

Kern Water Collaborative Nitrate Control Program

Priority 2 Groundwater Subbasin
Community Outreach & Engagement

March 24, 2026

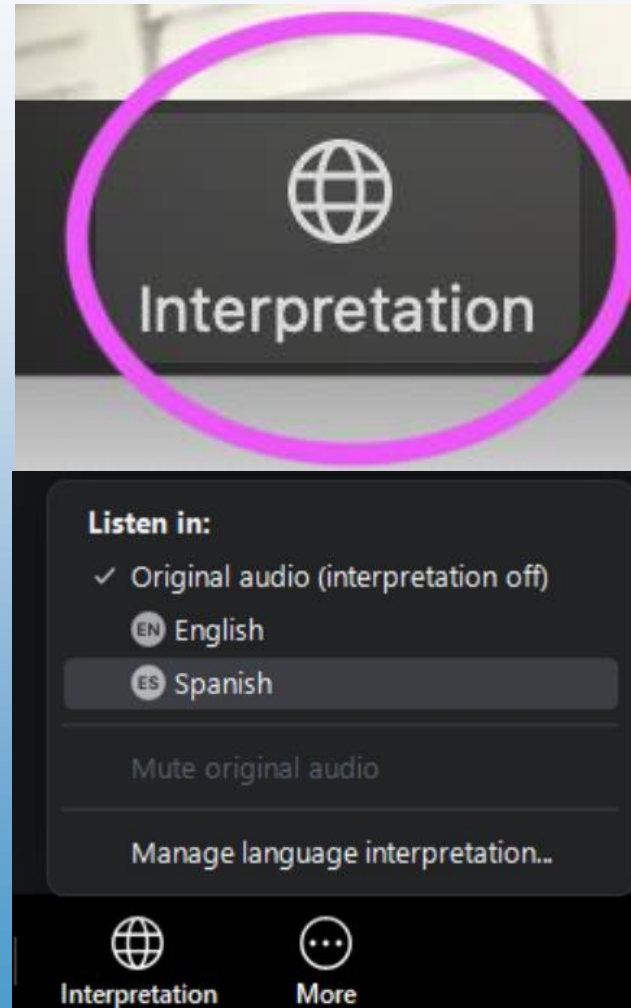


LANGUAGE INTERPRETATION THROUGH ZOOM (AUDIO)

Click the Interpretation icon in your meeting controls

- Click the Interpretation icon in your meeting controls
- Navigate to Language Channels
- Select Spanish
- Mute Original Audio

Zoom Questions? Send a message to Grapevine in the Chat.



Haga clic en el icono Interpretación en los controles de la reunión

- Haga clic en el icono Interpretación que parece un mundo en los controles de la reunión en la parte inferior
- Vaya a cde idioma
- Seleccione español
- Silencie el audio original

¿Preguntas sobre Zoom? Envíe un mensaje a Grapevine en el chat

If translation services are not required, feel free to disregard this message.

VIEW OPTIONS ON ZOOM (VIDEO)

Click on View Options at the top of your screen and select

“Presentacion en Espanol,”

“Presentation in English.”

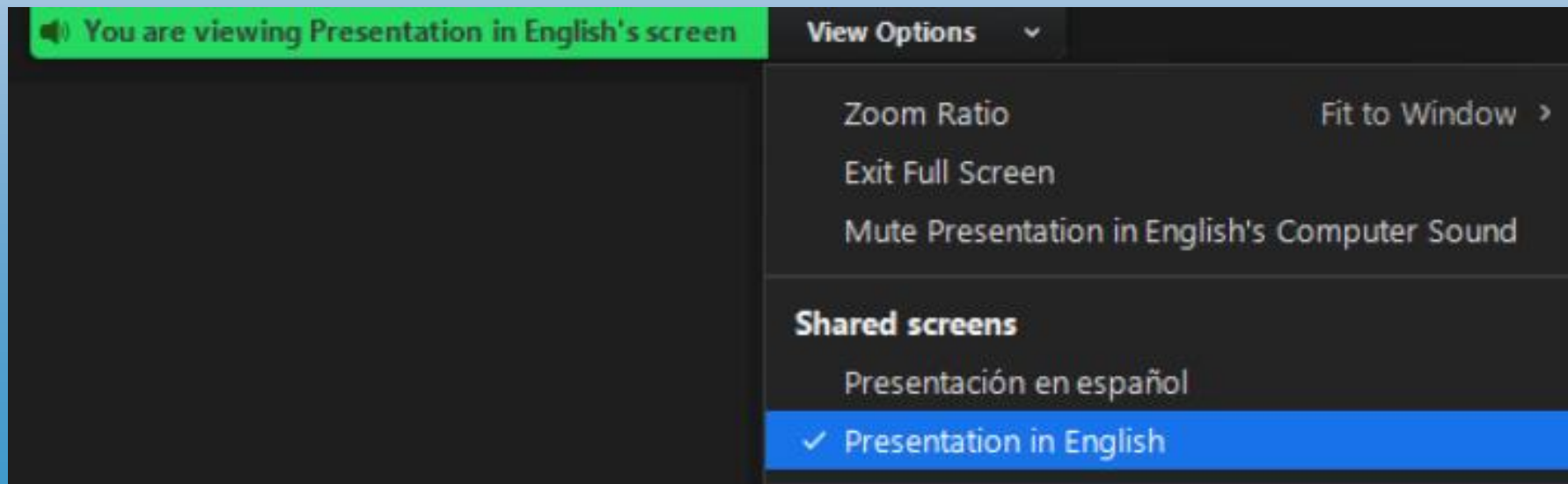
Zoom Questions? Send a message to Grapevine in the Chat.

Haga clic en Ver Opciones (View Options) en la parte superior de la pantalla y seleccione

“Presentacion en Espanol,”

(“Presentation in English.”)

¿Preguntas sobre Zoom? Envíe un mensaje a Grapevine en el chat.



GUIDELINES FOR TODAY'S ZOOM MEETING

- Check the meeting participant list – if you are shown by a phone number, please rename yourself or put a message in the Chat to let us know you participated in the meeting.
- As an attendee in this meeting, you are automatically muted.
- If you have a question at anytime, click on the Q&A icon and type your question for our team to read and address during the question and answer period.
- If you are having technical issues, please use the “Chat” function. One of our meeting hosts will try to provide assistance.

MEETING AGENDA

- Introduction
- Nitrate Control Program Overview
- Identifying Potentially Impacted Residents
- Final Management Zone Proposal
- Closing



INTRODUCTION

Kern Water Collaborative





KWC TEAM

KWC Staff

Nicole Bell
Executive Director

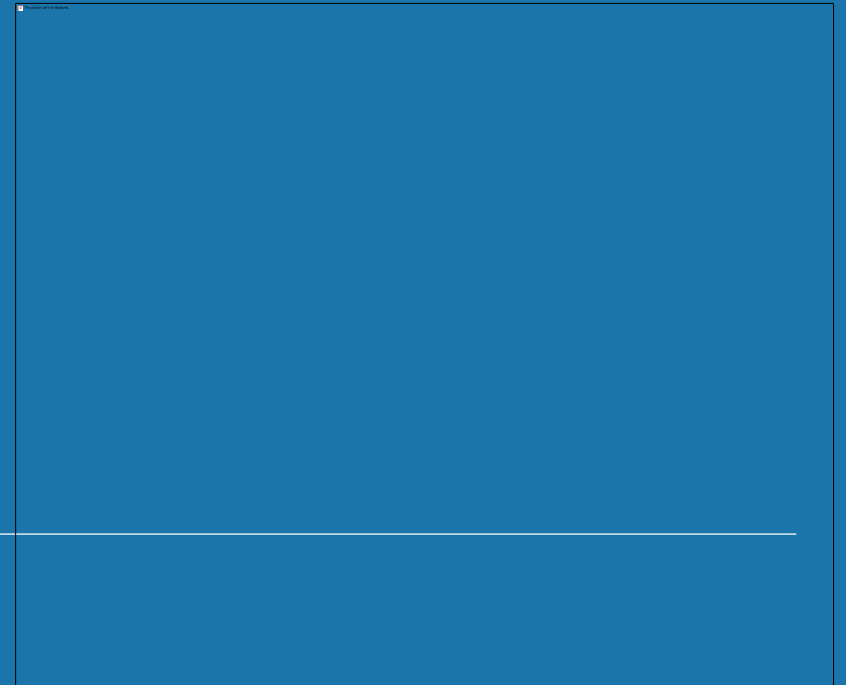
Consultants

Luhdorff & Scalmanini Consulting Engineers

Barbara Dalgish
Vicki Kretsinger Grabert

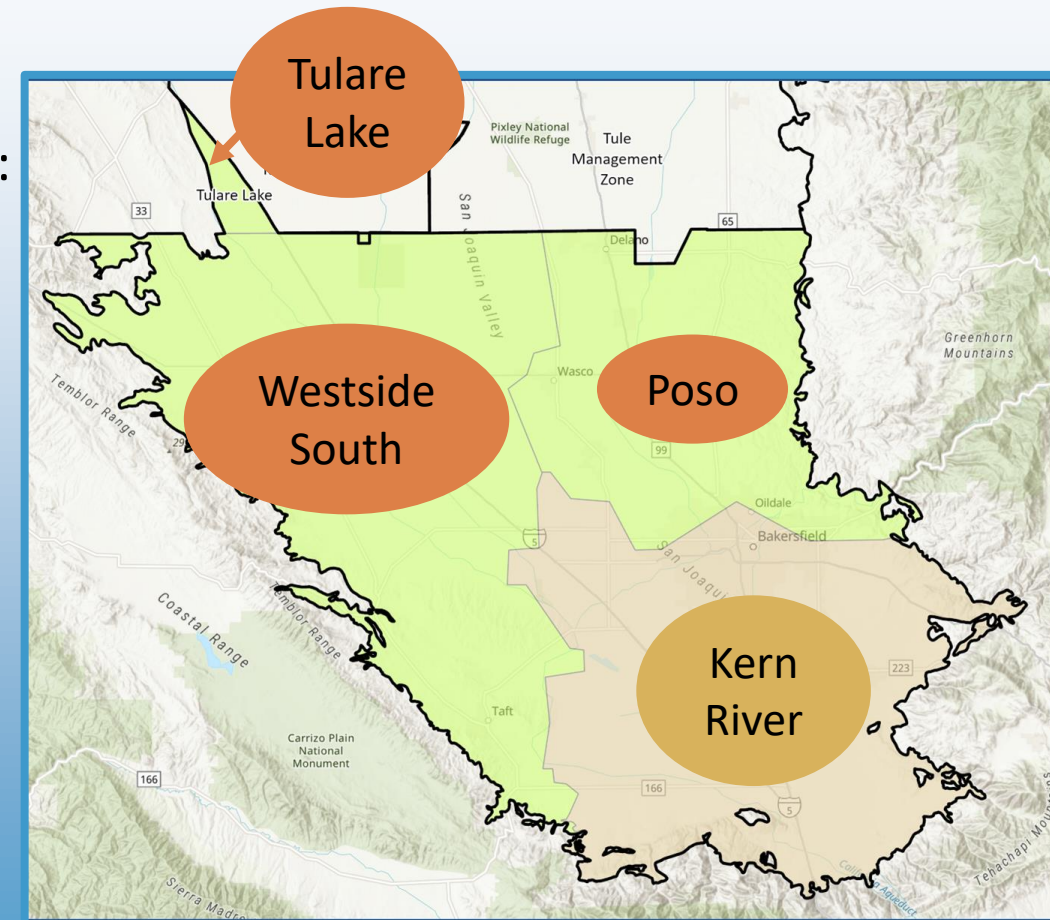
GEI Consultants

Jackie Takeda



KERN WATER COLLABORATIVE STRUCTURE & MISSION

- Non-Profit Public Benefit Corporation
 - Created to maintain and improve the quality of life within:
 - Kern County's three groundwater subbasin areas (Westside South, Poso, and Kern River), and
 - A small portion of Kings County's Tulare Lake groundwater subbasin.
 - Established to implement the Management Zone approach
 - Address nitrate contamination of groundwater drinking water supplies
 - Dedicated to engaging in activities with the goal of:
 - investigating, protecting or enhancing the quality of groundwater drinking water supplies for residents in the region



Focus first on green areas; long-term focus on brown area

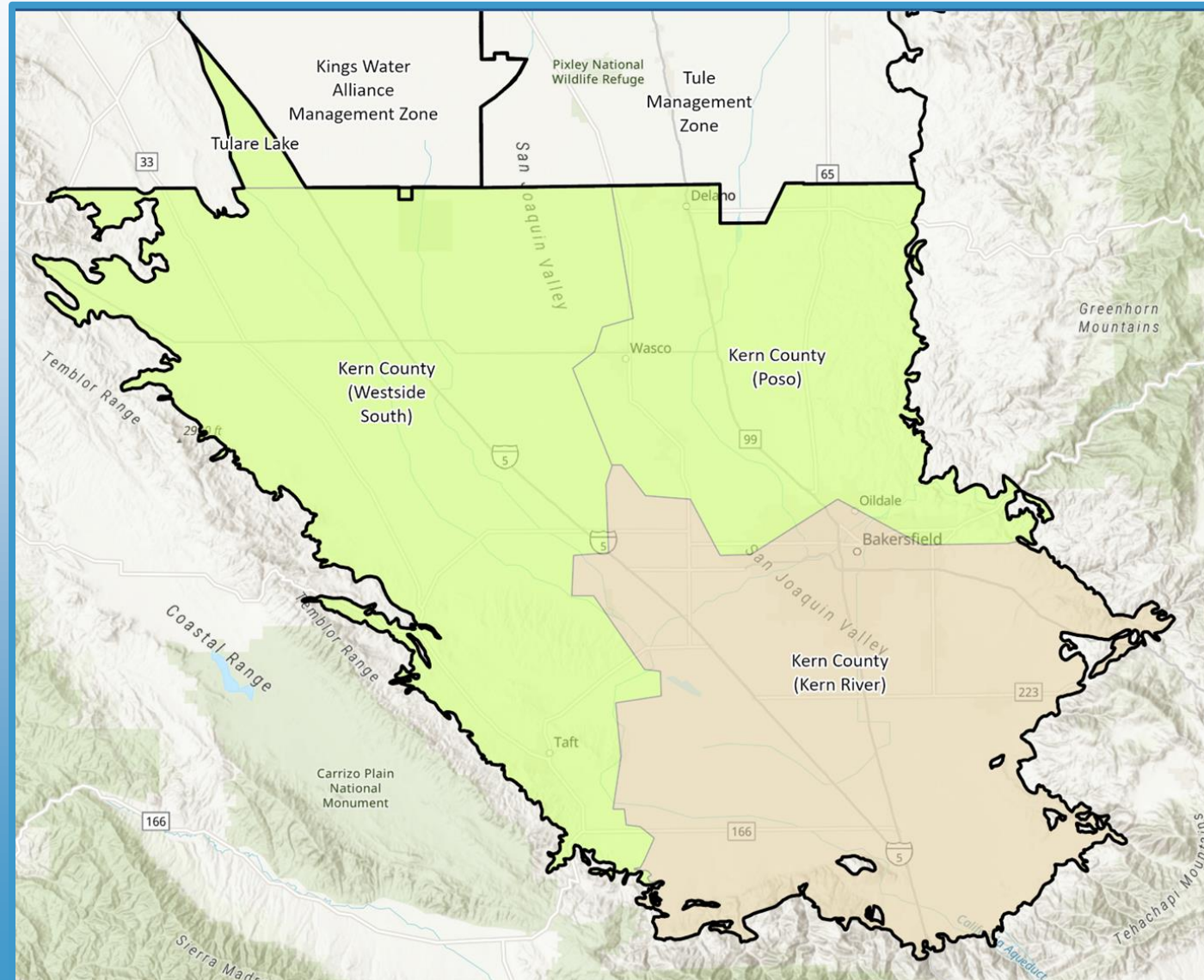
KERN WATER COLLABORATIVE BOARD OF DIRECTORS

- Board Officers
 - 4 officers
- Board Members
 - 7 members
- Staff
 - Nicole Bell, Executive Director



KERN WATER COLLABORATIVE NITRATE CONTROL PROGRAM: PRIORITY AREAS

- Kern County Groundwater Subbasin is divided into three areas:
 - Westside South
 - Poso
 - Kern River
- Small area of Tulare Lake Groundwater Subbasin
- Priority 2: Tulare Lake, Westside South, and Poso
- Not Prioritized: Kern River



WHAT IS THE NITRATE CONTROL PROGRAM?

Barb Dalgish, Luhdorff & Scalmanini
Consulting Engineers



NITRATE CONTROL PROGRAM OVERVIEW

- Nitrate Control Program is a regulation* designed to help solve nitrate issues in the Central Valley.
- Three main goals:
 1. Provide safe drinking water supplies
 2. Reduce nitrate impacts to water supplies
 3. Restore groundwater quality, where reasonable and feasible
- Management Zone approach to work collaboratively to achieve these goals



* <https://www.cvsalinity.org/nitrate-control-program.html>

WHY DOES THIS MATTER TO ME?

- Human Right to Water (AB685) California Policy:
“Every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes.”
- Nitrate – tasteless, odorless, can’t boil it out of your water, at high levels it reduces your blood’s ability to absorb oxygen
- Nitrate contamination is prevalent in some areas in the Central Valley



WHY DOES THIS MATTER TO ME?

- **Where do you get your water from?**
 - Public Supply Well? Private Domestic Well?
 - Drinking water obtained from groundwater that enters our homes through a private domestic well may require action if impacted by nitrate
- **Your drinking water may be impacted by high levels of nitrate; how can you find out for sure?**
 - Public Water System = Consumer Confidence Report*
 - Private Domestic Well = laboratory sample (well test)



*<https://sdwis.waterboards.ca.gov/PDWW/>

WHAT IS A MANAGEMENT ZONE AND HOW CAN I GET INVOLVED?

- **Kern Water Collaborative is working to:**
 - Bring safe drinking water to your community, where needed
 - Work with the community to identify solutions tailored to your area
- **You can be involved too!**
 - Sources of nitrate in the area, e.g., growers, dairies, wastewater treatment facilities, food processors, and wineries are already getting involved
 - We need your input too, i.e., direct input from residents about water solutions



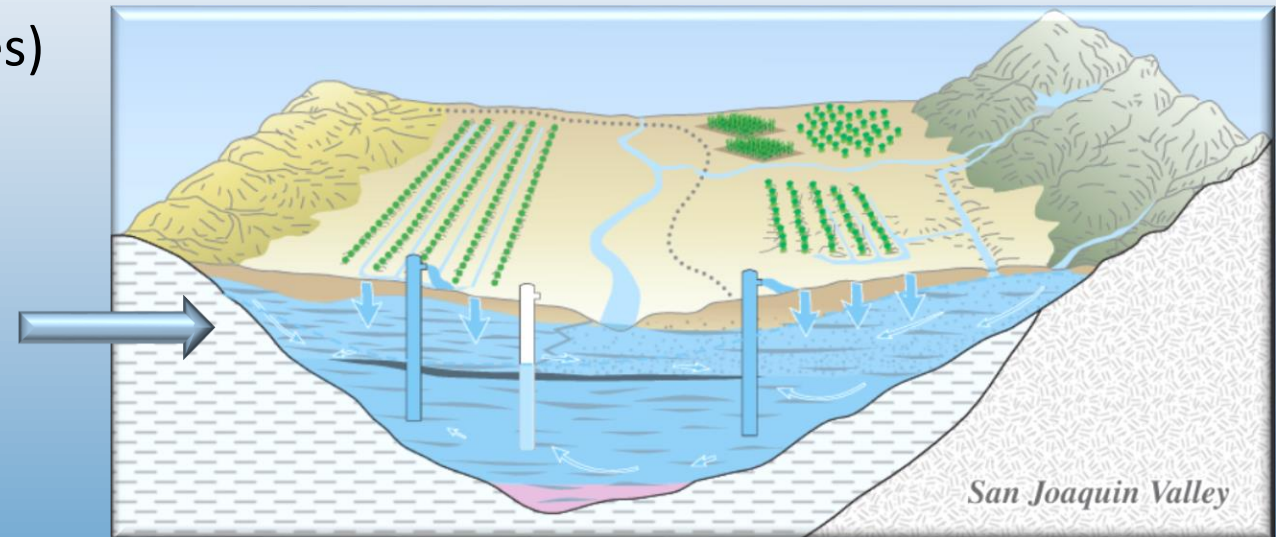
IDENTIFYING POTENTIALLY IMPACTED RESIDENTS

Barb Dalgish, Luhdorff & Scalmanini
Consulting Engineers



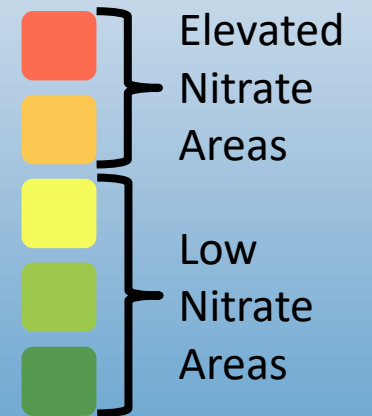
HOW DO WE DETERMINE NITRATE CONDITIONS?

- Collect all available groundwater nitrate data from areas of interest
 - Public Sources (State and Federal databases)
 - Data by Request (County Departments)
 - Incorporate domestic well tests from KWC
- Focus on the Upper Zone of the Groundwater System
 - Where are domestic wells pumping from?
 - Look at recent data (2010 to present)
 - Spatial interpolation: “use what we know to figure out what we don’t know”

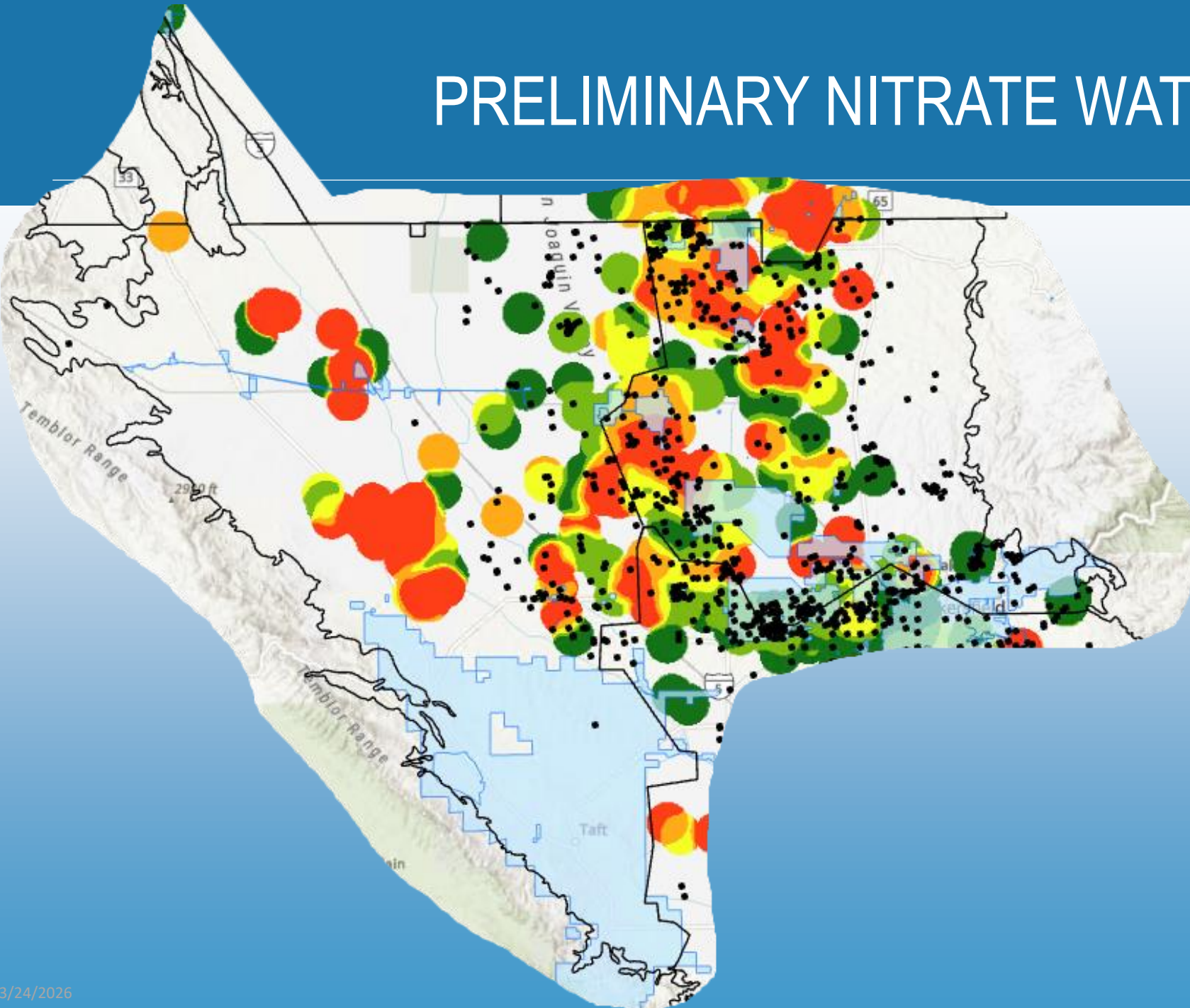


WHERE DOES HIGH NITRATE OCCUR?

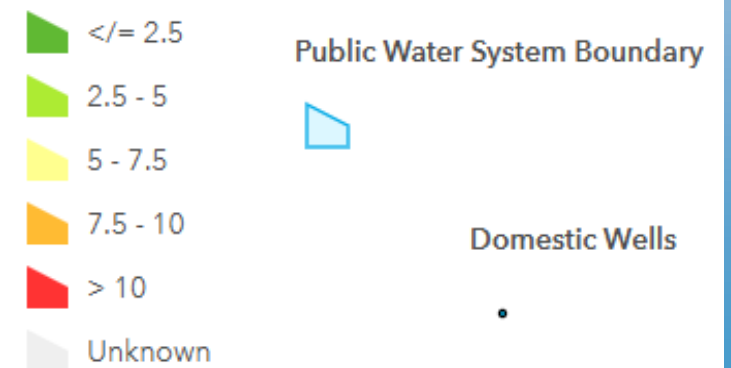
- Identify Areas Affected by Nitrate
 - Locating areas where unsafe levels of nitrate are in drinking water
 - Locating private domestic wells in areas with unsafe nitrate levels
 - Identify existing water systems that treat for nitrate
- Maps Showing Recent Nitrate Levels
 - Used to help identify affected residents
- Preliminary Domestic Well Assessment and Population Count
 - Locations of Private Domestic Wells
 - Public Water System Boundaries



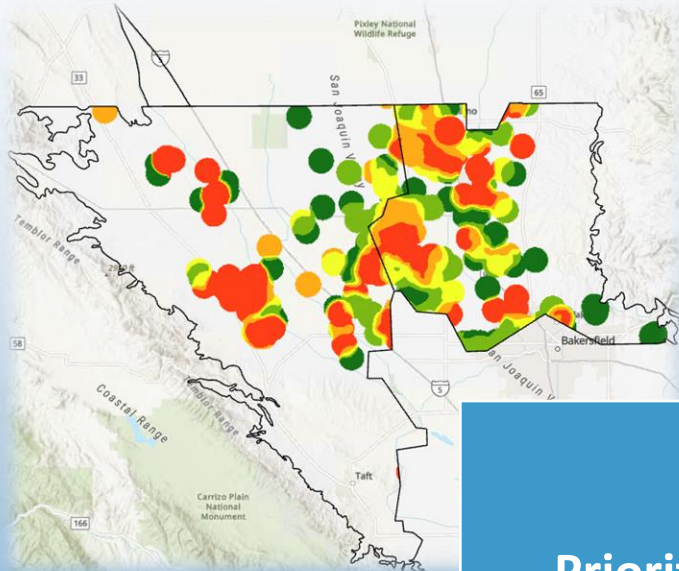
PRELIMINARY NITRATE WATER QUALITY



Ambient Nitrate Conditions in the Upper Zone Since 2010



WHAT IS POTENTIAL IMPACT TO DOMESTIC WELL USERS?



- KWC has prepared a preliminary estimate of the number of domestic wells and population of residents potentially affected by elevated nitrate levels (> 7.5 mg/L as N)

Priority 2 Area	Preliminary Estimate of Number of Domestic Wells Outside Public Water Supply Boundaries with Potentially Elevated Nitrate	Preliminary Estimate of Number of Residents Outside Public Water Supply Boundaries with Potentially Elevated Nitrate
Tulare Lake Area	-	-
Westside South	25	614
Poso	110	1,723

FINAL MANAGEMENT ZONE PROPOSAL

Barb Dalgish, Luhdorff & Scalmanini
Consulting Engineers



FINAL MANAGEMENT ZONE PROPOSAL (FMZP)

Key Elements of Table of Contents

1. Background and Purpose
2. Characterization of Proposed Management Zones
3. Initial Assessment of Groundwater Conditions
4. Management Zone Participants
5. Current Nitrate Treatment and Control Efforts or Management Practices (of participants)
6. Early Action Plan Development
7. Plan to Develop Management Zone Implementation Plan

Water quality and general descriptive information about each of the P2 Management Zone Areas

Information about the permitted dischargers participating in each proposed Management Zone

Summary information about the Early Action Plan which is attached as an appendix

Opportunities to review FMZP/EAP

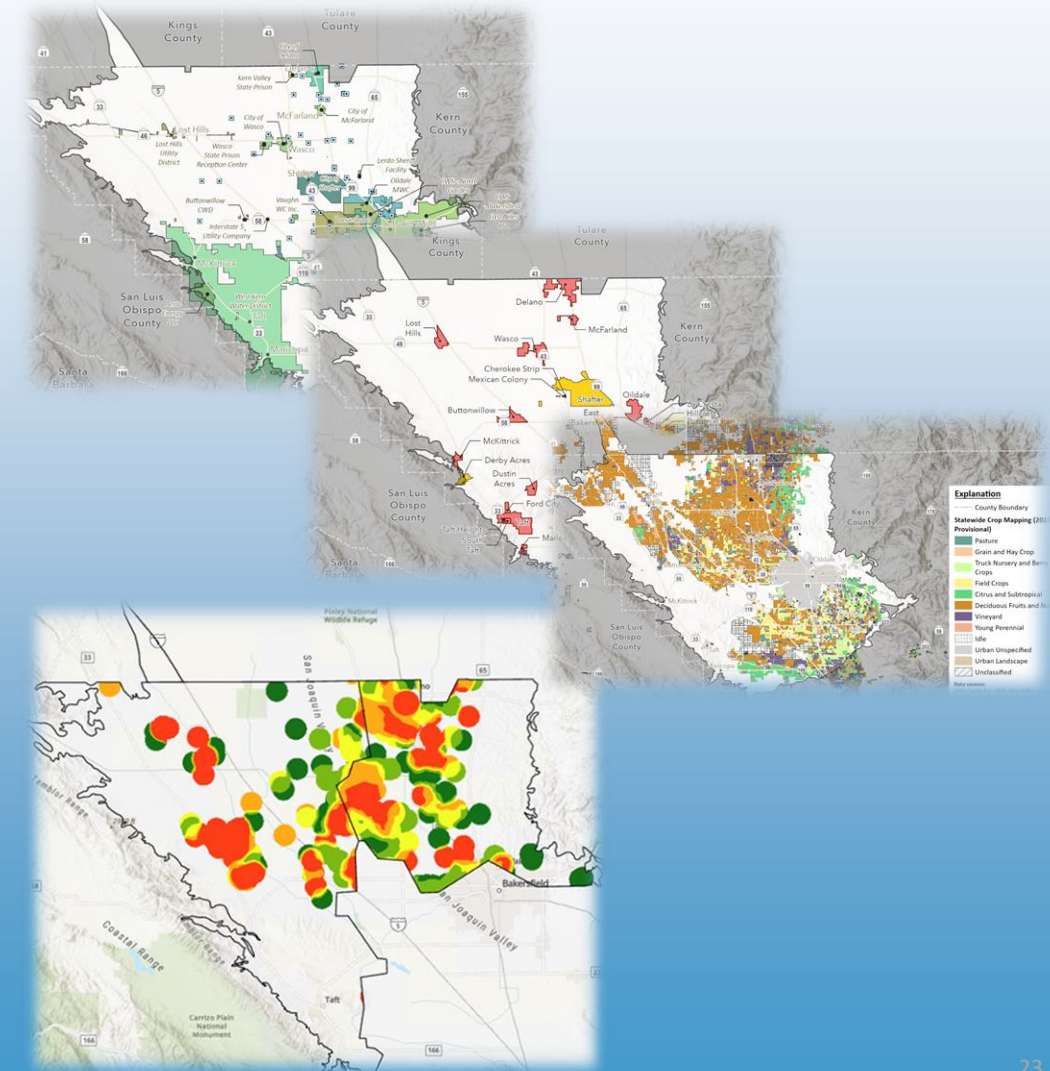
Draft KWC Public Comment Period: January 12, 2026 to January 26, 2026

Public Comment Period: from February 23, 2026 to March 24, 2026

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- Permitted Dischargers
- Non-Discharger/Stakeholder Participation

- General Orders (ILRP, CAFO)
 - Individual Permitted Dischargers

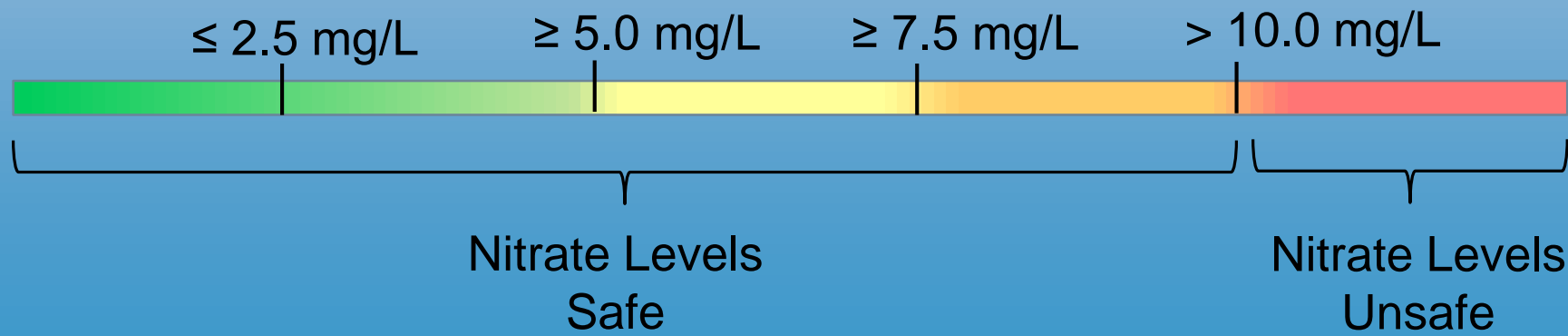
DRINKING WATER SOLUTIONS: EARLY ACTION PLAN

Jackie Takeda, GEI Consultants



WHAT IS AN EARLY ACTION PLAN (EAP)?

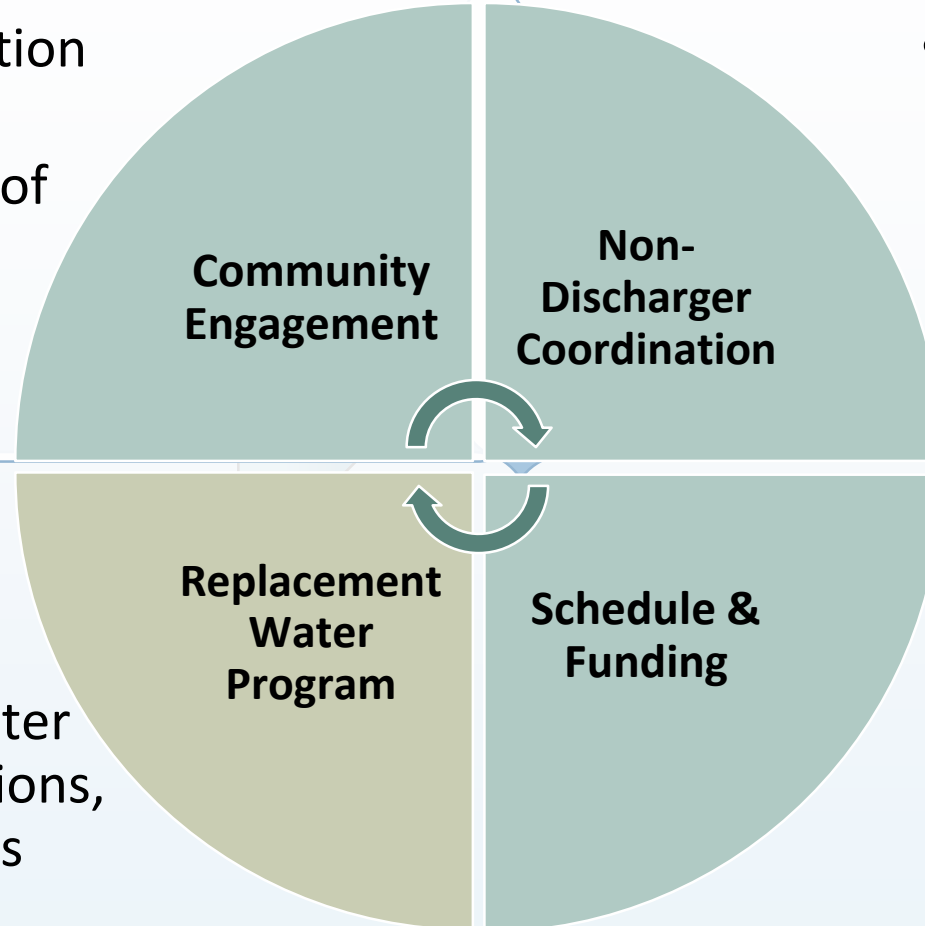
- The Management Zone is required to develop and implement short- and long-term solutions to ensure residents have access to safe drinking water in areas impacted by unsafe nitrate levels
- The Early Action Plan is the Management Zone's plan to test wells to determine if they are impacted by nitrate and where needed provide access to safe drinking water
- Early Action Plan posted for review and comment at: <https://kwcmz.org/>



KEY ELEMENTS OF THE EARLY ACTION PLAN

- Local input on Early Action Plan development
- Input on identification of proposed solutions

- Nitrate well testing program
- Provide replacement water: e.g., bottled water delivery, water fill stations, or point-of-use systems



- Processes to ensure coordination with other local, regional, and state agencies

- Funding mechanisms identified
- Implementation milestones

WHAT OPTIONS ARE BEING CONSIDERED TO PROVIDE SAFE DRINKING WATER?



Home Bottled
Water Delivery



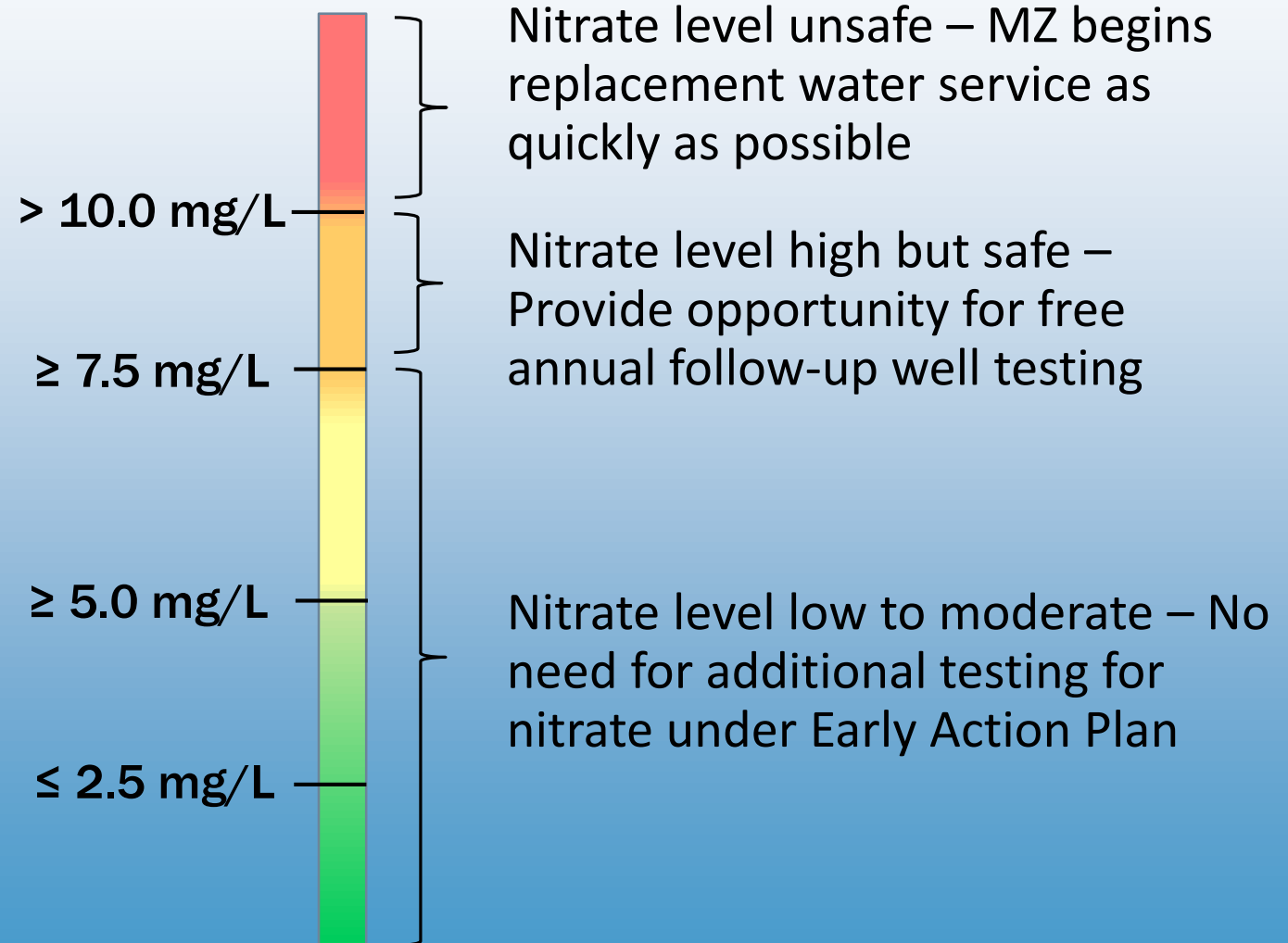
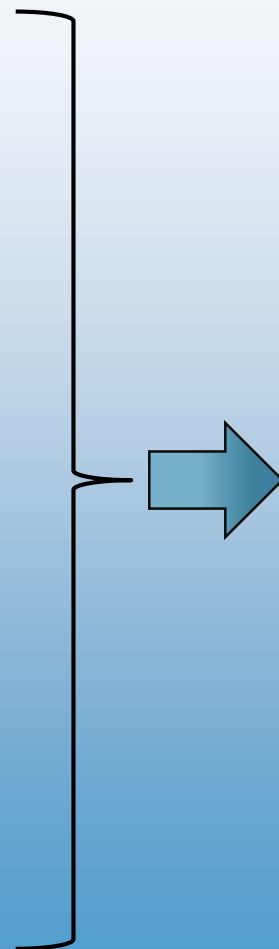
Install Point-of-
Use Treatment
System in Your
Home



Visit Local
Water Fill
Station to Fill
Water Bottles

HOW WILL I KNOW WHAT NITRATE LEVELS ARE IN MY WELL?

- Representative from the Management Zone (MZ) will come to your home to test your well water for nitrate at no cost to you
 - Results will be provided to you
 - Test results determine next steps



COMMUNITY PARTICIPATION

* Key Dates Looking Ahead



KEY MILESTONES FOR EARLY ACTION PLAN DEVELOPMENT AND IMPLEMENTATION



CLOSING



Questions?

FOR MORE INFORMATION

- Kern Water Collaborative www.kwcmz.org
- Contact Nicole Bell nicole@kwcmz.org
- Nitrate Control Program <https://www.cvsalinity.org/nitrate-program/>
- Management Zone Documents:
<https://www.cvsalinity.org/resources/management-zone-development/>
- Notice of Public Comment:
https://content.govdelivery.com/attachments/CAWRCB/2026/02/23/file_attachments/3563060/eng_cvsalts_fmzp_eap_noc_p2.pdf

KWC Phone: 661-888-4108

P.O. Box 1428, Bakersfield, CA 93302

Technical Team Contacts:

- Barbara Dalgish: bdalgish@lsce.com
- Vicki Kretsinger: vkretsinger@lsce.com
- Jackie Takeda: jtakeda@geiconsultants.com

THANK YOU!

WEBSITE: www.kwcmz.org

EMAIL: nicole@kwcmz.org

PHONE: 661-888-4108