

# Public Review Draft

## Mitigation Plan to Address Groundwater Levels, Land Subsidence and Groundwater Quality Impacts

Version 1.0

*Prepared for:*



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GROUNDWATER SUSTAINABILITY AGENCY

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## Attachments

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- Attachment A. EKGSA Mitigation Claim Application
- Attachment B. EKGSA Mitigation and Indemnification Agreement Template



## 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
ft	Feet
gpm	gallons per minute
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
KWF	Kaweah Water Foundation
M&I	Municipal and Industrial
MO	Measurable Objective
MT	Minimum Threshold
SAFER	Safe and Affordable Funding for Equity and Resilience
SHE	Self-Help Enterprises
SGMA	Sustainable Groundwater Management Act
Subbasin	Kaweah Groundwater Subbasin
SWRCB	State Water Resources Control Board



# 1 Introduction

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## 1.1 Sustainable Groundwater Management Act Background

On September 16, 2014, Governor Jerry Brown signed into law a three-bill legislative package, composed of AB 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley), collectively known as the Sustainable Groundwater Management Act (SGMA) and is codified in Section 10720 et seq. of the California Water Code. In his signing statement, Governor Edmund G. Brown, Jr., emphasized that “groundwater management in California is best accomplished locally.” This legislation created a statutory framework for groundwater management in a manner that can be sustained during the planning and implementation horizon without causing undesirable results.

SGMA requires governments and water agencies of high and medium priority basins to achieve sustainability by avoiding undesirable results. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically over-drafted basins, including the Kaweah Subbasin to which the East Kaweah Groundwater Sustainability Agency (EKGSA) is a portion, the deadline for achieving sustainability is 2040.

In order to comply with the requirements of SGMA, the EKGSA and the two other Kaweah Subbasin Groundwater Sustainability Agencies (GSAs) have prepared a groundwater sustainability plan (GSP) The GSP serves to do the following:

- *Describe the basin setting (Hydrogeologic Conceptual Model) to define and describe the geographic and geologic setting of the East Kaweah Groundwater Sustainability Agency (EKGSA) boundaries*
- *Identify and describe the Sustainability Goal for the Kaweah Subbasin and the EKGSA area.*
- *Identify and describe the Six Undesirable Results set forth in SGMA, as they pertain to the Kaweah Sub-Basin and the EKGSA jurisdictional area.*
- *Identify and describe the Specific Minimum Thresholds and Measurable Objectives required for the EKGSA to achieve the Sustainability Goal*
- *Define and identify Projects and Management Actions proposed by EKGSA to achieve the Sustainability Goal.*

(EKGSA GSP, page 1-1)

## 1.2 East Kaweah Groundwater Sustainability Agency Background

The EKGSA is made up of seven participating member agencies including County of Tulare, City of Lindsay, and several irrigation districts. Of these agencies the County of Tulare and the City of Lindsay are the only member agencies with direct land use planning authority. However, all the member agencies have an interest in land use planning policies, and how it will impact their continued development and water supplies.

EKGSA covers approximately 117,300 acres. Beneficial users within the plan area were identified by the Advisory Committee during the development of the Communication and Engagement Plan. These users



are described in detail in Section 1.5.2 of Chapter 1. There are approximately 1,680 wells within the EKGSA boundary, based on information available from the Well Completion Report (WCR) database. In the EKGSA and Kaweah Subbasin, the primary surface water sources for groundwater replenishment include precipitation, Kaweah River flows, and San Joaquin River water via Friant CVP contracts. Average annual precipitation is 7 to 13 inches, increasing eastward. The EKGSA goals are to develop several recharge, storage, conservation, and/or water recycling projects utilizing these supplies (EKGSA GSP, page ES-1).

As part of the effort to consider interests of all beneficial uses and users of groundwater, the EKGSA formed two committees, a Technical Advisory Committee (TAC) and an Advisory Committee (AC), to assist in developing policy and giving guidance from technical, social, and impacted party perspectives. The EKGSA is led by an Executive Director (ED) under the direction of the EKGSA Board of Directors. The ED's role is to coordinate all the Board provided resources toward developing and implementing a GSP with the intention of achieving goals of SGMA by the year 2040 (EKGSA GSP, page ES-2)

The EKGSA is located on the eastern side of the Kaweah Subbasin and covers approximately one quarter of the Subbasin acreage. It is made up of two areas bisected by the Kaweah River. The unconsolidated sediments of the EKGSA form a single unconfined aquifer. Four different geomorphic regions are delineated in order to relate wells of similar hydrology. The major land use in the EKGSA is agriculture. (EKGSA GSP, page ES-2).

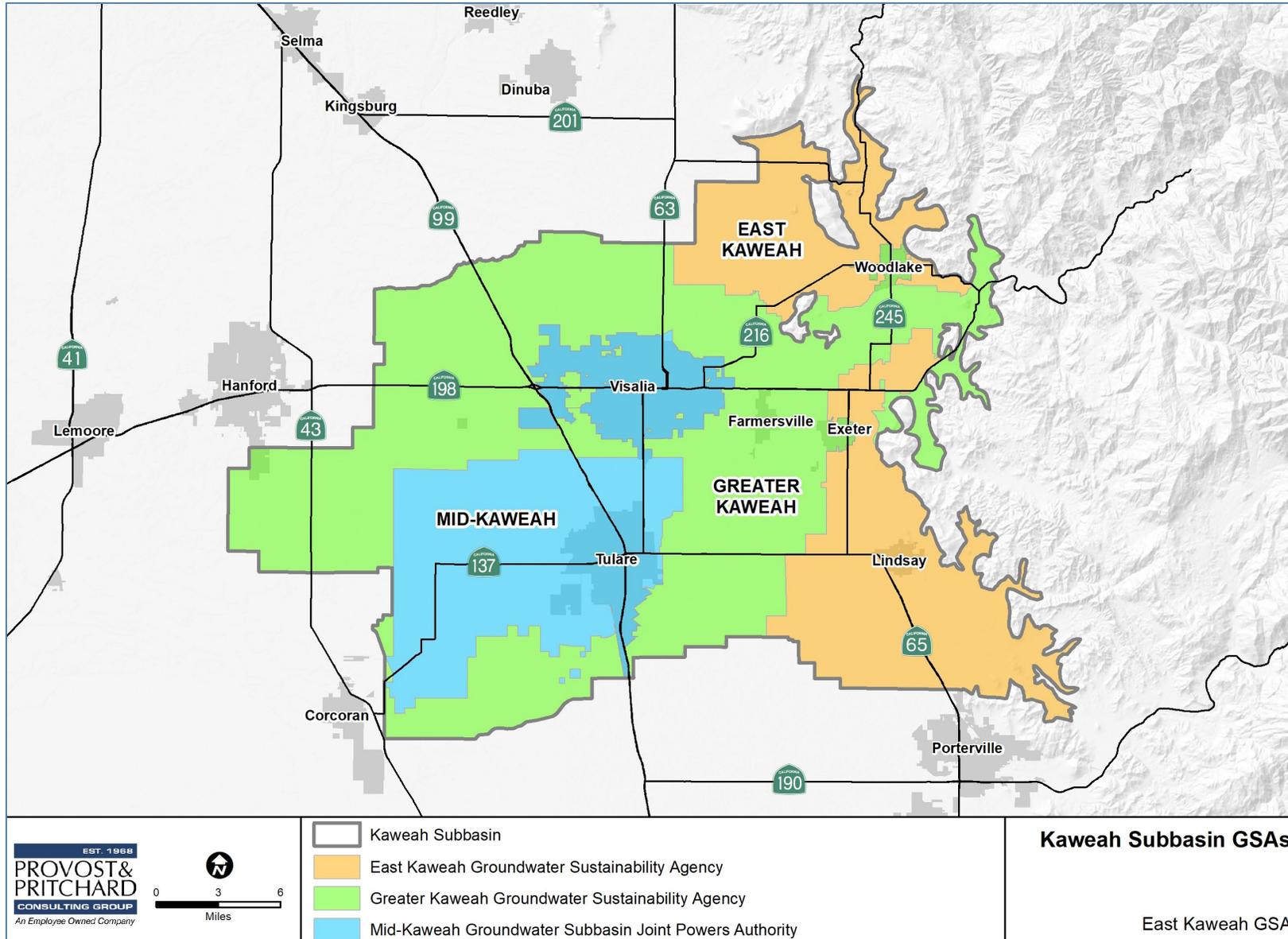


Figure 1. East Kaweah Groundwater Sustainability Agency Boundary within the Kaweah Subbasin



### 1.3 Mitigation Plan Purpose

The Kaweah Subbasin has been in overdraft for many years, resulting in significantly lowered regional and local groundwater levels. The EKGSA GSP includes projects and management actions that allow for the Subbasin to reach sustainability by 2040 and beyond. However, until sustainability is achieved, continued groundwater level declines and land subsidence is expected in areas of the Subbasin.

The purpose of the EKGSA Mitigation Plan (Plan) is to mitigate adverse impacts on wells and critical infrastructure adversely affected by declining groundwater levels, land subsidence, and degraded groundwater quality caused while EKGSA is implementing its GSP.

Recognizing the importance of mitigation, the three Kaweah Subbasin GSAs committed to a Mitigation Program Framework that has been revised concurrently with the Plan development. The original iteration of the Program Framework was included Appendix 6 of the Kaweah Subbasin Coordination Agreement contained in the 2022 Amended EKGSA GSP (July 2022). The revised Mitigation Framework coordinates the development of individual GSA mitigation Plans with details on the Mitigation Program and Plans' processes, requirements, schedule, and funding opportunities.

The 2023 Mitigation Program Framework allows for each GSA to elect which wells use types may be considered for mitigation qualification, in addition to electing inclusion of critical infrastructure. EKGSA has elected to include all well types and critical infrastructure to be considered for mitigation qualification. A description of the unique vulnerabilities of each is detailed below.

### 1.4 Coordination 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). 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 the development of this Mitigation Program Framework. The Kaweah Subbasin GSAs were advised to utilize existing services rather than interfere by developing competing programs. Therefore, the Kaweah Subbasin GSA's, including EKGSA, will identify Claimants that qualify for these existing programs' mitigation services during the pre-qualification phase, and coordinate with the Claimant and KWF and/or SHE.

KWF and SHE do not have stringent criteria for those in need of immediate, interim drinking water supply. SHE requires the affected household(s) to be below 80% of California's median household income to qualify<sup>1</sup> for long-term mitigation support.

Claimants (within EKGSA) who have lost access to drinking water that do not qualify for mitigation support from existing programs may qualify for GSA-funded mitigation through the EKGSA Mitigation Plan.

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<sup>1</sup> MHI may change overtime. 80% of the state's MHI as of June 2023 is \$67,278 for a household of four. [https://www.waterboards.ca.gov/drinking\\_water/services/funding/documents/srf/mhi.pdf](https://www.waterboards.ca.gov/drinking_water/services/funding/documents/srf/mhi.pdf)



## 1.5 Drinking Water Well Vulnerabilities

Where available from well permit information, the average depths of domestic wells are shown on **Figure 2**. Domestic drinking water wells in the EKGSA are drilled to a depth more shallow than agricultural production wells, on average. Shallower wells are more vulnerable to chronically declining water levels; therefore, the Kaweah Subbasin required drinking water wells to be a requirement of all the Subbasin's Mitigation Plans.

The lack of location, construction, and production data from domestic wells across the Subbasin serves as a primary challenge in predicting adverse impacts to domestic wells. Well data available to the EKGSA is from the California Department of Water Resources (DWR) Well Completion Report (WCR) dataset. The WCR 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. It is acknowledged that not all existing and active drinking water wells may be documented in available resources from DWR. To be able to better identify all drinking water wells, the Mitigation Program includes a commitment to implement a Well Registration Program by June 30, 2024 in conjunction with ongoing outreach within the GSA's communities. Mitigation Program and EKGSA's focused outreach is described in **Section 3.2**.

In addition to outreach, the Kaweah Subbasin GSAs are in the process of developing a Well Registration Program with the aim of addressing this niche data gap. More information on that is described in **Section 3.4**.

## 1.6 Agricultural (Ag) Water Well Vulnerabilities

The agricultural wells in the Kaweah Subbasin are often drilled deeper than domestic wells; however, the unique geomorphology of the EKGSA creates a shallow depth to bedrock for the eastern half of the GSA. As a result, many of the EKGSA agriculture wells are drilled much shallower than the western portion of the Subbasin, with less aquifer storage capacity (**Figure 3**). Considering subsidence has not historically been an issue in the EKGSA with the Corcoran Clay tapering before entering the GSA boundary, the greatest vulnerability to the GSA's agricultural wells may be linked to the chronic lowering of groundwater levels. However, interbedded clays have been documented within the western portion of EKGSA. Therefore, as a precautionary measure and in alignment with Kaweah Subbasin Mitigation Program Framework requirements, the GSA has included subsidence related adverse impacts to wells as a possible need for mitigation in this Plan. Average depths of agricultural wells are depicted in **Figure 3**.

## 1.7 Municipal and Industrial (M&I) Well Vulnerabilities

The conditions that induce vulnerabilities for both drinking water wells and agricultural wells are comparable to the vulnerabilities for M&I wells. Vulnerability of wells to allowable overdraft is most strongly correlated with a well's depth. Wells drilled shallower are more vulnerable to the adverse impacts of the groundwater conditions associated with allowable overdraft. Average depth of public supply wells is depicted in **Figure 4**.



## 1.8 Critical Infrastructure Vulnerabilities

The greatest vulnerability to critical infrastructure within the Kaweah Subbasin includes subsidence induced structural damage that may impair function and, in some cases, increase flood risk. The EKGSA has not historically experienced significant subsidence, due to the Corcoran Clay's extent tapering before the EKGSA boundary; however, interbedded clays are being studied throughout the Subbasin and may contribute to subsidence induced adverse impacts to critical infrastructure in EKGSA. Therefore, critical infrastructure has been included in this Plan.

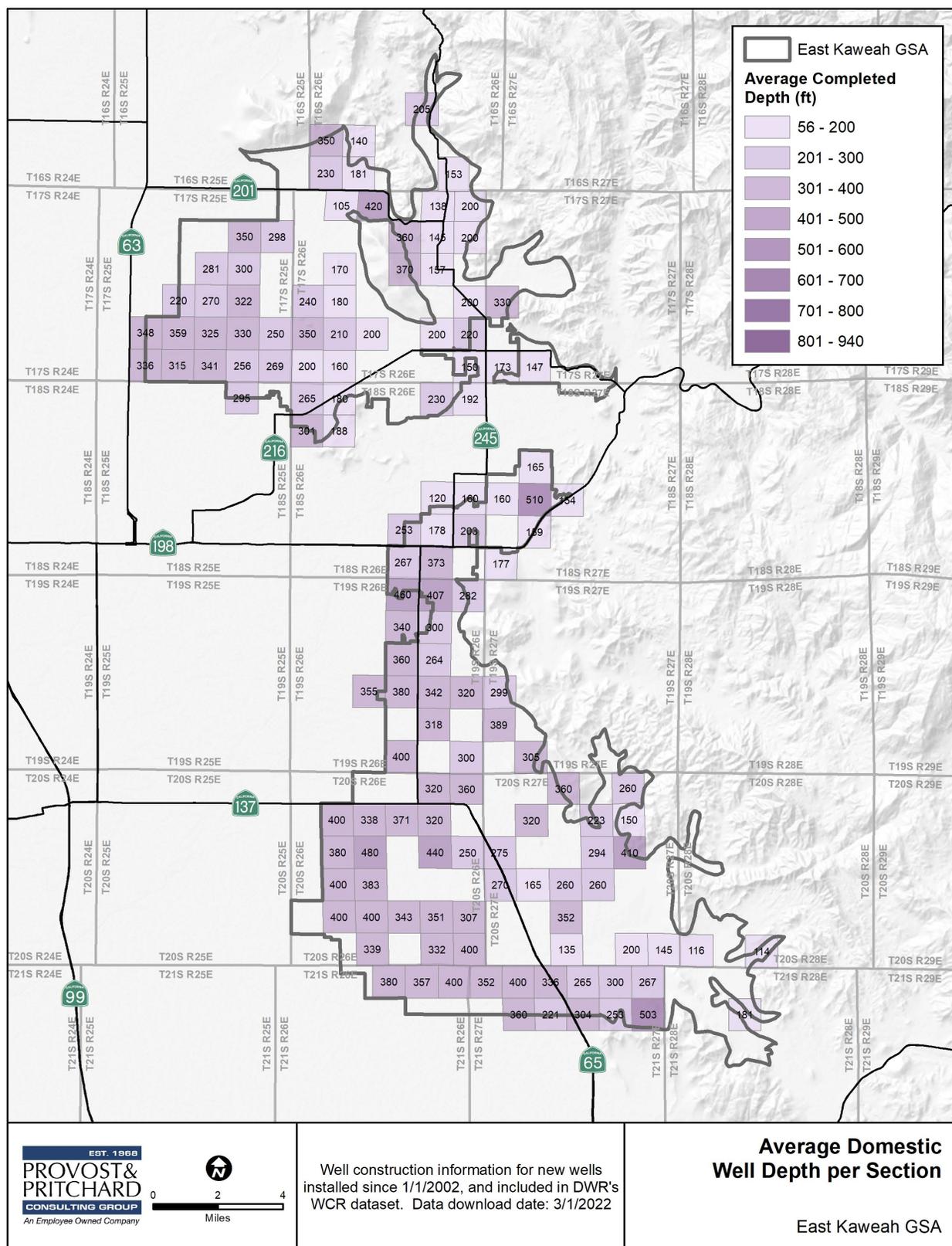


Figure 2. Average Depth of Domestic Wells in EKGSA

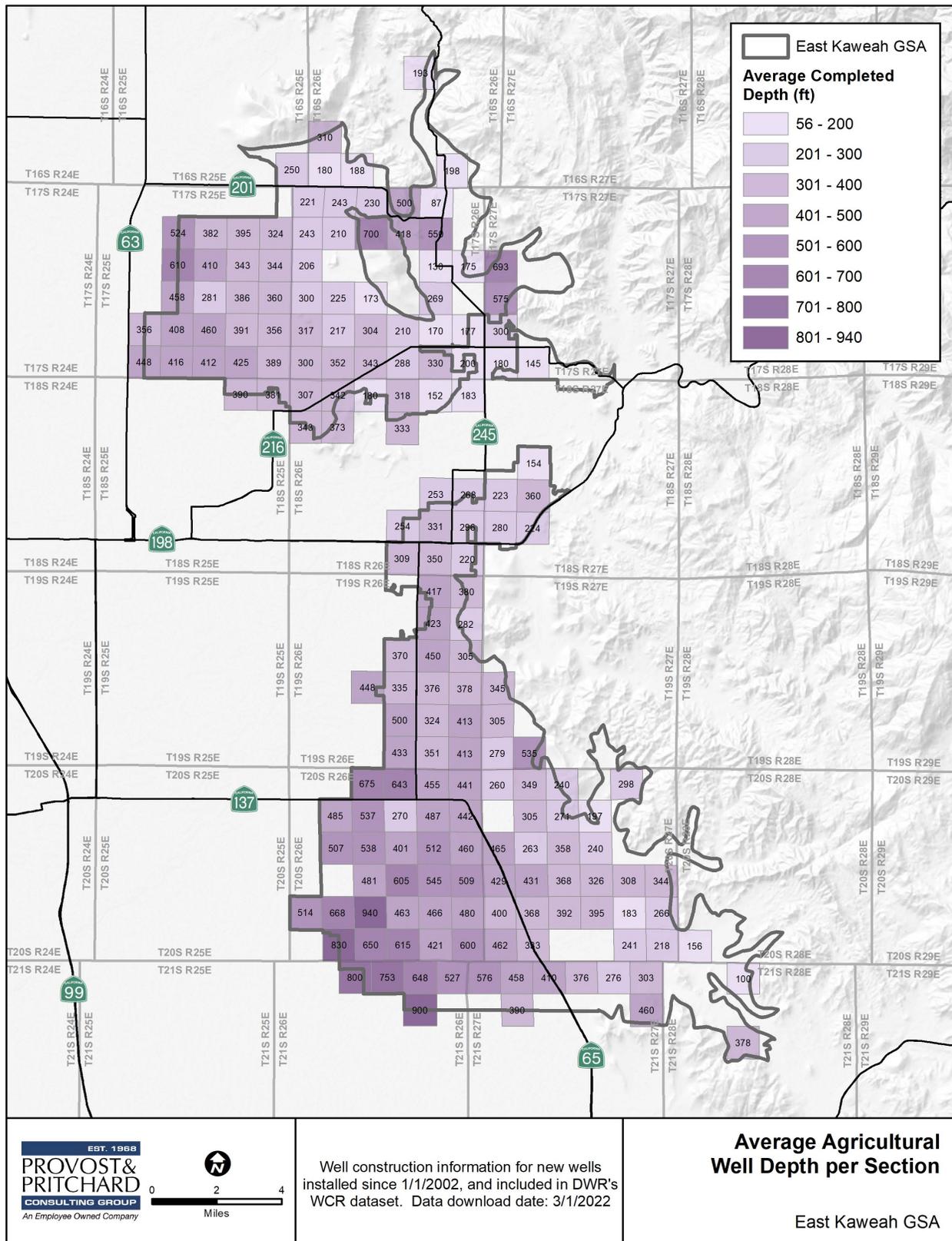


Figure 3. Average Depth of Agricultural Wells in EKGSA





## 2 Potential Impacts to Wells

### 2.1 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. The well is considered dry once the groundwater level is below the intake of a pump that cannot be lowered anymore (**Figure 5**). 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 EKGSA Mitigation Plan<sup>2</sup>.

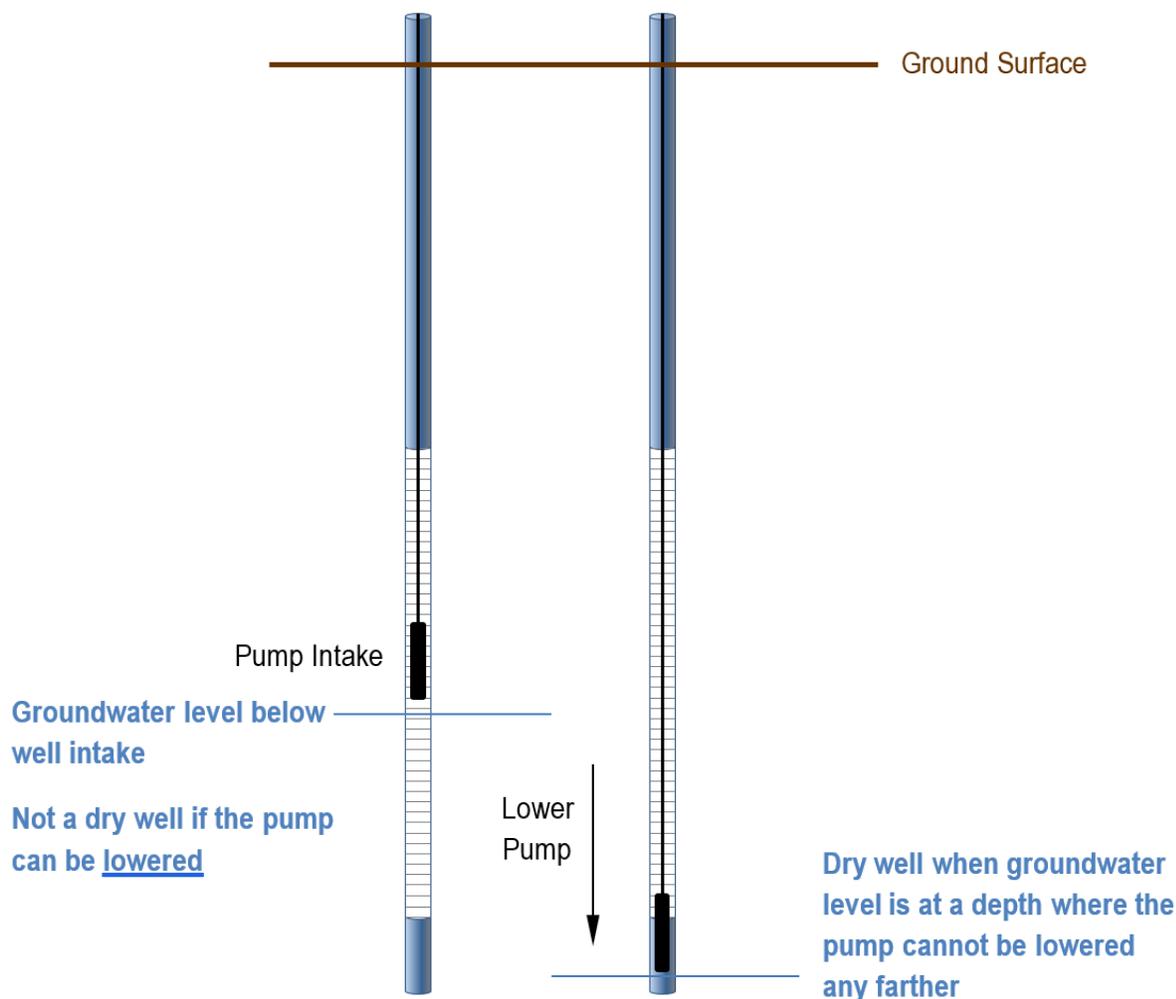


Figure 5. Groundwater Levels Relative to Pump Intake and Bottom of Well

<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)



## 2.2 Subsidence Impacts

The most common subsidence-related impact to wells is well casing failure. The most common cause of subsidence in the Kaweah Subbasin is related to groundwater extraction influencing subsurface pressure gradients. In this case, 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 6** 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.

In addition to well impacts, critical infrastructure such as water conveyance structures, may have been adversely impacted by allowable overdraft induced subsidence. EKGSA includes wells and critical infrastructure within the Plan.

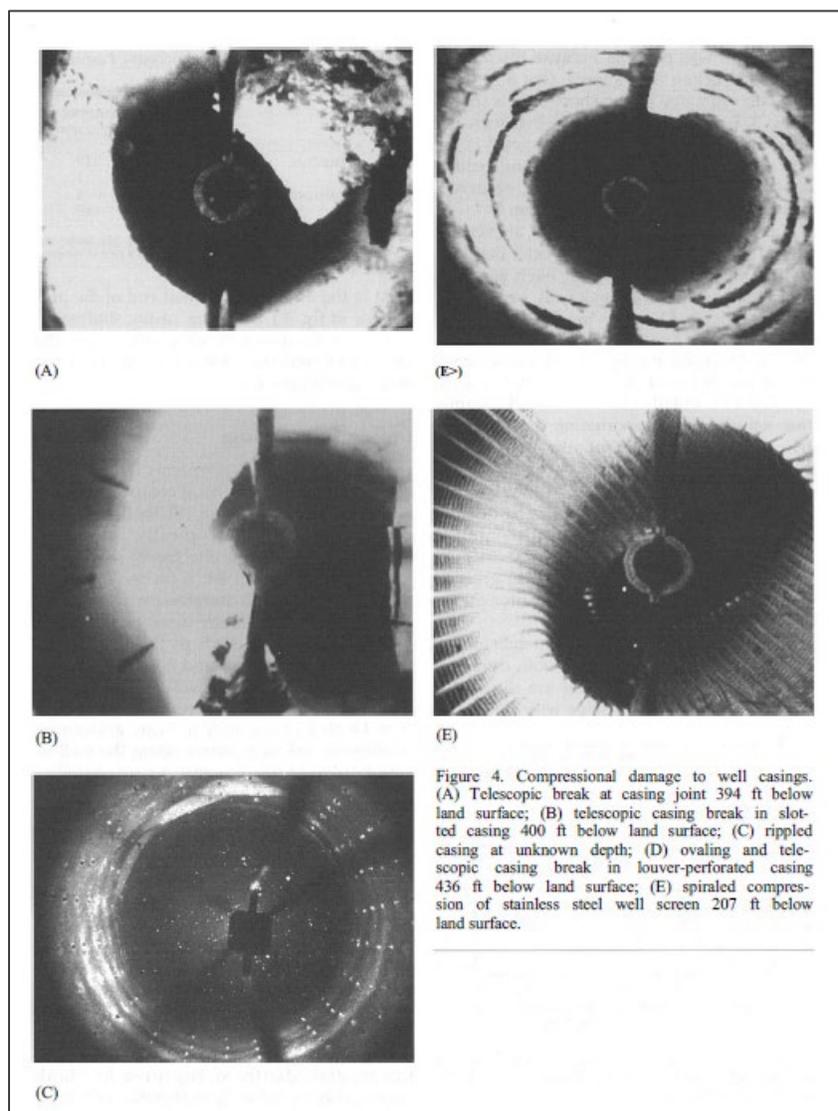


Figure 6. Well Damage Attributed to Subsidence (Borchers et al., 1998)



## 2.3 Groundwater Quality Impacts

Lowering of groundwater levels has been shown in some cases to degrade groundwater quality.<sup>3</sup> While most groundwater meets drinking water standards, some groundwater can contain high concentrations of nitrate, uranium, arsenic, pesticides and other contaminants. Nitrate levels in groundwater also come from naturally occurring mountain block and mountain front recharge. Nitrate is the most common groundwater quality constituent found at concentrations higher than regulatory standards in shallow aquifers in the Kaweah Subbasin, including EKGSA. Nitrate application in fertilizer is widespread and it is also released from dairy operations and septic systems throughout the EKGSA. Because nitrate is introduced into shallow groundwater from prevalent land use practices, there are no defined nitrate plumes. The Kaweah Subbasin Mitigation Program Framework and EKGSA Mitigation Plan are intended to mitigate adverse impacts associated with the allowable overdraft; therefore, groundwater quality issues must be related to chronic lowering of groundwater levels to be considered for mitigation qualification. Degraded groundwater quality may be related to allowable overdraft if chronic lowering of groundwater levels has a direct correlation with introduction of a new constituent of concern or significant increase in concentration of a constituent of concern. The causation and correlations of changes in groundwater quality are to be considered during the investigation phase of the mitigation claims process.

## 3 Mitigation Plan

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### 3.1 Mitigation Plan Overview

The Mitigation Plan starts with effective initial outreach to communities and individuals at risk of having detrimental impacts to their wells and/or critical infrastructure from chronically declining groundwater levels.

To notify the EKGSA of an impacted well or critical infrastructure, the asset owner (claimant) will complete and file a claim application with EKGSA (**Appendix A**). The EKGSA will review the claim application to perform a pre-qualification evaluation to ensure (1) the claimant has provided enough information to proceed to the qualification and investigation phases and (2) interim drinking water supplies can be arranged in a timely manner, if requested and qualify. Following the pre-qualification, EKGSA will determine if the claimant qualifies for mitigation and then investigate whether the impact can be mitigated and if the impact was induced by the subbasin's allowable overdraft.

In the event a claim qualifies for mitigation, EKGSA will determine the most suitable mitigation solution. If a claimant disagrees with the proposed mitigation, EKGSA may invite a third party to mediate (see **Section 3.7 Claims Dispute**). Once both the claimant and EKGSA agree to a mitigation measure, they must sign the Mitigation and Indemnification Form included in **Appendix B** prior to awarding the agreed mitigation.

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<sup>3</sup> <https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2021GL094398>



## 3.2 Mitigation Plan Outreach

The EKGSA is conducting an outreach campaign to promote the EKGSA Mitigation Plan to individuals and communities. Phase 1 outreach for the Mitigation Plan will begin prior to approval of the Plan with a 45-day public comment period. EKGSA has begun Phase 1 of outreach with the following actions:

1. EKGSA mass-mailed a flyer to all landowners within the EKGSA notifying of the Board Meeting on June 23, 2023, to consider release of the document for public comment. Stakeholders are encouraged to attend and provide public comment.
2. EKGSA has hand delivered flyers in Spanish to all locations recommended by Community Water Center and Self-Help Enterprises to ensure Severely/Disadvantaged Communities are reached in the most effective manner.
3. EKGSA released an electronic mailer has been sent to all identified interested parties that includes information on the Mitigation Plan development and upcoming public comment period.
4. Social media outreach campaign related to the Mitigation Plan has been kicked-off.
5. EKGSA has increased the meeting frequency with the [stakeholder] Advisory Committee during the development of the EKGSA Mitigation Plan.
6. EKGSA launched a Mitigation webpage on their website, available in English and Spanish (<https://ekgsa.org/mitigation>).

In addition to the actions above, the Kaweah Subbasin GSAs are coordinating on “Groundwater Day,” a large outreach event on July 14, 2023, which will cover topics related to progress towards groundwater sustainability, including information about the Mitigation Plan and open public comment period.

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 water system drinking water supply wells. During this more intensive outreach phase, a minimum of two public workshops will be provided: one for City of Lindsay and the other for the communities of Plainview and Strathmore.

In addition to the workshops, the EKGSA will have a dedicated webpage on their website that outlines the Kaweah Subbasin Mitigation Program and provides detailed information on the EKGSA 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 EKGSA.

The initial outreach effort will take place in June, July and August 2023. Stakeholder outreach will continue throughout GSP implementation. In accordance with the Kaweah Subbasin Mitigation Program Coordination Agreement Amendment (dated XX 2023), continued outreach will also include:

1. The EKGSA's advisory committee will hold an agenda item to discuss Mitigation Plan implementation every quarter.
2. The EKGSA 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.



3. The EKGSA will provide updates on mitigation efforts in the Kaweah Subbasin Annual Reports submitted on April 1 of each year.
4. The EKGSA will refine the notification-trigger criteria and system. The notification trigger system introduced in this iteration of the Plan is explained in **Section 3.3 Notification Process**

### 3.3 Notification Process

The effectiveness of the Plan will be improved with a notification trigger process, intended to notify well users and critical infrastructure owners of groundwater conditions nearing the possibility of potential adverse impacts to their well/infrastructure. The 2022 Amended EKGSA Groundwater Sustainability Plan included a preliminary trigger system for domestic wells (Table 5-12 of EKGSA GSP). The criteria established in the 2022 GSP serves as the beginning basis for the EKGSA Notification and Mitigation Triggers, included in **Table 1** below. **Table 1** clarifies EKGSA's commitment to sustainability and addressing adverse impacts along the way. EKGSA's approach is multi-dimensional, acknowledging that mitigation and sustainable management must be addressed from various angles, such as through the GSA's implementation of groundwater allocations, new recharge and supply projects, educational outreach, and this Mitigation Plan.

The notification trigger process will be improved as the GSA implements a well registration program, which will improve data and analyses on wells outside of the GSA's existing database, particularly domestic wells. The well registration program is scheduled to be rolled out in a later iteration of the Plan by June 30, 2024. More information on the upcoming well registration program is available in **Section 3.4 Well Registration**



**Table 1. EKGSA Notification and Mitigation Trigger Process**

Trigger	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	None expected. (continue existing practices). <i>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.</i>	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) by Analysis Zone (formerly referred to as "Threshold Region" <sup>4</sup> )	<ol style="list-style-type: none"> <li>1. Review monitoring network and results to identify specific conditions that need further investigation.</li> <li>2. Initiate investigation and vetting of specific conditions.</li> <li>3. Evaluate monitoring frequency.</li> </ol>	Annual Report to include GSA map indicating impacted and/or vulnerable areas.	Impacted wells to undergo Mitigation Claim process via this Mitigation Plan.	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 by Analysis Zone (formerly referred to as "Threshold Region")		Annual Report to include visualization of impacted areas on GSA map. Outreach and communication initiative with impacted well users.	GSA in conjunction with existing drinking water mitigation agencies to provide effective mitigation measures, outreach, and well stewardship education.	GSA to evaluate and implement (if necessary) localized groundwater pumping limits and actions.
Red	Groundwater conditions at or below established MTs by Analysis Zone (formerly referred to as "Threshold Region")	<ol style="list-style-type: none"> <li>1. Review monitoring network and results to identify specific conditions that need further investigation.</li> <li>2. Initiate investigation and vetting of specific conditions.</li> <li>3. Increase monitoring frequency.</li> </ol>	Annual Report to include visualization of impacted areas on GSA map. Outreach and communication initiative with impacted well users.  Local agencies consulted to improve investigation, outreach, and opportunities for improved management.	Impacted wells to undergo Mitigation Claim process via this Mitigation Plan.  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.	GSA to evaluate and implement (if necessary) broader groundwater pumping limits or alternative actions.

<sup>4</sup> Figure 7. offers a depiction of the EKGSA's Analysis Zones in relation to the GSA's management areas.

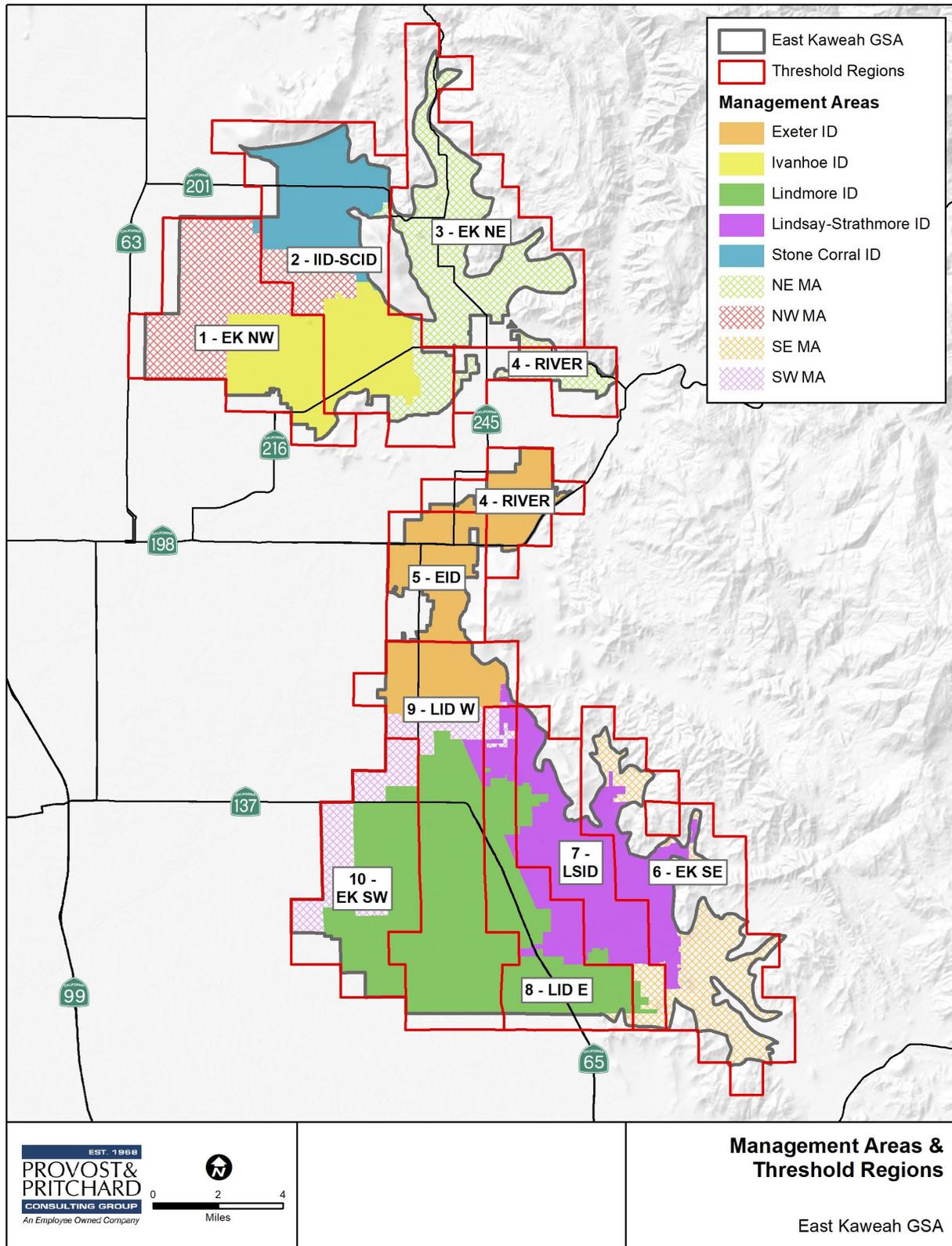


Figure 7. Depiction of EKGSA's Management Areas and Analysis Zones (formerly referred to as "Threshold Regions")



### 3.4 Well Registration

The Kaweah Subbasin GSAs have committed to develop a well registration program by June 30, 2024. The purpose of registering wells is to create a baseline record for each well in the event of a future claim. This can be particularly beneficial for drinking water wells, as many of these wells' construction, maintenance, and exact location are considered a data gap. SGMA noted wells that extract less than 2 acre-ft 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 EKGSA's investigation of a claim, 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.

### 3.5 Well Claims Process

The claim process for wells within the EKGSA boundary is summarized in **Figure 8** and described further below.

1. **Stakeholder outreach** is performed by EKGSA, described in **Section 3.2** above.
2. **Owner of impacted well (Claimant) files a Mitigation Claim application (Attachment A)**. The application requires the Claimant to provide information on the well or critical infrastructure's construction and current conditions, including water quality and groundwater levels for wells. In the event the landowner cannot provide this information, the EKGSA shall provide assistance in obtaining this information through tools and information within the capacity of the EKGSA.



Figure 8. Well Claims Process



3. Based on verification of the claim, the EKGSA will **pre-qualify the claim**, with full qualification pending a full investigation of the claim. The function of the pre-qualification phase is to (1) ensure sufficient information is provided to further investigate the claim and (2) prioritize arrangement of interim drinking water supplies within 10 business days, should it be requested by the Claimant. **Figure 9** depicts the pre-qualification process.

If there is insufficient data provided by the Claimant to evaluate the claim, EKGSA may collect supplemental data provided the Claimant agrees to allow EKGSA or its contractor access to the well. This may include pulling the pump to measure the pump intake depth, depth to the bottom of the well, and static groundwater level, as necessary; modify the wellhead to install the sounding port to measure static and pumping groundwater levels; modify the wellhead to install a flow meter; or conduct a downhole video survey of the well.

In the event the Claimant does not provide sufficient base information and does not agree to allow EKGSA or its contractor access the well, then the Mitigation Claim will be disqualified from mitigation.

4. An **EKGSA investigation of the claim** will be conducted by EKGSA staff or technical contractor(s) to determine whether the well or critical infrastructure impact is attributed to allowable continued overdraft conditions expressed as declining groundwater levels, land subsidence, and/or degraded groundwater quality induced by chronic lowering of groundwater levels. The investigation may extend beyond the subject well to determine current groundwater conditions in the area and anticipated future conditions. **Figure 10.** depicts the investigation process. **Table 2.** includes considerations that can be made during the investigation and qualification phases.

The EKGSA's **qualification** process is detailed in **Figure 11.** This process will inform whether to provide full or partial well mitigation based on a user's compliance with the GSA's GSP, Rules & Regulations, other laws or regulations, and income status. The EKGSA Technical Advisory Committee (TAC) shall perform the claim qualification evaluation. For claims that do qualify, the TAC shall provide the EKGSA Board with a recommended mitigation measure for consideration. Mitigation will be awarded on a "first-come, first-served" basis, with the exception of wells that qualify for mitigation through the SAFER program issued through Self-Help Enterprises<sup>5</sup>.

If the impact occurred before January 2020, the GSA is not responsible for the impact and the claim will be denied.

If a home is purchased with a dry well, SAFER funds cannot be used and the claim is disqualified. The GSA shall provide educational materials on well stewardship to disqualified claimants, upon request.

**Table 2** includes considerations that can be made during the investigation and qualification phases.

5. **Identification of suitable mitigation.** Following the recommendation of an appropriate mitigation measure by the EKGSA TAC, the EKGSA Board and Claimant shall discuss the proposed appropriate mitigation measure. Mitigation measures are anticipated to be developed on a case-by-case basis. Criteria for selecting appropriate mitigation are detailed further in **Section 3.6.**
6. **A Mitigation and Indemnification Agreement (Attachment B)** will be provided for signature for successful claims that requires the Claimant to indemnify EKGSA after mitigation has been completed. In the event the Claimant disagrees with EKGSA's proposed mitigation, a third party may be arranged to mediate and/or independently evaluate the claim in alignment with this Plan, the

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<sup>5</sup> Well users whose household income is less than eighty percent (80%) of the statewide annual MHI level qualify for SAFER mitigation funding.



GSA's rules and regulations, and financial status of EKGSA. A clarified appeals or claims dispute process is scheduled to be implemented by June 30, 2024.

- Mitigation Arranged.** Following signature of the Mitigation and Indemnification Agreement, EKGSA shall arrange the agreed upon mitigation. The time in which mitigation can be arranged may vary based on the agreed upon each mitigation measure's unique time constraints.

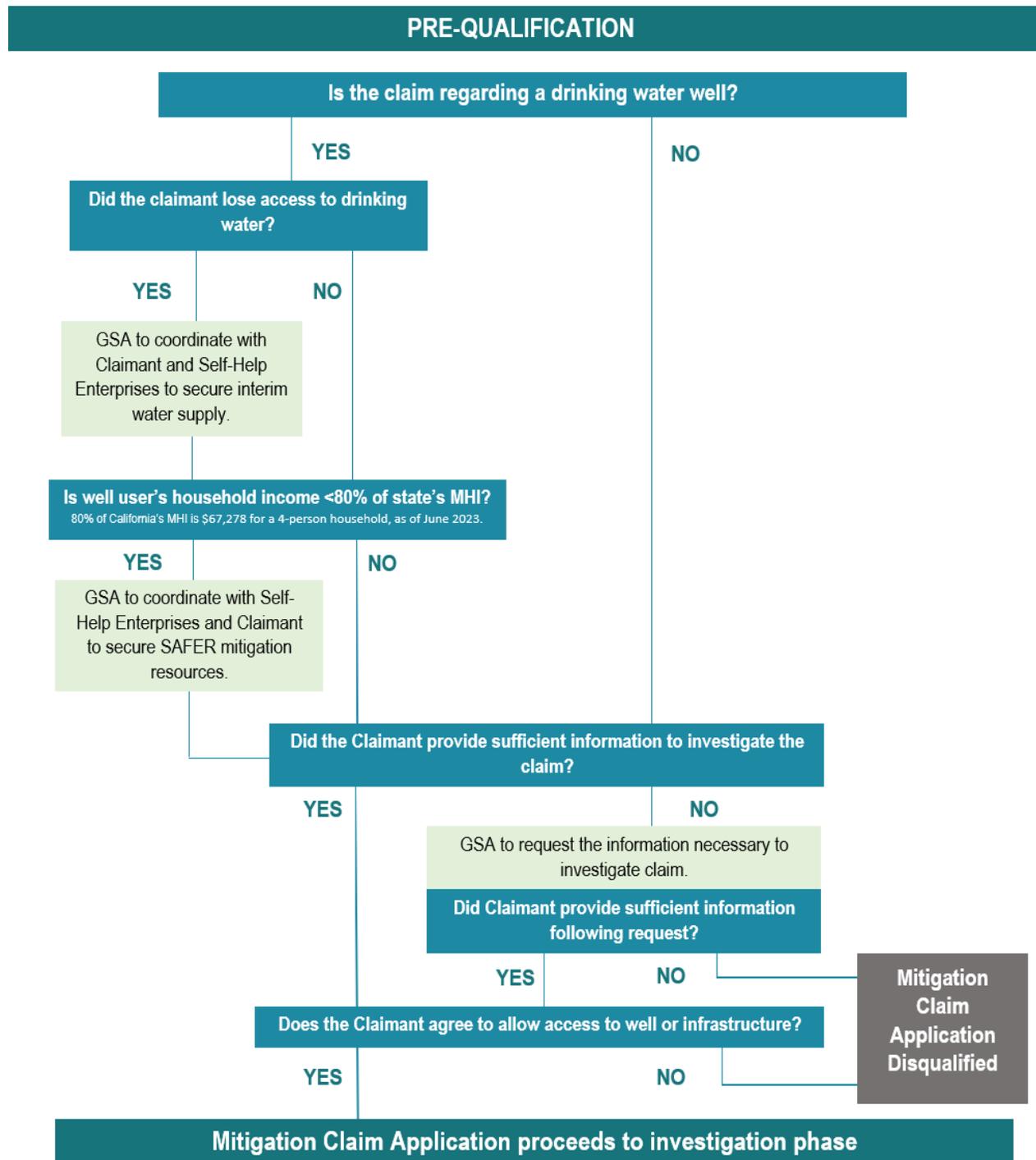


Figure 9. Pre-Qualification Process



## INVESTIGATION

**EKGSA to perform Initial Technical investigation:**

Work shall be performed to the extent that data and information is available.

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></p> <ul style="list-style-type: none"> <li>Historic static groundwater levels</li> <li>Historic pumping groundwater levels</li> <li>Well operation and maintenance history</li> <li>Well construction history</li> <li>Historic monthly production volume</li> <li>Potential for consolidation</li> <li>Nearby historic land and water use</li> <li>Depth to bedrock</li> <li>Nearby conjunctive use activity</li> <li>Well depth, perforated intervals, pump depth</li> </ul>	<p><b>GSA to review:</b></p> <ul style="list-style-type: none"> <li>Historic groundwater quality at well</li> <li>Historic groundwater quality at nearby wells</li> <li>Historic static groundwater levels</li> <li>Historic pumping groundwater levels</li> <li>Well operation and maintenance history</li> <li>Well construction history</li> <li>Historic monthly production volume</li> <li>Potential for consolidation</li> <li>Nearby historic land and water use</li> <li>Depth to bedrock</li> <li>Nearby conjunctive use activity</li> <li>Well depth, perforated intervals, pump depth</li> </ul>	<p><b>GSA to review:</b></p> <ul style="list-style-type: none"> <li>Historic InSAR data</li> <li>Historic static groundwater levels</li> <li>Historic pumping groundwater levels</li> <li>Operation and maintenance history</li> <li>Construction history</li> <li>Historic monthly capacity</li> <li>Potential for consolidation</li> <li>Nearby historic land and water use</li> <li>Depth to bedrock</li> <li>Nearby conjunctive use activity</li> <li>Well depth, perforated intervals, pump depth</li> <li>Photos of physical damage</li> <li>Original well/infrastructure survey/design</li> </ul>

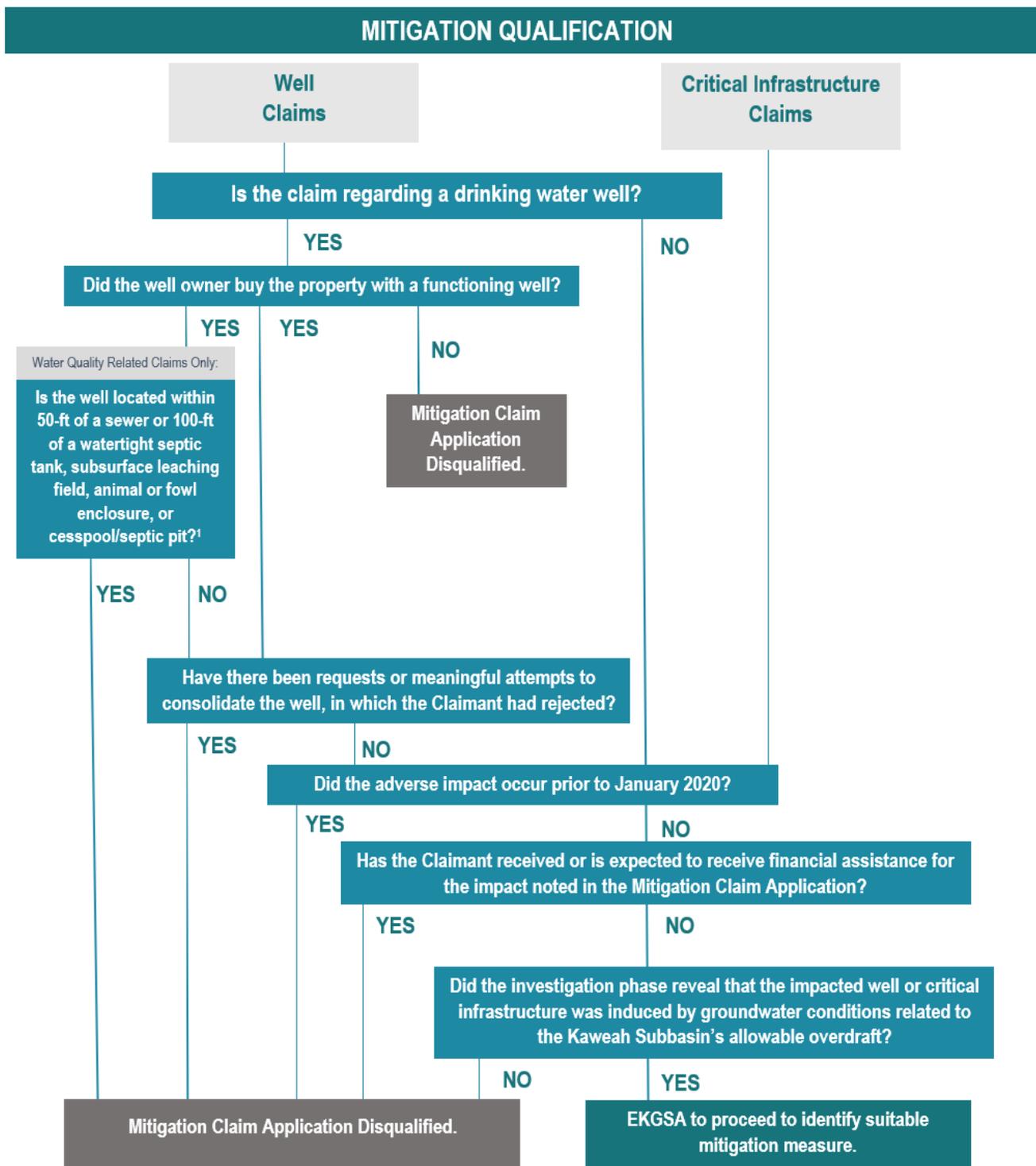
**EKGSA to perform field investigation:**

<p><b>GSA may perform the following:</b></p> <ol style="list-style-type: none"> <li>(1) Pull pump and measure pump intake depth, well bottom, static water level.</li> <li>(2) Modify wellhead to install sounding port to measure static and pumping level.</li> <li>(3) Modify wellhead to install flowmeter</li> <li>(4) Conduct video log</li> <li>(5) Investigate site to inform water requirement</li> <li>(6) Investigate nearby land and water use</li> <li>(7) Investigate site for consolidation feasibility</li> </ol>	<p><b>GSA may perform the following:</b></p> <ol style="list-style-type: none"> <li>(1) Pull pump and measure pump intake depth, well bottom, static water level.</li> <li>(2) Modify wellhead to install sounding port to measure static and pumping level.</li> <li>(3) Modify wellhead to install flowmeter</li> <li>(4) Conduct video log</li> <li>(5) Collect water quality samples at Claimants well</li> <li>(6) Collect water quality samples at wells nearby impacted well</li> <li>(7) investigate site for consolidation feasibility</li> <li>(8) Investigate site and nearby land use for source of water quality impact</li> </ol>	<p><b>GSA to investigate:</b></p> <ol style="list-style-type: none"> <li>(1) Evidence of ground fissures consistent with subsidence</li> <li>(2) Visible casing collapse, damage, or protrusion attributable to subsidence.</li> </ol> <p><b>For well claims, GSA may perform the following:</b></p> <ol style="list-style-type: none"> <li>(1) Pull pump and measure pump intake depth, well bottom, static water level.</li> <li>(2) Modify wellhead to install sounding port to measure static and pumping level.</li> <li>(3) Modify wellhead to install flowmeter</li> <li>(4) Conduct video log</li> </ol>
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GSA may request additional data and information. GSA may reach out to original driller or design engineer to validate information provided.

**Mitigation Claim proceeds to Qualification phase.**

**Figure 10. Investigation Process**



<sup>1</sup>Well distance to sewer, septic, etc. is based on California Well Standards, Part II Water Well Construction, Section 8. Well Location with Respect to Contaminations and Pollutants. <https://water.ca.gov/Programs/Groundwater-Management/Wells/Well-Standards/Combined-Well-Standards/Water-Construction>

Figure 11. Qualification Process



**Table 2. Considerations to inform investigation and qualification evaluations**

<b>Kaweah Subbasin Mitigation Qualifications and Investigation Considerations Questionnaire</b>	<b>GW Levels</b>	<b>Land Subsid</b>	<b>Water Quality</b>
<b>All Impacted Well Considerations</b>			
Have you replaced a well since GSP Implementation?	X	X	X
Are there records available on the well (including maintenance, pump company)? If so, provide to GSA.	X	X	X
Has there been a notable change in production capacity? If so, since when? If so, provide records to GSA	X	X	
Does the impacted well extract from a hard rock/fissure well?	X	X	X
Do neighboring <sup>1</sup> wells extract from the same aquifer?	X	X	X
Has the impacted well been active within the last 6-months?	X	X	X
Has the well undergone significant updates (deepened, casing replacement, lowering pump)?	X	X	X
When was the impacted well installed and operational?	X	X	X
Does the impacted well have a history of water quality issues? Provide water quality analysis if available.			X
Is the impacted well located within 50-feet of any sewer (sanitary, industrial, or storm; main or lateral)? <sup>3</sup>			X
Is the impacted well located within 100-feet of a watertight septic tank or subsurface sewage leaching field? <sup>3</sup>			X
Is the impacted well located within 100-feet of animal or fowl enclosure? <sup>3</sup>			X
Is the impacted well located within 100-feet of a cesspool or septic pit? <sup>3</sup>			X
Do neighboring <sup>1</sup> wells have a history of water quality issues?			X
Has the well user received or is expected to receive financial assistance from a third party to mitigate noted well issue? Third-party must not be GSA staff or GSA's SGMA consultants.	X	X	X
<b>Impacted Domestic Well Considerations</b>			
Is the well serving a low-income household (or located in a S/DAC <sup>2</sup> )?	X	X	X
Have there been requests/attempts to consolidate well with nearby municipality?	X	X	X
Have there been requests/attempts to consolidate well with a new small community water system?	X	X	X
<b>Impacted Critical Infrastructure<sup>4</sup> Consideration</b>			
Are there records available on infrastructure maintenance? If so, provide to GSA.		X	
Are there records on operational/flow history (for water conveyance infrastructure)? If so, provide to GSA.		X	
Has the infrastructure owner received or is expecting to receive financial assistance from a third party to mitigate noted infrastructure impact? Third-party must not be GSA staff or GSA's SGMA consultants.		X	
Does the impacted infrastructure pose a flood risk (directly or indirectly)?		X	
Has there been a notable loss in conveyance capacity? If so, since when? (for water conveyance infrastructure)?		X	
When was the infrastructure built and when did operation begin?		X	
<p><sup>1</sup>Neighboring is defined as any wells within a 1,000-foot radius (for domestic) and X-foot (for ag) of the impacted well. This is based on industry standard of well impact analyses in the San Joaquin Valley.</p> <p><sup>2</sup>The GSAs will use the current years' definition of low-income household as defined by the State of California's Department of Housing and Community Development. S/DAC represents Severely Disadvantaged Community or Disadvantaged Community. As of June 2023, this includes households with an income less than 80% of the state's median household income.</p> <p><sup>3</sup>Based on California Well Standards, Part II Water Well Construction, Section 8. Well Location with Respect to Contaminations and Pollutants. <a href="https://water.ca.gov/Programs/Groundwater-Management/Wells/Well-Standards/Combined-Well-Standards/Water-Construction">https://water.ca.gov/Programs/Groundwater-Management/Wells/Well-Standards/Combined-Well-Standards/Water-Construction</a></p> <p><sup>4</sup> Critical infrastructure within the Kaweah Subbasin includes the Friant-Kern Canal, other non-native water conveyance infrastructure (such as canals, pipelines, and irrigation structures), railways, highways, and major roads.</p>			



### 3.6 Mitigation Actions

In the event a well qualifies for mitigation assistance through the claims process, the options in which EKGSA may consider for appropriate mitigation are listed below. Each claim will be unique, and the GSA recognizes the importance of treating each claim on a case-by-case basis. The GSA may identify an optimal mitigation action that is not listed in this Plan. The EKGSA mitigation options are summarized in **Figure 12** and **Figure 13** and explained in **Section 3.6.1** and **3.6.2** below.

#### 3.6.1 Interim Well Mitigation Actions

In the event of drinking water loss, interim measures may be needed until long-term mitigation can be arranged. The pre-qualification process allows for prioritization of identifying this need and coordination with existing programs to ensure the claimant has access to emergency temporary drinking water while their claim undergoes the investigation and qualification phase to identify if the claimant qualifies for long-term mitigation through the EKGSA Mitigation Plan. Interim mitigation is available through SHE and KWF, described in **Section 1.4** and below. Interim mitigation options are listed in **Figure 12**.

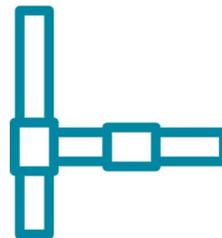
### Interim Mitigation Applies to Claimants who lost access to drinking water



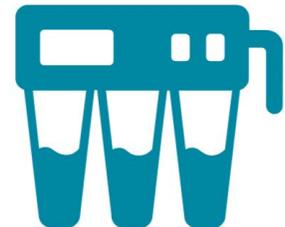
Bottled  
Water



Household  
Water Tank  
Supplies



Temporary  
Consolidation  
to Community  
Well



Reverse Osmosis  
(Point of Use)

**Figure 12. Interim Mitigation Options**



**Table 3** lists organization and contact information to obtain immediate relief for dry wells and water service interruptions for domestic users.

**Table 3. Drinking Water Assistance for Households**

Organization	Services Provided	Contact Information
<b>Tulare County</b>	Bottled water	Contact: Sandra Sabin Email: Bottled <a href="mailto:waterssabin@tularecounty.ca.gov">waterssabin@tularecounty.ca.gov</a> Phone: (559) 624-7071 *Tulare County's bottled water services have been suspended as they have coordinated with Self-Help Enterprises. This resource is included in the event the County resumes emergency bottled water supply services.
<b>Self-Help Enterprises</b>	Bottled water, tanks/hailed water, domestic well assessment / repair / replacement	Bottled water, tanks/hailed water, domestic well assessment / repair / replacement. Dry domestic wells: (559) 802-1685 Bottled water, tanks/hailed water, domestic well assessment / repair / replacement. Bottled water: (559) 802-1284 Bottled water, tanks/hailed water, domestic well assessment / repair / replacement. Well repair/replacement/connection: (559) 802-1289 Bottled water, tanks/hailed water, domestic well assessment / repair / replacement. General drought support: (559) 802-1685 Website: <a href="https://www.selfhelpenterprises.org/programs/emergency-services/">https://www.selfhelpenterprises.org/programs/emergency-services/</a>
<b>Kaweah Water Foundation</b>	Bottled water, water kiosks fill stations	Address: 2975 Farmersville Rd. Farmersville, CA 93223 Email: <a href="mailto:admin@kaweahwater.org">admin@kaweahwater.org</a> Phone: (559) 325-4463 Website: <a href="http://kaweahwater.org">kaweahwater.org</a>

**Note:** Adversely impacted well users should file a claim with their respective GSA as described in the Process portion of the Program description regardless of if they obtain assistance from other organizations.

**Dry Well Tank Replacement:** A storage tank and hauled water can be provided as an emergency short-term solution to households whose private wells have gone dry. Income qualification applies for the drinking water assistance program. Applicants to this program are also eligible for the bottled water program described below and will be provided with additional information about funding options for a replacement well or another water source. Property owners (not tenants) can apply for this program. Call Self-Help Enterprises at (559) 802-1685 or email [droughtsupport@selfhelpenterprises.org](mailto:droughtsupport@selfhelpenterprises.org).

**Bottled Water:** This program is available for households that are experiencing dry wells and/or contamination in their water and meet income qualifications. Qualifying households will receive a total of 60 gallons of bottled water delivered to their home monthly to use for drinking and cooking. Note: Residents living in communities with a population larger than 1,000 must request assistance from the SWRCB directly and are not eligible for the Tulare County Bottled Water Program (i.e., Strathmore). Impacted residents, whether they are tenants or property owners, can apply for this program. Call



Tulare County Resource Management Agency at (559) 624-7071 or email [bottledwater@tularecounty.ca.gov](mailto:bottledwater@tularecounty.ca.gov).

**Kiosks:** This program provides drinking water kiosks that are open to everyone because of a nitrate settlement between the SWRCB and nitrate dischargers. Residents must take their own refillable containers (up to 5-gallon bottles) to the kiosks and service themselves. Available drinking water kiosks are in:

- Okieville on the corner of Road 48 & Avenue 229
- Hanford at the transit station
- Farmersville at the Kaweah Delta Conservation District at 2975 N Farmersville Blvd, Farmersville, CA 93223

**CV SALTS Management Zones Drinking Water:** Communities impacted or threatened by nitrate can access a free program that includes nitrate well testing and safe drinking water via bottled water (subject to eligibility). No income qualification applies. Residents are also able to access drinking water kiosks as previously described. The Safe Drinking Water Program Inquiry Form for the Kaweah Water Foundation is available at <https://kaweahwater.org/>.

The EKGSA may seek funding from existing programs including but not limited to those listed above to cover the cost of interim water supply. If an affected party is not eligible to receive funding from an existing program (e.g., income qualifications), then the EKGSA may provide funding for interim emergency water supply to affected parties (e.g., domestic users) for up to 60 days based on an initial determination of a filed claim. If the EKGSA determines that the claim is not a result of EKGSA-approved or authorized activities, then EKGSA may cease funding of the interim emergency water supply. Domestic users will have no obligation to reimburse costs for emergency water supply up to 60 days. If it is determined by subsequent investigation that the issue is not attributable to EKGSA-approved or authorized activities than the GSA would have no further financial obligation. EKGSA may extend the duration of interim emergency water supply beyond 60 days at its discretion if it is determined that additional time is required to make a determination regarding a claim.

### 3.6.2 Long-Term Mitigation Actions

Claimants who qualify for long-term mitigation support from EKGSA may be awarded the following, listed in **Figure 13**. Each claim is expected to be unique, therefore, the GSA reserves the right to identify appropriate mitigation options that may not be listed in this Mitigation Plan. Qualifying drinking water well claims may receive physical assistance and/or technical assistance. All non-drinking water well claims may receive mitigation via technical assistance.

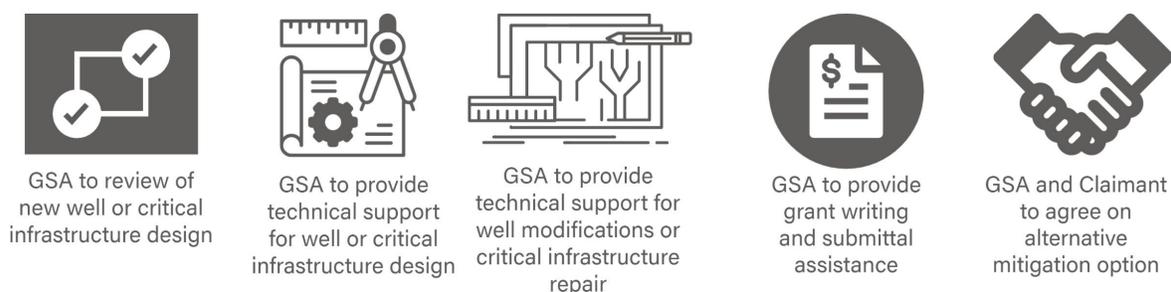


## Long-Term Mitigation Options

### Drinking Water Well Claims



### Non-Drinking Water Well and Critical Infrastructure



**Figure 13. Long-Term Mitigation Options**

Mitigation measures for impacted drinking water wells could include one or more of the following:

1. Well casing and/or screen repair. Depending on the age of the well and the type of impact, damaged wells may be repaired, either by cementing or placing a swage across failed intervals.
2. Lowering of well pump. If there is adequate separation between the pump intake and the bottom of the well, the pump may be lowered. However, if the groundwater level falls below 20 feet from the bottom of the well, there will not be enough submergence for the pump to operate optimally.
3. Pump repair/replacement. Provided the well pump has been damaged by allowable continued overdraft conditions resulting in declining groundwater levels and/or land subsidence.
4. Drilling a replacement well. Where repair of the casing or screen is not possible, a new replacement well may be drilled and constructed.
5. Deepening a well by redrilling within the impacted well to a deeper depth. Where space for a new well is limited, redrilling a well to a deeper depth within the impacted well may be the only option of accessing groundwater.
6. Complete a permanent connection to a public water system, if that source of supply is available.
7. Provide an equivalent water supply from an alternate source.
8. Grant identification, writing, review, and submittal assistance
9. With the consent of the affected landowner, provide other acceptable mitigation.



The mitigation measure considerations for non-drinking water wells and critical infrastructure include the following:

1. Development or review of new well/critical infrastructure design.
2. Development or review of well modifications (such as but not limited to lowering pump, deepening well, casing replacement).
3. Development or review of critical infrastructure repair.
4. Grant identification, writing, review, and submittal assistance.
5. With the consent of the affected well or critical infrastructure owner, GSA may provide other acceptable mitigation.

Mitigation measures for degraded groundwater quality impacted wells could include one or more of the following:

1. Complete a permanent connection to a public water system if that source of supply is available.
2. Provide an equivalent water supply from an alternate source.
3. Grant identification, writing, review, and submittal assistance.
4. Wellhead treatment design or design review.
5. Installation of a reverse-osmosis filter
6. With the consent of the affected landowner, provide other acceptable mitigation.

### 3.7 Claims Dispute

In the event a claimant disagrees with the mitigation proposed by the GSA, a third party shall be arranged by the GSA 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 June 30, 2024.

### 3.8 Indemnification

Prior to EKGSA issuing mitigation, the claimant and GSA must enter a Mitigation and Indemnification Agreement (**Attachment B**). The indemnification aspect of the agreement's duty is to hold the GSA harmless for any adverse impacts to property, injury, income, etc. associated with implementation of the agreed upon mitigation measure.

### 3.9 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 (**Attachment A**), EKGSA requests the Claimant contact the GSA to discuss data and information sharing confidentiality solutions.



## 4 Mitigation Funding and Anticipated Costs

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Aside from potential local, state, and federal grant funds, additional funding sources for implementation of the EKGSA Mitigation Plan and subsequent long-term mitigation support are being evaluated through discussions amongst the EKGSA staff, TAC, Board, consultants, and most critically, stakeholders. It is paramount that the Mitigation Plan can be feasibly implemented negatively impacting disadvantaged communities and farms in the GSA.

Potential sources of funding may include, but are not limited to:

1. A portion of pumping fees to be set aside annually to fund the Mitigation Plan
2. Property-based tax with 100% of revenue dedicated to instituting long-term mitigation via the EKGSA Mitigation Plan

The EKGSA's financial model is designed to avoid generating profit, which has prevented the GSA from previously generating funds for the Mitigation Plan implementation. A Proposition 218 Election process may be required.

Anticipated costs may be generated by the following activities:

1. Administering the Mitigation Plan
2. Development of the Well Registration Program and Claims Dispute Process
3. Claim Investigation Evaluation(s)
4. Claim Qualification Evaluations
5. Mitigation Award (s): Physical Funding
6. Mitigation Award(s): Technical Assistance Funding
7. Outreach and Webpage Maintenance
8. Coordination with Stakeholders, KWF, and SHE
9. Development of future versions of the Mitigation Plan

### 4.1 Interim Well Mitigation Funding

The EKGSA is responsible for arranging interim drinking water supply and should a claim be determined to be attributable to the Subbasin's allowable overdraft.

As discussed in **Sections 1.4** and **3.6.1**, The EKGSA is working closely with SHE and KWF to support their existing and effective emergency drinking water supply mitigation services. All impacted drinking water wells, independent of well user's household income, qualify for immediate emergency drinking water in the form of bottled water and/or tanks.

The EKGSA will seek additional appropriate funding from existing or future federal, State and County programs to cover or supplement interim water supply and mitigation of domestic and small system wells. In addition, specific grants or loans could be applied for from State or federal agencies for municipal projects.



Non-drinking water well use types do not qualify for interim drinking water supplies under this Mitigation Plan.

## 4.2 Long-term Well Mitigation Funding

The EKGSA long-term well mitigation funding is undergoing ongoing discussion with the EKGSA staff, TAC, Board, consultants, and [stakeholder] advisory committee.

Funding for long-term drinking water well mitigation is available through SAFER/SHE for households whose income is less than 80% of the state's Median Household Income (MHI)<sup>6</sup>. All other claims related to drinking water above the 80% MHI threshold may qualify for long-term mitigation with funding through EKGSA.

Claims related to non-drinking water wells and critical infrastructure may qualify for technical assistance mitigation, which would be funded through EKGSA.

It is infeasible for the GSA to fund all mitigation activities through the GSA's pumping fees, considering the cost of pumping fees must be feasible to avoid the unintended consequence of significantly impairing the abundance of sole-income, small family farms in the EKGSA. The GSA will continue to support SHE and KWF while continuing the search for existing and future funding mechanisms, such as grants and loans.

## 5 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>

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<sup>6</sup> MHI may change overtime. 80% of the state's MHI as of June 2023 is \$67,278 for a household of four.  
[https://www.waterboards.ca.gov/drinking\\_water/services/funding/documents/srf/mhi.pdf](https://www.waterboards.ca.gov/drinking_water/services/funding/documents/srf/mhi.pdf)



# Attachment A

## EKGSA Mitigation Claim Application

# Kaweah Subbasin Mitigation Claim Application

## Pre-Qualification Information:

*Please circle which GSA your impact claim applies:*

East Kaweah GSA

Mid-Kaweah GSA

Greater Kaweah GSA

*For drinking water well claims, is an interim water supply such as bottled water or tank requested?*

Yes No

*As the Claimant, will you allow physical access to the adversely impacted well (or critical infrastructure, if applicable) for the GSA or authorized third-party to perform a field investigation?*

Yes No

*Is the Claimant the owner<sup>7</sup> of the adversely impacted well (or critical infrastructure, if applicable) in which this claim application applies?*

Yes No

*For drinking water well claims, is an interim water supply such as bottled water or tank requested?*

Yes No

*Please state your household's income and how many people are in your household. Your income and number of people in your household will not be used to disqualify you from mitigation wualification. This information can be used to inform applicability of this claim to Self-Help Enterprise's long-term mitigation services*

Household annual income: \_\_\_\_\_

Number of people in household: \_\_\_\_\_

*Please describe the reason behind this mitigation claim application:*

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<sup>7</sup> The Claimant must own the asset of the this claim application. If you are not the owner of the impacted well and/or infrastructure, please provide contact information of the owner to support the GSA in pursuing communication on the Mitigation Program and how to support.

**Claimant information:**

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

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

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

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

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

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

APN: \_\_\_\_\_ Size of Property: \_\_\_\_\_ acre(s)

Number of Living Units: \_\_\_\_\_

Unit1 Address: \_\_\_\_\_

Unit2 Address: \_\_\_\_\_

Unit 3 Address: \_\_\_\_\_

Please circle response:

Within City Limits?:	Yes	No	Unsure, request GSA assistance to confirm
Water System Near By:	Yes	No	Unsure, request GSA assistance to confirm
Water Main in Front of Home:	Yes	No	Unsure, request GSA assistance to confirm
Flood Zone:	Yes	No	Unsure, request GSA assistance to confirm

### Impacted Well Information:

*If making a claim regarding critical infrastructure (non-well), please skip this section and proceed to the "Critical Infrastructure Information" section.*

**Please circle response:**

Impacted Well's Use	Domestic	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 as much of the following documentation as is available:**

*Please understand that the more information available, the more effective the claims process and potential mitigation may be. In the event not enough information is available to inform an appropriate mitigation measure or possible causation of well impact, the claim may be disqualified.*

- Well completion report
- Well design documentation
- Water level records
- Water quality records and/or lab reports
- Photos
- Maintenance records
- Driller name and contact information
- Documentation from neighboring wells' construction, operations, and maintenance

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

Do you have an idea what the impacted well's issue may be? If so, please explain:	
When was the well installed?	
When did the well become operational?	
When did the well become non-operational?	
Depth of well	
Perforated intervals	
Size of pump	
Depth of pump in well	
Is the condition of the pump serviceable?	
Has the pump been removed from the well?	
When was the last modification to the well made? What was the modification?	
Has the well been abandoned? If so, why?	
Does the well have a pump saver?	
What is the designed capacity of the well?	
What is the recent capacity of the well (note units including daily or monthly)	
Has the well experienced water quality issues? If so, when?	
Have neighboring wells experienced water quality issues? If so, when?	
Is the well located near septic? If so, please provide more information.	

# Well Site Map Sketch

## Include in sketch:

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

*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.*

**Impacted Critical Infrastructure Information:**

*If making a claim regarding a well, please skip this section and ensure the "Well Information" section is completed.*

**Please circle response:**

Infrastructure Type            canal            road            pipeline            ditch            Other

If other, please explain:

Privately Owned?            Yes            No            Unsure

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

*Please understand that the more information available, the more effective the claims process and potential mitigation may be. In the event not enough information is available to inform an appropriate mitigation measure or possible causation of well impact, the claim may be disqualified.*

- Infrastructure design documentation
- Photos
- Maintenance records
- Documentation from neighboring infrastructure's construction, operations, and maintenance

**Please fill out the following information 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 well become non-operational?	
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 B.

## Mitigation & Indemnification Agreement Template

