

1. Background and Purpose

The Nitrate Control Program established by the Central Valley Water Quality Control Board (Central Valley Water Board) provides two pathways for compliance for permitted discharges to groundwater. Pathway A is for individual permittees and sets conservative limitations for source control. Pathway B is for permittees proposing to be regulated under a Management Zone. Both Pathways require the development of an Early Action Plan (EAP) defined 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 (10 mg/L nitrate as nitrogen). While these wells are primarily domestic wells, this EAP also addresses areas where public water supply wells have nitrate levels exceeding the water quality objective.

1.1 Early Action Plan Requirements

An EAP must include the following, unless otherwise approved by the Central Valley Water Board's Executive Officer:

- i. 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;
- ii. A process for coordinating with others that are not dischargers to address drinking water issues, which must include consideration of coordinating with affected communities, domestic well users and their representatives, the State Water Board's Division of Drinking Water, Local Planning Departments, Local County Health Officials, Sustainable Groundwater Management Agencies and others as appropriate;
- iii. 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
- iv. A funding mechanism for implementing the Early Action Plan, which may include seeking funding from Management Zone participants, and/or local, state and federal funds that are available for such purposes;

For participants in a Management Zone, the EAP is submitted to the Central Valley Water Board with the submittal of a Preliminary Management Zone Proposal. Implementation of

the EAP shall begin as soon as is reasonably feasible, but no later than 60 days after submittal, unless the Central Valley Water Board deems the EAP to be incomplete.

1.2 EAP Framework

1.2.1 Workflow

Figure 1-1 provides an overview of the key work elements included in this EAP: Identification of residents potentially impacted by nitrates in their drinking water source (see Section 4), outreach activities to the general public in the Management Zone and identified residents within the area covered by the EAP (see Section 6) and development of temporary alternative drinking water sources (see Section 6). These work elements will be coordinated with non-dischargers within the Management Zone (see Section 3) and activities will be documented through data management and reporting activities.

1.2.2 Area of Applicability

This EAP applies to the area within Turlock Management Zone boundary where nitrate in the upper zone of the underlying groundwater is expected to exceed the nitrate water quality objective (**Figure 1-2** – Figure showing MZ Boundary and area within the boundary to which the EAP applies). Section 2 provides the basis for how this area was determined.

1.2.3 Participants

This EAP will be implemented by all declared participants of the Turlock Management Zone. A participant is an individual discharger subject to Waste Discharge Requirements or dischargers that are part of a third-party group subject to a General Order that have filed a Notice of Intent to the Central Valley Water Board documenting that they have opted to comply with the Nitrate Control Program through Path B, i.e., participation in a Management Zone. The participants of this Management Zone are named in the Preliminary Management Zone Proposal.

1.3 Community Outreach to Develop EAP Approach

Placeholder - To be developed, expected content to include:

- *Process to develop EAP, including stakeholder participation*
- *Community outreach activities to receive public comments*
- *Summary of how community comments were addressed*

1.4 EAP Effective Date

The effective date of this EAP is [*within 60 days of submittal date for Preliminary Management Proposal*], unless the Central Valley Water Board issues a formal objection. This EAP will remain in effect until it is superseded by the requirements established in the approved Management Zone Implementation Plan established for this Management Zone.

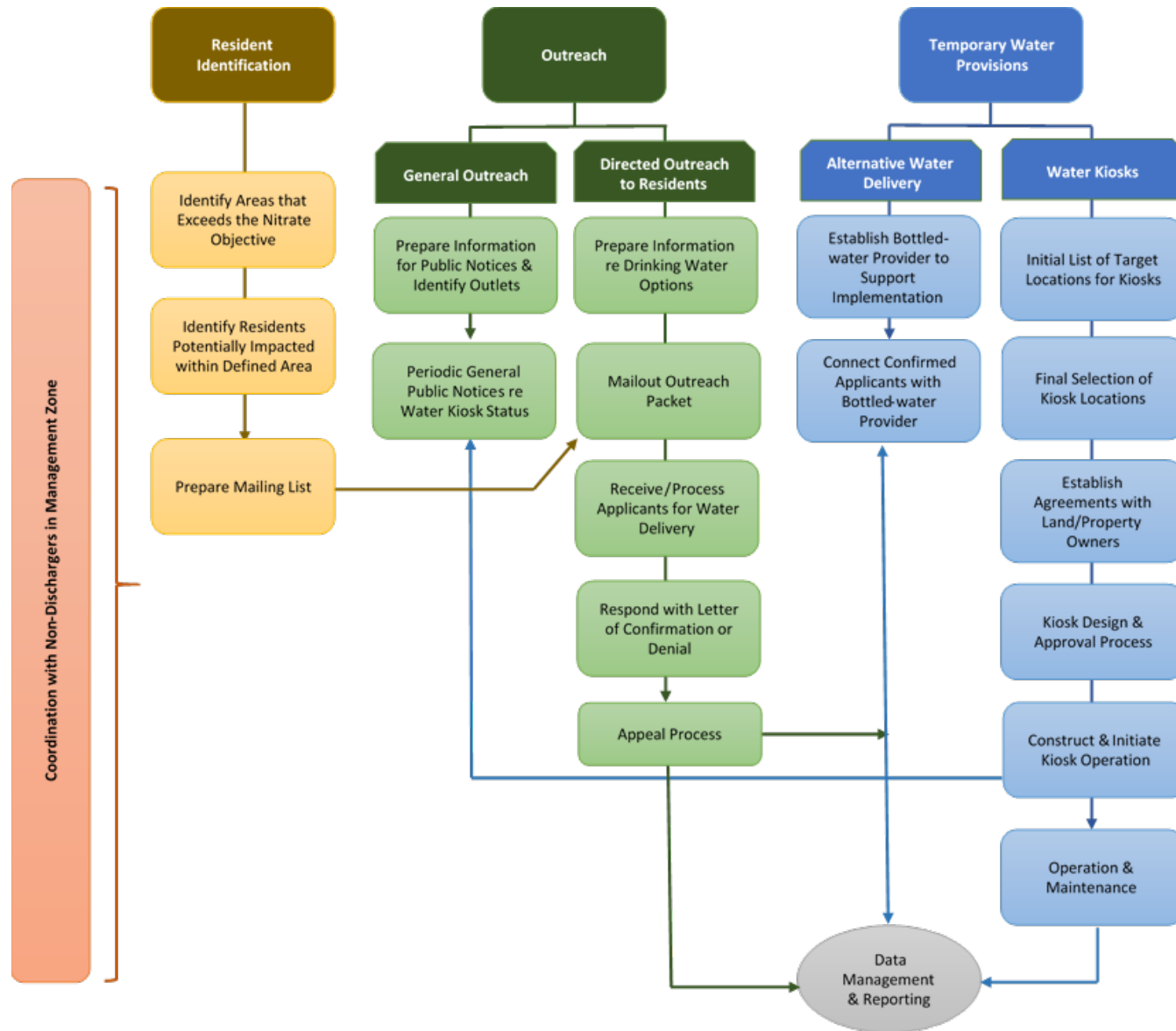


Figure 1-1. Workflow Elements of Early Action Plan

2. Identification of Potentially Impacted Groundwater Users

Placeholder – This information is being developed by Luhdorff & Scalmanini.

2.1 Nitrate-impacted Areas

2.2 Public Water Supply Sources

2.2.1 Public Water Supply Systems

2.2.2 State Small Water Systems

2.2.3 Local Small Water Systems

2.3 Potentially-Impacted Domestic Wells

3. Existing Safe Drinking Water Programs Serving Management Zone Area

Placeholder - This section will describe existing programs/efforts to provide safe drinking water to residences within the area covered by the EAP.

4. Process to Identify Potentially Affected Residents

Section 2 identified the geographic areas within the Management Zone that have the potential for the underlying upper zone groundwater to have nitrate levels exceeding the water quality objective. The EAP targets these areas for identification of potentially affected residents, i.e., residents that may be using this groundwater as a drinking water source. The sections below provide the methodology to identify these residents. Section 6 below describes how the EAP will conduct outreach to these residents.

The following process will be implemented to identify potential residences within the Management Zone that may have a domestic well, or be connected to a public water supply system, that is providing water that has nitrates that exceed the nitrate water quality objective. The process described only identifies residences that may be drinking contaminated water. This information will be used to conduct outreach to ensure that residents are aware of the options within this Management Zone for obtaining non-contaminated water.

Step 1: Data Development

Figure 2-X [*map illustrating area with nitrate exceeding the water quality objective*] above serves as the baseline map for the use of mapping tools to develop a preliminary list of residences within the Management Zone boundary. In general, the water quality data and water system boundaries will be overlaid on Google Earth images to begin the process of identifying residences within the area. The resulting mapped area will be subdivided and analyzed at an appropriate scale using a grid overlay (grid size will depend on the resolution needed to identify residences; but no greater than a 2 x 3-mile grid is anticipated).

Within each grid, residential properties will be located using Google Earth satellite images. County parcel shapefile data (with assessor parcel numbers [APN]) will be requested from Stanislaus and Merced Counties. This shapefile will be overlaid on the gridded Google Earth image to associate land parcels with each residential property.

Step 2: Establish List of Potentially Affected Residences

The location of public water supply systems (public water systems, local small water systems, state small water systems) will be identified within the area of analysis. Each of these systems will be evaluated for compliance with the nitrate water quality objective. Residences served by a compliant water system will be removed from the list of potential residences. If any system is determined to be non-compliant with the nitrate water quality objective, those residents within that water system will remain on the list.

Using the data developed in Step 1, a grid by grid analysis will be completed to identify parcels with potentially affected residences. All parcels and associated property ownership and addresses will be compiled in a spreadsheet for subsequent analysis. The spreadsheet will be screened to identify residences that are identified as members of a Coalition under the Irrigated Lands Regulatory Program (ILRP). These residences will be removed from the spreadsheet because outreach to these residents regarding the EAP will occur through the ILRP program.

The final list of potentially affected residents (mailing list) will be divided into owner-occupied and tenant-occupied residences. Owner-occupied residences are those that have the same physical and mailing address, whereas tenant-occupied residences have different physical and mailing addresses. The resulting mailing list will be used as described below in Section 6.

5. Process to Coordinate with Non-Dischargers

Placeholder to address the following EAP requirement: A process for coordinating with others that are not dischargers to address drinking water issues, which must include consideration of coordinating with affected communities, domestic well users and their representatives, the State Water Board's Division of Drinking Water, Local Planning Departments, Local County Health Officials, Sustainable Groundwater Management Agencies and others as appropriate.

5.1 Identification of Non-Dischargers

Placeholder for list

5.2 Coordination Activities

Placeholder to discuss: (a) current participation by non-dischargers; and (b) future outreach and coordination under this EAP.

6. Temporary Drinking Water Provisions

This section of the EAP describes the specific actions planned within the Management Zone to provide access to sources of safe drinking water for residents who are dependent on groundwater from wells that supply water that exceeds the nitrate water quality objective. These actions are considered temporary but will remain available until permanent sources of safe drinking water become available within the Management Zone area. The specific actions that will be implemented to provide permanent sources of drinking water will be identified in the Management Zone Implementation Plan that will be developed within six months after the Central Valley Water Board issues its formal approval of the formation of this Management Zone (after submittal of the Final Management Zone Proposal).

6.1 Temporary Sources of Drinking Water

Both primary and secondary sources of safe drinking water will be provided to residents within the area of the Management Zone that the EAP applies (see Section 1.2.2 for area of applicability). Primary sources are those that are available to all residents in the area. A secondary source of drinking water is provided to residents who are unable to access the primary drinking water source; this source is only available to residents that meet specific applicability criteria.

6.1.1 *Primary Source: Water Kiosks*

Water kiosks will serve as the primary source of safe drinking water for residents in the area covered by this EAP. A water kiosk is an independent water-dispensing facility connected directly to a water source that meets safe drinking water standards and is constructed and operated as required by state and federal regulations. The facility will be made available to area residents at no cost. The following sections describe the Water Kiosk Program that will be implemented under this EAP.

6.1.1.1 Initial Criteria to Identify Areas for Water Kiosk Development

The Turlock Management Zone will establish up to eight water kiosks within the Management Zone. The actual number depends on where it is possible to establish an operational kiosk, especially given that the installation and operation of a kiosk depends on the cooperation and agreement with a land or property owner.

The initial basis for selection of these targeted locations was to establish kiosks with minimal non-overlapping areas that are no greater than 10 miles in diameter. **Figure 6-1** illustrates the initial areas, showing the centroid of each of the areas targeted for installation of a kiosk

(example to be illustrated during Management Zone meeting).¹ Each of the targeted locations is in general: (a) relatively rural; and (b) in areas not served by an existing public water supply or state/local small water system. In addition, the targeted areas also encompass all disadvantaged communities (DAC) or unincorporated communities (DUC) within the Management Zone.

Based on this initial evaluation and using the ten-mile diameter criterion, the areas within the Management Zone impacted by high nitrate concentrations can be covered by as few as seven kiosks. However, the actual number of kiosks established in the area will depend on the Management Zone's ability to find locations that meet the selection criteria below, especially securing permission from land/property owners to install a water kiosk and having the ability to connect the kiosk to viable safe drinking water source. It is known that finding acceptable locations for installation of a kiosk will be challenging due to concerns regarding liability and safety issues. Therefore, it may be necessary to reconfigure the targeted locations and/or modify the diameter of the areas served as currently shown in Figure 6-1.

6.1.1.2 Final Criteria to Establish Water Kiosk Locations

The following criteria will be applied to the maximum extent possible to each of the targeted areas to identify a final location for water kiosk installation:

- Permission to install and operate a kiosk on land or property owned by a third party can be secured.
- Source of water to the kiosk meets safe drinking water regulations
- Source of water to the kiosk 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 (target of 1.5-2 gallons/minute, consistent with California regulations for faucets in new residential construction).
- Establishment of kiosk is not expected to create any safety issues.
- Vehicle access/parking is available, sufficient to not cause any unnecessary congestion.
- Location is available for public access at least six days/week, except during state-observed holidays.
- Operational hours are at least 8 am until 7 pm.
- *INSERT Other...?*

6.1.1.3 Facility Requirements

Kiosk design, construction and operation and maintenance (O&M) requirements will be consistent with state and federal regulations. If available, the Management Zone may use the specifications from other approved water kiosks in the Central Valley Region as a template for

¹ The potential targeted locations for kiosks described or illustrated in this document are conceptual for planning purposes. Actual locations as well as the size of the diameter of the area to be served may be modified as further information regarding water supplies and available properties for siting a kiosk are identified.

the design and implementation of kiosks established under this EAP [*INSERT example if available*]. The water kiosk will be metered in to track usage.

6.1.1.4 Water Kiosk Implementation Approach

Once implementation of the EAP begins, the following process will be implemented to finalize locations for kiosks and implement the process to install and operate the kiosks (see Section 7 for schedule of implementation):

- Identify final locations for installation of a water kiosk:
 - Identify potential landowners/property owners (any entity with a proprietary interest in the land upon which the kiosk will be installed) within each targeted area consistent with the selection criteria. This list will be prioritized for implementation and land/property owners will be contacted to initiate discussions regarding installation of a kiosk with the goal of identifying a land/property owner willing to enter into an agreement to install a kiosk on their property.
 - Establish any necessary agreements to formalize use of the land as location for installation of a water kiosk.
 - If no land/property owner can be identified in the targeted location, an alternative location for the water kiosk will be developed taking into account the locations of other established or planned kiosks within the EAP area.
- Prepare the appropriate documentation (e.g., kiosk design, installation/construction documents, operational procedures, O&M requirements, approvals/agreements, etc.) for the water kiosk.
- Submit the water kiosk documentation to the California Division of Drinking Water (DDW) for approval.
- Construct/install the water kiosk, as approved by DDW.
- Establish agreements/contracts as needed to ensure appropriate O&M occurs at the facility
- Provide notice to the community within the Management Zone and the Central Valley Water Board that the kiosk is operational.

Throughout the kiosk development and installation process, status updates and outreach on the progress of the water kiosk program will continue through regular Management Zone activities.

6.1.2 Secondary Source: Alternative Water Delivery

For residents that are unable to use one of the water kiosks established within the Management Zone area, alternative water delivery will be provided if specific criteria are met. The Alternative Water Delivery Program within this Management Zone will consist of providing bottled water to residences approved to receive delivery per the requirements below (Note: this text may be modified to include Point of Use (POU) systems as well as there may be a need to identify more

than one alternative water delivery option. Therefore, keep in mind during review that references to bottled water as an alternative water source may also include a POU system).

6.1.2.1 Qualifications

Bottled water may be delivered to residences that are unable to access a kiosk. Acceptable reasons may include medical disability, age-related conditions, lack of mobility or lack of transportation. Any resident located within the area covered by this EAP within the Turlock Management Zone may apply to receive bottled water. A request to participate in an Alternative Water Delivery Program may be made by submitting a completed application to the Management Zone governing body (see **Attachment A – to be developed**). The Management Zone reserves the right to confirm that obtaining water from a water kiosk is not a viable option for the applicant; however, no personal or medical information is required to be submitted as part of the application. All applicants must meet the following minimum criteria:

- Applicant does not receive drinking water from a public water supply system where state- and/or county-mandated testing indicates the public water supply system complies with nitrate standards.
- Current drinking water source at the applicant's residence contains nitrate concentrations above the drinking water standard of 10 mg/L (nitrate measured as nitrogen). If appropriate data to assess this criterion are not available, the applicant will request that their water source be tested at no cost to them.
- Applicant is not receiving or is not eligible for alternative water delivery through another existing program.
- If bottled water delivery is provided by a third-party bottled water provider and the provider requires the applicant to sign an agreement to receive the bottled water, the applicant must be willing to sign the agreement and meet the bottled water provider agreement's terms and conditions.

Along with a completed application, the applicant for bottled water delivery will include the following supporting documentation:

- Proof of residency within the area encompassed by this EAP. Proof of residency requires two different documents consistent with the requirements to provide proof of California's Real ID program. Visit <https://www.dmv.ca.gov/portal/dmv/detail/realid> to see requirements to demonstrate California residency. See the fact sheet provided on the website linked below for a list of acceptable documents to demonstrate residency.²
- Recent (within last 2 years) water quality test data from the drinking water source at the applicant's residence. If the drinking water source has not been tested or the data are not

² https://www.dmv.ca.gov/portal/wcm/connect/2db22455-e270-47a3-819c-d7c7716d5194/List_of_Docs_REALID.pdf?MOD=AJPERES&CVID=

recent, the applicant may request that the Management Zone test the water at no cost to the applicant. In this instance, the applicant will check the appropriate box on the application and the Management Zone will contact the resident to arrange to have the water tested.

6.1.2.2 Implementation Approach

The sections below provide information on how the Management Zone will implement the Alternative Water Delivery Program.

General Public Outreach to the Management Zone

The Management Zone will provide public notice of the availability of safe drinking water for residents within the area covered by the EAP within 30 days after the following events:

- When the first water kiosk is operational within the area;
- When 33% or more of the kiosks are operational within the area;
- When 67% or more of the kiosks are operational within the area; and
- When all water kiosks planned for implementation under this EAP are operational within the Management Zone.

Public notice may be accomplished through direct mail, notices in the newspaper, on relevant websites (e.g., Management Zone, Water Quality Coalitions, County, Central Valley Water Board, or others as appropriate). Each public notice will be prepared in English and Spanish and include direct information or links to information about the following:

- Management Zone and EAP, including why the elevated nitrate is a potential health concern;
- Locations of operational kiosks (at the time the public notice is released) and information regarding use;
- Alternative Water Delivery Program, including criteria to participate and how to apply; and
- Program representatives or website to contact to obtain more information.

Direct Outreach to Residents in Areas with Nitrate Exceeding the Water Quality Objective

The Management Zone will develop a packet of materials for mailout to the residences identified under Section 4. This packet, which will provide information in both English and Spanish, will only be mailed once. This mailed packet will include the following:

- Cover letter that explains the EAP and how its implementation may apply to their residence;
- Educational pamphlet regarding nitrate in drinking water as a potential health concern;
- Identify locations of water kiosks within the area covered by the EAP;
- Describe the Alternative Water Delivery Program: (a) criteria to participate; (b) information regarding how to apply and what the resident needs to do to have their well tested, if that is

necessary to complete the application; and (c) an application that may be mailed or submitted online; and

- Program representatives or website to contact to obtain more information.

The outreach packet will be sent via regular mail to each residence on the final mailing list. The process to develop this mailing list is discussed above in Section 4.

Responding to Applicants for Alternative Water Delivery Program

Once an application is received, the Management Zone will complete the following processing activities:

- Review the application for completeness and confirm that the applicant qualifies for the Program (contact with the applicant will be made in English or Spanish, as appropriate):
 - If the application indicates that the applicant’s drinking water source needs to be tested for nitrate, the resident will be contacted to schedule sampling of the well by a representative of the Management Zone. Sample collection and laboratory analysis will follow standard State-approved methods.
 - If necessary based on the information in the application, the Management Zone may contact the applicant to confirm that obtaining water from a water kiosk is not a viable option for the applicant.
- Prepare a response to each applicant:
 - Approved applicants for the Alternative Water Delivery Program will receive a letter of confirmation from the Management Zone that includes: (a) statement that they are approved for alternative water delivery; (b) information regarding how alternative water service will be initiated, and (c) the amount of water delivery approved for the residence (based on the information provided in the application regarding the number of people in the household at the applicant’s address). If the Management Zone tested the applicant’s water for nitrate, the letter will also include a copy and explanation of the sample results.
 - If a resident’s application to participate in the Alternative Water Delivery Program is denied, the applicant will receive a letter of denial from the Management Zone that states the reason for why the application was denied. If the reason for denial is because the applicant’s drinking water has nitrate concentration below the water quality objective, the letter will include a copy and explanation of the sample results. The letter will include steps that may be taken by the applicant to appeal the decision, if it is believed that an error has been made in the decision.

Establish Alternative Water Delivery Provider

The Management Zone will select one or more vendors to provide bottled water to approved applicants. Agreements will be established as needed to ensure that bottle-water delivery service remains uninterrupted either until the EAP is no longer being implemented or the applicant

begins to receive drinking water from a source that complies with the nitrate water quality objective.

Long-term Management

Approximately three months after initiation of an Alternative Water Delivery Program to a residence, the Management Zone will contact the recipient to ensure the amount of water being provided is sufficient or is not in excess of the needs of the household. Throughout EAP implementation, the Management Zone will have staff available to answer questions or address concerns from residents participating in the program.

Data Management

The Management Zone will maintain records that document the following information:

- Master list of residences to which an outreach packet was mailed to and the number of packets returned as undeliverable.
- For applications received, the number of drinking water testing requests received, number of drinking water sources tested and associated test results, and numbers of letters of confirmation or denial sent out.
- For letters of confirmation, the number of residents that established agreements with the selected bottled water provider.
- For letters of denial, the number of residences that appealed the denial and the resolution of each appeal.

6.2 Reporting

As provided for in the implementation schedule (Section 7), the Management Zone will prepare periodic reports to document progress and status of implementation of the Water Kiosk and Alternative Water Delivery Programs. At a minimum, these reports will include information regarding participation in each program, water quality sample results, total number of gallons received from each water kiosk, volume of water delivered by alternative mechanism, expenditures during the reporting period and anticipated costs for the next reporting period.

7. Early Action Plan Implementation

7.1 Schedule/Milestones

Table 7-1 provides the schedule and milestones for the implementation of the EAP. This schedule is based on the implementation approach provided in the above sections. If it is necessary to modify the schedule or milestones, the Management Zone will submit a letter to the Executive Officer of the Central Valley Water Board documenting the requested modification, the reason(s) for the request and a proposed new schedule and/or milestones.

7.2 Roles and Responsibilities

Placeholder - to be determined

7.3 Funding

7.3.1 Program Cost

Preliminary assessment planned for meeting

7.3.2 Program Allocation

Placeholder - to be determined

7.3.3 Funding Mechanism

Placeholder - to be determined

Preliminary Draft Early Action Plan: June 11, 2019 – For Discussion Purposes only

Table 7-1. EAP Implementation Schedule

EAP Element		Task	Schedule/Milestones
Resident Identification		Identify residences in area covered by EAP and develop mailing list to support outreach	Within 120 days of EAP effective date
Outreach	General Public	Develop public notice mechanisms and materials	Within 120 days of EAP effective date
		Deliver public notice of EAP Implementation	Within 30 days of the following milestones: <ul style="list-style-type: none"> • When the first water kiosk is operational within the area • When 33% or more of the kiosks are operational within the area • When 67% or more of the kiosks are operational within the area • When all water kiosks planned for implementation in this EAP are operational within the area.
	Targeted to Specific Residents	Develop outreach packet for residential delivery	Within 120 days of EAP effective date
		Mail outreach packet	Within 30 days prior to first kiosk becoming operational
		Drinking water tests	Conduct tests within 30 days of request
		Issue all letters of confirmation or denial	Issue letter within 30 days of application if no water test required; within 60 days if water test is required
		Resolve all appeals to letters of denial	Complete review within 60 days of receipt of communication requesting review of denied application
Temporary Water Delivery Program	Establish Water Kiosks	Establish list of potential land/properties for locating a kiosk within targeted areas	Within 30 days of EAP effective date
		Establish final list of locations for kiosk development	Identify all kiosk locations within 90 days of EAP effective date
		Complete documentation necessary to seek approval to construct kiosk and submit to DDW for review	Submit water kiosk documentation to DDW for approval per the following milestones: <ul style="list-style-type: none"> • Kiosks 1 & 2: within 180 days of EAP effective date • Kiosks 3, 4, 5 & 6: within 1 year of EAP effective date • Kiosks 7 & 8 (if needed) within 1.25 years of EAP effective date • If more than 8 kiosks are needed, documentation for remaining kiosks will be submitted within 1.5 years of EAP effective date
		Construct kiosks	Initiate installation of each DDW-approved kiosk within of 90 days of approval
		Establish agreements to operate/maintain kiosks	Complete for each kiosk prior to the date kiosk becomes operational
		Notify Central Valley Water Board when kiosks are operational	Within 30 days of kiosk becoming operational
		Notify community of water kiosk operational status	See EAP public notice requirements above.

Table 7-1. EAP Implementation Schedule

EAP Element		Task	Schedule/Milestones
Temporary Water Delivery Program	Alternative Water Delivery Program	Establish agreement with alternative water provider	Within 30 days of mailout of outreach packet to residences
		Follow-up with residents receiving delivery of water via alternative means	Check in with each residence within 90 days after initiation efforts to provide alternative water delivery to the residence
Data Management & Reporting		Records management	Compile data in a timely manner to support preparation of EAP Reports
		Submit EAP Status Reports to Management Zone Participants and Central Valley	Submit status reports within 30 days of the following: <ul style="list-style-type: none">• Six-months after the EAP effective date• 1 year after the EAP effective date• Annually after the Year 1 report until the EAP is no longer effective