PUBLIC DRAFT SUBMITTAL REPORT | November 7, 2024

# KINGS WATER ALLIANCE PRIORITY 2 MANAGEMENT ZONE EARLY ACTION PLAN ADDENDUM

**Attachment D** 

PREPARED FOR



PREPARED BY





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- Appendix E Public Water System and Supply Well Nitrate Tables

## LIST OF ACRONYMS

Acronym	Definition
AB	Public Water Supply Well Status, Abandoned
AR	Public Water Supply Well Status, Active Raw
AU	Public Water Supply Well Status Active Untreated
С	Public Water System Type, Community
Central Valley Water Board	Central Valley Regional Water Quality Control Board
CVDRMP	Central Valley Dairy Representative Monitoring Program
CV-SALTS	Central Valley Salinity Alternatives for Long-term
	Sustainability
CVSC	Central Valley Salinity Coalition
CVWB	Central Valley Water Board
CSD	Community Services District
DAC	Disadvantaged Community
DDW	Division of Drinking Water
DS	Public Water Supply Well Status Destroyed
DWR	California Department of Water Resources
DWW	Drinking Water Watch
EAP	Early Action Plan
FMZP	Final Management Zone Proposal
GAMA	Groundwater Ambient Monitoring and Assessment
GIS	Geographic Information Systems
GSA	Groundwater Sustainability Agency
ILRP	Irrigated Lands Regulatory Program
IR	Public Supply Well Status Inactive Raw
IU	Public Supply Well Status Inactive Untreated
KWA	Kings Water Alliance
LSWS	Local Small Water System
MCL	Maximum Contaminant Level



Acronym	Definition				
mg/L	milligrams per liter				
mg/L as N	milligrams per liter as nitrogen				
MHI	Median Household Income				
MZ	Management Zone				
MZIP	Management Zone Implementation Plan				
Ν	Nitrogen				
NC	Public Water System Type, Non-Community				
NO <sub>3</sub> -N	Nitrate as Nitrogen				
NTC	Notice to Comply				
NTNC	Public Water System Type, Non-Transient Non-Community				
OWTS	Onsite Waste Treatment System				
PMZP	Preliminary Management Zone Proposal				
PN	Public Supply Well Status Pending				
POU	Point of Use				
PWS	Public Water System				
SDAC	Severely Disadvantaged Communities				
SDWIS	Safe Drinking Water Information System				
SGMA	Sustainable Groundwater Management Act				
SSWS	State Small Water System				
State Water Board	State Water Resources Control Board				



# **EXECUTIVE SUMMARY**

#### E.S.1. Background

The Central Valley Regional Water Quality Control Board (Central Valley Water Board) has begun implementing a new Nitrate Control Program in the Central Valley that is designed to achieve three nitrate management goals:

- Goal 1 Ensure a safe drinking water supply;
- Goal 2 Reduce nitrate loading so that ongoing discharges neither threaten to degrade high quality waters absent appropriate findings by the Central Valley Water Board nor cause or contribute to exceedances of nitrate water quality objectives; and
- *Goal 3* Implement long-term, managed restoration of impaired water bodies.

The Kings Water Alliance (KWA) was established to achieve these three goals for its Management Zone. As required by the Nitrate Control Program, the KWA prepared this Early Action Plan (EAP), which identifies the initial actions that will be carried out to address drinking water with unsafe nitrate levels being used by residences in the Priority 1 (Kings groundwater subbasin) and Priority 2 (portions of the Tulare Lake groundwater subbasin) areas of the Management Zone (**Figure ES-1**). EAP implementation is occurring in phases. Phase 1 began implementation in the Priority 1 area in May 2021. This EAP addendum has been prepared to facilitate implementation of Phase 2 which will begin in the Priority 2 area in February 2025.

The key element of this EAP, which was developed in collaboration with the community, is the Interim Replacement Water Program. This Program provides immediate alternative sources of drinking water for residences that depend on groundwater from domestic wells for drinking and cooking purposes where that groundwater contains unsafe levels of nitrate (water with more than 10 milligrams per liter nitrate as nitrogen (mg/L-N)).

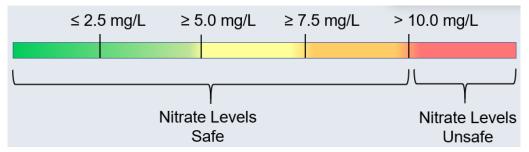


Figure ES-1. Scale Showing Nitrate Safe and Unsafe Levels



## E.S.2. Identification of Nitrate-Impacted Areas

As described in more detail within the Preliminary Management Zone Proposal (PMZP), nitrate groundwater data were requested, downloaded, and compiled using various publicly available sources and complemented by data requested from the Fresno and Tulare County Environmental Health departments<sup>1</sup>. The compiled nitrate groundwater data were categorized into depth zones, following previously developed CV-SALTS best management practices. Wells constructed in the Upper Zone of the groundwater system and with nitrate data since the year 2010 were used to determine recent average ambient nitrate concentrations. The best readily available groundwater nitrate dataset compiled and analyzed included sample results for wells in the Upper, Lower, and Below Lower Zones from January 2010 to May 2024. These nitrate data were used in determining ambient nitrate conditions in the Upper Zone of the groundwater system for the Priority 2 KWA Management Zone area (i.e., Tulare Lake Subbasin).

The Upper Zone average nitrate concentrations were used to produce a map showing the spatial interpolation (kriging using a search radius of 1.5 miles) of ambient nitrate conditions within the Management Zone for conditions between 2010 and 2024. As illustrated in Figure E.S.1, several nitrate-impacted areas occur within the Priority 1 and 2 areas of the Management Zone. These areas are defined by average recent nitrate concentrations in the Upper Zone that exceed the drinking water Maximum Contaminant Level (MCL) of 10 milligrams per liter nitrate as nitrogen. Inherent uncertainty exists for the preliminary estimate of ambient nitrate conditions. As more Upper Zone nitrate data become available (through EAP implementation of well testing, or other monitoring programs associated with the Irrigated Lands Regulatory Program, Groundwater Sustainability Agencies, or other entities), the ambient nitrate analysis will be repeated, and the ambient map will be updated (and potentially changed) prior to the Final Management Zone Proposal submittal date. The ambient nitrate Upper Zone map is not intended to be a substitute for well testing or interim water replacement requirements.

<sup>&</sup>lt;sup>1</sup> Kings County was also contacted but did not have readily available groundwater nitrate data not already contained in the public databases utilized.



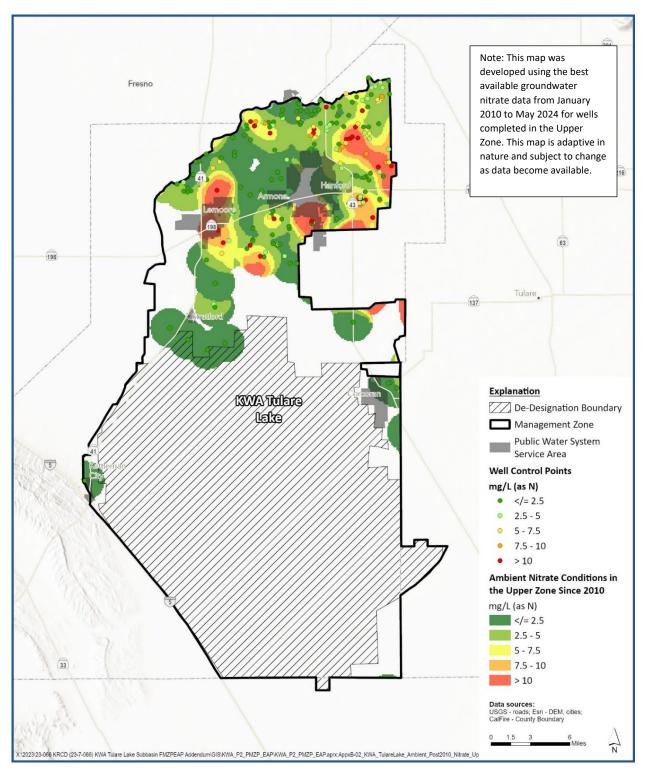


Figure ES 2. Ambient Nitrate Conditions in the Upper Zone since 2010



In addition to the map that shows areas potentially impacted by nitrate in groundwater in the Upper Zone, the groundwater nitrate data compilation also contains all available public water system supply well nitrate sample results. From the available records downloaded from the State Division of Drinking Water<sup>2</sup>, it appears that 4 public supply wells located within the Priority 2 Tulare Lake Subbasin KWA Management Zone have exceeded the nitrate MCL at some time. All four of those wells were considered to have an "active" status, as listed by the Drinking Water Watch<sup>3</sup>. None of the public water systems in the Priority 2 Tulare Lake Subbasin KWA Management ZOL at some time. All four of the public water systems in the Priority 2 Tulare Lake Subbasin KWA Management ZOL at ne for the public water systems in the Priority 2 Tulare Lake Subbasin KWA Management ZOL at some time. All four of the public water systems in the Priority 2 Tulare Lake Subbasin KWA Management ZOL at some time. All four of the public water systems in the Priority 2 Tulare Lake Subbasin KWA Management ZOL at some time. All four of the public water systems in the Priority 2 Tulare Lake Subbasin KWA Management ZOL at some time. All four of the public water systems in the Priority 2 Tulare Lake Subbasin KWA Management ZOL at some time. All four of the public water systems in the Priority 2 Tulare Lake Subbasin KWA Management ZOL at some time.

The ambient nitrate conditions map for the Upper Zone was overlain with known public water system boundaries and approximate domestic well locations to identify potentially impacted residents. Only 114 domestic wells are plotted within known public water system boundaries. An estimate of 79 domestic wells located outside of known public water system boundaries are located within mapped areas with estimated Upper Zone ambient nitrate above the safe drinking water standard (of 10 milligrams per liter nitrate as nitrogen). Using census block data from the 2023 U.S. Census, the estimated population of residents living outside known public water system boundaries and within mapped areas with potentially unsafe drinking water (estimated Upper Zone ambient nitrate above the MCL) is over 1,063.

## **E.S.3. Identification of Potentially Affected Areas**

A key component of the EAP is identification of residents or other entities in the Management Zone that may be obtaining their drinking water from a well impacted by nitrate levels that exceed 10 mg/L-N. Some KWA outreach efforts will target those identified as being most likely impacted by elevated nitrate (nitrate levels > 7.5 mg/L as N). This targeted outreach will occur at the same time the KWA is implementing general community outreach activities for the entire Management Zone. The process to identify residents or other entities in potentially affected areas will begin immediately upon EAP implementation using the steps described. Where appropriate, the KWA will prioritize and target those that rely on domestic wells, and for the Public Water Systems (PWSs), will evaluate on a case-by-case basis the role of the Management Zone.

## E.S.4. Community Outreach Program

The KWA has and will continue to engage the community on the EAP including the Interim Replacement Water Program with the overall objective to create a level of engagement and

<sup>&</sup>lt;sup>3</sup> Public Water System information was acquired from the State's Safe Drinking Water Information System (SDWIS) Drinking Water Watch online database (<u>https://sdwis.waterboards.ca.gov/PDWW/</u>) accessed August 2024.



<sup>&</sup>lt;sup>2</sup> Public Supply Well nitrate data was acquired from the Division of Drinking Water (<u>https://www.waterboards.ca.gov/drinking\_water/certlic/drinkingwater/EDTlibrary.html</u>) accessed August2024.

awareness with community residents and stakeholders that establish trust and robust participation. The stated goals of the community outreach program are to: 1) identify and cultivate relationships with key influential individuals and organizations in the communities to amplify information from the Management Zone, 2) provide channels for input and participation that connect with residents in a way that is effective and accessible, and 3) provide easy-to-understand, timely information on the EAP development and implementation.

The community outreach program goals guided outreach during EAP development in the Priority 1 area of the Management Zone (i.e, the Kings Subbasin). KWA conducted a series of community outreach events beginning in November 2020 to obtain input on EAP development. Webinars included opportunities to ask questions and provide comments to KWA staff and its consultants. Webinar polling was conducted to solicit input on demographics, communications preferences, and drinking water solutions. Virtual office hours were open to the public to solicit input and answer questions on EAP development. Events were promoted using varying communications methods including community flyers at key locations, community organization distribution, email, and direct mail. A survey in both English and Spanish to solicit feedback on preferred drinking water solutions was conducted and distributed via email, website, and community organization outreach using digital platforms.

This EAP reflects the input received from the public. General community outreach will continue during EAP implementation through a variety of communications mediums including virtual and in-person community meetings, sharing information through the KWA's website, sharing regular updates via email to the interested persons email list, direct mail pieces, and/or information distribution through entities that are locally collaborating with the KWA's efforts to provide safe drinking water. In addition to ongoing broad community outreach, this EAP includes a program to outreach directly to residences in areas most likely to have domestic wells contaminated by nitrate. A community survey to potentially impacted residents was conducted to obtain input.

## E.S.5. Interim Replacement Water

The Interim Replacement Water Program provides an immediate solution for those currently experiencing unsafe levels of nitrate in their drinking water source. However, these solutions are only temporary and will eventually be replaced by long-term, permanent solutions.

There are three key options to obtain safe water now at no cost to residents located in the Management Zone: (a) delivered or non-delivered home bottled water; (b) installation of a Point-of-Use (POU) treatment system in your home; or (c) utilizing water fill stations strategically located within the Management Zone. Regarding the first two options, a residence may receive these alternative water options if the resident can answer yes to the following three statements:

1. My home is a residence relying on a domestic well for drinking water in the KWA;



- a. For residents requesting service that receives drinking water from a PWS that is non-compliant with the nitrate drinking water standard, where appropriate, the KWA will prioritize and target those that rely on domestic wells, and for the Public Water Systems (PWSs), will evaluate on a case-by-case basis the role of the Management Zone.
- 2. I am willing to sign an agreement with the KWA's service provider; and
- 3. My well has unsafe nitrate levels (> 10 mg/L-N) (see Figure ES-1) as determined by a water quality analysis conducted by a certified laboratory

If you do not know if your well water has unsafe nitrate levels, you may contact the KWA (<u>https://kingswateralliance.org</u>) to request that your well be sampled at no cost to you. Results from the nitrate test, which will be provided to you will be used to determine the next steps. Most importantly, if your nitrate levels are unsafe the KWA will work with you immediately to obtain a safe source of drinking water. If nitrate levels are high (> 7.5 mg/L-N) but safe, the KWA will offer the opportunity to have your well tested again at no cost to you in the future.

Finally, the KWA may also install additional water fill stations in the Management Zone. Three are currently operational in the Dinuba, Kerman, and Hanford areas; all fill stations use a certified source of safe and free drinking water and are available to the entire community at no cost. Based on the needs of the community, additional fill station locations may be developed through the implementation of this EAP. Through this program, the community will be made aware of the existing fill stations and the availability of additional stations, if developed.

## E.S.6. Early Action Plan Implementation

The KWA began implementing Phase 1 of this EAP in the Priority 1 area (Kings Subbasin) on May 8, 2021. Implementation of Phase 2 in the Priority 2 area (relevant portions of the Tulare Lake Subbasin) will begin within 60 days of the submittal of this Addendum, or by February 26, 2025, unless the Central Valley Water Board notifies the KWA that this EAP Addendum is incomplete. A community outreach meeting will be held in early 2025 to kick-off Phase 2 of the program and inform residents regarding how to participate in the Interim Replacement Water Program. The Management Zone will also continue in its outreach to the community regarding the need and/or approach for developing additional water fill stations.



# **1. BACKGROUND**

## **1.1. Regulatory Requirements**

The Central Valley Regional Water Quality Control Board (Central Valley Water Board) established a Nitrate Control Program for the Central Valley Region of California that became effective January 17, 2020. One of the key goals of this Program is to work with the local community to ensure that a safe drinking water supply is available to residents affected by high levels of nitrate in the groundwater that is the source of their drinking water.

Implementation of the Nitrate Control Program is prioritized by groundwater subbasin. The Central Valley Water Board sent out Notices to Comply with the Nitrate Control Program to permitted dischargers (e.g., growers, dairies, poultry farms, wastewater treatment and food processing facilities) in the Priority 1 subbasins (Modesto, Turlock, Chowchilla, Kings, Kaweah, and Tule Subbasins) on May 29, 2020 and in the Priority 2 subbasins (Yolo, Eastern San Joaquin, Merced, Delta-Mendota, Madera, Tulare Lake, Kern County (Westside South), and Kern County (Poso) on December 29, 2023.

The priority for groundwater subbasins to comply with the Nitrate Control Program, and thus the schedules for program implementation, vary across the Kings Water Alliance (KWA) Management Zone. Regardless, permitted dischargers within the boundary of the Kings River Water Quality Coalition opted to work collectively together to establish one Management Zone to comply with all Nitrate Control Program requirements. The KWA Management Zone includes the Kings and Tulare Lake Subbasins, the northwestern portion of the Kaweah Subbasin and very small portions of the Madera, Delta-Mendota, Westside, Kern County, Tule and Pleasant Valley Subbasins (**Figure 1-1**).

The Management Zone entities are required to develop an Early Action Plan (EAP), which is defined in the Nitrate Control Program as: "a plan that identifies specific activities, and a schedule for implementing those activities, that will be undertaken to ensure immediate access to safe drinking water for those who are dependent on groundwater from wells that exceed the primary maximum contaminant level (MCL) for nitrate" (Central Valley Water Board, 2020). The MCL is 10 milligrams/liter nitrate as nitrogen (mg/L-N). The provisions to provide access to safe drinking under this EAP are considered temporary and will be replaced by permanent solutions through an approved Management Zone Implementation Plan (MZIP).

The Nitrate Control Program regulations state that the EAP must include the following elements (Central Valley Water Board, 2020):

• A process to identify affected residents and the outreach utilized to ensure that impacted groundwater users are informed of and given the opportunity to participate in the development of proposed solutions;



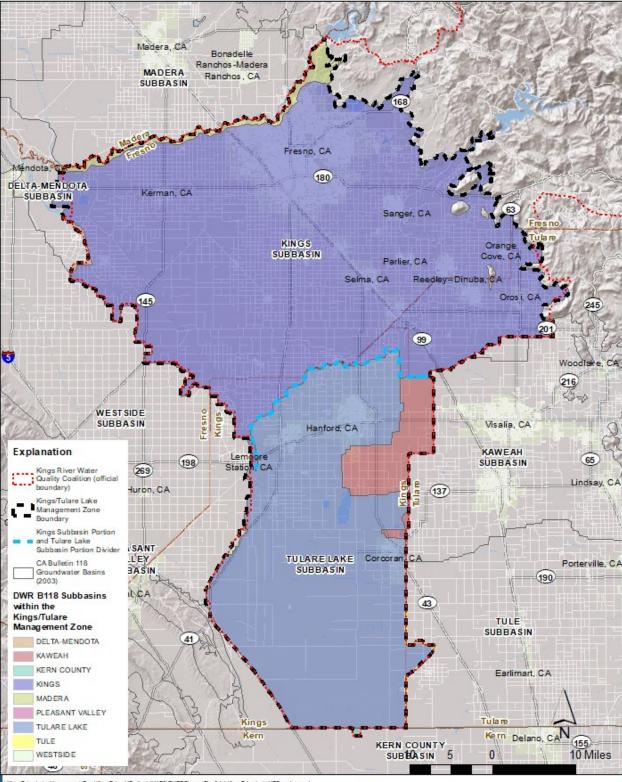
- A process for coordinating with others that are not dischargers to address drinking water issues, which must include consideration of coordinating with impacted communities, domestic well users and their representatives, the State Water Resources Control Board's (State Water Board) Division of Drinking Water (DDW), Local Planning Departments, Local County Health Officials, Sustainable Groundwater Management Agencies (SGMA) and others as appropriate;
- Specific actions and a schedule of implementation that is as short as practicable to address the immediate drinking water needs of those initially identified within the Management Zone, or area of contribution for a Path A discharger, that are drinking groundwater that exceeds nitrate standards and that do not otherwise have interim replacement water that meets drinking water standards; and
- A funding mechanism for implementing the EAP, which may include seeking funding from Management Zone participants, and/or local, state and federal funds that are available for such purposes.

Because the KWA includes both Priority 1 and 2 areas that have different implementation schedules under the Nitrate Control Program, this Management Zone has phased implementation of the EAP:

- Phase 1 EAP implementation began on May 8, 2021, in the Priority 1 areas of the KWA that include all or part of the Kings, Kaweah, and Tule Subbasins and the very small adjacent Priority 2 areas in the Delta Mendota and Madera Subbasins. Phase 1's EAP has now been incorporated into KWA's Management Zone Implementation Plan (MZIP) where it will continue to guide community outreach efforts, provide free well testing to residents and, where needed, offer emergency and interim drinking water to residents while the KWA implements its long-term drinking water program (Kings Water Alliance 2023).
- Phase 2 EAP implementation will soon begin in the Priority 2 Tulare Lake Subbasin and very small adjacent Priority 2 areas in the Westside, Pleasant Valley, and Kern County Subbasins. This Phase will begin within 60 days of the EAP Addendum submittal, or by February 26, 2025, unless the Central Valley Water Board notifies the KWA that this EAP Addendum is incomplete.

This EAP Addendum was submitted to the Central Valley Water Board as an attachment to the KWA Priority 2 Management Zone's Preliminary Management Zone Proposal (PMZP), December 28, 2024. Phase 2 implementation will begin within 60 days of submittal, or by February 26, 2025, unless the Central Valley Water Board notifies the KWA that this EAP Addendum is incomplete. If deemed incomplete, the KWA will work with the Central Valley Water Board in a timely manner to address their concerns.





HKingsTulareLake Management ZonelKingsTulare MZ, nitre tr MAP8(PMZPP)gures/Pg\_2HH KingsTulareLakeMZBoundary/mxd





## 1.2. Community Outreach to Develop Early Action Plan

The KWA implemented a comprehensive effort to reach out to the community within the Management Zone, as described in the KWA's Community Engagement Communication & Outreach Plan (**Appendix A**). Community engagement activities were conducted in a manner consistent with guidance prepared by the State Water Resources Control Board (State Water Board, 2020) (see **Appendix B**). The following sections summarize outreach completed for both phases of EAP implementation, Priority 1 (Phase 1) and Priority 2 (Phase 2) areas. Section 4 below describes the community outreach that will continue during Phase 2 EAP implementation.

## 1.2.1. Community Outreach Activities

The KWA implemented a variety of activities to involve the community in the development of this EAP. Key Management Zone outreach activities completed during the development of this EAP are described below (see **Appendix A** for additional documentation).

## 1.2.1.1. Community Outreach Meetings

Due to state directives during the COVID pandemic all Phase 1 community outreach meetings were held online using a ZOOM Webinar platform with Spanish translation provided. This approach is consistent with state-provided guidance (State Water Board, 2020). Table 7 of Appendix A includes a summary of the community public outreach meetings and workshops that were conducted as part of Phase 1.

Phase 2 implementation focused community outreach meetings had a combination of in-person and virtual meeting options. This approach is consistent with state-provided guidance (State Water Board, 2020). Two community outreach meetings were held during Phase 2 EAP development:

- August 27, 2024, Zoom Webinar The meeting presentation information on the following key topics: (a) Why do we care about nitrate? (b) What is the new Nitrate Control Program? (c) Who needs to be involved? (d) Where is drinking water affected? In addition to answering these questions, the EAP was introduced to the community as the mechanism to implement early actions or short-term solutions to address areas where drinking water is impacted by nitrate contamination. Additionally, the draft interim replacement water program planned for implementation through the EAP, including bottled water delivery, Point-of-Use (POU) treatment system installation and water fill stations was presented.
- September 24, 2024, Hanford, CA The meeting presentation information on the following key topics: (a) Why do we care about nitrate? (b) What is the new Nitrate Control Program? (c) Who needs to be involved? (d) Where is drinking water affected?



In addition to answering these questions, the EAP was introduced to the community as the mechanism to implement early actions or short-term solutions to address areas where drinking water is impacted by nitrate contamination. Additionally, the draft interim replacement water program planned for implementation through the EAP, including bottled water delivery, Point-of-Use (POU) treatment system installation and water fill stations was presented.

- TBA, Lemoore, CA This meeting presented: (a) general information to inform the public regarding nitrate concerns in the area; (b) updated information on nitrate water quality conditions in the KWA area and areas where domestic wells are most likely impacted by nitrate; (b) the draft interim replacement water program planned for implementation through the EAP, including bottled water delivery, Point-of-Use (POU) treatment system installation and water fill stations; and (c) how the public may comment on the draft EAP that is available for public review and continue to participate in the program during EAP implementation.
- TBA, Hanford, CA This meeting presented: (a) general information to inform the public regarding nitrate concerns in the area; (b) updated information on nitrate water quality conditions in the KWA area and areas where domestic wells are most likely impacted by nitrate; (b) the draft interim replacement water program planned for implementation through the EAP, including bottled water delivery, Point-of-Use (POU) treatment system installation and water fill stations; and (c) how the public may comment on the draft EAP that is available for public review and continue to participate in the program during EAP implementation.
- Week of November 18 A virtual office hour was held to solicit feedback from the community and answer questions. KWA staff were available during the hour.

**Appendix A** provides the presentations delivered at each of the Phase 1 and Phase 2 meetings and summarizes meeting participation.

## 1.2.1.2. Public Meeting Notices

The KWA conducted extensive outreach to encourage local participation in public meetings. This outreach includes community residents, non-dischargers, permitted dischargers and any other interested parties as described in **Appendix A**.

For the Phase 1 and Phase 2 community outreach meetings, the KWA publicly noticed the meeting through the following actions (see **Appendix A** for meeting notice examples):

- Direct mailers were sent to residents throughout the KWA
- Meeting notices in English and Spanish were posted at key community locations in the KWA
- Directly inviting local community leaders



- Outreach to local community and governmental organizations
- Event notice on the KWA website and upcoming meeting email notice to the KWA email lists

Virtual Office Hours were promoted through the following actions:

- Promotion during community outreach meetings
- Events notices on the KWA website
- Email notices to the KWA email lists

## 1.2.1.3. KWA Management Zone

The KWA maintains a website (<u>https://kingswateralliance.org</u>) which includes information on the Nitrate Control Program and EAP, educational information on the KWA, links to past outreach event materials and videos, an events page to promote upcoming outreach, and an interactive map for residents to determine if they are in a Phase 1 or Phase 2 area of the KWA (<u>https://kingswateralliance.org/map/</u>).

#### 1.2.1.4. Public Review Opportunities

KWA provided stakeholders, including local community residents, the opportunity to review the Phase 1 EAP. For Phase 2 implementation, this EAP addendum was required to include Priority 2 area updates. Similar to the Phase 1 process, the KWA provided an updated Phase 2 EAP Addendum public draft to stakeholders, including local community residents, the opportunity to review. Public notification was made on November 8, 2024, to inform the public draft EAP Addendum was available for review and comment; comments to the KWA were due by November 22, 2024, in order to be included in the submittal due to the Central Valley Water Board (CVWB) by December 28, 2024. Comments and KWA responses to comments are provided in Attachment C of the PMZP document. Comments received after November 22 were still accepted but not incorporated in the final submittal.

To notify residents of the opportunity to review this document, the following notification activities were conducted:

- Direct email of the document link to list of interested parties;
- Posting of document links on the KWA website and other locations;
- Virtual office hours the week of November 18, 2024.



#### **1.3. Early Action Plan Implementation**

As noted above, Phase 1 EAP implementation began in the Priority 1 areas of the KWA Management Zone on May 8, 2021. EAP implementation activities in the Priority 1 areas have now been incorporated into KWA's Priority 1 MZIP (Kings Water Alliance 2023). EAP Phase 2 implementation will begin within 60 days of submittal, or by February 26, 2025, unless the Central Valley Water Board notifies the KWA that this EAP is incomplete. Community outreach will continue to occur on a regular basis during EAP implementation. Phase 2 EAP tasks to be implemented include identification of:

- Date, time and location for a community outreach meeting to kickoff implementation of the EAP.
- Potentially affected residents on domestic wells, i.e., those in areas of the KWA where
  nitrate concentrations most likely exceed 7.5 mg/L-N. Once these residents are
  identified the KWA will begin outreach to advise residents of the opportunity to have
  their well tested for nitrate at no cost to them and interim replacement water options,
  including the opportunity to obtain bottled water, installation of a Point-of-Use (POU)
  treatment system ("POU System") in their home or obtain water from fill stations
  including those already in place (in Kerman, Dinuba, and Hanford).
- With community input, begin identification of potential locations for new water fill stations in the area that would be available to all residents.
- Respond to requests to participate in the Interim Replacement Water Program and need for nitrate testing of wells.

The following sections provide detailed information about the above tasks as well as other activities that will be implemented through this EAP Addendum.



# 2. IDENTIFICATION OF NITRATE-IMPACTED AREAS

## 2.1. Groundwater Nitrate Assessment

To support the development of the Tulare Lake PMZP Addendum, nitrate groundwater data were requested, downloaded, and compiled using various publicly available sources, including the State Water Board's Division of Drinking Water (DDW), GeoTracker Groundwater Ambient Monitoring and Assessment (GAMA) data, and the Irrigated Lands Regulatory Program monitoring data. These data were complemented by data requested from Fresno County departments<sup>4</sup>. Groundwater data were meticulously vetted and categorized into depth zones, following previously-developed CV-SALTS best management practices, and wells completed in the Upper Zone<sup>5</sup> of the groundwater aquifer were used to determine recent average ambient nitrate concentrations for data since the year 2010. The best available groundwater nitrate dataset for Upper Zone wells consisted of publicly and non-public data between January 2010 and May 2024 for wells in the Management Zone and a three-mile buffer around the Management Zone<sup>6</sup>.

The Upper Zone average nitrate concentrations for wells in the Management Zone were used to produce a geospatial analysis of ambient conditions across the Management Zone. This methodology involves a technique called "kriging", which utilizes known control point data and interpolates (or estimates) ambient nitrate conditions in between control points, using a search radius of 1.5 miles. Figure 2-1 shows the Tulare Lake Management Zone with the estimated ambient nitrate conditions in the Upper Zone, representing average groundwater quality conditions since 2010. The Management Zone recognizes that the map of ambient nitrate in the Upper Zone has inherent uncertainty and is adaptive in nature. As more Upper Zone nitrate data become available (through EAP implementation of well testing, or other monitoring programs associated with the Irrigated Lands Regulatory Program, Groundwater Sustainability Agencies, or other entities), the ambient nitrate analysis will be repeated, and the ambient map will be updated (and potentially changed) prior to the Final Management Zone Proposal submittal date. The map of ambient Upper Zone nitrate is not intended to be a substitute for well testing or interim water replacement requirements. For the Priority 2 Tulare Lake Subbasin Management Zone area, groundwater quality data for wells completed in the Upper Zone covered most of the northern area, with data gaps in the central and south parts of the

<sup>&</sup>lt;sup>6</sup> "Public and non-public" data refer to data from public and non-public entities that was either requested and/or downloaded for this data-gathering effort.



<sup>&</sup>lt;sup>4</sup> Kings County was also contacted, but did not have readily-available groundwater nitrate data that are not already published via other sources previously listed.

<sup>&</sup>lt;sup>5</sup> Upper Zone as defined by the Central Valley Water Board is, "the portion of the groundwater basins, subbasin or Management Zone from which most domestic wells draw water."

subbasin. The largest data gap area with unknown nitrate conditions in the Upper Zone occurs near the De-Designation Boundary in the southern portion of the Tulare Lake Subbasin<sup>7</sup>.

Using the available nitrate dataset, there are small nitrate-impacted areas that occur within the Tulare Lake Subbasin portion of the KWA Management Zone; these are defined by average recent nitrate concentrations in the Upper Zone exceeding the drinking water Maximum Contaminant Level (MCL) of 10 mg/L nitrate as N. **Figure 2-1** depicts these nitrate-impacted areas (see Section 3 of Chapters 2 and 3 of the PMZP for information regarding the development of Figure 2-1). The largest nitrate-impacted areas exist in the vicinity of Lemoore, south Hanford, and northwestern Remnoy.

## 2.2. Potentially Impacted Public Water Supply Wells

## 2.2.1. Public Water Supply Wells in the Management Zone

Public Water Systems (PWS) are defined as systems that provide drinking water to: (1) 15 or more service connections; or (2) regularly serves at least 25 individuals daily for at least 60 days per year (**Table 2-1**). Non-Community systems include any facility that provides drinking water, such as churches, rest stops, stores, schools, businesses, etc.

Table 2-1. Classification of Drinking Water Systems by Constituency, Connections, and Duration of Service per Year									
Duration of	Connections:		< 5	5 +	< 15	15 +	< 200	200 +	
Service	Persons Served:		< 25			25 +			
N/A	Small Water System (SWS) <sup>1</sup>	By	Connections						
< 60 days/year	Local Small Water System	Defined B	Connections & (persons, duration)						
< 60 days/year	State Small Water System	Classification			ctions & duration)				
>= 60 days/year	Community Public Water System (PWS) <sup>2</sup>	Clas			Connections or (person duration)				

Source: Adapted from Boyle et al. 2012

<sup>&</sup>lt;sup>7</sup> See the Kings Water Alliance Management Zone Preliminary Management Zone Proposal (2021) for additional information.



- <sup>1.</sup> Classification as a SWS does not preclude classification as any of the other types. SWS may be regulated by DDW or by Local Primary Agency county but must have less than 200 connections.
  - <sup>2.</sup> A PWS is a system for the provision of water for human consumption that has 15 or more service connections OR regularly serves at least 25 individuals at least 60 days per year.

Community PWS, which are regulated by the State Water Board's DDW, are required to submit water samples of their raw and delivered water for a broad suite of regulated constituents on various schedules that depend on the constituent and the source water context. All PWS data on water quality, source locations, service areas, and historical data are publicly available on the State Water Board website<sup>8</sup>.

State Small Water Systems (SSWS) are defined as systems serving at least five but not more than 14 residential households. Mutual Water Companies are frequently classified as a SSWS. Typically, SSWS are regulated by county environmental health departments; regulatory oversight of these systems varies by county. Typically, counties require submission of water quality samples annually (at most) for a smaller set of constituents than monitored by a PWS.

SSWS data are public; however, most counties in the state do not have these data compiled in any easily accessible format. Many counties require a fee for data retrieval for these systems. Typically, the data available include sporadic water quality data for a few constituents, and the original permit for the system. The permit typically includes information on the construction of the water source (well) and the street where service is provided.

Local Small Water Systems (LSWS) include residential systems serving two to four households. Most counties regulate LSWS as if they were simply private wells – that is, they are unregulated except for the requirements associated with the drilling permit. Typically, no information is available to identify the difference between a single-household well and one used for a LSWS.

Elevated nitrate concentrations have been found in many PWS wells in the Kings/Tulare Lake Management Zone. The State Water Board's Drinking Water Source and Water Systems identification documentation was accessed via the internet<sup>9</sup> to provide water system information that complements water quality data from the DDW. Together, these two sources provide information on how many systems have active versus inactive wells that have nitrate (as N) exceeding the MCL. This documentation provides a status code for each well, as well as a population served number, and the number of connections for each water system.

Wells with any measurement of raw untreated water having nitrate exceeding the MCL were extracted from the database to determine if the wells are considered to be actively providing water to the water system or have been abandoned, destroyed, or inactive. Based on DDW data (accessed August 20204), four (4) public supply wells in the Tulare Lake Subbasin portion of the KWA Management Zone have exceeded the MCL for nitrate. All four of these wells are

<sup>&</sup>lt;sup>8</sup> <u>https://data.ca.gov/dataset/drinking-water-public-water-system-information</u>, accessed October 2021

<sup>&</sup>lt;sup>9</sup> <u>https://sdwis.waterboards.ca.gov/PDWW/</u> accessed August 2024.

considered "Active" (Active Raw, meaning the groundwater is sampled directly from the well). Active public supply wells that have experienced nitrate concentrations exceeding the MCL are located near the city of Corcoran (**Figure 2-2 Addendum**).

The California Department of Water Resources (DWR) provides approximate well locations for all Well Completion Reports (WCR) they have on record. These records include location information for domestic wells drilled across the state. **Figure 2-2 Addendum** show the locations provided by DWR for the domestic drinking water wells in their WCR database, as well as the service area boundaries of PWSs available in the area. Publicly available PWS service area boundaries are compiled by the California Environmental Health Tracking Program (CEHTP).

Table E-1 in **Appendix E-Addendum** lists the four public supply wells from the DDW database that have experienced nitrate concentrations that have exceeded the MCL one or more times in their period of record for the Priority 2 Tulare Lake Subbasin portion of the KWA Management Zone. This table provides:

- (a) Summary of the nitrate data available for the individual well, including:
  - a. Date range of measurements;
  - b. Number of measurements;
  - c. Range of nitrate measurements; and
  - d. Date of the most recent nitrate exceedance.
- (b) Well system characteristics, including:
  - a. Well status (active, inactive, etc.);
  - b. Water system the well provides water to;
  - c. Water system type (community, non-community non-transient, etc.);
  - d. Number of connections; and
  - e. Population served by that water system.

Table E-2 in **Appendix E-Addendum** provides information about the public water supply system that has experienced at least one well where nitrate concentrations have exceeded the MCL. This table provides:

- a) Water system number (as identified by DDW);
- b) Water system name;
- c) Water system type;
- d) Number of connections (which ranges from 1 to 135,693);
- e) Number of wells in each well status category that have exceeded the nitrate MCL;
- f) Population served by the PWS; and
- g) If the PWS has an active impacted well, the population of potentially affected people served by the PWS.



## 2.2.2. Delivered Water Treatment Status of Public Water System Wells

Although there are some active wells that have been tested for nitrate with results indicating nitrate concentrations have exceeded the MCL of 10 mg/L nitrate as N, many PWSs have treatment facilities to remove nitrate or other contaminants prior to the water being delivered to consumers. Using the best information readily available, it is possible to find DDW sources of water for PWS that are categorized as "treated". This includes the following potential DDW-defined well status categories:

- AT Active Treated: An active source which is sampled after any treatment.
- CT Combined Treated: Combined sources which are treated.
- DT Distribution System Sample Point, Treated: Sample point within the distribution system after treatment.
- IT Inactive Treated: A source which is not in service for periods of one year or greater and which provides treated water to a system.
- ST Standby Treated: A source which is used less than 15 calendar days per year, with periods not to exceed five consecutive days and which provides raw water which is sampled after treatment.

Even when a water system has a documented treated source according to DDW, this does not ensure that the water system treats its water for nitrate (a treated source may mean chlorination prior to being distributed, or possible treatment for other contaminants such as arsenic, manganese, or organic chemicals). PWS typically treat elevated nitrate by using blending, reverse osmosis (RO; membrane technology), ion exchange (IX), granular activated carbon (GAC), or biological or chemical nitrate removal via denitrification (less common). Out of the eleven (11) Public Water Systems located within any portion of the Management Zone, 4 of these systems have treatment capabilities as indicated by having a treated source in the DDW records. One of the 4 systems have some form of treatment that might treat nitrate (e.g., blending, reverse osmosis, granular activated carbon, ion exchange), as indicated by their source name mentioning nitrate.

Table E-3 Addendum in **Appendix E** summarizes the water system treatment information that is available from DDW. **Figure 2-3 Addendum** shows the Management Zone and the public supply wells that have exceeded the nitrate MCL; the circled water systems have treated water sources (according to well status data from DDW) that might treat for nitrate. The color of the circle indicates whether the water system has had a nitrate sample from a treated source that exceeds the MCL (greater than 10 mg/L as N).

## **2.3. Potentially Impacted Public Water Systems**

Public supply wells impacted by nitrate have been identified, and information about treatment status has been summarized. Based on further investigation of public water systems with



potential nitrate issues, it is possible to determine current compliance status. If a public water system is fully in compliance with all Title 22 drinking water standards, these systems will not have any open violations filed with the State Water Board (accessible via Drinking Water Watch).

The Human Right to Water Data Portal (also through the State Water Board, <u>https://www.waterboards.ca.gov/water\_issues/programs/hr2w/</u>, accessed August 2024) provides a GIS point shapefile of public water systems and their compliance status (as of November 2020). The Human Right to Water Portal map file represents information available on community and non-transient non-community public drinking water systems that are regulated by the State Water Board or Local Primacy Agency (LPA). Public drinking water systems included in this dataset have had or are in exceedance of a federal/state primary or secondary drinking water standard between January 2012 to November 2020. The State Water Board's regulatory authority does not include water systems that are defined as "state small water systems", "local state small water systems", or private domestic wells.

The Human Right to Water Data Portal was last updated in November 2020. Information about why public water systems may be out of compliance is available through individual investigation of each public water system through the Drinking Water Watch website. Using a combination of information gleaned from data summarized in Section 2.2, (public supply wells with nitrate data from the Division of Drinking Water), the Human Right to Water Data Portal, and the Drinking Water Watch website, the compilation of the compliance status of all public water systems in the Priority 2 Tulare Lake Subbasin portion of the KWA Management Zone can be seen in **Appendix E** Table E-4 Addendum. This table illustrates that there are no PWS currently out of compliance (as of August 2024) due to nitrate or nitrate plus a co-contaminant. There are five PWS that are currently out of compliance as of August 2024, two due to non-MCL related violations (such as not performing monitoring on an appropriate schedule). MCL exceedances cause violations in three PWS resulting in them being out of compliance. Contaminants causing compliance issues due to MCL exceedances include TTHM, HAA5, and coliform for those three PWS.

There are zero public water systems in the Priority 2 Tulare Lake Subbasin portion of the KWAMZ that are out of compliance due to nitrate conditions that exceed the safe drinking water limit. This means that there are zero residents served by public water systems currently out of compliance (as of August 2024) due to nitrate contamination alone or due to nitrate PLUS additional co-contaminants.

## 2.4. Potentially Impacted Domestic Wells and Local Small Water Systems

**Figures 2-2 Addendum** illustrate the locations of potentially impacted domestic wells and areas of elevated nitrate (7.5 mg/L to 10 mg/L as N, and > 10 mg/L as N). These areas were used along



with DWR's domestic well locations based on Well Completion Reports<sup>10</sup>. The approach to identify potentially impacted domestic wells and local small water systems utilizes Public Water System service area GIS map coverages, which are only available for larger systems. Public Water System boundaries are not the same as city limits, although most large cities do have their own Public Water System, with mapped service areas. Domestic wells located within the boundaries of a PWS were identified even though they may not be used for drinking water (**Figure 2-2 Addendum**). The map of recent ambient Upper Zone nitrate was used to estimate the number of potentially impacted domestic wells in the Management Zone.

There are approximately 114 domestic wells located within the PWS residential service areas in the Priority 2 Tulare Lake Subbasin portion of the KWA MZ. It is unknown whether any of these wells are still being used even though they are potentially in a PWS area<sup>11</sup>. The number of domestic wells outside of PWS service areas far outweighs those of unknown use status within PWS service areas. Smaller Public Water Systems do not have a mappable service area associated with them, simply a physical address and number of connections. The domestic wells that may be located within these smaller PWS that do not have a documented service area mapped boundary readily available to the public are conservatively counted in the domestic well count in the category of domestic wells outside known PWS boundaries.

To estimate the number of wells potentially impacted by elevated nitrate, domestic wells were placed into six groups:

- Group 1 Groundwater in the Upper Zone with nitrate as N at or below 2.5 mg/L;
- Group 2 Groundwater in the Upper Zone with nitrate as N above 2.5 mg/L as N and at or below 5.0 mg/L;
- Group 3 Groundwater in the Upper Zone with nitrate as N above 5.0 mg/L and at or below 7.5 mg/L;
- Group 4 Groundwater in the Upper Zone with nitrate as N above 7.5 mg/L and at or below the MCL of 10 mg/L;
- Group 5 Nitrate as N exceeding the MCL of 10 mg/L in the Upper Zone; and
- Group 6 Unknown category because the domestic well(s) are located where insufficient nitrate data exist in the Upper Zone to perform the spatial interpolation of ambient nitrate conditions.

The total number of wells inside and outside PWS boundaries was compared to the number of wells in each elevated nitrate category to provide an estimate of the percentage of domestic wells potentially impacted by elevated nitrate in the groundwater. **Table 2-2 Addendum** 

<sup>&</sup>lt;sup>11</sup> Outreach to individual PWS to request accounting data may help identify residents within a PWS boundary that rely on private domestic wells rather than compliant metered water.



<sup>&</sup>lt;sup>10</sup> Many domestic well locations provided by DWR's Well Completion Report database may not be exact locations, but rather many wells are plotted in the center of a 1-square mile township/range-section area. Therefore, several domestic wells may plot at the same location, and their locations are accurate up to one mile.

summarizes the results of this analysis. This analysis has some inherent uncertainty associated with domestic well locations and the ambient nitrate map (which is adaptable and subject to change as additional Upper Zone groundwater nitrate data become available over time).

To estimate the population potentially impacted by residents relying on groundwater that may have elevated nitrate, 2010 census block data were mapped and joined with the ambient Upper Zone nitrate concentrations occurring outside of PWS boundaries. The population was summed for census blocks outside PWS boundaries and within the Management Zone for those areas with nitrate concentrations in the Upper Zone (using the six categories of nitrate concentrations described above). **Table 2-2 Addendum** summarizes the results of this analysis.

The total estimated number of domestic wells located outside of PWS boundaries and the potential population associated with residents relying on groundwater that may have elevated nitrate concentrations are derived from two very different methodologies. Based on the estimated population in the potentially affected areas, it is likely that the estimated number of domestic wells located in those areas is underestimated based on information from DWR's WCR database.



Table 2-2 Addendum. Summary of Domestic Wells and Population with Estimated Upper Zone Nitrate Area Categories (Priority 2 Tulare Lake Subbasin KWAMZ)										
	DWR Domestic Wells Located Outside PWS Boundaries		DWR Dom. Wells Within PWS Boundaries	DWR Total Domestic Wells Domestic Wells in De-Designation in Management Boundary Zone		2023 Census Block Analysis (Outside PWS service areas)				
Estimated Upper Zone Ambient Nitrate (2010-2024)**	Domestic Wells Outside PWS Boundarie S	% of Total Domestic Wells Outside PWS	Total Domestic Wells in P2 Tulare Lake Subbasin portion of KWAMZ Within PWS Boundaries	All Domestic Wells in Management Zone	DWR Domestic Wells Outside of PWS Boundary and Within De- Designation Boundary	DWR Domestic Wells Within PWS Boundary and Within De- Designation Boundary	Population Outside PWS Boundaries	Population Outside PWS Boundaries and Within De- Designation Boundary		
Group 1: <=2.5 mg/L as N	368	88.9%	46	414	4	0	10,511	14		
Group 2: >2.5 – 5.0 mg/L as N	359	95.0%	19	378	0	0	3,449	0		
Group 3: >5.0 – 7.5 mg/L as N	136	96.5%	5	141	0	0	1,179	0		
Group 4: >7.5 – 10.0 mg/L as N	65	97.0%	2	67	0	0	804	0		
Group 5: >10.0 mg/L as N	79	75.2%	26	105	0	0	1,063	0		
Group 6: Unknown*	157	90.8%	16	173	74	1	3,121	750		
Total (Outside PWS Boundaries)	1,164	91.1%	114	1,278	78	1	20,127	764		

\*Domestic wells or Census Blocks are located in a "Gap Area" where insufficient Upper Zone nitrate data exist to do a spatial interpolation of ambient nitrate conditions.

\*\*Ambient nitrate levels are based on best available groundwater nitrate data meticulously vetted at the time of analysis and are based on Upper Zone nitrate data from January 2010 to May 2024. These mapped nitrate levels are subject to change and are therefore adaptable, as new data become available.



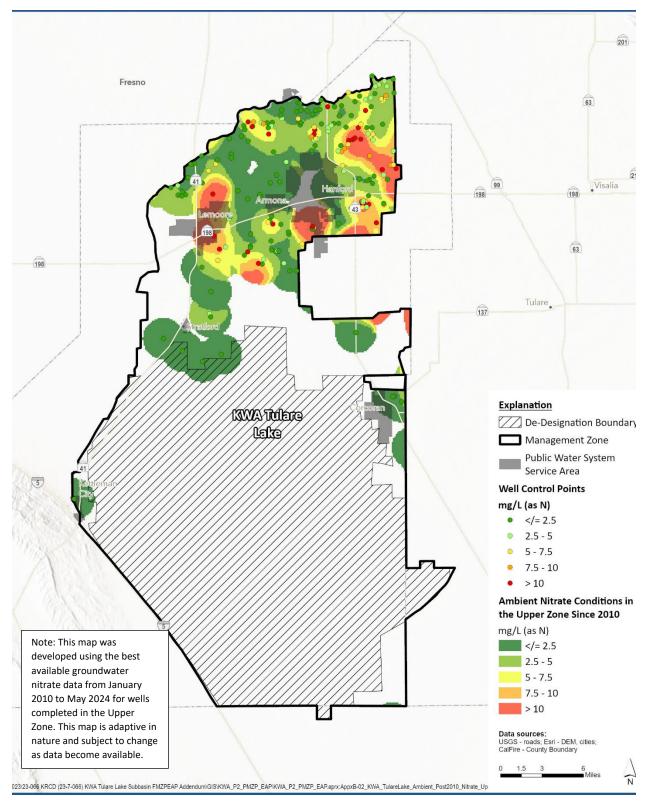


Figure 2-1 Addendum. Ambient Nitrate Conditions in the Upper Zone Since 2010



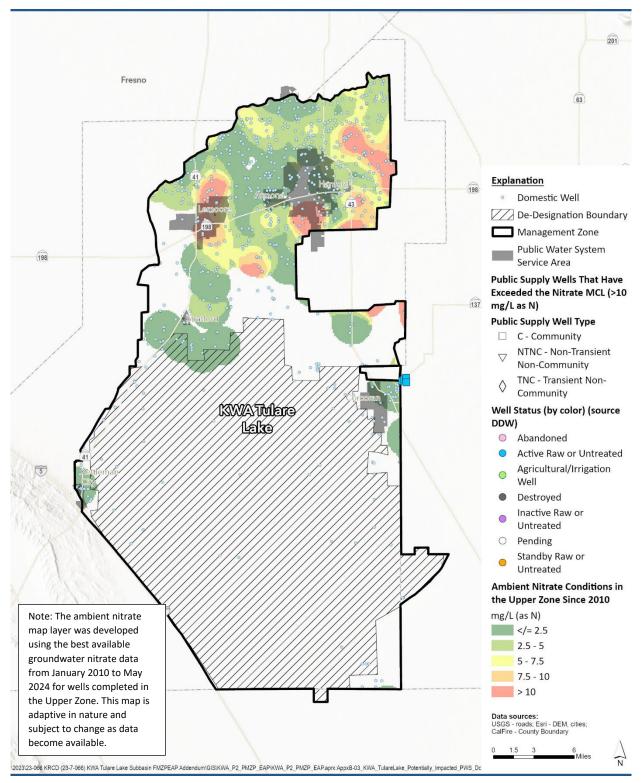


Figure 2-2 Addendum. Potentially Impacted Public Water Supply Wells and All Domestic Wells



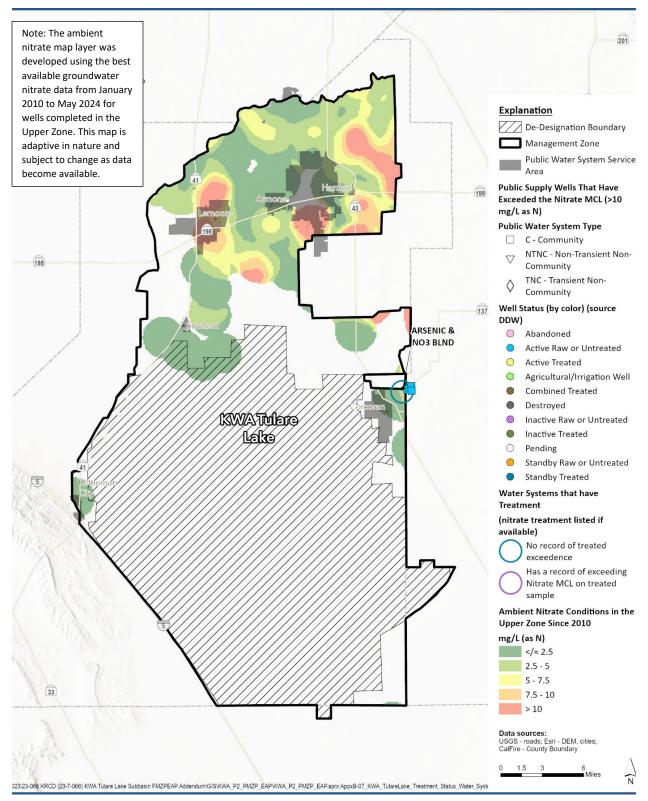


Figure 2-3 Addendum. Treatment Status for Water Systems that have Wells with Nitrate-Impacted Samples



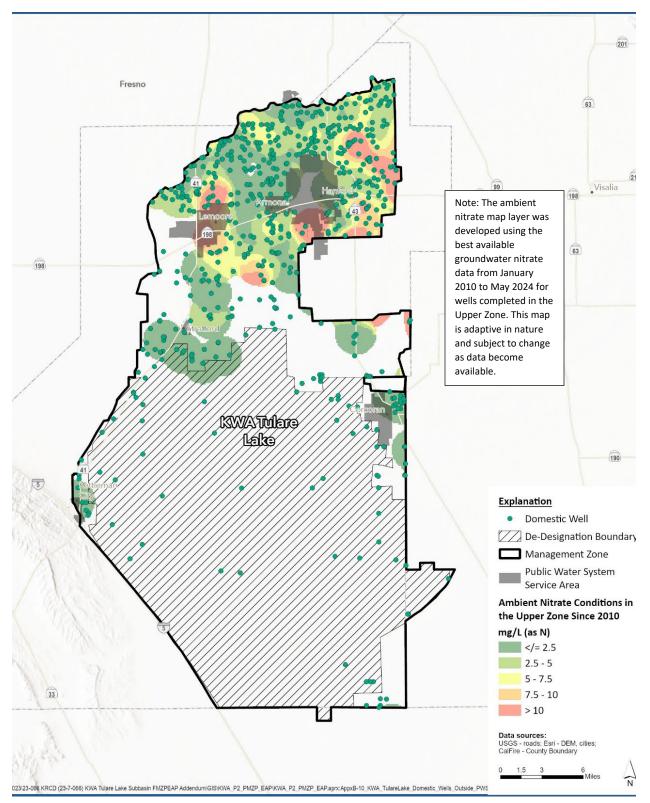


Figure 2-4 Addendum. Domestic Wells Located Outside Public Water System Areas in the Kings/Turlock Lake Management Zone



# **3. IDENTIFICATION OF POTENTIALLY AFFECTED AREAS**

A key component of the EAP is identification of residents in the KWA that may be obtaining their drinking water from a domestic well impacted by nitrate levels > 10 mg/L-N. While the KWA conducts outreach to the entire Management Zone (Phase 1 and Phase 2 areas), the KWA will target some of its outreach efforts specifically to those identified as being most likely impacted by elevated nitrate, i.e., in areas where nitrate is most likely > 7.5 mg/L-N. This targeted outreach will occur at the same time that the KWA is implementing general community outreach activities to the entire Management Zone. The process to identify residents in potentially affected areas will begin immediately upon EAP implementation using the steps described in the following subsections.

## **3.1. Process to Identify Affected Residents**

**Figure 2-1 Addendum** identifies the portions of the KWA where nitrate conditions in the Upper Zone of the groundwater system are likely > 7.5 mg/L-N (see orange and red-colored areas). Regardless of these findings, any resident on a domestic well within the Management Zone may contact the KWA at any time to discuss the opportunity to participate in the Interim Replacement Water Program.

The KWA will implement the following stepwise process to identify residences that may have a domestic well. The information developed to identify domestic wells in nitrate-impacted areas provides a starting point for the work described below. The outcome of this process will be information needed to target EAP outreach to those residents most likely served by a domestic drinking water source that has high nitrate levels. As nitrate data are received from this EAP's well testing program, these data will be incorporated into the KWA's database and used to support periodic re-evaluations regarding whether targeted outreach should include additional areas.

#### Step 1: Data Development – Identify PWS Boundaries and Obtain County Parcel Data

Public databases that provide PWS boundary information are often not accurate. Therefore, in Step 1, the Management Zone will utilize publicly available PWS boundaries for mailing to Assessor Parcel Numbers (APN) and addresses. After the initial mailing using APN data, KWA will switch to rural residential mailing routes provided by the U.S. Postal Service for additional mailing.

To identify the parcels within the Management Zone, the county assessor parcel GIS data will be requested. The GIS-based parcel data will be overlaid with the PWS data obtained above and groundwater nitrate water quality characterization data. The outcome will be a base map that identifies areas where nitrate is most likely > 7.5 mg/L-N and not served by a PWS.



#### Step 2: Remove Parcels Served by Nitrate Compliant PWS

Each PWS will be evaluated to determine if it is compliant with the nitrate water quality standard (Note: An initial evaluation was completed during development of the PMZP; the findings from this effort will be updated as needed). Parcels located within nitrate compliant PWS boundaries will be removed from further evaluation. If it is unclear whether the PWS is in compliance with the nitrate requirements, the associated parcels will be retained. After Step 2, all remaining parcels should meet the following criteria:

- Located within the Management Zone;
- Not served by a nitrate compliant PWS or status of compliance of the associated PWS is unknown; and
- Located in an area where the Upper Zone of the relevant groundwater subbasin potentially has elevated nitrate levels > 7.5 mg/L-N.

#### Step 3: Establish List of Potentially Affected Residences

GIS-based parcel information (APN or address) will be exported into an Excel spreadsheet. The resulting spreadsheet will be provided to a third-party vendor to generate a mailing list. The outcome will be a preliminary mailing list to be used for targeted resident outreach activities, as described below.

#### Step 4: Identify Targeted Residences Subject to Existing Well Testing Program

The Irrigated Lands Regulatory Program (ILRP) required that growers in the Tulare Lake Basin begin monitoring domestic (drinking water) wells on their enrolled parcels for nitrogen in 2020. The purpose of this monitoring is to identify drinking water wells that have nitrate concentrations > 10 mg/L-N and notify well users of the potential for human health risks if the water is used for drinking or cooking.

Under Step 4, the preliminary mailing list created under Step 3 will be evaluated to determine if any residences included on the target list have already had their well tested under the existing well sampling program. For residences identified under this step: (a) if the well test result is > 10 mg/L-N, the Management Zone will include them on the targeted outreach mailing list to inform them of the EAP and interim replacement water options available to them (if replacement water is still needed); or (b) if the test result is  $\leq$  7.5 mg/L, then they will not be targeted for direct outreach under the EAP. However, their well will continue to be re-tested as required under the ILRP (see also Section 5.3).

## **3.2. Process for Non-Compliant Public Water Systems**

**Section 2.3** identified PWSs located within the KWA that are currently non-compliant with the nitrate drinking water standard. During EAP implementation, the KWA will prioritize and target those that rely on domestic wells, and for the Public Water Systems (PWSs), will evaluate on a case-by-case basis the role of the Management Zone. This support would also apply to other



PWSs found to be non-compliant with nitrate standards during EAP implementation (i.e., those not already identified in Section 2.3).

# 4. COMMUNITY OUTREACH PROGRAM

Section 1.2 above summarizes the community outreach activities completed to support the development of this EAP. Community outreach will continue during EAP implementation to obtain additional community input. The outcome of these efforts may result in modifications to this EAP in the future (See Section 6.4.2 and process to amend the EAP).

## 4.1. Information Sharing

The Management Zone shares information with stakeholders, including community residents, with interests in the implementation of this EAP through several mechanisms, as described in the following subsections.

## 4.1.1. Management Zone Website

The KWA maintains a website (<u>https://kingswateralliance.org</u>) that serves two key purposes, including providing a: (a) mechanism for residents to notify the KWA that they would like to receive notifications of upcoming outreach events and mailouts of program information and (b) place to post the following information:

- Planned community outreach-related activities and how to participate.
- Schedule for implementation of EAP's interim replacement water program.
- Information regarding how to have your well tested for nitrate at no cost to the resident.
- Interim Replacement Water Program information, including, e.g., (1) how to receive bottled water deliveries at your home; (2) how to have a POU System installed in your home; and. (3) locations of and procedures to use the existing operational water fill stations and information on the development status of any new water fill stations in the area;.
- Informational materials such as fact sheets, community flyers or other materials that can be used individually or shared with others.
- Frequently Asked Questions (FAQs) regarding relevant Nitrate Control Program activities, e.g., phasing of EAP implementation and Management Zone development.

## 4.1.2. Materials Development & Distribution

The KWA will prepare informational materials on an as needed basis to support implementation of this EAP Addendum (e.g., FAQs or "how to" instructions for topics such as how to have your



well tested, how to request bottled water delivery or installation of a POU System, or how to access and operate a water fill station). These materials will be posted on the website and, as needed, provided to stakeholders within the KWA to facilitate information sharing. Any posted documents will include both English and Spanish translations when feasible. Other language translations will be developed, if the need is identified.

#### 4.2. Community Outreach Activities

The KWA will conduct periodic community outreach meetings to support EAP implementation (see Section 6.1 for implementation schedule). Upcoming meeting schedules will be shared with the community during outreach activities and through website postings.

#### 4.2.1. General Community Outreach Meetings

General community outreach meetings were held during development of this EAP (information will be provided in both English and Spanish to the maximum extent practicable; other language support will be provided if determined necessary). Opportunities to participate in these meetings will continue during EAP implementation. KWA will hold a combination of hybrid and virtual community outreach meetings depending on the need/purpose of the meeting and the residents' input. **Table 4-1** summarizes the activities that have been and will continue to be implemented by the KWA to conduct each meeting. The content of each meeting may vary, but the primary purpose of these meetings is to inform the community of the following:

- Phasing of EAP implementation across the KWA;
- Overall status of implementation of EAP activities: under Phase 2 in the Tulare Lake Subbasin and ongoing implementation of the Interim Replacement Water Program under the MZIP in the Kings Subbasin;
- Opportunity for residents with a domestic well with nitrate at a concentration greater than 10 mg/L-N to participate in or access services from the interim replacement water programs;
- Obtain input from the community on how implementation of the EAP can be improved;
- Have discussions regarding potential long-term drinking water solutions as those planning efforts increase;
- Status of next steps in the Nitrate Control Program, e.g., development of Final Management Zone Proposal and Management Zone Implementation Plan in the Priority 2 area; and
- Schedule for subsequent meetings and upcoming milestones.



The KWA will notify the public of EAP-related community outreach events (at a minimum in both English and Spanish) through the use of one or more of the following methods:

- Email to residents that have registered with the KWA to receive information.
- Postings on the KWA website and the websites of organizations that have partnered with the KWA to share information.
- Social media networks, e.g., Facebook or Nextdoor.
- Direct mail to KWA residents, using cost effective methods.
- Public announcements, e.g., through newspaper notices in local and regional media or radio advertisements in the local area.
- Requests to other entities to facilitate outreach efforts, e.g., civic organizations, school and community service districts or houses of worship.
- Others, as determined by the KWA.

Table 4-1. Process to Conduct Community Outreach Meeting								
Task	Primary Activities							
1. Address meeting logistics	<ul> <li>a. Secure public venue for in-person meeting</li> <li>b. Prepare and send out "save the date" meeting notice at least 10 days in advance of the meeting date (English and Spanish); post same information on the website</li> </ul>							
(if meeting is virtual, 1a	c. Send out follow-up meeting notice in English and Spanish within 3-4 days of the meeting date							
will not be necessary)	<ul> <li>Send out meeting notice flyers to other supporting stakeholders to email their internal email list, post on bulletin boards or post on their websites</li> </ul>							
	e. Secure necessary translation services for meeting							
2. Prepare meeting materials	<ul> <li>Prepare, as needed, meeting agenda, handouts,</li> <li>PowerPoint presentation materials specific to the purpose of the meeting</li> </ul>							
	b. Bring copies of any Management Zone informational materials for distribution at the meeting (if in-person)							
<ol> <li>Post follow-up information as needed after outreach meeting</li> </ol>	<ul> <li>Post meeting presentation materials and handouts to Management Zone website (Note: If meeting was virtual, also post a recording of the meeting on the website)</li> </ul>							
<ol> <li>Follow-up directly with meeting participants after meeting, as needed</li> </ol>	<ul><li>a. Follow-up on action items from the meeting</li><li>b. Respond to post-meeting emails/inquiries</li></ul>							



# 4.2.2. Targeted Resident Outreach

Section 2 identifies areas within the KWA where nitrate concentrations in the Upper Zone of the underlying groundwater are most likely > 10 mg/L-N (e.g., see Figure 2-1). The KWA has been and will continue to conduct additional outreach (in addition regular, ongoing outreach to the entire Management Zone) to target residents on domestic wells in these areas. Outreach in the Priority 1 area (under Phase 1) will continue as described in the MZIP. In the Priority 2 area targeted outreach will occur as noted in the EAP implementation schedule in Section 6.1. Section 3.1 describes the process for identifying the residents on domestic wells within Priority 2 target areas for the purpose of developing a targeted mailing list for direct residential outreach.

The KWA will send the following information to each household on the targeted residential outreach mailing list (at a minimum, information will be provided in both English and Spanish):

- A cover letter that explains the EAP and how its implementation may apply to their residence.
- Educational materials regarding nitrate in drinking water as a potential health concern.
- Provide information about options available to obtain interim replacement water and, if needed, have their domestic well tested for nitrate (these materials will make clear that where well testing is needed it will be done at no cost to the resident).
- Information about opportunities to participate in EAP implementation and development of long-term drinking water solutions.
- Contact information for a KWA representative and website address where the resident can obtain more information (KWA will have Spanish-speaking representative available, as needed). A KWA representative will be available to address questions during day and evening hours.

The KWA will conduct additional outreach to targeted residents on domestic wells that have not responded in some manner to the initial mailout of information. Additional outreach to non-respondents may include a second mailout of information (unless previous mailed information was returned as undeliverable). The KWA will also look for additional opportunities to share information at locations where people gather in the local area, e.g., local community centers, schools, houses of worship, or farm labor centers.

#### 4.3. Coordination with Non-Dischargers

The KWA will coordinate with entities that are not dischargers subject to the requirements of the Nitrate Control Program but have a potential role in ensuring residents have access to safe drinking water. This collaboration can help the KWA:

• Identify potentially affected residents to target for outreach;



- Implement the Interim Replacement Water Program;
- Support outreach activities to all residents within the Management Zone;
- Prepare outreach materials tailored to the constituencies associated with nondischargers;
- Inform other interested parties of EAP-related activities ongoing in the area, e.g., Kings County Boards of Supervisors, Kings County Public Health Departments, other appropriate County departments, trade groups, local community organizations, etc.
- Keep the Central Valley Water Board and DDW informed (outside of regular EAP status reports) of any issues or concerns that may be developing through program implementation;
- Apply for grants that support not just implementation of the Nitrate Control Program but other area programs to ensure the community has safe drinking water; and
- Develop long-term solutions for providing safe drinking water to residents in the Management Zone.

**Appendix A** has a list of stakeholders including community residents that the Management Zone has been coordinating with during EAP development and implementation. This list will be added to as other stakeholders are identified over time. During EAP implementation all entities on the interested parties list will continue to receive notices of EAP-related activities and will be invited to all community outreach meetings.

# 5. INTERIM REPLACEMENT WATER PROGRAM

This section describes the specific early actions the KWA will implement in Priority 2 areas per the EAP schedule to provide interim replacement water for residents who are dependent on groundwater from domestic wells that supply water that has a nitrate concentration of > 10 mg/L-N. These actions are ongoing in the Priority 1 area (Kings Subbasin) through the MZIP (Kings Water Alliance 2023). Early actions will begin in the Priority 2 areas within the KWA when EAP implementation begins within 60 days of submittal of this EAP Addendum, or by February 26, 2025, unless the Central Valley Water Board notifies the KWA that this EAP Addendum is incomplete. These actions are considered temporary, but they will remain available until permanent sources of safe drinking water become available within the KWA.

#### 5.1. Interim Replacement Water Program Options

The Interim Replacement Water Program has two key components that will be implemented in parallel to meet the needs of as many residents as possible and as quickly as possible:

• Replacement water options designed to meet individual household needs including: (a) bottled water delivery; and (b) installation of a POU System in the home (where appropriate).



• Implementation of water fill stations to meet additional community needs.

The sections below describe each of these program components and how they are being implemented through the EAP. Section 6 provides the schedules for implementation of this program in the Priority 2 areas within the Management Zone. Activities within the Priority 1 areas are now guided by the MZIP developed for that area (Kings Water Alliance 2023).

# 5.1.1. Bottled Water Delivery Program

The KWA will offer a bottled water delivery program to meet household-specific water needs. Section 5.2 below describes how a resident can participate in this program. In general, residents participating in the program will:

- Receive regular deliveries of bottled water from KWA's bottled water vendor at no cost to the residents.
- Establish any necessary agreements and schedules with the KWA's vendor(s) to implement service at their residence. It is anticipated the vendor providing the bottled water service will: (a) provide a hand pump to the resident at no cost during the initial delivery; (b) deliver 5-gallon water bottles on a regular schedule; and (c) pick up the empty bottles (Note: Smaller sized bottle options, e.g., 3-gallon, may also be available).
- Receive an initial volume of 60 gallons/month of water at their home. Through coordination with the KWA, this initial volume may be increased or decreased based on the needs of each household.

As noted above, each resident is responsible for establishing any necessary agreements with the vendor and complying with the terms and conditions of any signed agreements. However, the KWA will assist residents as needed with any questions or issues that arise during the establishment of the agreement with the KWA's vendor.

# 5.1.2. Point of Use Treatment System Program

The KWA may offer a program to install and operate a POU System in a residence at no cost to the resident to meet household-specific water needs. In general, a residence participating in this program would have a POU System installed at an appropriate location in the residence to provide the household with water for drinking and cooking (e.g., under the kitchen sink). Section 5.2 below describes how a resident can participate in this program.

Every request for POU System installation will require careful evaluation to be sure the appropriate treatment system can be installed in the household. In addition, a POU System cannot be considered for installation without additional water quality analyses that test for the full range of water quality contaminants known to potentially occur in groundwater in the subbasin. In some cases, for example due to a lack of necessary data or site-specific circumstances, a POU System may not be a viable interim drinking water option for the



residence. Reasons why installation of a POU System may not be a viable option include, but may not be limited to:

- Inadequate incoming pressure to the treatment system;
- High nitrate levels (typically > 20 mg/L-N) that limit the effectiveness of the POU System to treat the water to a safe level;
- Presence of other contaminants besides nitrate that limit the effectiveness of the POU System and/or are not treatable through a POU System;
- Presence of bacteria from the drinking water well;
- Inadequate location for the POU treatment system waste stream disposal; and
- Inability to ensure that a robust POU System service plan can be implemented at the residence.

To support the POU System Program, the KWA will coordinate with DDW and the vendor(s) as needed to assist with POU System technical issues. If the technical problems are unresolvable, the residence may alternatively participate in the bottled water delivery program.

Where a POU System is a feasible interim replacement water option, the KWA's POU System vendor(s) will work with the resident to install the treatment system. If the resident is not the owner of the residence, the process to install and maintain the POU System will require written approval of the property owner.

Once approved, the resident will establish any necessary agreements (and schedule) with the KWA's vendor(s) to install and maintain a POU System at the residence. It is anticipated that services will include: (a) installation of the treatment device; (b) initial water testing to ensure the device is removing nitrate down to safe levels as expected; and (c) periodic maintenance of the POU System (as required by the manufacturer). The cost of these services will be borne by the Management Zone as long as the EAP is effective or until an alternative option is provided to ensure the residence has drinking water safe from nitrates. If a resident chooses to continue the use of the POU treatment system, even where permanent drinking water solutions have been made available, the resident will be responsible for paying for maintenance services. If the resident does not allow required maintenance and monitoring of the POU System to take place (as per the vendor agreement), then the KWA has the discretion to modify the approved interim replacement water option from a POU System to bottled water delivery.

As noted above, each resident is responsible for establishing any necessary agreements with the vendor and complying with the terms and conditions of any signed agreements. However, the KWA will assist residents as needed with any questions or issues that arise during the establishment of an agreement with the KWA's vendor.



# 5.1.3. Water Fill Station Program

#### 5.1.3.1. Description

A water fill station is an independent water-dispensing facility connected directly to a PWS that meets safe drinking water standards and is constructed and operated as required by state and federal regulations (i.e., as required to meet implementation of the California Safe Drinking Water Act as defined in the California Health & Safety Code and Titles 17 and 22 of the California Code of Regulations), as applicable. Three water fill stations are currently operational within the KWA (**Figure 5-1**)

(https://kingswateralliance.org/safedrinkingwater/fillstationshttp://www.kingswateralliance.org/safedrinkingwateralliance.org/safedrinkingwater/fillstationshttp://www.kingswateralliance.org/safedrinkingwater/fillstationshttp://www.kingswateralliance.org/safedrinkingwateralliance.org/safedrinkingwateralliance.org/safedrinkingwateralliance.org/safedrinkingwateralliance.org/safedrinkingwateralliance.org/safedrinkingwateralliance.org/safedrinkingwateralliance.org/safedrinkingwateralliance.org/safedrinkingwate

- *Kerman, CA* This station is located in the northwest portion of the Priority 1 Kings Subbasin at the Kerman Community Center (15101 W Kearney Blvd, Kerman, CA 93630).
- *Dinuba, CA* This station is located in the southeast portion of the Priority 1 Kings Subbasin at 517 E El Monte Way, Dinuba, CA 93618.
- *Hanford, CA* This station is located in the northern portion of the Priority 2 Tulare Lake Subbasin at the KART Transit Center (504 W. 7th Street, Hanford, CA 93230).

In addition to the three stations above already located within the KWA, two water fill stations are also operating within the boundary of the Kaweah Water Quality Coalition along the east/southeast side of the KWA. One of these locations is only a few miles east of the KWA boundary, at the southwest corner of Avenue 229 and Road 48 in Okieville (see **Figure 5-1**). The Kaweah Management Zone provides additional information about this water fill station on their website (<u>https://kaweahwater.org</u>).

The existing fill stations were developed in the KWA in response to the State Water Board's Office of Enforcement's Replacement Water Settlement Agreement (RWSA) with three water quality coalitions (Kings River Water Quality Coalition Authority, Kaweah Basin Water Quality Coalition and Tule Basin Water Quality Coalition) (State Water Board 2019). The RWSA required the coalitions to "install drinking water kiosks" to ensure safe drinking water for individuals who may be impacted by nitrate contamination from nearby drinking water wells. The settlement agreement required installation of three water fill stations within the Kings River Water Quality Coalition with each station expected to serve drinking water to up to 3,000 residents (State Water Board 2019).

The fill stations may be used by anyone to fill water bottles up to five gallons in size as often as necessary at no cost to the user. Water stations may not be the preferred solution for some residents to obtain drinking water; however, they do serve as a front-line solution to reach as many residents as possible while other solutions are implemented. Moreover, while fill stations



are being developed to address nitrate concerns, their presence in the community can provide other local benefits, including for example:

- Safe drinking water source for homeless;
- Source of water for farm labor contractors to fill up containers to provide safe water for field workers;
- Alternative water source for residents who:
  - Are reliant on wells that may dry up during significant periods of drought; and
  - Because of privacy concerns, do not respond to the KWA's offers to provide bottled water delivery or POU System services.

Under the EAP, the KWA may establish additional fill stations that target areas with the following characteristics:

- Results of community outreach activities indicate the need for and support for additional fill stations;
- Residents are not served by a nitrate compliant PWS;
- Nitrate concentrations in the underlying groundwater are most likely > 10 mg/L-N; and
- The area is not already served by an existing water fill station (see **Figure 5-1 Addendum**), including those in an adjacent Management Zone.

If additional fill stations are planned for development, the KWA will work with the community through its outreach process to identify the best areas to target for installation of the stations as needed, where it fits operational standards and requirements.



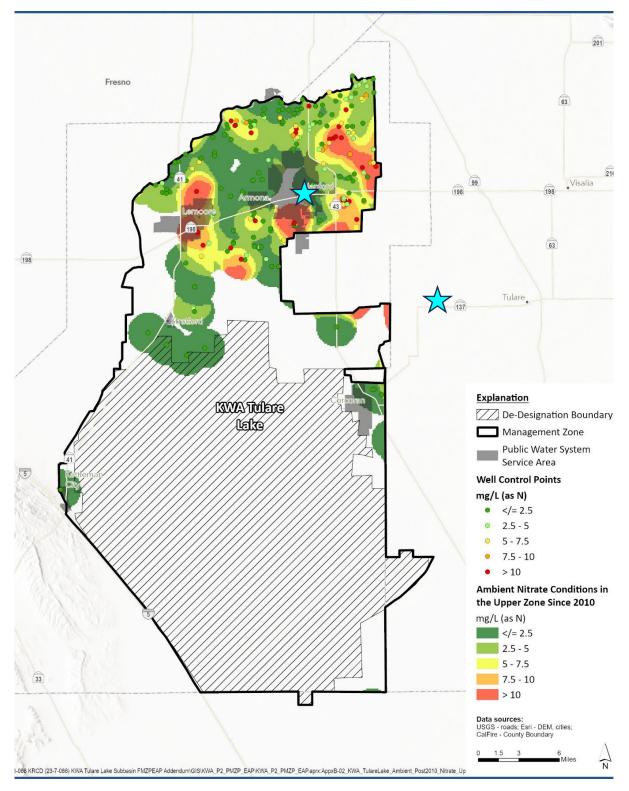


Figure 5-1 Addendum. Existing Water Fill Station Locations in Proposed Kings Water Alliance and Kaweah Management Zones Relative to Nitrate Concentrations in Groundwater in the Kings Water Alliance Management Zone.



# 5.1.3.2. Siting and Use Criteria for Identifying a Water Fill Station Location

It is anticipated that any additional fill stations developed by the KWA will be new installations. However, if the opportunity becomes available in the Management Zone, the KWA will consider partnering with entities that already have an operational fill station. Where such a partnership can be established, KWA will work with the entity to make any modifications to the facility necessary to support the fill station requirements under this program and compensate the owner for water used.

When identifying a new location to establish a water fill station, the KWA will look for locations that meet as many of the following criteria as possible:

- It is within an area that the community has indicated would benefit from a water fill station.
- KWA is able to obtain permission to install and operate a filling station on land or property owned by a third party.
- Fill station receives its water from an existing PWS that (a) complies with all regulatory
  requirements to provide safe drinking water; and (b) has sufficient capacity to dispense
  water at a reasonable rate to fill up multiple containers (up to five gallons) within a
  short period of time. The minimum targeted rate is 1.5-2 gallons/minute, consistent
  with California regulations for faucets in new residential construction.
- The location is within an area where the public already goes to meet other family needs, e.g., at a governmental facility, shopping center, school or house of worship.
- Establishment of the fill station is not expected to create any safety issues for users, e.g., location is in a well-lit and well-trafficked area.
- Vehicle access/parking is available close to the fill station (to minimize distance a water bottle must be carried) and be sufficient in area to not cause any unnecessary congestion.
- To the extent practicable, the location meets the goal of having a water fill station open 24 hours/7 days per week.
- Operation of the fill station does not create noise impacts on neighboring properties, especially during nighttime hours.

Through its existing program to establish water fill stations, the Kings River Water Quality Coalition has developed significant experience identifying and developing locations for these stations. This experience has shown there are challenges to finding viable locations that meet all of the above criteria. Regardless, the KWA will work to identify sites that most closely meet these criteria.



#### 5.1.3.3. Implementation Approach

**Table 5-1** summarizes the key steps/activities that the KWA will implement to install and operate a water fill station. Consistent with the implementation of existing fill stations, residents that use the fill station will need to provide their own bottles to fill at the facility. Information regarding how the user should clean and sanitize water bottles and store them is provided here: <u>https://kingswateralliance.org/safedrinkingwater/fillstations</u>.

	Table 5-1. Process to Develop Water Fill Stations						
	Task	Primary Activities					
1.	Establish locations for installation of additional fill stations	<ul> <li>a. Complete research to identify viable locations</li> <li>b. Conduct site visits; coordinate with land/property owners</li> <li>c. Make final selection of site location</li> </ul>					
2.	Establish agreements with land/property owner of selected site and water provider for the station	<ul><li>a. Establish any necessary agreements to secure use of the site for installation and operation of a fill station</li><li>b. Establish water usage agreements with water provider, as needed</li></ul>					
3.	Complete site design and obtain necessary approvals and funding to install new fill station	<ul> <li>a. Prepare the station design (including operational signage) and construction-related documents)</li> <li>b. Obtain any required approvals/permits to implement the project (as required by local or state regulations)</li> </ul>					
4.	Establish operational plans, as needed	<ul> <li>a. Prepare sampling analysis plan for testing (or rely on existing plans used for other water fill stations)</li> <li>b. Prepare operation and maintenance (O&amp;M) procedures including cleaning procedures as needed to operate the station</li> </ul>					
5.	Construct the new filling station	<ul> <li>a. Complete construction of the facility (including installation of signage) and obtain any necessary approvals to open the facility to the public</li> </ul>					
6.	Conduct outreach to the local community to inform the public of the availability of the fill station	<ul> <li>a. Conduct outreach as described in Section 4</li> <li>b. Notify the community when the fill station is open</li> <li>c. Notify the Central Valley Water Board when the fill station is open</li> </ul>					
7.	Manage operating site, conducting necessary maintenance and gathering usage data	<ul> <li>a. Gather data on usage</li> <li>b. Respond promptly to repair needs to minimize time when water not available</li> <li>c. Conduct routine maintenance</li> </ul>					



#### 5.2. Participation in Bottled Water or POU System Programs

**Table 5-2** summarizes the steps or activities to be carried out by the KWA to implement the bottled water and POU System programs. Residents in Priority 1 areas of the KWA have been and may continue to request participation during MZIP implementation for either of these interim replacement water options by: (a) contacting the KWA directly by phone (559) 549-6747; (b) sending an email to info@kingswateralliance.org; or (c) submitting an eligibility survey available on the KWA website (https://kingswateralliance.org/eligibility/) which can be submitted by mail or online to the KWA (**Appendix D**). Priority 2 areas within KWA will be able to begin requesting participation during Phase 2 EAP implementation. The KWA will confirm that the resident submitting the request meets the following three eligibility criteria:

- 1. Residence requesting services is a resident on a domestic well within the KWA and does not receive drinking water from a PWS where state- and/or county-mandated testing indicates the PWS complies with the nitrate water quality objective.
  - For residents requesting service that receives drinking water from a PWS that is noncompliant with the nitrate drinking water standard, where appropriate, the KWA will prioritize and target those that rely on domestic wells, and for the Public Water Systems (PWSs), will evaluate on a case-by-case basis the role of the Management Zone.
- 2. If the KWA contracts with a vendor(s) to provide the requested bottled water or POU System services and the vendor(s) requires the resident to sign an agreement to receive these services, the resident must be willing to sign and meet the terms and conditions of the agreement.
- 3. The current drinking water source at the residence has a nitrate concentration that is above the safe drinking water level of 10 mg/L-N (see Section 5.3 below for information regarding how to have your well tested).

Residents participating in the bottled water or POU System programs will receive periodic check-ins (e.g., via email or telephone) from the KWA after services are initiated. These check-ins are provided to verify the KWA's approved vendor(s) are providing services as contracted. In addition, check-ins provide the opportunity for the KWA to (a) answer questions from residents; (b) verify sufficient bottled water is being delivered to the residence; and (c) evaluate if the POU System is receiving proper maintenance.



	Table 5-2 Process to	Request Participation in Replacement Water Programs
	Task	Primary Activities
1.	Establish agreements with vendor(s) to provide services to residents	<ul> <li>a. Select vendor(s) to provide the following services: (a) bottled-water delivery; (b) POU System installation and maintenance; and (c) well testing.</li> <li>b. Establish procedures to (a) connect vendor(s) with residents (including understanding regarding agreements residents will need to establish with the vendor); and (b) process payments for services rendered.</li> </ul>
2.	Conduct targeted residential outreach in Management Zone (see Section 4.2.2)	<ul> <li>a. Send direct mailout to target areas (areas most likely to have nitrate concentrations in groundwater &gt; 10 mg/L-N) informing them of the availability of all replacement water programs active in the KWA and how to participate in any program.</li> <li>b. Use other mechanisms described in Section 4 to notify the community at large of the availability of replacement water programs and how to participate in any program.</li> </ul>
3.	Verify residents requesting bottled-water delivery or POU System installation meet eligibility Criteria 1 and 2 (see Section 5.2)	<ul> <li>a. Verify the resident is located within the Management Zone.</li> <li>b. Verify the resident is willing to establish any required agreements with the Management Zone's vendor(s) providing the requested services.</li> </ul>
4.	Unless acceptable nitrate data are already available (see Section 5.3.1), conduct well testing to verify eligibility with Criterion 3	<ul> <li>a. Obtain well water sample in coordination with the resident (and property owner, as needed) to test the drinking water source to the residence; notify resident of well test results.</li> <li>b. If well test result indicates the nitrate concentration is &gt; 10 mg/L-N, the KWA will discuss options for replacement water with the resident, including the pros and cons of each approach. The KWA will connect the resident or property owner with the appropriate vendor (bottled water delivery or POU System) to initiate replacement water services if either of these replacement water options are selected.</li> <li>c. If well test result indicates the nitrate concentration is ≤ 10 mg/L-N the resident and property owner will be notified that (a) the bottled water delivery or POU System options are not available to them through the KWA at this time; and (b) a follow-up well test may be offered, (i.e., if the test result was ≥ 7.5 and ≤ 10 mg/L-N (see Section 5.3.2)</li> </ul>



	Table 5-2 Process to Request Participation in Replacement Water Programs							
	Task	Primary Activities						
5.	Conduct follow-up with residents receiving bottled water deliveries	<ul> <li>a. Check-in with residents receiving services to verify: (a) monthly delivery volume is sufficient for household; modify as needed; and (b) service is being provided by vendor(s) as contracted. Check-ins will occur as follows: <ol> <li>Within one month of initiation of service;</li> <li>Approximately six months after initiation of service; and</li> <li>Annually</li> </ol> </li> </ul>						
6.	Conduct follow-up with residents with POU System	<ul> <li>a. Check-in with residents receiving services to: (a) verify POU System is operating; (b) answer any questions regarding POU System O&amp;M and (c) verify resident is having system maintained as required by the agreement established with the vendor(s). Check-ins will occur as follows: <ol> <li>Within one month of initiation of service;</li> <li>Approximately six months after initiation of service; and</li> </ol> </li> </ul>						
7.	Conduct follow-up outreach to residents or property owners with a nitrate test result that was ≤ 10 mg/L but ≥ 7.5 mg/L- N	a. Provide opportunity for residents or property owners to have well re-tested per the procedures provided in Section 5.3.2.						

# 5.3. Residential Well Testing Program

The KWA established its residential nitrate well testing program in Priority 1 areas during Phase 1 EAP implementation. KWA will continue to implement this program in these areas through the implementation of the Priority 1 MZIP (Kings Water Alliance 2023). During Phase 2 residents in the Priority 2 area of the Management Zone may request to have their well sampled for nitrate. Well testing will be provided to rural residents on domestic wells that live within the Management Zone boundary, are not currently receiving drinking water from a nitrate-compliant PWS and receive their drinking water from a well. In addition, well testing will be provided to residents that live outside the Management Zone boundary *where* the resident is located immediately downgradient from Management Zone dischargers within their area of contribution. The KWA will only test the well that provides water to the residence. If the resident does not know the source of water to the household, e.g., whether the household receives nitrate-compliant water from a regulated PWS, KWA representatives will work with them to evaluate this question.



A well test is necessary to verify eligibility to receive bottled water delivery or installation of a POU System, as described in the previous section. Section 5.2 above describes the various ways a resident can contact the KWA regarding getting a well test conducted. The following sections describe the KWA well-testing program.

#### 5.3.1. Initial Well Test

If the nitrate concentration of the well water is unknown, the KWA will coordinate with the residence to have the water tested as soon as possible at no cost to the resident. If the resident is not the owner of the property, permission from the property owner is necessary to have the well tested (see <a href="http://kingswateralliance.org/eligibilty/">http://kingswateralliance.org/eligibilty/</a> for well testing information). The resident may also provide the results from a previous well test if the water sample was collected within the last five years using standard methods for well sampling, and the nitrate concentration was analyzed using an approved Environmental Protection Agency (EPA) method by a laboratory certified under the California Environmental Laboratory Accreditation Program (ELAP).

It is anticipated that the resident will initiate contact with the landowner to obtain permission to have a well tested. However, if requested by the resident, the KWA will follow up and obtain permission from the landowner on behalf of the resident. If the KWA learns that the resident is unable to obtain permission from the landowner or the landowner is not responsive to requests to obtain permission, the KWA will work with the Central Valley Water Board staff to address the issue.

Well sampling carried out by the KWA will be conducted using standard well sampling procedures consistent with sample methods used to implement other well testing programs in the area, e.g., as described in Central Valley Water Board's ILRP Drinking Water Well Program FAQ guidance (Central Valley Water Board 2020). All samples will be analyzed for nitrate using EPA-approved methods at an ELAP certified laboratory.

Residents and property owners will be notified of the results from the well test following receipt of the results from the laboratory:

If the results indicate nitrate levels are > 10 mg/L-N, the resident and property owner will be contacted directly via telephone or email within 24 hours of the KWA receiving the test result. The KWA will discuss options for replacement water with the resident, including the pros and cons of each approach. If bottled water or POU System service is selected, the KWA will coordinate with the resident and property owner to initiate bottled-water or POU System service at the residence as quickly as possible. The telephone/email communication will be followed up with a mailed written summary of the well test findings to the resident and the property owner, as applicable, that includes: a copy of the laboratory report; if applicable, documentation that the well water was only tested for nitrate, recommend that



the resident consider having the well tested for other potential contaminants if seeking installation of a POU System (also see Section 5.4; if known, the KWA will provide information regarding other well testing programs that may be available in the area) and any recommended next steps. If any additional water testing is required by the vendor to support installation of a POU System, the KWA will coordinate this testing with the vendor providing this service.

If the results indicate nitrate levels are ≤ 10 mg/L-N, the resident and property owner will
receive a written summary of the results, including a copy of the laboratory report. The
written summary will indicate, as relevant that: (a) the residence will not be able to
participate in the KWA's bottled water or POU System replacement water programs; (b) the
well water was only tested for a selected set of contaminants and that the resident may
want to consider having their well tested for other potential contaminants (also see Section
5.4) (if known, the KWA will provide information regarding other well testing programs that
may be available in the area); and (c) advise the resident of opportunity to have their well
tested again, if applicable (see Section 5.3.2).

# 5.3.2. Follow-up Well Test

For any resident or property owner that has an initial nitrate well test result showing nitrate levels  $\leq$  10.0 mg/L but  $\geq$  7.5 mg/L-N, and the resident is not already having their well tested on a regular basis as required through the Central Valley Water Board's ILRP or the KRWQC groundwater trend monitoring program, the KWA will offer follow-up well testing. Within one year of the initial well test the KWA will contact the resident or property owner to offer the opportunity to retest the well at no cost. If the resident or property owner does not want their well re-tested, no additional follow-up will occur. If the resident or property owner agrees to have the well re-tested and the result remains between 7.5 and 10 mg/L-N, then the KWA will continue to reach out on an annual basis to provide the opportunity to have the well tested at no cost until the nitrate concentration is < 7.5 mg/L-N, or > 10 mg/L and the resident is provided with the option to receive bottled water or have a POU system installed.

# 5.4. Coordination with Other Related Safe Drinking Water Programs

The purpose of this EAP Addendum is to fulfill the safe drinking water requirements of the Nitrate Control Program as they pertain to nitrate levels in groundwater. It does not address other potential water quality concerns that may impact drinking water within the KWA area, e.g., arsenic, uranium or 1,2,3 Trichloropropane (TCP). However, other programs (e.g., Safe and Affordable Funding for Equity and Resilience [SAFER] under the Safe and Affordable Drinking Water Fund are anticipated to support efforts to test for these other constituents of concern through the grant funding in the near future (pending KWA Board approval, as early as 2024).

Through its ongoing community outreach program and coordination with Self-Help Enterprises (SHE) (either directly or through contract mechanisms established by other entities such as the



Central Valley Salinity Coalition), the KWA will identify opportunities to collaboratively address these other contaminants of concern where appropriate. The intent of this collaboration is to implement as cost effective a program as possible that minimizes the potential for a residence to have its well tested multiple times, each time for different constituents. To this end, the KWA will coordinate with the State Water Board, Central Valley Water Board, community-based organizations and other interested entities to identify opportunities to implement a complementary well testing program. KWA is currently applying for a SAFER grant to enhance the well testing program to contain additional water quality concerns. KWA has participated in monthly collaborative efforts with SHE in the past to avoid duplicating efforts providing assistance to residents and continue to communicate with SHE as needed when questions about services arise.

# 5.5. Coordination with Irrigated Lands Regulatory Program

Well testing regulatory requirements have been established for the ILRP. Given the overlap between these regulatory programs, the KWA recognizes the importance of simplifying efforts by residents with the Management Zone to have their drinking water well tested. Accordingly, the KWA will coordinate its Residential Well Testing Program with ILRP's Drinking Water Well Monitoring Program. If a resident is applying for a well test under the Interim Replacement Water Program well testing program is located on an enrolled parcel under the ILRP, the KWA will work with the resident and the associated parcel owner within the ILRP Coalition to determine if the well has already been sampled to satisfy ILRP well testing requirements. If the well has been tested and the test result indicates that nitrate is > 10 mg/L-N threshold, the KWA will work with the resident and parcel owner to ensure the resident receives drinking water. Similarly, if the well has not been tested for nitrate, consistent with the Interim Replacement Water Program procedures, the KWA will work with all parties to get the well sampled and address any needs for drinking water. Regardless of the situation, the KWA will coordinate with all parties so that the resident can receive drinking water if warranted. Also, while the KWA is ready to assist residents with having their well tested, any action by the KWA under the NCP is not a substitute for or satisfies domestic well testing requirements under the ILRP program.

#### 5.6. Central Valley Dairy Representative Monitoring Program

The CVDRMP is working closely with selected dairy and confined bovine feeding operations within the Central Valley to implement a monitoring program to evaluate potential impacts of industry practices on first encountered groundwater. Domestic well testing is not part of the CVDRMP. However, the facilities permitted under the dairy/confined bovine feeding operation general orders and participants in the CVDRMP do test domestic wells and submit findings directly to the Central Valley Water Board. As a participant in the KWA, the CVDRMP will



encourage dairies and confined bovine feeding operations to share domestic well test results with the KWA to facilitate MZIP implementation in a more cost effective and efficient manner.

# 6. EARLY ACTION PLAN IMPLEMENTATION

# **6.1. Schedule/Milestones**

EAP activities in the KWA have been implemented in two phases. Phase 1 EAP implementation began on May 8, 2021, in the Priority 1 areas within the Management Zone boundary: Kings Subbasin, Kaweah Subbasin and Tule Subbasin (**Figure 6-1**). The very small areas within the Priority 2 Madera and Delta-Mendota Subbasins within the Management Zone boundary are also included in Phase 1. The EAP for this phase has been incorporated into the Priority 1 MZIP where it will continue to guide efforts to outreach to the community, provide free well testing to residents and, where needed, offer emergency and interim drinking water until the KWA implements its long-term drinking water program that will work to assist residents and communities obtain permanent solutions to provide safe drinking water to residents in the KWA (Kings Water Alliance 2023).

Phase 2 implementation in the Priority 2 areas of the Management Zone begins within 60 days of the submittal of this Addendum, or by February 26, 2025, unless the Central Valley Water Board notifies the KWA that this EAP Addendum is incomplete (**Figure 6-1**). A summary of the activities that occurred during Phase 1 EAP implementation is included in **Appendix A**. These types of activities will continue during Phase 2.

	Year/Quarter																
	2021			2022		2023			2024				2025				
Priority 1	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Notice to		$\mathbf{\hat{1}}$															
Comply (NTC) - 5/29/20			ed 3/8/2 ted 5/8/		FMZ	P submi	tted 8/2	9/22	MZIP submitted (9/5/23; to replace EAP in Priority 1 areas)			MZIP Implementa				ation	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Priority 2																	
Areas No Activity Priori				rity 2 NT	C-12/2	9/23	PMZF	P/EAP to 12/2	be subr 8/24	nitted	EAP Phase 2 Startup (2/26/25)						

# Figure 6-1. Phasing of EAP Implementation in Relation to Notices to Comply (NTC) in Priority 1 and 2 Subbasins

# 6.1.1. Phase 2 Schedule/Milestones

**Figure 6-2** illustrates the general schedule and key milestones currently planned for implementation during Phase 2. Note that with the exception of the installation of fill stations, the activities that occurred in Phase 1 will continue into Phase 2 as part of MZIP implementation in the Priority 1 area (e.g., General Community Outreach, Bottled Water and POU System



Programs and Monitoring and Reporting). **Table 6-1** provides more detailed information regarding EAP implementation in this portion of the KWA.

# 6.2. Early Action Plan Funding Mechanism

The KWA, governing body overseeing efforts to comply with the Nitrate Control Program, is a non-profit public benefit corporation that filed for non-profit status on November 17, 2020. **Attachment E** of the PMZP provides the Articles of Incorporation and by-laws of the KWA. The Board of Directors currently has seven seats that can be expanded up to 11 seats as needed; these Board members have worked collaboratively to develop an equitable cost allocation approach to fund the implementation of this EAP. The Board of Directors will regularly review and, where needed, update this cost allocation as part of its annual budgeting process. The KWA is prepared and fully committed to funding the activities associated with the EAP including implementation.

KWA will explore potential supplemental funding sources, including but not limited to, grant and loan programs administered by the State Water Board and Department of Water Resources, which are intended for drinking water and agricultural water quality improvement.

# 6.3. EAP Program Evaluation

The KWA will conduct monitoring to evaluate the effectiveness of its EAP program. This information will be used to (a) prepare EAP status reports and (b) adaptively manage the EAP over time while long-term drinking water solutions are in development.

# 6.3.1. Monitoring Activities

For Phase 1, the KWA implemented the following record-keeping and data collection efforts; these activities will continue into Phase 2:

- *Bottled-water Delivery Program* The KWA will maintain records that include the following information:
  - Requests for participation in this program;
  - Wells tested as a result of requests for participation and the well test results;
  - Communications with each resident regarding well test results and eligibility to participate in bottled water program; and
  - Communications with residents and status of participation in program (e.g., follow-up check-ins to verify water needs are being met and contracted services are being provided).
- *POU System Program* The KWA will maintain records that include the following information:
  - Requests for participation in this program;



- Wells tested as a result of requests for participation and the well test results (including results for contaminants other than nitrate);
- Communications with each resident and property owner (as needed) regarding well test results and eligibility to participate in POU System program;
- Status of participation of residents that had a POU System installed (e.g., verify vendor is able to provide maintenance and conduct monitoring as required for each system); and
- Communications with residents and status of participation in program (e.g., follow-up check-ins to verify contracted services are being provided).
- Water Fill Station For any stations operational, the KWA will collect usage data, including volume of water dispensed and days and times fill stations are most often used. These data will provide (a) insight on patterns of usage at each facility; and (b) if needed, a basis for compensating the owner of the facility providing water to the fill station. Fill station usage data also may be used to evaluate whether additional fill station capacity is needed in the KWA. If periods of high usage are identified at any station, additional site monitoring may be temporarily conducted to determine the degree to which lines may be forming causing significant delays in obtaining water or congestion at the site.

The KWA will also conduct the following additional record-keeping activities to support its effort to evaluate Phase 2 EAP implementation:

- Residences that have been targeted for outreach to participate in the Interim Replacement Water Program but have not responded or have indicated no interest in participating in the program<sup>12</sup>.
- Documentation of any residents that were approved for bottled-water delivery or POU System installation but did not activate the services with the KWA's vendor(s).
- Documentation of how situations were resolved where the resident requested a POU System but due to technical issues had to rely on bottled water delivery instead.
- Contacts with residents to provide an opportunity for a re-test of their domestic well and the outcome of those efforts.
- Documentation of how a situation was resolved if the well was tested as part of the ILRP or dairy program, and how the resident's drinking water needs are resolved if the well test indicates that the well exceeds the nitrate standard of 10 mg/L-N.

<sup>&</sup>lt;sup>12</sup> This tracking is completed using the number of mailers sent using the USPS direct mailing route and the response rate.



# 6.3.2. Reporting and Adaptive Management

At the request of the Central Valley Water Board's Executive Officer and in coordination with other Priority 1 Management Zone entities, the KWA established the following metrics to track progress in the implementation of the KWA Priority 1 EAP (KWA 2022):

- Location, forum type and general attendance figures for all outreach efforts
- Number of residences tested for nitrates
- Number of residences tested for other contaminants
- Number of households being provided bottled water
- Number of operable fill stations/kiosks and usage information for each.

These metrics will continue to be implemented as part of KWA's Phase 1 MZIP Emergency & Interim Drinking Water Program and begin for KWA's Phase 2 EAP implementation. In general, the KWA along with other Management Zone entities provide the above information monthly to the Central Valley Salinity Coalition (CVSC). The CVSC then compiles the information into a report which is submitted to the CV-SALTS Executive Committee, which includes the Central Valley Water Board. The Central Valley Water Board's Executive Officer shares this information with the Central Valley Water Board in the Executive Officer reports, which are prepared and disseminated approximately six times per year. The information is summarized into a dashboard format and is also publicly available on the CVSC's website at: https://cvsalts.mljenv.com/.

The Management Zone entities report this information in both numeric and graphic formats. Reported information includes illustration of periodic reporting for the non-outreach metrics (e.g., number of residences wells tested, people being served bottled water, and kiosk usage information). In addition to providing periodic reporting of the metrics described above, the Management Zone entities also report summary statistics of combined outreach activities. Outreach activities generally fall within the following fourteen outreach types split into two categories: people engagements and meetings and events.

- People Engagements include the following eight outreach types:
  - Mailers This engagement includes the number of mailings and physical mail pieces Management Zones sent to homes.
  - Hand-delivered materials This engagement includes the number of Management Zone materials dropped off at homes, such as door hangers, in mailboxes, etc., and does not include in-person contact.
  - Emails This engagement includes the number of emails sent to deliver information on a Management Zone.



- Flyers and packets This engagement includes the number of printed Management Zone materials distributed through schools or other third-party distribution.
- Newspaper articles This engagement includes the estimated number of readers that would be exposed to Management Zone content, through paid or earned media promotions.
- Radio and TV This engagement includes the estimated number of listeners that may be exposed to Management Zone messages via radio mentions, TV coverage, through paid or earned media promotions.
- Social media This engagement includes the total number of people reached when exposed to Management Zone messages through social media.
- Website visitors Each Management Zone entity manages a website (KWA Priority 1 and Priority 2 Management Zones share the same website) that provides information regarding the program and allows for well testing applications to be submitted on-line. The Management Zone entities utilize on-line browser tools to track the number of website visitors and receive and respond to applications submitted via the website.
- Meetings and events include the following six types:
  - Online meetings This includes the number of attendees participating in Management Zone meetings via Zoom and other conferencing events.
  - In-person public meetings This includes the number of attendees participating in Management Zone in-person meetings.
  - Briefings and reports This includes the total audience that would attend Management Zone briefings/updates for officials, leaders, and organizations to describe and promote the Nitrate Control Program.
  - Door-to-door meetings This includes the number of people Management Zone representatives have spoken with at households.
  - Open public events This includes the number of contacts and conversations Management Zone representatives have with people at tabling public events at community-based events (e.g., County fairs, flea markets, farmers markets, food banks).
  - Phone conversations This includes the number of individuals Management Zone representatives have conversations with.

Any substantive changes to the EAP being considered will be discussed with the community through regular community meetings prior to submittal as a recommended change to the Regional Board. Recommended revisions to the KWA Priority 2 EAP Addendum will be



submitted to the Executive Officer of the Central Valley Water Board (recommendations may be submitted by letter or as part of an EAP status report).

Unless the Central Valley Water Board objects to the recommended revisions to this EAP Addendum, KWA will begin implementation of the revised EAP within 60 days of submittal unless the Central Valley Water Board objects and notifies the KWA that this EAP Addendum is incomplete. If the Central Valley Water Board objects to the proposed revisions, the KWA will work with the Central Valley Water Board to address their concerns to the extent possible. If the proposed revisions are not approved, then the EAP will continue to be implemented as written.



	Subtacka		20	25		2026				
Task	Subtasks	QTR 1	QTR 2	QTR 3	QTR 4	QTR 1	QTR 2	QTR 3	QTR 4	
General Community	General Community Outreach activities (website, flyers, other communications)		1			1		8		
Outreach	Conduct public community and stakeholder meetings					2026 sch	edule det	ermined in	2025	
Phase 2	Establish mailing list of targeted residents in Phase 2 area									
Targeted Residential	Mailout Replacement Water Program information									
Outreach	Conduct follow up outreach (as necessary)									
Phase 2 Replacement	Expand vendor services to Phase 2 area									
Water: Bottled Water & POU	Process well-testing requests from Phase 2 residents									
Treatment Systems	Residents follow-up to verify service being provided and conduct follow-up well testing							 		
Phase 2 Replacement Water: Fill Stations	In coordination with the community, identify planning locations of new water fill station(s) in the Phase 2 area		Sc	hedule d	epender	it on resid	dents' inj	out		
Monitoring and	Gather monitoring data from all program activities							1		
Reporting	Prepare EAP status reports									

Figure 6-2 Addendum. General Phase 2 EAP Implementation Schedule



Table 6-1	Table 6-1 Addendum. Kings Water Alliance Management Zone Phase 2 EAP Implementation Schedule (see also Figure 6-2)								
Task	Subtasks	Schedule (Assumes EAP Start Date: February 26, 2025)							
	Maintain Management Zone website	Ongoing							
	Maintain existing and develop additional mechanisms to provide notice to the public of EAP implementation activities	Ongoing							
	As needed, prepare materials to support community outreach activities (e.g., flyers for upcoming meetings, FAQs, etc.)	Ongoing							
General Community Outreach	Send out public notice of upcoming community meetings	<ul> <li>"Save the Date" public meeting notice – send within 10 days prior to scheduled meeting.</li> <li>Final meeting notice – send within 3-4 days of meeting date (include Zoom link if meeting will be virtual).</li> </ul>							
	<ul> <li>Conduct public community meetings to provide:         <ul> <li>EAP status update;</li> <li>Information on replacement water program options;</li> <li>Implementation schedule;</li> <li>Well-testing opportunity; and</li> <li>Other topics as needed.</li> </ul> </li> </ul>	<ul> <li>Initial EAP implementation kickoff meeting in the Phase 2 area – Early 2025.</li> <li>Additional meetings – periodic community outreach meetings will be held on a regular basis as needed to best accomplish the goals of Phase 2 EAP implementation.</li> <li>Note: Meetings are currently a balance of in-person and virtual to meet multiple needs within the community.</li> </ul>							
Phase 2 Targeted	Establish mailing list for targeted residents in the Phase 2 area (residents with domestic well in areas most likely impacted by nitrate at concentrations >	Complete by April 30, 2025.							



Table 6-1	Table 6-1 Addendum. Kings Water Alliance Management Zone Phase 2 EAP Implementation Schedule (see also Figure 6-2)								
Task		Subtasks	Schedule (Assumes EAP Start Date: February 26, 2025)						
Residential Outreach	7.5 mg/L-N – see n 1)	ed and orange areas in Figure 2-							
		ent Water Program information iling list of targeted residents	Complete initial mailing by June 30, 2025. Conduct follow-up mailings, if needed.						
	not respond to init	outreach to residents that did ial contact or had mailed ied as undeliverable	As needed, but complete by August 15, 2025 for first mailing. Within 45 days after subsequent mailings when they occur.						
		agreements with vendors as pottled water or install a POU in Phase 2 area	Prior to initial mailout of outreach packet to targeted residences (see above).						
		ipt of service request from Phase tiate eligibility evaluation	Within 3 business days of receipt of request to receive services.						
Phase 2 Replacement Water:		d to verify eligibility of residents s, schedule and conduct well test	Schedule well testing as quickly as possible in coordination with resident (and property owner if the resident is not the owner).						
Bottled Water or POU System Programs	Advise residents (or property owner as	Result is > 10 mg/L-N	Within 24 hours of receipt of test results, contact resident or property owner via telephone or email to discuss replacement water options and initiate bottled water or POU System services as requested by the resident; follow-up with written information within 3 business days (see Section 5.3.1 regarding information to be communicated).						
	needed) of initial nitrate well test results	Result is ≤ 10 mg/L-N	Within 3 business days of receipt of test results, send written notice to the resident or property owner of ineligibility to participate in bottled water or POU System programs (see Section 5.3.1 regarding information to be communicated)						



Table 6-1	Addendum. Kings	Water Alliance Management 2	Cone Phase 2 EAP Implementation Schedule (see also Figure 6-2)			
Task		Subtasks	Schedule (Assumes EAP Start Date: February 26, 2025)			
	Follow-up well testing if initial well test is ≥ 7.5 mg/L-N but ≤ 10 mg/L-N	Initial well test is ≥ 7.5 mg/L but ≤ 10 mg/L-N	<ul> <li>Within one year offer resident or property owner the opportunity to retest the well at no cost. If the resident or property owner:</li> <li>Does not want their well re-tested, no additional follow-up is required</li> <li>Agrees to have the well re-tested and the result remains between 7.5 and 10 mg/L-N, then the KWA will continue to reach out to the resident or property owner on an annual basis to provide the opportunity to have the well tested at no cost until the nitrate concentration is &lt; 7.5 mg/L-N.</li> </ul>			
	Follow-up with residents participating in bottled water/POU program to verify: (a) services are being received as contracted; and (b) bottled water recipients have sufficient water being delivered		Conduct first check-in with each resident within 30 days after confirming eligibility to receive bottled water/POU System services; conduct second check-in within 90 days after first check-in.			
Phase 2 Replacement Water: Fill Stations	In coordination with the community, identify planning locations of new water fill station(s) in the Phase 2 area		To be discussed with residents during EAP implementation at community meetings. KWA will work with the residents on best opportunities and timing for fill stations.			
	Collect monitoring data/maintain records as described in Section 6.3.1		Ongoing			
Monitoring and Reporting	program metrics in Management Zone Program dashboar participate in EAP s	pport compilation of EAP collaboration with other entities for the Nitrate Control d on CV-SALTS website; status reports to the Central d through CV-SALTS Executive gs	Monthly in conjunction with CV-SALTS Executive Committee Meetings.			



# 7. REFERENCES

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# APPENDIX A COMMUNITY ENGAGEMENT COMMUNICATION & OUTREACH PLAN – UPDATED AUGUST 2023

#### **Overview**

The adopted Nitrate Control Program (NCP) requires meaningful outreach and the opportunity to participate in development of deliverables and proposed solutions by potentially affected parties. Deliverables for Path B, the Management Zone Approach, includes the Preliminary Management Zone Proposal (PMZP), Early Action Plan (EAP), Final Management Zone Proposal (FMZP), and the Management Zone Implementation Plan (MZIP). Solutions for the drinking water needs of those affected by nitrate contamination include both immediate, short-term, and future, long-term solutions. The Kings Water Alliance (KWA) has developed a strategy outlining goals and tactics used to outreach and engage with impacted residents within the KWA service area during community engagement activities related to development and implementation of plans and solutions. The development and implementation of the required deliverables and solutions involves ongoing engagement with potentially impacted and impacted residents to allow public input and response during various stages. The core objective and goals of the strategy will guide ongoing efforts to engage the public. The strategy is intended to guide the Kings Water Alliance's ongoing stakeholder outreach efforts for the most effective engagement throughout the required development and implementation process.

The processes and tactics in the strategy are intended to be iterative, and it is expected certain processes or tactics may adapt to better reflect the needs of the impacted residents. The strategy is intended to be flexible and adaptive to reflect community needs and best practices for public involvement.

#### **Strategic Overview**

The guiding components to the outreach and engagement strategy includes:

- 1. Objective
- 2. Goals
- 3. Tactics

#### Objective

The public outreach and engagement strategy's objective is to create a level of engagement and awareness with community residents that establishes trust and provides robust participation in the development and implementation of short- and long-term drinking water solutions.



Critical to achieving the objective are a set of goals that employ integrated communications tactics, using various channels and communications mediums to reach impacted residents effectively while giving all an opportunity for engagement.

#### Goals

The goals set to achieve the objective are as follows:

- 1. Identify and cultivate relationships with key influential individuals and organizations in the communities to amplify information from the KWA.
- 2. Provide channels for input and participation that connect with residents in a way that is effective and accessible
- 3. Provide accurate, easy-to-understand, timely information on the development and implementation of short- and long-term drinking water solutions.

#### **Tactics**

The integrated communications tactics for EAP development are as follows:

DEVELOPMENT AND IMPLEMENTATION OUTREACH & ENGAGEMENT TACTICS						
ТАСТІС	AUDIENCE					
Identify and cultivate community influencers to disseminate information	Community residents					
Conduct Community Profiles	All					
Consult local NGOs on materials and outreach methods	Community residents					
Develop and continue to update webpage to educate and inform with translation feature	All					
Develop bi-lingual 1-page information sheet on short-term drinking water solutions	All					
Develop information sheet on long-term drinking water solutions (bi-lingual)	All					
Develop bi-lingual flyer to promote events	Community residents					
Send direct mail piece(s) to support the efforts for short- and long-term drinking water solutions	Community residents					
Promote sign-ups to KWA Interested Persons Email List as a means for staying informed	Community residents					
Host webinars and virtual office hours for potentially impacted residents and interested stakeholders with live	All					
Spanish interpretation						
Host and/or participate in community events for potentially impacted residents and interested stakeholders	All					

#### **Table 1: Development and Implementation Outreach Tactics**



DEVELOPMENT AND IMPLEMENTATION OUTREACH & ENGA	AGEMENT TACTICS
TACTIC	AUDIENCE
Develop and conduct surveys in English/Spanish to gather feedback on short and long-term drinking water solutions	All
Set up and maintain dedicated phone line for interested persons and residents to access for information and	All
questions	
Identify and directly engage community organization leaders to solicit feedback, cooperative efforts, and/or partnerships	Community organizations and NGOs
Send outreach letter and continue engaging the Tachi Yokut Tribe	Tribes
Informational flyer, webinar, and community events promotion posted at fill stations and key locations within affected communities	Community residents
Employ text messaging communications feature via NGO or other means to conduct a survey to gauge opinions on short- and long-term drinking water solutions	Community residents
Employ text messaging communications feature via NGO to promote upcoming outreach	Community residents
Develop contact database for email communications, notices, and information on development and implementation of short- and long-term drinking water solutions	All
Develop, maintain, and update the Kings Water Alliance website with educational resources and engagement opportunities	All
Radio spots in residents' primary language	Community residents
Disseminate information and notices via NGOs to network of stakeholders and community residents on meetings, events, and/or short- and long- term drinking water solutions	Community residents
Disseminate information and notices via dischargers to	Employees of farming and
network of staff and colleagues for meetings, events,	industrial operations;
and/or short- and long- term drinking water solutions	community residents
Develop and maintain strategic community partnerships	Community organizations and NGOs
Disseminate information and notices via community partnerships to network of stakeholders and community residents on meetings, events, and/or short- and long- term drinking water solutions	Community residents



DEVELOPMENT AND IMPLEMENTATION OUTREACH & ENGAGEMENT TACTICS					
ТАСТІС	AUDIENCE				
Disseminate information and notices via door-to-door					
efforts for meetings, events, and/or short- and long- term	Community residents				
drinking water solutions					

The tactics listed above are intended to be iterative, and it is expected certain tactics may adapt to better reflect the needs of impacted residents and best practices for public involvement. These tactics will serve as a guide for KWA outreach tactics from planning, deliverables, and, ultimately, implementation to engage potentially impacted and impacted residents.

# Stakeholder (Audience) Identification

In compliance with the Nitrate Control Program's requirements as well as outreach and engagement best practices, impacted residents (residents potentially impacted by nitratecontaminated drinking water), community organizations, non-governmental organizations (NGOs), Native American Tribes, in addition to other interested stakeholders and members of the public, will be engaged in the development and implementation short- and long-term drinking water solutions.

The primary existing and potential engaged publics engaged to achieve the stated goals of this strategy include:

- 1. Impacted Residents
- 2. Community Leaders
- 3. Community Organizations / NGOs
- 4. Native American Tribes
- 5. Interested Stakeholders

#### **Impacted Residents**

In compliance with the Nitrate Control Program's requirements residents potentially impacted or impacted by nitrate-contaminated drinking water are engaged in the process and development of the short- and long-term drinking water solutions.

An initial assessment of potential nitrate impacted areas were identified utilizing readily available existing data from the Central Valley Salinity Alternatives for Long-term Sustainability (CV-SALTS) and the State Water Resources Control Board Groundwater Ambient Monitoring and Assessment Program (GAMA) for the analysis. After impacted areas were identified, United State Postal Service (USPS) rural residential zip codes and mailing routes were identified for impacted residents. KWA utilizes Every Door Direct Mail (EDDM) to select rural/highway and PO Box residential routes for potentially impacted residents. The identified residents are generally

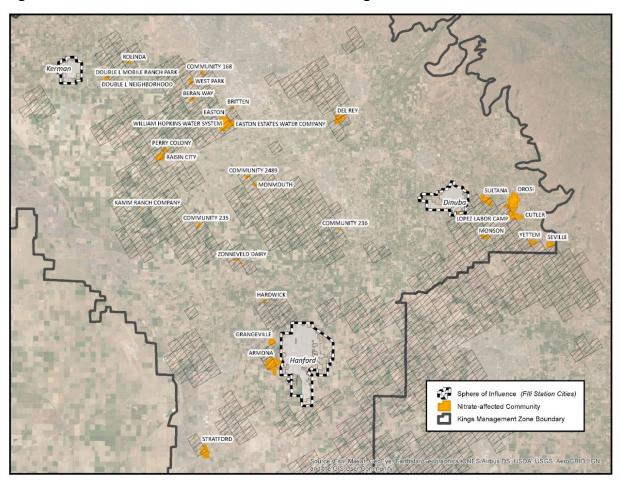


located within the following Disadvantaged Communities (DACs) and rural communities within the KWA:

Communities with Impacted Residents	
Rolinda	Monmouth
Double L Mobile Ranch Park	Community 235
Double L Neighborhood	Community 236
Community 168	Hardwick
West Park	Grangeville
Beran Way	Armona
Britten	Stratford
Easton	Sultana
William Hopkins Water System	Lopez Labor Camp
Easton Estates Water Company	Monson
Del Rey	Orisi
Perry Colony	Cutler
Raisin City	Yettem
Kamm Ranch Company	Seville
Community 2489	

#### Table 2: DACs and Rural Communities with Impacted Residents







Impacted or potentially impacted residents within the DACs and rural communities identified are the primary target audience of outreach and engagement efforts during EAP development and implementation of short- and long-term drinking water solutions. Impacted residents have been engaged and will continue to be engaged via diverse channels to ensure a transparent process.

#### **Community Leaders**

Community leaders serve as two-way information gatekeepers to potentially impacted residents, and therefore have been invited to engage in the development and implementation of deliverables and solutions. These leaders will continue to be engaged throughout the process of development and through implementation of drinking water solutions. Direct outreach to leaders from the following communities has been conducted:



# Table 3: List of Communities with Targeted CommunityLeader Outreach and Engagement

Community Leader Outreach	
Armona	
Cutler	
Easton	
Stratford	
Orosi Public Utilities District	
Sultana Community Services District	
Raisin City	
Monson	
Zonneveld Dairies	
Rolinda	
East Orosi	

The list of leaders from the communities listed is not exhaustive or conclusive and will continue to develop as further outreach is conducted.

# Community Organizations / NGOs

Community Organizations and NGOs serve as two-way information gatekeepers to potentially impacted residents. These organizations and NGOs often bring knowledge and expertise about residents in DACs and rural communities and are an invaluable resource in effectively reaching and communicating to impacted residents and other interested stakeholders.

Individuals from the following Community Organizations and NGOs have been actively outreached to and engaged in the development of the short- and long-term drinking water solutions and in the development of communications tactics and outreach materials:

Community Organizations and NGOs	
Fresnoland (Fresno Bee)	Self-Help Enterprises
Fresno County Farm Bureau	Community Water Center
Kings County Farm Bureau	Leadership for Justice and Accountability

#### Table 4: Community Organizations and NGOs actively participating in EAP development

Community Organizations and NGOs listed in Table 4 were effective in disseminating a drinking water survey to their network of community organizations, further extending the reach of the KWA. The network of organizations included in the dissemination of a survey is listed in Table 5 below.



Community Organizations and NGOs Reached via Actively Participating	
Central California Environmental Justice Network	
Centro Binacional	
Sierra Club Tehipite Chapter	
Self-Help Enterprises	
California Rural Legal Assistance	
California Rural Legal Assistance Foundation	
Friend of Calwa	
Dolores Huerta Foundation	
Fresnoland	
Lideres Campesinas	
Central Valley Partnership	
United Farm Workers Foundation	
Mi Familia Vota	
Centro La Familia	
Pesticide Reform	
Radio Bilingue	

#### Table 5: Community Organizations and NGOs Reached via Actively Participating NGOs

This audience segment will continually be engaged to amplify information and engagement opportunities, and to better understand the needs of the impacted residents. Efforts will be made to continue to engage those listed (Tables 4 and 5) in addition to others willing to participate. NGOs will continue to be solicited for feedback on outreach methods during EAP development and implementation for short- and long-term drinking water solutions, and to date have offered important feedback, including a recommendation to simplify language on outreach flyers and review of a drinking water survey to ensure simple language and userfriendly questions.

#### **Native American Tribes**

A single tribe was identified within the KWA service area. The Tachi Yokut Tribe has been engaged via letter inviting members of the Tribe to participate in EAP development and implementation. Efforts will continue to engage and inform the Tribe on the development and implementation of short- and long-term drinking water solutions.

#### Public or Quasi-Public Agencies

Public and/or Quasi-Public agencies may include local and regional governmental entities and agencies, municipalities, public water systems, community service districts, counties, county service areas, public utility districts, or water districts (public and private) in which the KWA seeks participation, evaluation, cooperation, and/or coordination in the development and implementation of short- or long-term drinking water solutions.



## Interested Stakeholders

Other interested stakeholders may include local and regional entities and agencies, community organizations, and other interested members of the public who wish to participate in the development and implementation of drinking water solutions. This may include but is not limited to agricultural producers, local land-use planning agencies, environmental interests, federal agencies, irrigation districts, and groundwater sustainability agencies (GSAs).

These interested stakeholders have been and will continue to be invited to participate in the activities of short- or long-term drinking water solutions.

### **Key Messages**

The KWA has incorporated and will continue to incorporate key messages in all its communications and engagement activities to help foster clear and accurate communication. This will ensure a level of consistency across all outreach and engagement efforts, instill trust, and provide the opportunity for all KWA staff to engage and communicate a common message. Messages will continue to be developed as EAP development and implementation of short- and long-term drinking water solutions progresses.

The key messages for development and implementation of short- and long-term drinking water solutions are:

- The new Nitrate Control Program is part of a long-term strategy for addressing nitrate pollution in the Central Valley's groundwater.
- The Nitrate Control Program has three goals:
  - Provide safe drinking water supplies
  - o Reduce nitrate impacts on water supplies
  - Restore groundwater quality, where reasonable and feasible
- Many small communities in the Central Valley rely on groundwater for drinking water. Some communities cannot safely use groundwater for drinking water as nitrate levels present the potential for human health impacts.
- Safe drinking water solutions are being developed in local communities. We need your input to develop and implement solutions.
- Drinking water solutions should be flexible and locally driven.
- The KWA encourages participation and input from stakeholders.
- The KWA seeks to incorporate public input received in decisions.
- The KWA is committed to considering all stakeholder comments.



Future messaging will be developed as outreach and engagement continues for short-and long-term drinking water solutions.

# **Transparency and Accountability**

Transparency and accountability are integral to the effectiveness of EAP outreach and engagement. Being open and involving stakeholders at key points during the development and implementation of short- and long-term drinking water solutions creates a democratic process that will produce a positive and well-received solution.

# Best Practices for Transparency and Accountability

The KWA has adhered to and will continue to adhere to the following practices to help ensure accountability and transparency:

- Advanced notification of public meeting times, locations, and agendas
- Website posting of materials and resources
- Solicitation of input from identified stakeholders and a good faith effort to incorporate stakeholder interests in decisions

As the KWA works with stakeholders, various public opportunities for engagement may be considered and deployed to best meet the needs of impacted residents and other interested stakeholders.

Outreach and engagement efforts are intended to be flexible, adapting to meet the needs of impacted residents and other stakeholders engaging in the short- and long-term drinking water solutions development and implementation process. Timing and specific outreach and engagement tactics and tasks are subject to change to better meet the goals and objectives. If a change occurs, the intended result of the tactics and tasks will still be achieved, but through more efficient and/or effective methods.

# Stakeholder Committee Formation

With the support and guidance of KWA staff and Board of Directors, the Stakeholder Committee is an important venue to provide a means in which interested parties may participate in the process of implementation of short- and long-term drinking water solutions. The Stakeholder Committee contributes to the process of ensuring impacted groundwater users are informed of and given the opportunity to participate in the development of proposed solutions. The Committee is a formal venue for coordinating with others that are not dischargers to address drinking water issues, including affected communities, domestic well users and their representatives, the State Water Board's Division of Drinking Water, Local Planning Departments, Local County Health Officials, Groundwater Management Agencies, and



others as appropriate. Table 6 below identifies potential participants in the Stakeholder Committee.

The Stakeholder Committee will meet regularly to work with the KWA staff and Board to identify short and long-term solutions for providing safe drinking water to residents impacted by nitrates in the KWA service area, to engage impacted residents and other interested parties, and to provide input to the Board.

Stakeholder	Identified Participant
	Rolinda resident
	Armona resident
	Stratford resident
	Easton resident
Impacted Residents	Sultana resident
	Monson resident
	Raisin City resident
	Orosi resident
	Cutler resident
	Kings River Water Quality Coalition
Irrigated Agriculture	Fresno County Farm Bureau
Irrigated Agriculture	Kings County Farm Bureau
	Tulare County Farm Bureau
	North Kings GSA
	McMullin Area GSA
	Kings River East GSA
	North Fork Kings GSA
	Central Kings GSA
Groundwater Sustainability Agencies	South Kings GSA
	Mid-Kings GSA
	South Fork Kings GSA
	Tri-County GSA
	Southwest Kings GSA
	El Rico GSA
	Self-Help Enterprises
Community Based Organization	Leadership Counsel for Justice & Accountability
	Community Water Center
	County of Tulare
	County of Kings
Municipal	County of Fresno
	City of Dinuba
	City of Kerman
Dairy	Dairy CARES
	California Milk Producers Council

 Table 6: Stakeholder Committee Representatives



Stakeholder	Identified Participant
	Kings Water Alliance Board Liaison
	Almond Board
Industry/Other	American Pistachio Growers
Industry/Other	The Wine Group
	Wonderful
	Zonneveld Dairies

# **Communication Methods**

The outreach and engagement specific to EAP development and implementation of short- and long-term drinking water solution relies on integrated communications methods, in which multiple communications channels and mediums are used to inform, educate, and engage stakeholders. It should be noted the strategy and tactics for EAP development outreach and engagement operates within the limitations of the COVID-19 pandemic and includes a concentrated volume of digital communications. To offset any disadvantage digital formats may create, print communications methods have been also employed to reach all potentially impacted residents. This includes direct mail to impacted residents homes and community flyering at key locations in communities. It is expected once restrictions on in-person gatherings are lifted, in-person formats, like workshops held in communities, will be an option for EAP implementation outreach and engagement.

To meet the objectives of the strategy, the KWA will engage with stakeholders in both existing and new channels and venues.

# **Tactics for Engagement**

The preparation of EAPs requires community outreach and engagement to help develop interim drinking water solutions. The KWA provided and will continue to provide opportunities for potentially impacted residents and other interested stakeholders to participate in the development and implementation process of the EAP. Some of the broad tactics for engagement include briefings, one-on-one meetings, community meetings, industry/association briefings, newsletters, email updates, community webinars/workshops, and community call-ins.

Translation of materials and live interpretation will be offered whenever feasible to best engage with impacted residents and other interested stakeholders.

# Stakeholder Committee

The Stakeholder Committee is an important venue for public participation. Meetings with representatives of stakeholder groups (Table 6) will be held regularly and provide the opportunity for members of the public and representatives from NGOs and other local agencies



to participate by providing input and/or voicing concerns. Meeting information will be distributed via email and on an easily accessible webpage at www.kingswateralliance.org.

While COVID-19 restrictions are in place, meetings will be held via Zoom. Alternative meeting locations easily accessible to stakeholders and members of the public will be considered once restrictions are lifted.

# **Community Public Outreach Meetings**

Public outreach meetings and events provide an important venue to educate, inform, and solicit feedback from impacted residents and other interested stakeholders. Four public outreach events are anticipated to be held before the final EAP is adopted and submitted to the State Board. Spanish translation was available at all public outreach meetings and events listed in Table 7.

	Community Public Meetings/Workshops				
Date	Meeting Type	Location	Attendance	Topics	
11/19/2020	EAP Community Drinking Water Webinar	Online (Zoom)	32 public; 9 staff	Nitrogen Control Program; EAP 101; drinking water solutions	
1/28/2021	EAP Community Drinking Water Webinar #2	Online (Zoom)	28 public; 9 staff	Nitrate Control Program; Impacted Resident Identification; Drinking Water Solutions; Staying Involved	
2/10/2021	Community Outreach Virtual "Office Hours"	Online, telephone (Zoom)	4 public; 4 staff	Ealy Action Plan draft	
2/8/21	AGUA Coalition Call	Online (Zoom)	35 residents, management zone staff	Management Zones in the Central Valley; feedback on drinking water & outreach	
2/16/21	Community Outreach Virtual "Office Hours"	Online, telephone (Zoom)	1 public; 3 staff	Early Action Plan draft	

### Table 7: Community Public Meetings and Workshops



Any feedback and input solicited from the public during public outreach meetings will be considered by the KWA staff, technical consultants, and Board.

Public outreach meeting materials will be available to the public, posted on the relevant webpage and emailed to the interested persons list.

### Webinars and Virtual Office Hours

An important venue for outreach during the COVID-19 pandemic, the KWA will host two community outreach webinars to educate, inform, and solicit feedback from impacted residents and other interested stakeholders. Spanish translation of materials and live interpretation will be provided whenever feasible during EAP development and implementation to better engage with impacted residents and other interested stakeholders.

Extensive outreach was conducted to promote the November 19<sup>th</sup> webinar, including a direct mail piece in English/Spanish to over 6,000 potentially impacted residents, email notices to interested persons, and English/Spanish flyer distribution at 16 key locations in communities covering the northern, eastern, and southern KWA areas (Table 8). The webinar registration was accessible in English and Spanish, and details listed on the drinking water webpage on the Kings River Quality Coalition website can be translated on command. A list of webinar attendees is included in Appendix B-4. The November 19<sup>th</sup> webinar included live Spanish interpretation.

Extensive outreach was conducted to promote the January 28<sup>th</sup> webinar, including meeting notices in English/Spanish posted at 52 key locations in 27 communities throughout the Kings Water Alliance Management Zone (Table 8), event notice on the Kings Water Alliance website (<u>www.kingswateralliance.org</u>), targeted outreach via local Environmental Justice NGO email distribution lists to 17 local community organizations, targeted outreach to the Environmental Justice Community, Fresno Bee, and Fresno County Farm Bureau, email outreach to the Kings Water Alliance email lists, outreach to KBIF 900AM Punjabi Radio, Radio Bilingue, and Hmong Radio. The January 28<sup>th</sup> webinar included live Spanish interpretation.

Webinars will continue to be a key venue for effective outreach and engagement.

#### Live Polling

Live polling during outreach workshops and webinars is an important tactic to better understand the audience and solicit feedback on key issues and decisions. Live polling will be employed as often as is feasible during outreach events.

A live poll was conducted at critical points throughout the November 19th webinar to better understand the audience and solicit feedback on potential drinking water solutions, and possible limitations on proposed solutions. The was offered in both English and Spanish. The results of the live poll are included in Appendix B-5 (name of respondents has been omitted to



the respect the privacy of participants). Questions asked during the live polling session at the November 19<sup>th</sup> webinar include:

- 1. What stakeholder category best describes you? (¿Qué categoría de partes interesadas lo describe mejor?)
  - a. Domestic well owner (Dueño de pozo doméstico)
  - b. Community resident (Residente de la comunidad)
  - c. Management Zone stakeholder (Parte interesada de la Zona de Gestión)
  - d. Agency representative (Representante de agencia)
- 2. How did you hear about this webinar? (¿Cómo se enteró de este seminario web?)
  - a. Email notice (Aviso por correo electrónico)
  - b. Flyer mailed to my house (Un folleto enviado por correo a mi casa)
  - c. Friend/Colleague (Amigo / Colega)
  - d. Other (Otro)
- 3. Do you obtain your drinking water from a public water system or private well? (¿De donde obtiene el agua potable, de un sistema público de agua o de un pozo privado?)
  - a. Private well (Pozo privado)
  - b. Public water system (Sistema de agua público)
- Including yourself, how many in your household need access to safe drinking water? (Incluyéndose a usted mismo, ¿cuántos miembros de su hogar necesitan acceso a agua potable?)
  - a. 1
  - b. 2-4
  - c. 5-7
  - d. 8-9
  - e. More than 9
- 5. If offered the opportunity to have your well tested for nitrates at no cost to you, would you participate in that program? (Si se le ofreciera la oportunidad de realizar una prueba de nitratos sin costo para usted, ¿participaría en ese programa?)
  - a. Yes (Si)
  - b. No (No)
  - c. Not sure (No estoy seguro)
- 6. If you are unable to go to a fill station, which other options do you prefer? (Si no puede ir a una estación de servicio, ¿qué otra opción prefiere?)
  - a. Point of use treatment system (Sistema de tratamiento en el punto de uso)
  - b. Bottled water delivery (Entrega de agua embotellada)



- c. Other (Otro)
- Assume a fill station is within 10 miles of your home. If you are unable to access the fill station what would be the primary reason?/Suponga que hay una estación de servicio a 10 millas de su hogar. Si no puede acceder a la estación de llenado, ¿por que?
  - a. I do not have reliable transportation/car (No tengo transporte / carro confinable)
  - b. I do not have time (No tengo tiempo)
  - c. Too far from where I live (Demasiado lejos de donde vivo)
  - d. I have a disability that would make access difficult (Tengo una discapacidad que dificulta el acceso)
  - e. Other (Otro)

Live polling was also conducted at the January 28<sup>th</sup> webinar. Poll questions focused on assessing who was in the audience and their preference for meeting times and communication. Attendees were also asked to identify how they heard about the webinar.

- 1. How did you hear about this webinar? (¿Cómo se enteró de este seminario web?)
  - a. Email notice (Aviso por correo electrónico)
  - b. Flyer in my community (Folleto en mi comunidad)
  - c. Text message notice (Aviso de mensaje de texto)
  - d. Work colleague / Employer (Compañero de trabajo / empleador)
  - e. Friend / Family member (Amigo / Miembro de la familia)
  - f. Other (Otro)
- 2. What stakeholder category best describes you? (¿Qué categoría de partes interesadas lo describe mejor?)
  - a. Domestic well owner (Dueño de pozo doméstico)
  - b. Community resident (Residente de la comunidad)
  - c. Management Zone stakeholder (Parte interesada de la Zona de Gestión)
  - d. Tribal representative (Representante tribal)
  - e. Agency representative (Representante de agencia)
- 3. What is your preferred method of communication with the Kings Water Alliance? / ¿Cuál es su método preferido de comunicación con Kings Water Alliance?
  - a. Regular notices and information sent to my email (Avisos e información periódicos enviados a mi correo electrónico)
  - b. Regular meetings in or near my community (Reuniones periódicas en mi comunidad o cerca de ella)
  - c. A dedicated website updated regularly (Un sitio web dedicado que se actualiza periódicamente)



- d. Regular notices and information sent via text message (Avisos e información regulares enviados por mensaje de texto a mi celular)
- e. A local phone number I can call for information (Un número de teléfono local al que podría llamar para obtener información.)
- f. Stories in my local newspaper or radio station (Historias en mi periódico o estación de radio local)
- g. Information provided through my membership in community organizations (churches, clubs, etc.) (Información proporcionada a través de mi membresía en organizaciones comunitarias (iglesias, clubes, etc.)
- 4. What time of day do you prefer to attend outreach events, like this webinar? (¿A qué hora del día prefiere asistir a eventos de divulgación, como este seminario web?)
  - a. Morning (Mañana)
  - b. Afternoon (Tarde)
  - c. Evening (Noche)
  - d. No preference (Sin preferencias)

## Office Hours

Another opportunity to engage the public in a more informal venue, two virtual office hours will be offered prior to EAP adoption and submittal. Attendees have the option to virtually chat or call in to engage with the technical consultants and KWA staff to ask questions, provide input, and/or express concerns relative to EAP development. Spanish interpretation will be offered to participants.

The public was encouraged to join two virtual office hours held in February through promotion at the January 28<sup>th</sup> webinar, event notices on the Kings Water Alliance website, and email notices to the Kings Water Alliance email lists. Spanish translation services were available at Office Hours.

The timing of the office hours events was intentionally held after the release of the draft EAP and PMZP, allowing the public to ask questions and provide input on its content.

# Community Meetings

The Kings Water Alliance will work to integrate communications and outreach with existing venues. Attending routine meetings of community organizations involving impacted residents is a streamlined opportunity to engage and develop awareness while receiving feedback.

One example is the AGUA Coalition call attended by the Kings Water Alliance among other Central Valley management zones (provided in **Appendix B**). Hosted by the Community Water Center, the AGUA Coalition, or "Asociación de Gente Unida por el Agua/Association of People United for Water" is a regional grassroots coalition largely made up of impacted community members and leaders who reside in the Central Valley, and are dedicated to securing safe,



clean, and affordable drinking water for San Joaquin Valley communities. The Kings Water Alliance attended and provided a short presentation on its service area and purpose in engaging with residents. Feedback from residents on preferred drinking water solutions, potential barriers to access, and outreach recommendations was recorded and will continue to be considered as EAP implementation occurs.

Community meetings through existing venues will continue to be a part of the Kings Water Alliance outreach and engagement strategy.

#### In-Person Meetings

Once restrictions relating to the COVID-19 pandemic are lifted, in-person meetings will be held both for formal and informal workshops, briefings, and gatherings targeted to impacted residents and other interested stakeholders to share information, educate, build relationships, provide EAP updates, and solicit input. The KWA will make use of existing venues where community residents and other interested stakeholders typically meet as well as new venues as needed.

# **Key Locations Outreach**

When effective to encourage and promote attendance at outreach events, disseminating flyers at key locations within communities will be conducted to reach impacted residents. Key locations may include but are not limited to, grocery stores and markets, gas stations, churches, community centers, postal stores, and additional relevant locations.

To date, flyers in English and Spanish have been posted at the following key locations in the communities:

November 29, 2020 Webinar Promotion		
Community	Key Location	
	K&C Donuts and Bakery	
Easton	Easton Market	
Edston	Easton Presbyterian Church	
	Crossover Community Church	
	KART Transit Center Fill Station	
	Royal Food	
Hanford	Armona Seventh-Day Adventist Church	
	ATM (Allstar Mini Mart)	
	USPS	

## **Table 8: Flyer Distribution at Key Locations**



Cutler	Cutler Food Mart La Fiesta Foods Rubalcaba Grocery St. Mary's Catholic Church
Orosi	Orosi Mart and Deli Napa Auto Parts ATM (Super 7)
January 28, 2021 Webinar Promotion	
Community	Key Location
Rolinda	Coronado Mexican Food Rolinda Liquor Store
Double L Mobile Ranch Park	USPS boxes
Double L Neighborhood	SW corner of Church and Floyd Ave
	Saber's Market
West Park	Valentine Market
	Hopewell Missionary Baptist
Beran Way	West Park Market
Britten	Cherry Market
	K & C Donuts and Bakery
	Easton Market
Easton	Jack's Gas
	Shop-N-Quick
	Easton Presbyterian Church
	Crossover Community Church
Caruthers	Valero
	Better Buy Market
	Del Rey Park
Del Rey	Del Rey Supermarket
	Community Notice Board
	Jessica Restaurant
	Orange Crush
Perry Colony/Raisin City	Bee's Market
	Community Notice Board
Hardwick	KART Bus Stop
Grangeville	Grangeville Market
	KART Transit Center Fill Station (Hanford)
Armona	Royal Food
	Armona Seventh-Day Adventist Church
	ATM (Allstar Mini Mart) A&M Market
Stratford	El Mochomo
	Hardin's Grocery



Sultana	Cornerstone Market
Suitana	Amigos Produce Sinclair
Monson	Monson Market
	Orosi Mart and Deli
Orosi	Napa Auto Parts
	ATM (Super 7)
	Cutler Food Mart
Cutler	La Fiesta Foods
Cutier	Rubalcaba Grocery
	St. Mary's Catholic Church
	Magnolia Market No. 2
Yettem	Saint Mary Armenian Apostolic Church
	Texaco Visalia

Depending on the location, stacks of flyers were left for distribution or a flyer was taped to an easily accessible and visible window at the entrance of the locations. Some locations used a "campus style" flyer, with tear-offs included webinar details and contact information for interested stakeholders to take with them. Flyer examples are included for reference in Appendix B-6.

# Influencer Outreach

Communications and event promotions will be noticed to community leaders, communitybased organizations, and NGOs. Whenever possible, it will be requested that communications be disseminated to the networks of the leaders and individuals within the organizations to better amplify messages and notices to the public.

Partnering with these groups is an important component of effectively reaching impacted residents, as they understand, have established relationships with, and can comfortably communicate with residents in DACs and rural communities.

Other influencers that may be considered to disseminate information and relevant announcements include industry and commodity groups, governmental agencies, municipalities, public utilities, agricultural producers, and nitrate dischargers. Distributing information to the networks of these groups can bring effective awareness and engagement.

To date, EAP outreach has been distributed to an expanded network of the following entities:

- Kings River Conservation District
- Fresno County Farm Bureau
- Self-Help Enterprises
- Leadership Counsel for Justice and Accountability



# Direct Mail

When pertinent and timely, the KWA will utilize direct mail to reach all potentially impacted residents within the KWA service area. Communication pieces developed will include messaging that communicates information about the KWA and updates stakeholders on activities. KWA contact information and website information will be included on all direct mail pieces. When feasible, translation of direct mail communications pieces will be available. Communications may include newsletters, postcards, flyers, or additional direct mail formats appropriate for outreach and engagement goals.

To date, one direct mail piece has been sent (Appendix B-7):

### Table 9: Direct Mail Pieces Sent

Direct Mail				
Date	Mailer Topic	Audience	Language	Quantity
11/5/2020	Drinking Water Solutions: Ways to get involved in EAP development (webinar promotion)	Potentially impacted residents	English/Spanish	6,014

# **Outreach Content and Materials**

The KWA will develop and disseminate outreach materials that meet the needs of impacted residents and other interested stakeholders depending on their preferred method of receiving information. The KWA is committed to developing clear, consistent, and timely informational materials to help develop public understanding of the KWA, communicate information about EAP contents and implementation and how they relate to impacted residents and other stakeholders, inform the public on how to get involved, and motivate stakeholders to contribute to EAP development and implantation. Outreach content and materials will be easy to understand, using plain language to communicate important information, in addition to being visually appealing.

Based on the specific outreach and engagement purpose, written materials may include fact sheets, educational handouts, FAQs, presentations, maps, and graphics. Outreach materials will be available in print and website/digital formats and will be posted to the appropriate webpage, emailed, and distributed at meetings, workshops, and events.

Materials developed to date include:

- <u>Flyer</u> 11/19/20
- Webinar presentation slides 11/19/20
- Webinar recording 11/19/20



- Digital Story Map
- Flyer 1/28/21
- Webinar presentation slides 1/28/21
- Webinar recording 1/28/21
- Virtual Nitrate Control Program timeline webpage

## **Digital Communication**

#### Website

The KWA was previously using the Kings River Water Quality Coalition website (<u>www.kingsriverwqc.org</u>) but now has its own website (<u>http://kingswateralliance.org/</u>) to host Kings Water Alliance information and outreach materials. A dedicated EAP drinking water solutions webpage was developed that includes information and education on the Nitrate Control Program, the Kings Water Alliance, CV-SALTS program and links, and clear steps to engage in the drinking water solutions process. The webpage also includes information on past and upcoming community engagement opportunities. A Google translation tool is available on the webpage with translation capabilities into three additional languages: Spanish, Hmong, and Punjabi. The webpage is available at this link: http://kingswateralliance.org/. The webpage will continue to be updated regularly with pertinent information, resources, and relevant documents.

A KWA specific website will be launched in the first quarter of 2021. The KWA will ensure its new website remains up-to-date and contains timely information about:

- Status of the EAP
- Notices of meetings and outreach events
- Public opportunities to learn more and provide input
- Links to resources and documents

#### Email Distribution (Interested Persons List)

One of the fastest and easiest ways to stay up to date on KWA activities is by joining the interested persons email distribution list. An important method for keeping impacted residents and other interested stakeholders informed is via email updates using Constant Contact as a tool for distribution and email list management. The list is used to notify and encourage public involvement in meetings and events. To support transparency, emails detailing important decisions and upcoming events will continue to be sent to a growing list of interested persons.

There are two separate email lists for targeted communications:

- Nitrate dischargers (152 recipients)
- Impacted residents and other interested stakeholders (63 recipients)



To date, the following email updates have been sent to dischargers, impacted residents, and other interested parties:

	Email Updates to Interested Persons			
Date	Email Topic	# of	Open	Click-
8/7/2020	Next Steps: Nitrate Control Program and Kings Management Zone	Recipients 104	Rate 49%	through rate 32%
8/14/2020	Kings Management Zone- August Meeting	105	64%	26%
8/26/2020	Kings Management Zone- August Meeting	106	59%	53%
9/18/2020	Kings Management Zone- October Meeting	109	57%	55%
11/10/2020	Upcoming Webinar: EAP to address safe drinking water	115	55%	59%
11/19/2020	Reminder! Webinar tonight on EAP	138	45%	39%
1/6/2021	Webinar #2: Community Drinking Water Solutions & Nov webinar resources	152	57%	40%
1/11/2021	Your survey response is requested	46	59%	56%
1/11/2021	Help us reach more impacted residents- Distribute flyer and infor to your colleagues and staff	129	44%	23%
1/15/2021	Reminder: Your survey response is requested// today is last day to complete the drinking water survey!	50	44%	32%
1/18/2021	Help Us Drive Clean Drinking Water Solutions: WEBINAR #2	53	40%	38%
1/22/2021	Zoom Link: Safe Drinking Water Webinar #2	158	48%	24%
1/28/2021	TODAY @ 6! 💧 Safe Drinking Water Webinar #2	164	34%	33%
2/1/2021	Helpful Resources & January 28 Webinar Recording	62	44%	33%
2/9/2021	Have your safe drinking water questions answered	63	49%	16%
2/10/2021	Join us anytime from now through 2:00 PM to have your questions answered	185	23%	39%
2/16/2021	Virtual Office Hours is now LIVE	185	32%	12%
2/22/2021	Last Call for Comments! Share Your Input on the Early Action Plan and PMZP	185	38%	26%

## Table 10: Email Updates to Interested Persons



An example of an email notice sent to the impacted residents and interested stakeholders list is included in Appendix B-8.

#### YouTube

A YouTube account for the Kings Water Alliance has been established. The account will serve as an outreach tool to share multimedia content. Videos will work to educate the public while providing a catalogue of past webinars and outreach events for public reference.

The initial November 19, 2021, webinar video recording was posted on the Kings River Water Quality Coalition YouTube account and has received 23 views. The January 28, 2021, webinar video recording was posted on the new Kings Water Alliance YouTube account and has received 17 views. Videos will be migrated and housed on the Kings Water Alliance account as a library for the public to access.

## Non-digital communication

#### Phone line

In October 2020, the KWA's dedicated phone line became available for impacted residents and other interested stakeholders to contact with questions or comments on EAP development and implementation. Spanish interpretation is available on the phone line when and if needed. The phone number (559) 549-6747 is included on all outreach materials and on the webpage.

#### Physical Address

The KWA currently shares a physical address with the Kings River Water Quality Coalition. A PO Box is provided on all communications materials and on the webpage if impacted residents and other interested stakeholders prefer to communicate via direct mail.

## Media Coverage – Print, Digital, Radio

The KWA will identify preferred media outlets to provide information regarding outreach and engagement. This may include press releases, newspaper articles, and media briefings. Media outreach will seek to promote public engagement and understanding. The KWA will maintain a list of regional media including radio, television, newspapers, and organizational newsletters along with state and specialized media. An example of coverage from the Fresno County Farm Bureau is included in Appendix B-9.

To date, individuals from the following media outlets have been actively engaged:



#### Table 11: Media outlets engaged

News/Media
Fresno County Farm Bureau Newsletter
Fresnoland
Cutler/Orosi News

# **Drinking Water Survey**

To better understand the priorities of impacted residents, KWA conducted a drinking water survey. The survey provides an opportunity for impacted residents and other interested stakeholders to identify their solutions preferences and identify challenges to varying drinking water solutions. The Kings Water Alliance collaborated with the environmental justice organization Leadership Counsel for Justice and Accountability (LCJA) to develop and distribute the survey. The survey was disseminated via a diverse set of communications channels including the Kings Water Alliance interested persons email list, LCJA's email and text message lists, through 16 additional community organizations and NGOs, and LCJA's community Facebook group to ensure wide distribution to the relevant stakeholder groups. The survey was offered in both English and Spanish. Data received from the results were distributed to the KWA staff, technical consultants, and the Board for review and consideration. The survey results are attached (Appendix B-10).

# **Outreach and Engagement Evaluation**

## **Tracking Sheet**

To effectively measure outreach and engagement tactics against the goals and objective outlined in this strategy, a tracking document has been established for use across KWA staff in Google Sheets. The tracking sheet will ensure effective outreach and engagement reporting to the KWA Board, the public, State Board. Upon evaluation, the tracking sheet may assist KWA staff in pivoting efforts to increase clarity and efficiency of achieving the goals and objectives of this outreach strategy.

Measuring success requires tracking the following metrics:

- Awareness and Reach Metrics:
  - $\circ$   $\;$  Quantify the number of channels utilized to communicate
  - o Quantify output of materials/touchpoints across communications channel
  - Quantify the number of individuals receiving communications across channels
- Engagement Metrics:
  - o Website analytics



- Email open rate and click through rate
- Workshop and meeting attendance
- Phone calls received
- Impact Metrics:
  - Track key topics and questions posed by the public
  - Increase in engagement over time
  - Level of support and cooperation expressed by stakeholders

The KWA staff will assess metrics on a quarterly basis, and pivot tactics on an as needed basis to ensure effective and efficient communication.

#### **Reports to the Board and Stakeholder Committee**

KWA staff will provide outreach and engagement activities reports to the Board and Stakeholder Committee as needed. This will give an opportunity for the Board, representatives of diverse stakeholder groups, and members of the public to provide comment and recommendations to KWA staff on ongoing outreach and engagement activities during EAP development and implementation. An example of a report to the Board is included for reference in Appendix B-11.



# APPENDIX A ADDENDUM COMMUNITY ENGAGEMENT COMMUNICATION & OUTREACH PLAN – UPDATED NOVEMBER 2024

Placeholder for KWA to update as needed.



# APPENDIX B STATE WATER BOARD COMMUNITY ENGAGEMENT CHECKLIST

The State Water Board (2020) provides a table that summarizes the guidance found in its community engagement document. **Table B-1** below demonstrates how the Kings Water Alliance Management Zone's community outreach program aligns with the guidance.

Table B-1. Alignment Between Kings Water Alliance Management Zone Community Outreach Actions and State Water Board Guidance			
Community Engagement Element	Potential Actions to Implement Element	EAP Development and Implementation	
Communicate Effectively	Communicate with affected communities remotely	<ul> <li>KWA conducted virtual and hybrid community outreach meetings.</li> <li>Participants had the opportunity to use their digital devices or telephone to call in to the events or attend in-person.</li> <li>A dedicated phone line managed by KWA was established in October 2020 and promoted.</li> <li>A direct mail piece was sent to all potentially impacted residents in the KWA to raise awareness and promote the first webinar.</li> <li>Digital communications were employed including the development of a website, YouTube account, email updates to the KWA distribution lists.</li> <li>Flyers were left at key locations across the KWA to promote webinars and raise awareness.</li> <li>A comprehensive report of the communications is included in Appendix A, Communications &amp; Outreach Plan.</li> </ul>	



	Table B-1. Alignment Between Kings Water Alliance Management Zone Community Outreach Actions and State Water Board Guidance			
Community Engagement Element	Potential Actions to Implement Element	EAP Development and Implementation		
	Translate materials into Spanish and other language(s) identified	All flyers and direct mail were distributed in English and Spanish. Webinars included live Spanish translation; recordings were posted on YouTube and the KWA website with Spanish subtitles. All live polling conducted during the webinars included both English and Spanish translated text. Webinar registration and sign-up information was provided in both English and Spanish. The new website <u>www.kingswateralliance.org</u> includes a translation feature at the bottom right of the page that can translate content into Spanish, Hmong, and Punjabi. A drinking water survey was conducted via SurveyMonkey and made available in English and Spanish.		
	Provide a point of contact who speaks residents' primary language	A designated KWA staff member speaks Spanish, and attended all outreach events and is available to answer the dedicated KWA phone line should Spanish interpretation be needed.		
	Ensure planned one-on-one communications have personnel fluent in the primary language	A designated KWA staff member speaks Spanish, and attended all outreach events and is available to answer the KWA phone line should Spanish interpretation be needed.		
	Offer live interpretation at community meetings	A designated KWA staff member speaks Spanish, and attended all outreach events and is available to answer the dedicated KWA phone line should Spanish interpretation be needed.		
	Provide written materials in plain language	All materials intentionally included simple language to ensure understanding across all audiences. Technical language was avoided whenever possible. Flyers, the direct mail piece, and the drinking water survey were reviewed by NGOs familiar with Spanish interpretation and the needs of community residents. Adjustments were made as needed based on the recommendations of the NGOs.		



Table B-1. Alignment Between Kings Water Alliance Management Zone Community Outreach Actions and State Water Board Guidance			
Community Engagement Element	Potential Actions to Implement Element	EAP Development and Implementation	
	Speak in plain language	Outreach events provided an opportunity to learn the key components of the Early Action Plan and why it is relevant to residents. The information verbally communicated was simplified while still providing enough to explain the purpose of the EAP. Ample time for Question and Answer was left at webinars to ensure understanding from the audience. Polling was also conducted as a means to gauge the audience and distill the key points of the material presented. Virtual office hours were offered as another opportunity to provide answers or clarification if the material was not understood.	
Communicate Effectively (ctd)	Consult community groups if your materials are understandable to the community	Flyers, the direct mail piece, and the drinking water survey were reviewed by NGOs familiar with Spanish interpretation and the needs of community residents. Adjustments were made as needed based on the recommendations of the NGOs.	
	Ask participants if materials are understandable	Ample time for Question and Answer was left at webinars to ensure understanding from the audience. Polling was also conducted to gauge the audience and distill the key points of the material presented. Virtual office hours were offered as another opportunity to provide answers or clarification if the material was not understood.	
	Present information without bias	Information was comprehensively provided at the webinars hosted by the KWA. All considered drinking water solutions and their associated requirements were presented to the attendees. All potential solutions were also included in the drinking water survey conducted with impacted residents.	



	Table B-1. Alignment Between Kings Community Outreach Actions ar	
Community Engagement Element	Potential Actions to Implement Element	EAP Development and Implementation
	Know and communicate your constraints	Information was comprehensively provided at the webinars hosted by the KWA. All considered solutions and their associated requirements were presented to the attendees.
	Be transparent with decision-making processes	Residents and stakeholders have been routinely engaged on development of the EAP. Engagement has occurred via website updates, outreach events, and periodic email updates and reminders on deadlines and processes to EAP development and submittal.
Protect Personal	Mitigate concerns about information collection	Personal information was never required to be collected. Poll responses were not published tied to the respondent. Attendees were notified that their responses would be kept private. Webinar registration was encouraged but not required to attend, and the registration form for those who chose to register was kept short and simple. The drinking water survey collected some information to assess where attendees were from, including zip code, but it was clearly indicated as an optional question.
Information	Minimize collection of personal information	Personal information was never required to be collected. Poll responses were not published tied to the respondent. Attendees were notified that their responses would be kept private. Webinar registration was encouraged but not required to attend, and the registration form for those who chose to register was kept short and simple. The drinking water survey collected some information to assess where attendees were from, including zip code, but it was clearly indicated as an optional question.
Acknowledge Diverse Interests	Be inclusive of all groups within a community	Outreach was conducted to all potentially impacted residents via a direct mail piece.



	Table B-1. Alignment Between Kings Community Outreach Actions ar								
Community Engagement Element	Potential Actions to Implement Element	EAP Development and Implementation							
		A direct invitation to community leaders across the KWA was sent via email. A direct invitation to engage was sent to a Tachi Yokut Tribe representative.							
		A stakeholder committee representing diverse interests will be established to help guide EAP implementation. For a full list of stakeholder groups, reference Table 6 in Appendix A.							
	Provide "balanced access" to groups you are engaging with	A stakeholder committee representing diverse interests will be established to help guide EAP implementation. For a full list of stakeholder groups, reference Table 6 in Appendix A.							
	Evaluate your community engagement strategy	Evaluation methodologies are included in Appendix A. It is the full intent of the KWA to continually evaluate and track outreach efforts and adjust if/when needed.							
Evaluate and Revise	Make modifications	The addition of virtual office hours was incorporated into outreach efforts for EAP development to offer additional dedicated opportunities to engage. Modifications to outreach also included intentional branding strategy to deliberately migrate from the Kings River Water Quality Coalition to the KWA; this included the development of a logo, color scheme, website, and email template for interested person communications.							
	Develop a Community Profile	Community Profile documentation is provided in Appendix C.							
Learning About the Community	Develop a Contact List	The Kings Water Alliance maintains an interested persons contact list. Anyone can sign up to receive email updates. The KWA also maintains a list of community leaders, and NGOs who are familiar with community needs.							



	Table B-1. Alignment Between Kings Community Outreach Actions ar								
Community Engagement Element	Potential Actions to Implement Element	EAP Development and Implementation							
	Develop educational materials	<ul> <li>The following materials were developed:</li> <li>Flyers</li> <li>Webinar presentation slides</li> <li>Webinar recording</li> <li>Digital Story Map</li> <li>Virtual Nitrate Control Program timeline webpage</li> </ul>							
Educating the Community	Establish contact(s)	The KWA maintains an interested persons contact list. Anyone can sign up to receive email updates. The KWA also maintains a list of community leaders, and NGOs who are familiar with community needs.							
	Establish locations where information is publicly accessible	The KWA did extensive outreach at key locations in communities across the service area. For a list of locations, refer to Table 8 in Appendix A.							
	Distribute materials using multiple communication platforms	Appendix A identifies an integrated communications strategy as key to effective outreach. Outreach was conducted via diverse channels including digital, print, and radio. For a comprehensive identification of distribution methods, see Appendix A.							
Educating the Community	Hold community meetings to educate the community	The KWA conducted and continues to conduct multiple virtual and hybrid community meetings to encourage public participation and feedback on EAP development as well as provide opportunity to educate the community on nitrate issues.							
Collaborating with the Community	Create a process for collaborative decision-making	The KWA made a concerted effort to solicit feedback and hear from impacted residents. Efforts include conducting polls during webinars the KWA hosted, as well as conducting a drinking water survey. The results were shared with the technical consultants and staff to better understand the needs of impacted residents.							



		ss Water Alliance Management Zone and State Water Board Guidance							
Community Engagement Element	Potential Actions to Implement Element	EAP Development and Implementation							
	Provide updates	The KWA maintains an email interested persons list for timely updates on EAP development. Those on the list were clearly notified of EAP development milestones including public meetings to educate and receive input, EAP draft availability for public review and comment, and reminders to submit comments and ask questions. These milestones were also posted on the KWA website and clearly identified at public outreach meetings.							
Maintaining Involvement		The KWA has a dedicated phone line established to answer any questions or field comments from the public. An email has also been set up for similar purpose at <u>info@kingswateralliance.org</u> . The email is forwarded to the KWA staff who coordinate to ensure the best response possible.							
	Maintain contact and process for responding to community inquiries	A highly visible "Contact Us" button is included on the website header menu and visible from all webpages. The button leads to a contact form and uses encouraging language: "This site is designed to provide permitted dischargers, residents, and other interested stakeholders with a space to engage, giving you the opportunity to submit comments or questions, 24-hours a day, 7-days a week". Th page also lists the phone number and email address. Form submissions forward to KWA staff members.							

Source: Table adapted from State Water Board (2020), page 17



# APPENDIX C COMMUNITY PROFILE DATA



# APPENDIX D DOMESTIC DRINKING WELL TESTING AGREEMENT FORM (2024)

#### KINGS WATER ALLIANCE DOMESTIC DRINKING WELL TESTING

#### About Kings Water Alliance

Kings Water Alliance (KWA) is a California nonprofit corporation formed to: (i) study and address groundwater nitrate levels within its boundaries; and (ii) provide safe drinking water for residents impacted by nitrate contamination in groundwater within its Priority Area 1.

California's Central Valley has nitrate levels in groundwater that are above the public health standard limit of 10 milligrams per liter (mg/L) for Nitrate + Nitrite as Nitrogen. Drinking water with high levels of nitrate can pose health risks to children under six years old, pregnant women, and those individuals that are immunocompromised. In fact, preliminary research has identified potential links between nitrate consumption and various types of health concerns. Accordingly, nitrates found in groundwater resources are a concern for all Central Valley residents.

To address this issue, KWA offers free domestic drinking water well testing for Nitrate + Nitrite as Nitrogen (mg/L) to groundwater well owners within its Priority Area 1 as part of the Central Valley Salinity Alternative for Long Term Sustainability (CV-SALTS) initiative.

#### Domestic Drinking Water Well Sampling Eligibility

You are eligible for KWA's free domestic drinking water well testing for Nitrate + Nitrite as Nitrogen (mg/L) if your residential property is located within KWA's Priority Area 1 (an interactive map is available for verification at http://kingswateralliance.org/welltest/). If you are eligible, KWA invites you to complete the Kings Water Alliance Well Sampling Agreement attached to this document. This agreement is necessary for KWA to access your residential property and test your domestic drinking water well for Nitrate + Nitrite as Nitrogen (mg/L). If you have any questions or concerns regarding this agreement, please do not hesitate to contact KWA at 559-549-6747 or info@kingswateralliance.org.



#### KINGS WATER ALLIANCE WELL SAMPLING AGREEMENT

This Well Sampling Agreement (Agreement) is made and entered into by the Kings Water												
Alliance (KWA), and		(Landowner,	you,	or	your),	the						
Landowner(s) of that certain real property loc	ated in		Co	unty,	, Califor	mia,						
located at the following address:			danda									
(Property), with the following number of drinking water wells present												

#### I. Permission to Access Drinking Water Well(s) and Collect Water Sample for Testing

You grant KWA and its employees, agents, consultants, and contractors a cost-free nonexclusive license to enter onto your Property at a mutually agreed upon date and time to obtain water quality samples for analytical testing for Nitrate + Nitrite as Nitrogen (mg/L) from your domestic drinking water well(s).

Before entering onto your Property to exercise the rights granted under this Agreement, KWA will coordinate with you to schedule a date and time at which such access is acceptable to you. KWA will not access your Property to exercise the rights granted under this Agreement without your prior written consent. Further, if you have any pets that would otherwise interfere with or prohibit access to your Property, you will ensure that such pets are restrained on the day of access. If such pets are not rained on the day of access, KWA cannot guarantee that sampling will occur. You will not unreasonably withhold access to your Property from KWA.

You and KWA agree that this Agreement will remain in effect until either of the following occur:

(a) <u>Termination by a Party</u>. You and KWA agree that this Agreement may be terminated at any time, with or without cause, by either party upon 60 days written notice to the other party.

(b) <u>Change in Ownership</u>. You and KWA agree that this Agreement will terminate upon any change in ownership of your Property. Following that termination, KWA acknowledges that KWA must enter into a new agreement with the new owner(s) of the Property.

#### II. Permission to Access Upload Water Sampling Results to GeoTracker

GeoTracker is the State Water Resources Control Board's (State Board) data management system that provides online access to environmental data, including water quality data, such as information regarding nitrates in groundwater. The GeoTracker public portal retrieves records to view integrated data sets from multiple State Board programs and other agencies through an easy-



to-use Google maps GIS interface. This interface allows public users to view data in relationship to streets, roads, satellite imagery, and terrain map views.

As part of the Nitrate Control Program, the State Board requires (a) water quality testing results for Nitrate + Nitrite as Nitrogen (mg/L) and (b) the coordinates (longitude and latitude) of your groundwater well(s) from which the water quality sample was taken to be uploaded to GeoTracker. Accordingly, you authorize KWA to submit any water quality sample testing results and the coordinates (longitude and latitude) of your groundwater well(s) from which a water quality sample is taken to the State Board's data management system, Geotracker.

#### III. Access to Testing Results

Any water quality samples collected by KWA are solely for analytical testing of Nitrate + Nitrite as Nitrogen. As testing results become available, KWA will provide these results to you. Importantly, however, KWA does not represent that any water quality testing results provided to you by KWA are a final determination as to the quality or safety of your groundwater resources. Therefore, if you receive water quality testing results that do not indicate the presence of nitrates or nitrates below the public health standard limit of 10 milligrams per liter (mg/L), it does not mean that your well water is safe to drink. There are many other types of contamination that could make your drinking water unsafe to consume.

If the water quality testing results provided to you by KWA do not show traces of nitrates or nitrates below the public health standard limit of 10 milligrams per liter (mg/L), KWA still encourages you to have your water tested. Additional water testing resources include:

ENTITY	PHONE NUMBER	EMAIL
Self Help Enterprises Regional Household Well Assistance Program	559-802-1285	
Fresno County Environmental Health	559-600-3357	environmentalhealth@fresnocountyca.gov
County of Tulare Environmental Health Division	559-624-7400	
County of Kings Environmental Health Services	559-584-1411	

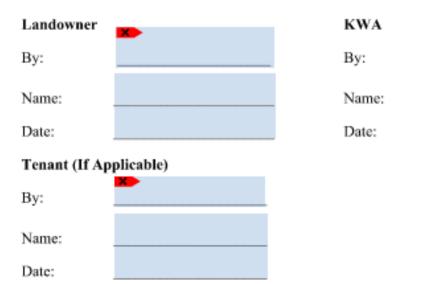
Further, a list of Certified Environmental Laboratory Accreditation Program (ELAP) laboratories for testing Nitrate + Nitrite as Nitrogen (mg/L) can be found here: https://www.waterboards.ca.gov/centralvalley/water\_issues/irrigated\_lands/drinking\_water/dw\_e lap\_labs\_list.pdf.



## IV. Initial and Signature

By signing this Agreement, you acknowledge the following:

Initial	
	I am eligible for KWA's free domestic drinking water well testing for Nitrate + Nitrite as Nitrogen (mg/L).
	My domestic drinking water well is used to provide water for drinking and cooking for my residence.
	I am the Landowner of the Property described above.
	I grant KWA and its employees, agents, consultants, and contractors a cost-free non- exclusive license to enter onto my Property, pursuant to the procedures set forth herein, to obtain water quality samples for analytical testing for Nitrate + Nitrite as Nitrogen (mg/L) from my domestic drinking water well(s) identified in Section I, above, subject to the terms of this Agreement.
	I understand and acknowledge that any water quality sample testing results provided to me by KWA only reflects data specific to Nitrate + Nitrite as Nitrogen. Further, I understand that these results are not a final determination as to the quality or safety of my groundwater resources.
	I understand that (a) water quality testing results for Nitrate + Nitrite as Nitrogen (mg/L) and (b) the coordinates (longitude and latitude) of my groundwater well(s) from which the water quality sample was taken will be uploaded to GeoTracker.





# APPENDIX E ADDENDUM PUBLIC WATER SYSTEM AND SUPPLY WELL NITRATE TABLES FOR PRIORITY 2 TULARE LAKE SUBBASIN PORTION OF KWAMZ

Table E-1. Summary of Nitrate-Impacted Public Supply Wells (by Well Status) for the KWA Priority 2 Tulare Lake Management Zone

Table E-2. Summary of Public Water Systems that have had Nitrate-Impacted Wells in the KWA Priority 2 Tulare Lake Management Zone

Table E-3. Treatment of Water Systems with Nitrate-Impacted Wells in the KWA Priority 2 Tulare Lake Management Zone

Table E-4. Compliance Status for Public Water Systems in the KWA Priority 2 Tulare Lake Management Zone



Well ID	Other Well Name	Date Range	Number (N) Min.		Max.	Most Recent Exceedance Date	Well Status [1]	DDW Water System Name	PWS Type	No. of Connections	Population Served	
1610004_001	WELL 01A - BEFORE NO3 BLND & AS TRT	10/25/1985 - 7/15/2024	270	0.38	35.00	11/8/2023	AR	CORCORAN, CITY OF	COMMUNITY	3560	21835	
1610004_002	WELL 02A - BEFORE AS TRT	10/25/1985 - 6/06/2024	199	ND	28.00	4/8/2024	AR	CORCORAN, CITY OF	COMMUNITY	3560	21835	
1610004_003	WELL 03A - BEFORE AS TRT	10/25/1985 - 7/08/2024	189	0.90	15.00	6/10/2024	AR	CORCORAN, CITY OF	COMMUNITY	3560	21835	
1610004_015	WELL 06A - BEFORE AS TRT	12/18/1998 - 7/08/2024	124	ND	33.00	3/30/2022	AR	CORCORAN, CITY OF	COMMUNITY	3560	21835	

#### Table E-1. Summary of Nitrate-Impacted Public Supply Wells (by Well Status) for the KWA Priority 2 Tulare Lake Management Zone

 $1^{[1]}$  Well Status can be defined as follows: AB = Abandoned; AR = Active Raw; AU = Active Untreated; DS = Destroyed; IR = Inactive Raw; IU = Inactive Untreated; PN = Pending

#### Table E-2. Summary of Public Water Systems that have had Nitrate-Impacted Wells in the KWA Priority 2 Tulare Lake Management Zone

	System Name	PWS Type	No. of Connections		Number of Wells in Public Water Supply Systems by Well Status										
DDW No.				Active Wells	Agricultural/ Irrigation Wells	Abandoned Wells	Destroyed Wells	Inactive Wells	Pending Status Wells	Standby Wells	Total No. of Wells That Have Exceeded MCL	No. of Currently Active Wells That Have Exceeded MCL	Population Served	Potentially Affected Population with Active Wells > MCL	
CA1610004	CORCORAN, CITY OF	COMMUNITY	3560	8	0	2	7	0	1	1	4	4	21835	21835	

#### Table E-3. Treatment of Water Systems with Nitrate-Impacted Wells in the KWA Priority 2 Tulare Lake Management Zone

DDW No.	System Name	PWS Type	No. of Connections	Population Served	Source Filed with	Treatment Pertaining to Nitrate Mentioned in Source Name (Y/N)	from Treated	Has Treated Source(s) with Nitrate Exceeding MCL (>10 mg/L as N) (Y/N)	Most Recent Exceedance for a Treated Source
CA1610004	CORCORAN, CITY OF	COMMUNITY	3560	21835	Y	Y	Y	Ν	Ν



# Table E-4. Compliance Status for Public Water Systems in the KWA Priority 2 Tulare Lake Management Zone

																	MCL Exceeda	ance		Total	Population	Population
PWS ID	PWS Name	County	Regulating Agency		State Classification	Service Area Classification	SAFER Status	MHI Status	Number of Connections (source: HR2W or SDWIS DWW)	Population Served (source: HR2W or SDWIS DWW)	Compliance Status [1]	Compliance Status Source	Violation Category (SDWIS DWW)	Violation Chemical(s) (SDWIS DWW)	Date of Violation (SDWIS DWW Determination Date)	Nitrate	Nitrate PLUS Co- Contaminant	Other Contaminant	Non- MCL Violation	Population Served by Currently Out-of- Compliance System due to any Violation	Served by Currently Out-of- Compliance System due to Nitrate Only	Served by Currently Out-of- Compliance System due to Nitrate PLUS Co- Contaminant
CA1610007	HOME GARDEN CSD	KINGS	DISTRICT 12 - VISALIA	COMMUNITY	COMMUNITY	R (Residential)	At-Risk	SDAC	467	1750	In Compliance	SDWIS 8/20/2024								0	0	0
CA1600507	HARDWICK WATER COMPANY	KINGS	LPA46 - KINGS COUNTY	COMMUNITY	COMMUNITY	R (Residential)	Not At-Risk	DAC	40	69	In Compliance	SDWIS 8/20/2024								0	0	0
CA1610009	KETTLEMAN CITY CSD	KINGS	DISTRICT 12 - VISALIA	COMMUNITY	COMMUNITY	R (Residential)	Failing	SDAC	352	1136	Out of Compliance	SDWIS 8/20/2024	MCL	TTHM	10/1/2022			х		1136	0	0
CA1600293	15TH AVENUE	KINGS	LPA46 - KINGS COUNTY	COMMUNITY	COMMUNITY	T (Secondary Residence)	At-Risk	SDAC	3	50	In Compliance	SDWIS 8/20/2024								0	0	0
CA1610004	CORCORAN, CITY OF	KINGS	DISTRICT 12 - VISALIA	COMMUNITY	COMMUNITY	R (Residential)	At-Risk	SDAC	3560	21835	In Compliance	SDWIS 8/20/2024								0	0	0
CA1610006	STRATFORD PUD	KINGS	DISTRICT 12 - VISALIA	COMMUNITY	COMMUNITY	R (Residential)	Potentially At-Risk	SDAC	364	1277	Out of Compliance	SDWIS 8/20/2024	MON, MON, MON	Nitrate, TTHM, HAA5	1/1/2021, 1/1/2020, 1/1/2020				х	1277	0	0
CA1610001	ARMONA COMMUNITY SERVICES DIST	KINGS	DISTRICT 12 - VISALIA	COMMUNITY	COMMUNITY	R (Residential)	At-Risk	SDAC	1366	4143	In Compliance	SDWIS 8/20/2024								0	0	0
CA1610005	LEMOORE, CITY OF	KINGS	DISTRICT 12 - VISALIA	COMMUNITY	COMMUNITY	R (Residential)	Failing	Non- DAC	7306	27185	Out of Compliance	SDWIS 8/20/2024	MCL,MCL, TT, MON	TTHM, HAA5, As, Nitrate	1/1/2011, 4/1/2017, 4/1/202, 1/1/2022			х	x	27185	0	0
CA1610003	HANFORD, CITY OF	KINGS	DISTRICT 12 - VISALIA	COMMUNITY	COMMUNITY	R (Residential)	Not At-Risk	DAC	18712	62127	Out of Compliance	SDWIS 8/20/2024	MON	Pb + Cu	10/1/2023				x	62127	0	0
CA1600002	SUNSET VISTA ESTATES MHP	KINGS	LPA46 - KINGS COUNTY	COMMUNITY	COMMUNITY	R (Mobile Park)	At-Risk	Non- DAC	109	400	In Compliance	SDWIS 8/20/2024								0	0	0
CA1010020	LATON COMMUNITY SERVICES DISTRICT	FRESNO	DISTRICT 23 - FRESNO	COMMUNITY	COMMUNITY	R (Residential)	Potentially At-Risk	DAC	473	1551	Out of Compliance	SDWIS 8/20/2024	MCL	Coliform	6/1/2019			х		1551	0	0

