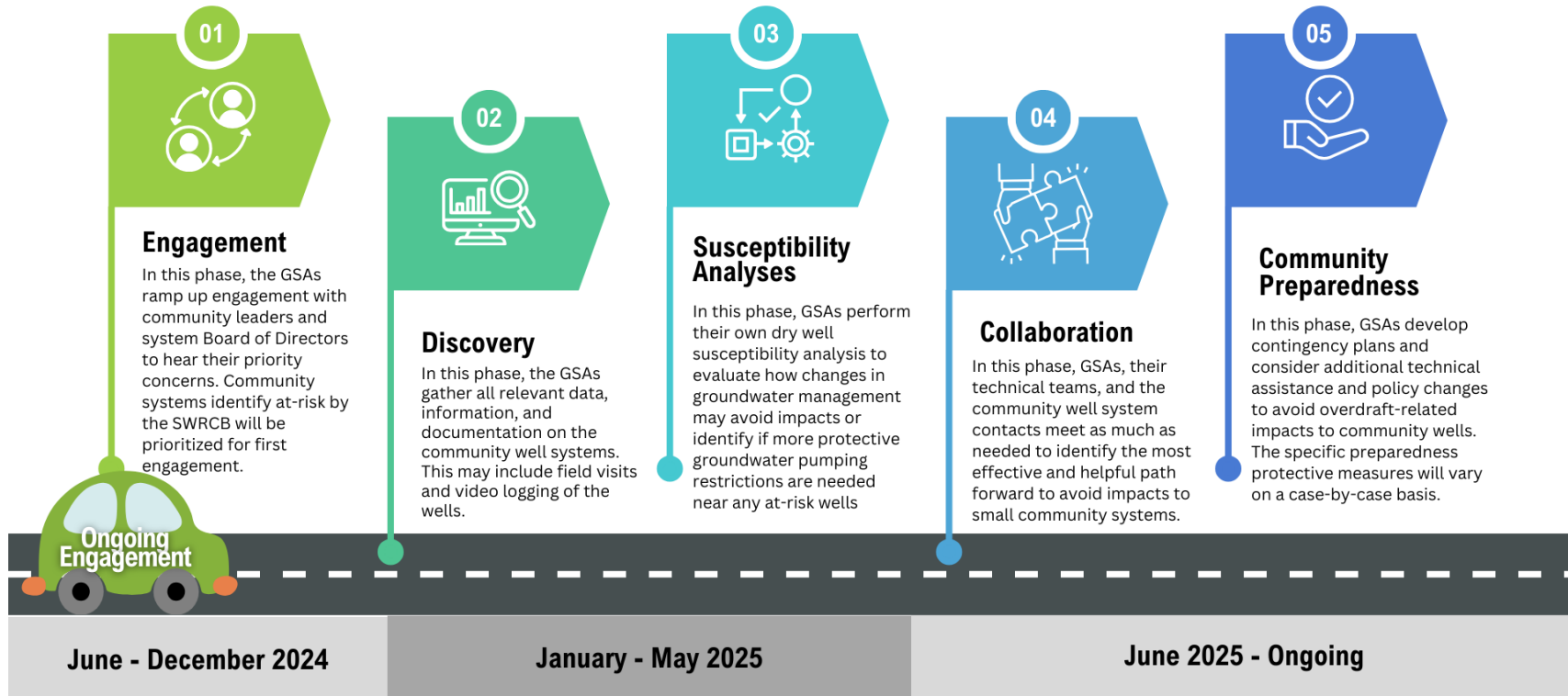


Figure A-1. Small Community Well Proactive & Protective Action Program (PPAP) Approach and Schedule



**Measurable Objectives Addressed 354.44(b)(1)**

This management action will directly address the impacts of chronic lowering of groundwater levels, reduced groundwater in storage, groundwater quality, and land subsidence caused by lowered groundwater levels by providing strategies to avoid impacts to small community wells and identify next steps to confirm their sustainability and resiliency.

**Circumstances and Criteria for Implementation 354.44(b)(1)(A)**

This is a high-priority management action needed to maintain access to a water supply that meets basic health and safety needs by mitigating impacts of declining water levels, land subsidence, and groundwater quality induced by pumping-influenced water level changes. Declining groundwater levels created by allowable overdraft during the implementation phase of the GSPs may induce unintended groundwater quality impacts. Therefore, the Kaweah Subbasin GSAs are committed to taking protective, proactive measures to avoid the need for mitigation of the small community water systems.

**Process to Provide Notice of Implementation 354.44(b)(1)(B)**

The public and relevant entities must be given the opportunity and time to comment on the Program prior to adoption by the GSA. Opportunities to comment will be made available at stakeholder advisory committee meetings, Amended GSP public comment period, and at GSA Board Meetings.

**Estimated Annual Program Benefits 354.44(b)(2)**

This management action is designed to provide the following benefits for small community water systems:

- Improved risk management and planning
- Reduced risk of experience impacts related to:
  - reduction in groundwater storage<sup>1</sup>;
  - chronic lowering of groundwater levels<sup>1</sup>;
  - land subsidence<sup>1</sup>; and
  - degraded water quality<sup>1</sup>

<sup>1</sup>induced by chronic lowering of groundwater levels (via overdraft during GSP implementation)

**Permitting and Regulatory Requirements 354.44(b)(3)**

The GSA will confirm with the Claimant that any mitigation efforts that are non-exempt from California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) requirements will comply with CEQA and NEPA prior to approval and issuance of mitigation assistance. New wells must comply with the Tulare County well permitting process.

**Evaluation of Benefits 354.44(b)(5)**

SGMA required annual reporting provides the GSAs the opportunity to review progress on this management action and regularly assess if the risk status of the Subbasin's small community wells' changes.

**How will the Project be accomplished and what is the water source? 354.44(b)(6)**

The Mitigation Program is not reliant on securing new groundwater or surface water sources. Figure A-1 details the phases to accomplish this management action.

**Legal Authority 354.44(b)(7)**

California Water Code Section 10725.2 provides the GSA has the powers and authorities “perform any act necessary or proper” to implement SGMA regulations and allows the GSA to adopt rules, regulations, ordinances, and resolutions necessary for SGMA implementation. (23 CCR §355.4(b)(6).)

**Program Cost 354.44(b)(8)**

The program cost is still unknown; however, it is projected to be within existing technical consultant contracts if projected into the future following GSP Amendment submittals.

**Funding Source 354.44(b)(8)**

The primary source of funding for the Mitigation Program is through GSA fees. The same funding source is used to fund outreach and technical consultant costs associated with GSA administration and GSP implementation.

**Management of Groundwater Extractions and Recharge 354.44(b)(9)**

This management action may provide critical insight into allocation decisions and groundwater recharge needs across the GSA. The primary path towards sustainability in the Kaweah Subbasin is founded on significant improvements in demand management via allocation revisions and projects and management actions. This management action may provide insights on where to prioritize demand management to avoid impacts on small community water systems.

**Level of Uncertainty 354.44(d)**

The GSAs are committed to this management action component of the Kaweah Subbasin Mitigation Program. As this management action will be the first of its kind in the region, there is considerable uncertainty associated with budget, schedule, and available data and information. The GSAs have experience developing methods of navigating uncertainty, such as sensitivity analyses and adapting schedules and budget priorities to achieve sustainability initiatives. The schedule and budget are subject to change as additional information and experience are gained through development and implementation.

# Attachment B

Technical Assistance Claim Application for Non-Drinking Water Wells and Critical Infrastructure

## Kaweah Subbasin Technical Assistance Claim Application

*If you are unsure of which GSA your claim is in, contact any of the Kaweah Subbasin GSAs via number and email listed on their websites and they can assist you in identifying. If you are unsure of how to answer any questions, please leave blank and this can be further discussed during a meeting with GSA staff.*

*Please circle which GSA your impact claim applies:*

East Kaweah GSA

Mid-Kaweah GSA

Greater Kaweah GSA

Claimant Name: \_\_\_\_\_

Claimant Contact Information: \_\_\_\_\_

*Are you the landowner of the property in which this Claim Application applies?*

Yes    No

If no, please provide the name and contact information of the landowner and the GSA shall contact the landowner to notify of the need for their participation in the Claim process.

Landowner Name: \_\_\_\_\_

Landowner Contact Information: \_\_\_\_\_

*As the Claimant, will you allow physical access to the adversely impacted well (or critical infrastructure for the GSA staff or authorized case worker to perform a field assessment?)*

Yes    No

Please attach available documentation for the well (for example the State Department of Water Resources Driller's Log, other well construction information, pump depth, groundwater level, or other information).

*Please describe the nature of your well or critical infrastructure impact:*

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## Kaweah Subbasin Technical Assistance Claim Application *to be completed with GSA staff*

*This portion of the claim application is to be completed with GSA staff during the Data and Information Request Meeting. Please gather all potentially relevant data and information related to your Claim in advance of the meeting with GSA staff to support your Claim. This may include level data, well construction, driller information, and water quality reports for wells and design and construction documentation for critical infrastructure.*

### Claimant information:

Date: \_\_\_\_\_

First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_ Middle Initial: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ Zip: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Phone # Home: \_\_\_\_\_ Cell: \_\_\_\_\_

Email: \_\_\_\_\_ Text Ok? Yes No

Accessors Parcel Number: \_\_\_\_\_

Does the impacted well or critical infrastructure support access to safe drinking water? Yes No  
If yes, explain: \_\_\_\_\_

### Impacted Non-Drinking Water Well Information

*This section of the application shall be completed with GSA staff during the initial meeting. If making a claim regarding critical infrastructure, please skip this section and proceed to the "Critical Infrastructure Information" section. The Kaweah Subbasin Mitigation Program does not require GSAs to mitigate for critical infrastructure and/or non-drinking water wells until June 30, 2025.*

**Please circle response:**

Impacted Well's Use	Monitoring	Agricultural	Municipal/Industrial	
Shared Well?:	Yes	No	Unsure	
Shared Well Agreement?:	Yes	No	Unsure	
Well Water Source:	Aquifer	Spring	Other	_____
Units Connected to Well:	1	2	3+	

**Please provide as much of the following documentation as is available:**

*Provide all the information that you have. Ask neighbors and family that might know. More information helps the Claims process and not information might stall or disqualify the Claim.*

- Well completion report (well drillers log)
- Well design documentation
- Water level records
- Water quality records and/or laboratory/test reports
- Photographs
- Well maintenance records
- Well driller name and contact information
- Well pump contractor and contact information
- Documentation from neighboring wells' construction, operations, and maintenance

**Please fill out the following information to the best to your ability. Additional information may be requested and/or a site visit may be requested by the GSA:**

When was the well drilled?	
When was water first pumped from the well?	
When did the pump stop working?	
Depth of well	
Depth and length of well screen	
Size of pump (horsepower (HP))	
Depth of pump in well	
Can the pump be fixed?	
Has the pump been removed from the well?	
When was the well last worked on by a pump contractor? What did they work on?	
Has the well been abandoned? If so, why?	
Does the well have a pump saver? <i>A pump saver is a PVC sleeve with slots on the lower end to allow water to enter while keeping sand particulate out.</i>	
How much water should this well be pumping?	
How much water has the well been pumping recently? (note units including daily or monthly)	
Has the well experienced water quality issues? Describe the issue and when it started	
Have neighboring wells experienced water quality issues? Describe the issue and when it started.	
Is the well located near septic tanks? If so, please provide the distance between well and septic tank and/or leaching field.	

# Well Site Map Sketch

**Include in sketch:**

- Property boundaries
- Septic Tank/Leach Lines

*Annotated photos or aerial images of the property may be used in place of a sketch.*

***Please also attach photos of the impacted well and pump.***

*Mark the well impacted and any other wells on the property.*

- Structures
- Cross Streets/Roads
- Fences/Gates
- Access
- North Arrow
- Pools/Ponds
- Driveways
- Trees
- Power Poles/Lines
- Existing Wells
- Neighboring Homes/Properties (left, right, across)



- Distance of Connection(s) if known
- Dogs/Animals on the Property

**Impacted Critical Infrastructure Information**

*This section of the Claim Application shall be completed with GSA staff during initial meeting. If making a claim regarding a well, please skip this section and ensure the "Well Information" section is completed. The Kaweah Subbasin Mitigation Program Framework does not require GSAs to mitigate for critical infrastructure until June 30, 2025.*

**Please circle response:**

Infrastructure Type	canal	road	pipeline	ditch	Other
If other, please explain:	_____				
Privately Owned?	Yes	No	Unsure		

**Please provide as much of the following documentation as is available:**

*Provide all the information that you have. Ask neighbors and family that might know. More information helps the Claims process and not information might stall or disqualify the Claim.*

- Infrastructure design documentation
- Photographs
- Operation and maintenance records
- Documentation from neighboring infrastructure's construction, operations, and maintenance
- Any permits relevant to the parcel and/or infrastructure

**Please fill out the following information to the best to your ability. Additional information may be requested and/or a site visit may be requested by the GSA:**

When was the infrastructure constructed?	
When did the infrastructure become operational?	
When did the infrastructure stop working??	
When was the last modification to the infrastructure made? What was the modification?	
Have neighboring infrastructure experienced subsidence related issues? If so, when?	

## Impacted Critical Infrastructure Site Map Sketch

Include in sketch:

- Dogs/Animals on the Property
- Property boundaries
- Structures
- All Known Water Conveyance Infrastructure (above and below ground)
- All Known Water Storage Infrastructure
- Cross Streets/Roads
- Fences/Gates
- Access
- North Arrow
- Pools/Ponds
- Septic Tank/Leach Lines
- Driveways
- Trees
- Power Poles/Lines
- Existing Wells
- Neighboring Homes/Properties (left, right, across)

*Annotated photos or aerial images of the property may be used in place of a sketch.*

# Attachment C

## Claims Process – Assessment Phase

Claims Process - Assessment Phase

*This process applies for (1) chronic lowering of groundwater levels, (2) land subsidence, and (3) degraded water quality*

**IMPACT ASSESSMENT**

GSA to perform desktop assessment:

Claims related to chronic lowering of groundwater levels	Claims related to degraded water quality	Claims related to land subsidence
<p><b>GSA to review:</b>                      Historic static groundwater levels                      Historic pumping groundwater levels                      Well operation and maintenance history                      Well construction history                      Historic monthly production volume                      Potential for consolidation to public water system                      Nearby historic land and water use                      Depth to bedrock                      Nearby conjunctive use activity                      Well depth, perforated intervals, pump depth</p>	<p><b>GSA to review:</b>                      Historic groundwater quality at well                      Historic groundwater quality at nearby wells                      Historic static groundwater levels                      Historic pumping groundwater levels                      Well operation and maintenance history                      Well construction history                      Historic monthly production volume                      Potential for consolidation                      Nearby historic land and water use                      Depth to bedrock                      Nearby conjunctive use activity                      Well depth, perforated intervals, pump depth</p>	<p><b>GSA to review:</b>                      Historic InSAR data                      Historic static groundwater levels                      Historic pumping groundwater levels                      Operation and maintenance history                      Construction history                      Historic monthly capacity                      Potential for consolidation                      Nearby historic land and water use                      Depth to bedrock                      Nearby conjunctive use activity                      Well depth, perforated intervals, pump depth                      Photos of physical damage</p>

GSA to perform field assessment:

<p><b>GSA may perform the following:</b>                      (1) Pull pump and measure pump intake depth, well bottom, static water level.                      (2) Modify wellhead to install sounding port to measure static and pumping level.                      (3) Modify wellhead to install flowmeter                      (4) Conduct video log                      (5) Investigate site to inform estimated water demand                      (6) Investigate nearby land and water use                      (7) Investigate site for consolidation feasibility</p>	<p><b>GSA may perform the following:</b>                      (1) Pull pump and measure pump intake depth, well bottom, static water level.                      (2) Modify wellhead to install sounding port to measure static and pumping level.                      (3) Modify wellhead to install flowmeter                      (4) Conduct video log                      (5) Collect water quality samples at Claimants well                      (6) Collect water quality samples at wells nearby impacted well                      (7) investigate site for consolidation feasibility                      (8) Investigate site and nearby land use</p>	<p><b>GSA to investigate:</b>                      (1) Evidence of ground fissures consistent with subsidence                      (2) Visible casing collapse, damage, or protrusion attributable to subsidence.</p> <p><b>For well claims, GSA may perform the following:</b>                      (1) Pull pump and measure pump intake depth, well bottom, static water level.                      (2) Modify wellhead to install sounding port to measure static and pumping level.                      (3) Modify wellhead to install flowmeter                      (4) Conduct video log</p>
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GSA may request additional data and information. GSA may reach out to original driller or design engineer to confirm information provided.

**Mitigation Claim proceeds to Qualification phase.**

# Attachment D

## Technical Assistance and Indemnification Agreement

Kaweah Subbasin Technical Assistance and Indemnification Agreement

The undersigned (“the Claimant”) having been awarded funding to support technical assistance by \_\_\_\_\_ Groundwater Sustainability Agency of the Kaweah Subbasin (“the GSA”) hereby agrees as follows:

1. The Claimant will indemnify and hold harmless the GSA, its Board of Directors, Staff, Consultant Staff, Advisory Committee Members, Technical Advisory Committee Members, Offices, Third-Party Facilitators from any and all claims, suits, actions, and liability of any character arising or alleged to arise, out of injuries or damages sustained by any person, persons, or property on account of the Claimant’s act or omission, neglect, or misconduct, or in violation of any law, ordinance, or regulation, which was caused to occur during the Claimant’s mitigation development or implementation.
2. The GSA shall not be liable to the Claimant’s staff or guests for any injury incurred while on the property in which mitigation will take place.
3. The Claimant is responsible for paying all taxes owed for income or property value the Claimant receives as a result of the mitigation measure.
4. The GSA is awarding the Claimant funding for the following technical assistance activities:

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Name of Claimant

\_\_\_\_\_  
Signature of Claimant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name of GSA General Manager

\_\_\_\_\_  
Signature of GSA General Manager

\_\_\_\_\_  
Date