



**KINGS WATER  
ALLIANCE**

# **KINGS WATER ALLIANCE MANAGEMENT ZONE**

## **WELCOME**

**PUBLIC WEBINAR**

**January 28, 2021**

# WEBINAR AGENDA

- **SESSION 1: Welcome**
- **SESSION 2: Nitrate Control Program**
- **SESSION 3: Identifying Potentially Impacted Residents**
- **SESSION 4: Drinking Water Solutions**
- **SESSION 5: Stakeholder Call to Action & Implementation**
- **Q&A**



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# **SESSION 1 WELCOME**

**Charlotte Gallock and Debra Dunn**

# INTRODUCTIONS

## ■ **Kings River Water Alliance**

- Charlotte Gallock, KRCD
- Debra Dunn, KRCD

## ■ **External Affairs**

- Cristel Tufenkjian, KRCD
- Rebecca Quist, KRCD

## ■ **Support**

- Jose Soto, KRCD
- Vincent Sambrano, KRWQC

## ■ **Technical Team/Presenter**

- Vicki Kretsinger Grabert, LSCE
- Barbara Dalgish, LSCE
- Richard Meyerhoff, GEI



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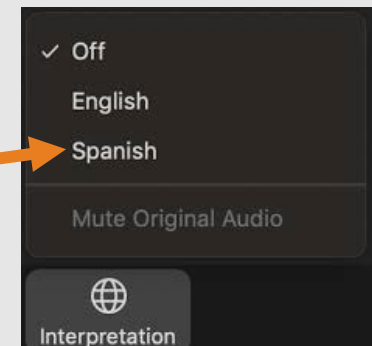
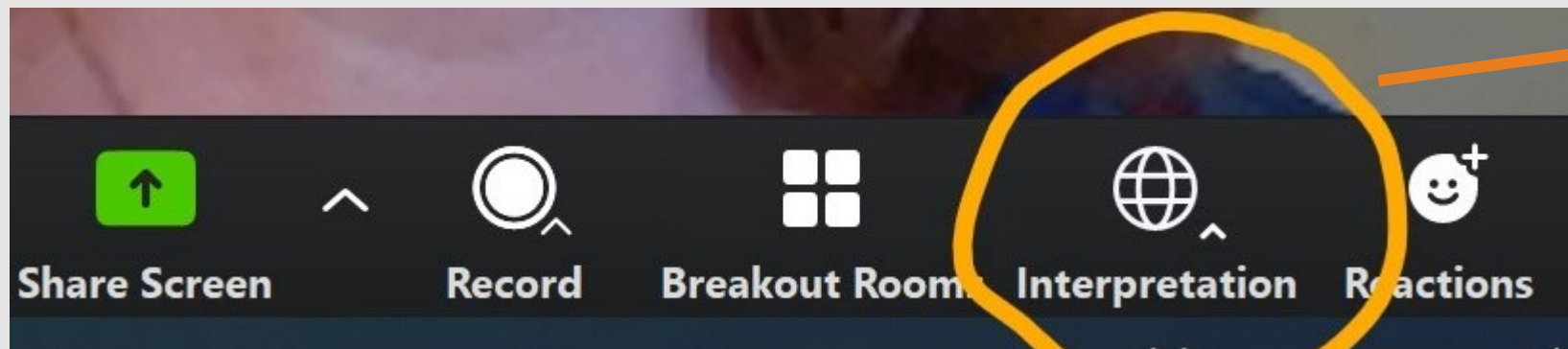
# **ZOOM WEBINAR DETAILS**

Rebecca Quist

# SPANISH TRANSLATION/TRADUCCIÓN ESPAÑOLA

To listen to the presentation in Spanish, click the globe icon at the bottom of your screen and select Spanish.

Para escuchar la presentación en español, haga clic en el ícono del globo terráqueo en la parte inferior de la pantalla y seleccione Español.



# ZOOM WEBINAR DETAILS

- **Video and audio is OFF for participants**
- **Questions & Answers**
  - **Use the Q&A feature to type a question throughout the presentations**
  - **Verbal questions will be taken at the end of the presentations**
- **Technical difficulties**
  - **Use the Chat feature for Zoom technical assistance**

**LIVE POLL**





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# **SESSION 2**

# **NITRATE CONTROL PROGRAM**

**Vicki Kretsinger Grabert**  
**LUHDORFF & SCALMANINI**  
**CONSULTING ENGINEERS**

# SESSION 2 TOPICS

- **What is the Nitrate Control Program?**
- **Why does this matter to me?**
- **What is a Management Zone and how can I be involved?**
- **What does the Management Zone do?**

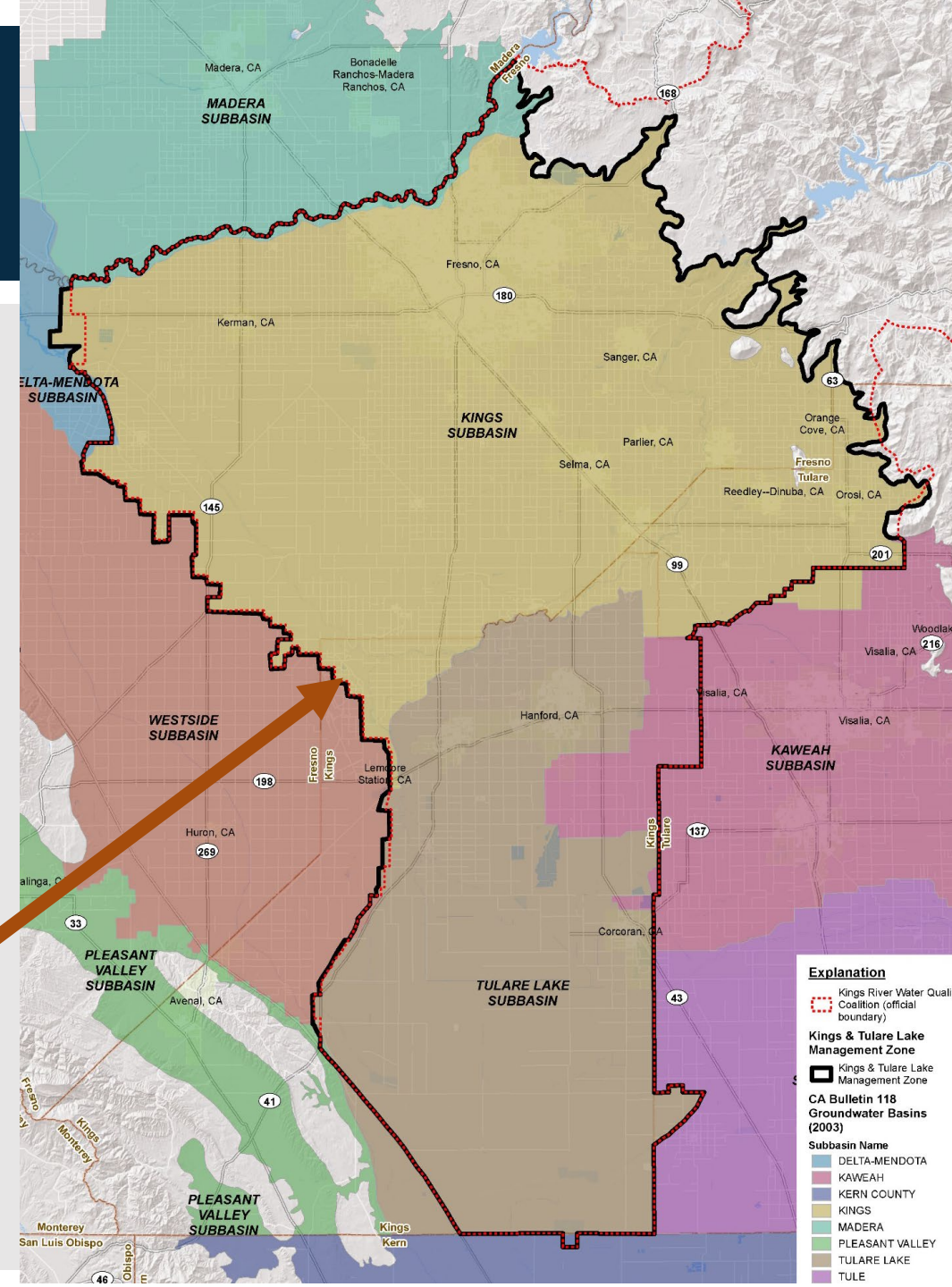
# WHAT IS THE NITRATE CONTROL PROGRAM?

- A new regulation that will help resolve problems with Nitrate in our area. We have three goals:
  1. Provide safe drinking water supplies
  2. Reduce Nitrate impacts to water supplies
  3. Restore groundwater quality, where reasonable, feasible, and practicable

- **First step: Stakeholders formed the**

# Kings Water Alliance Management Zone

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



# WHY DOES THIS MATTER TO ME?

- Human Right to Water (AB685) CA 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 High Priority Subbasins 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).



## 2019 Consumer Confidence Report

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language



# WHAT IS A MANAGEMENT ZONE AND HOW CAN I BE INVOLVED?

- **The Kings Water Alliance Management Zone will:**
  - Bring safe drinking water to your community, where needed.
  - We work together and share the cost of Nitrate Management.
  - We identify solutions tailored to the Kings/Tulare Lake area.
- **You can be involved too!**
  - Nitrate dischargers like Growers, Dairies, Wastewater treatment operators, Wineries, and Food Processors are already getting involved.
  - We need your input too – direct input from residents about water solutions.



# WHAT DOES THE KINGS WATER ALLIANCE MANAGEMENT ZONE DO?

- Find out where nitrate has impacted groundwater and identify residents.
- Collaborate with stakeholders to determine appropriate water solutions and address nitrate issues.
- Prepare and submit required regulatory documents.



## KINGS WATER ALLIANCE MANAGEMENT ZONE PRELIMINARY MANAGEMENT ZONE PROPOSAL

PREPARED FOR

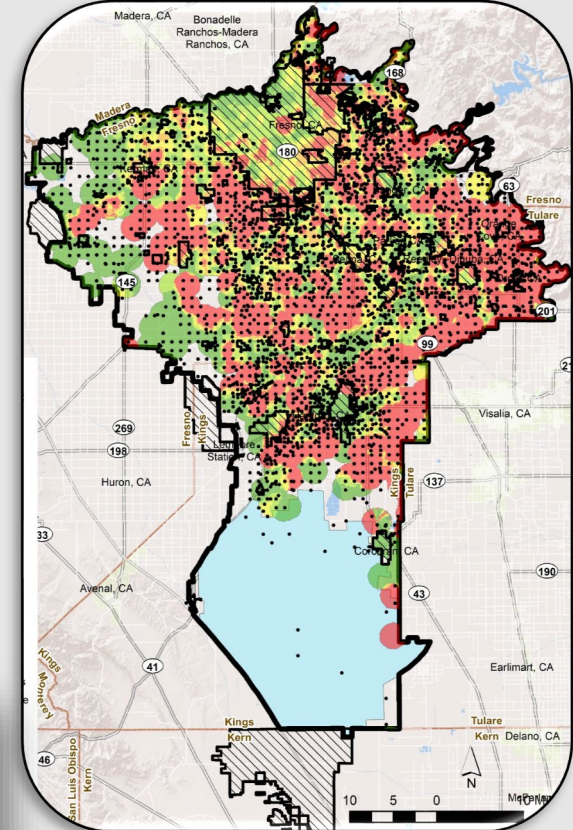
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## KINGS WATER ALLIANCE MANAGEMENT ZONE EARLY ACTION PLAN

Attachment F

PREPARED FOR

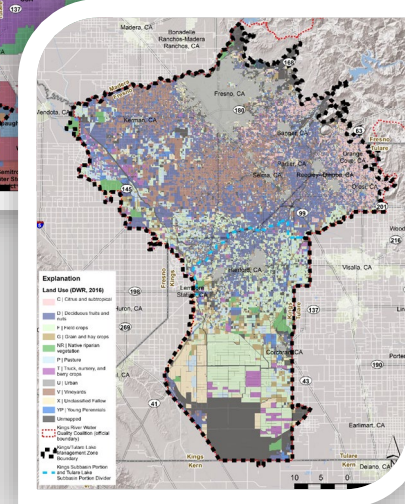
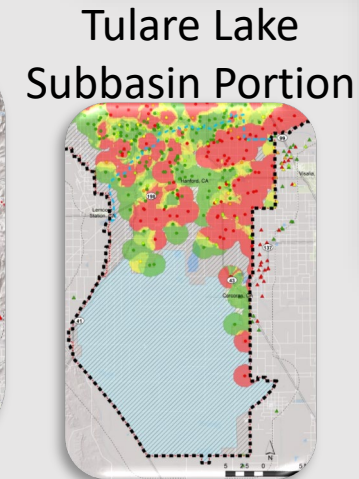
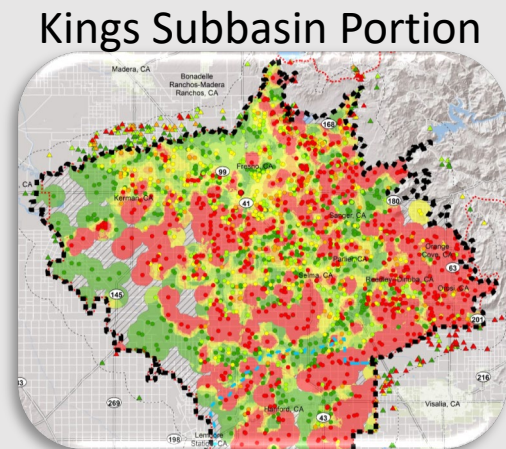
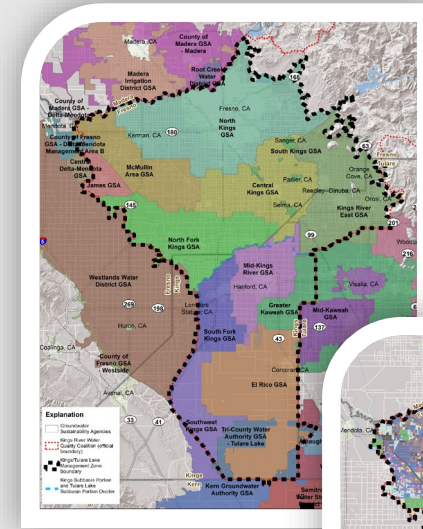
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# WHAT REGULATORY DOCUMENTS ARE REQUIRED?

## ■ Preliminary Management Zone Proposal (PMZP)

- Background information on Nitrate Control Program, Management Zone Development, Hydrogeology
- Nitrate Data Sources (and numbers of wells)
- Upper Zone of Groundwater definition
- Ambient Nitrate Analysis
- MZ Participants
- Current Nitrate Treatment/Control/Management

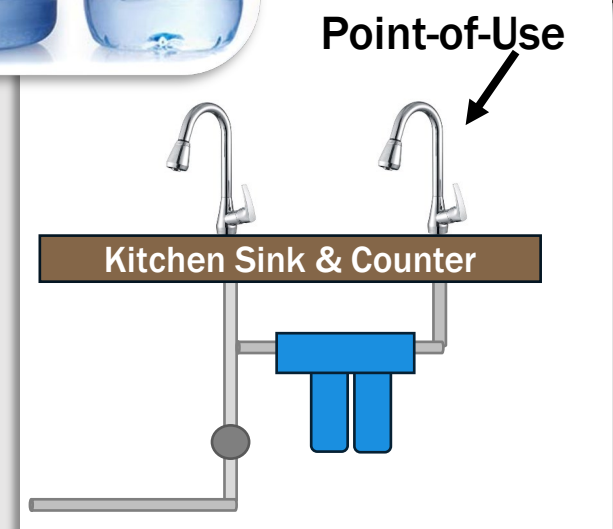




# WHAT REGULATORY DOCUMENTS ARE REQUIRED?

## ■ Early Action Plan (EAP)

- Community Engagement
- Identification of Potentially Impacted Groundwater Users
- Process to Identify Potentially Affected Residents
- Community Outreach During EAP Implementation
- Interim Replacement Water Program
- Residential Well Testing Program
- EAP Implementation
- Schedule





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# **SESSION 3 IDENTIFYING POTENTIALLY IMPACTED RESIDENTS**

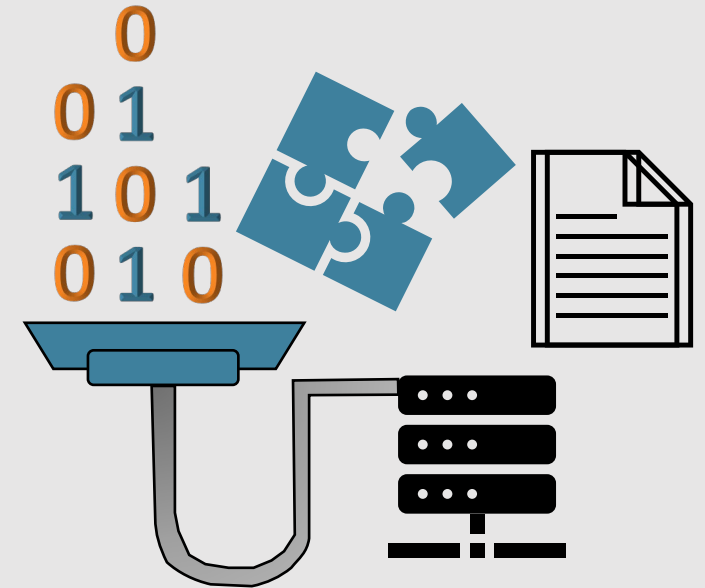
**Barb Dalgish  
LUHDORFF & SCALMANINI  
CONSULTING ENGINEERS**

# SESSION 3 TOPICS

- **How do we determine nitrate conditions?**
- **Where does high nitrate occur?**
- **Where am I in the Management Zone?**
- **How many wells and people might be affected?**

# HOW DO WE DETERMINE NITRATE CONDITIONS?

- **Collect all available groundwater nitrate data**
  - **Public Sources (State and Federal Databases)**
  - **Non-public sources via Data Requests (County Departments, Irrigation Districts, Water Districts, etc)**



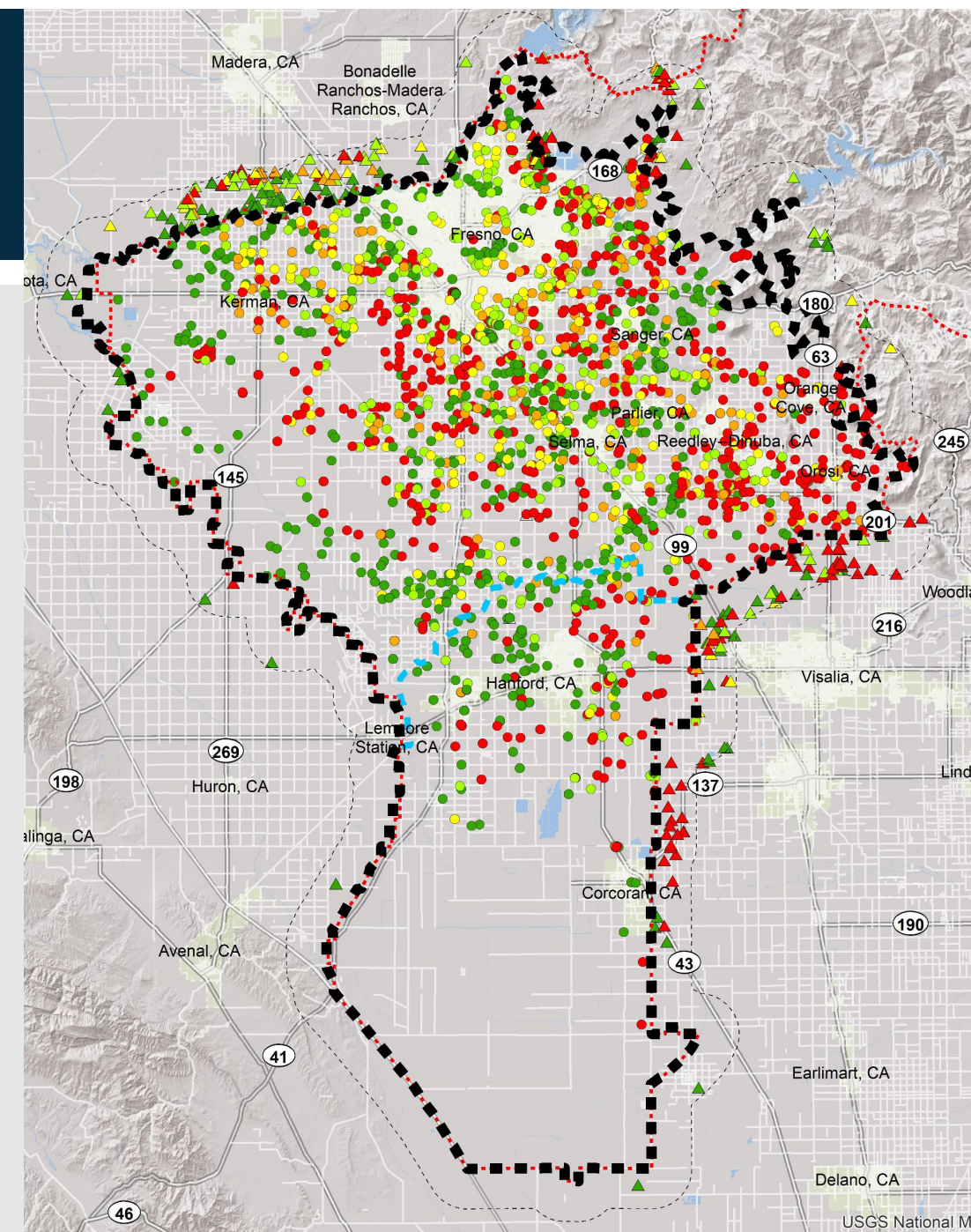
# HOW DO WE DETERMINE NITRATE CONDITIONS?

- **The Nitrate Control Program is focused on the Upper Zone**
  - **What is the Upper Zone of the groundwater system?**
  - **How do we associate groundwater nitrate data with the correct depth zone?**



# HOW DO WE DETERMINE NITRATE CONDITIONS?

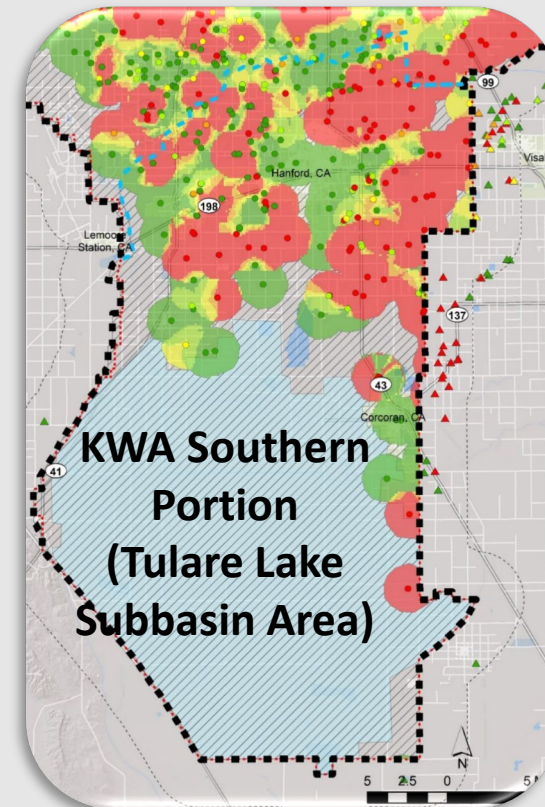
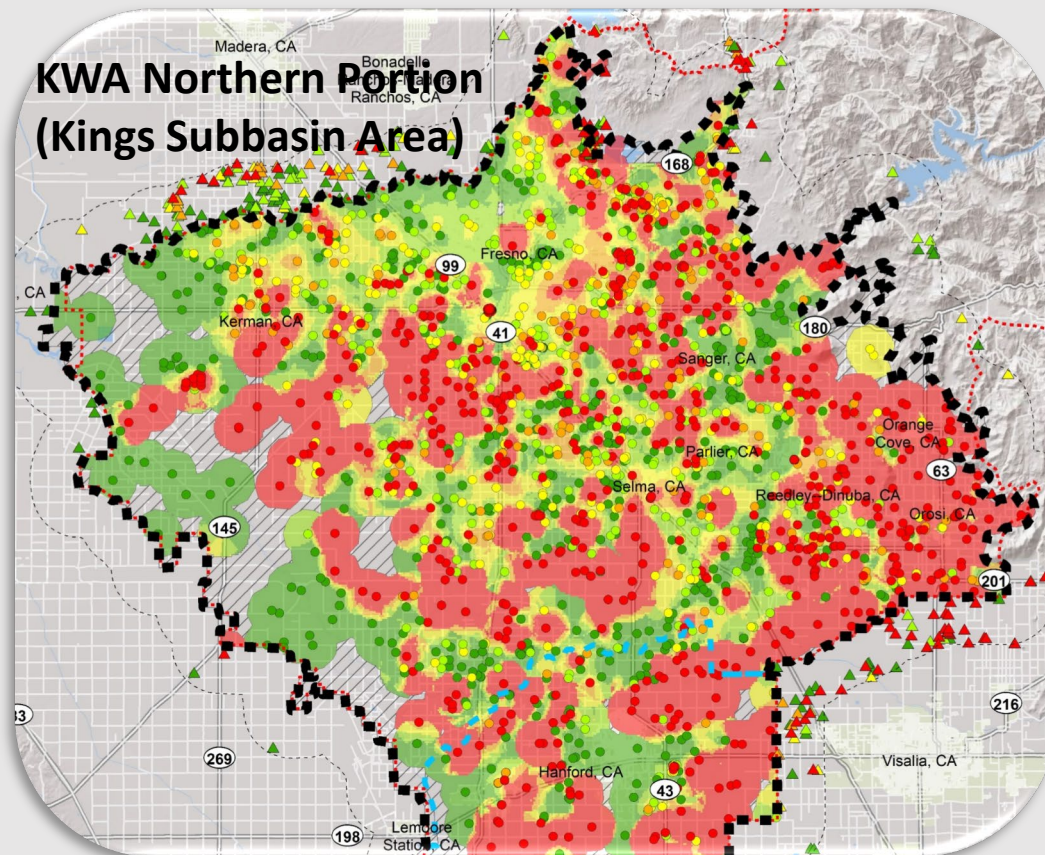
- How do we use the Upper Zone nitrate data to determine conditions?
- Average Post-2000
- Spatial Interpolation:  
*“use what we know to figure out what we don’t know”*





# WHERE DOES HIGH NITRATE OCCUR?

## ■ Ambient Nitrate Conditions in the Upper Zone (Post-2000)



### Explanation

Upper Zone Well with  
Average Post-2000  
Nitrate

(mg/L as N)

- ≤2.5
- >2.5 - 5.0
- >5.0 - 7.5
- >7.5 - 10.0
- >10.0

△ Upper Zone Control  
Point Outside MZ

■ MZ Area Delineation (for  
reporting and displaying  
purposes)

Ambient Nitrate in  
the Upper Zone  
(Post-2000)

(mg/L as N)

- ≤2.5
- >2.5 - 5.0
- >5.0 - 7.5
- >7.5 - 10.0
- >10.0

■ Unknown

■ Kings & Tulare Lake  
Management Zone  
Boundary

■ 3-mile Buffer for Nitrate  
Data Collection

■ CA Bulletin 118  
Groundwater Basins  
(2003)

■ De Designation  
Boundary

# WHERE AM I IN THIS MANAGEMENT ZONE?

- Interactive map (<https://arcg.is/OrKbH5>)
  - Remember: >10 mg/L as N (red area) means that the water is potentially unsafe to drink.
  - Type your address in and see what the estimated nitrate in the Upper Zone is near you.
  - The following slide shows an example map zoomed in on major communities.

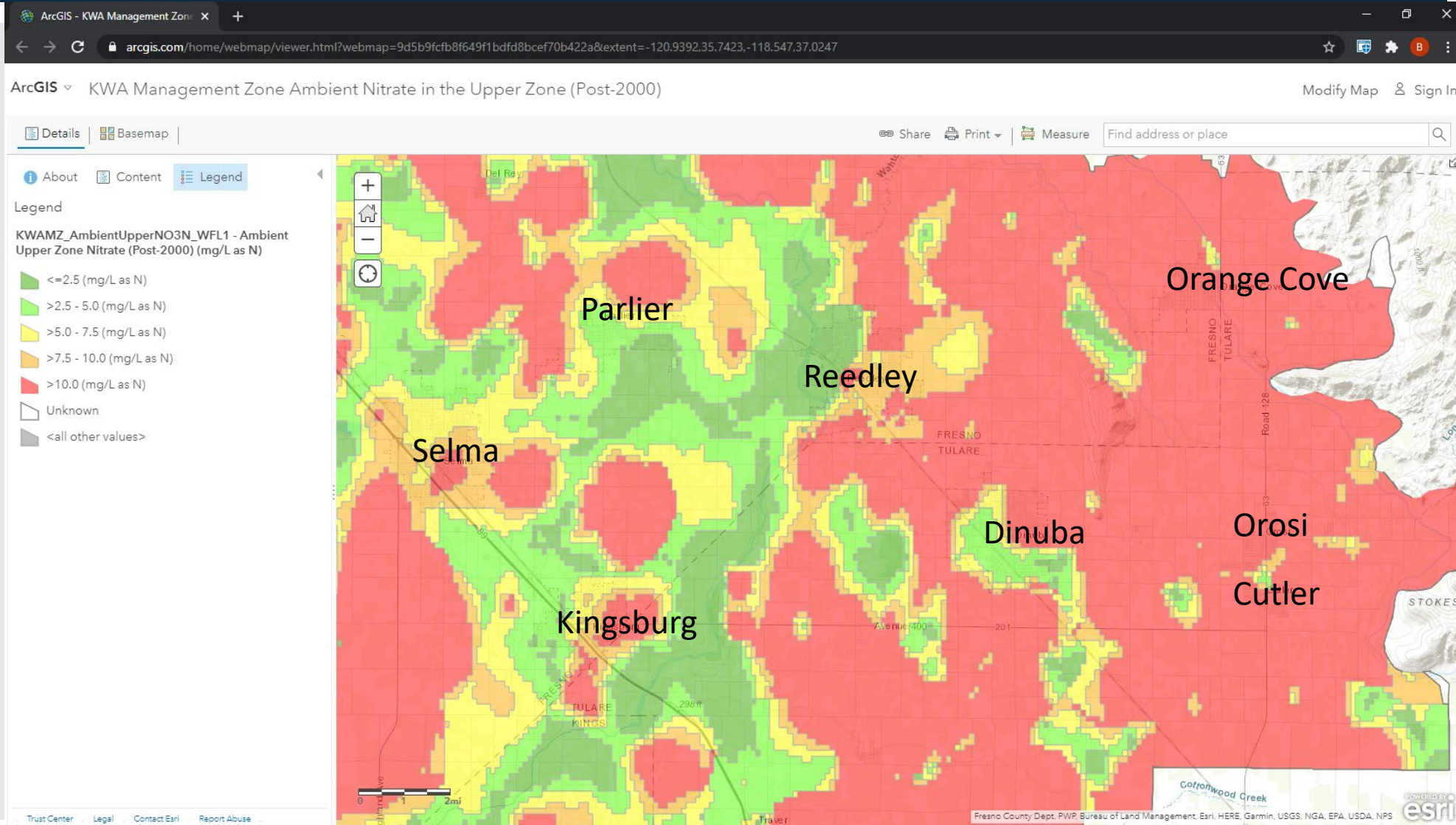


# WHERE AM I IN THIS MANAGEMENT ZONE?

## EXAMPLE

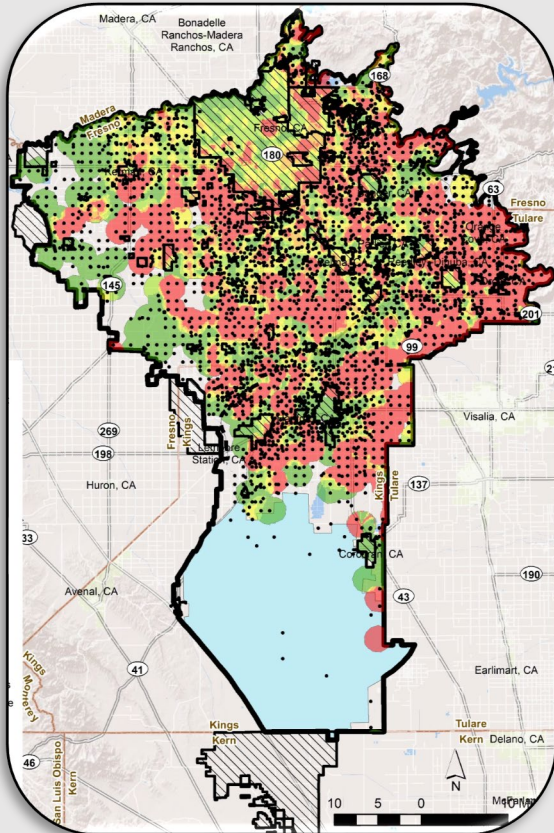
**Eastern Kings  
Area: Parlier,  
Selma, Reedley,  
Dinuba, Kingsburg,  
Orange Cove,  
Cutler, Orosi**

<https://arcg.is/OrKbH5>



# HOW MANY WELLS AND PEOPLE MIGHT BE AFFECTED?

- Domestic Wells (locations based on DWR Well Completion Reports)
- Population (based on 2010 Census Block GIS analysis)



## Domestic Wells & Population Outside Known Public Water System (PWS) Boundaries

Estimated Nitrate Level	Total Domestic Wells Outside PWS	Northern Population Outside PWS	Southern Population Outside PWS	Total MZ Pop. Outside PWS
>10mg/L as N	6,426	38,416	9,238	47,654



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# **SESSION 4 DRINKING WATER SOLUTIONS**

**Richard Meyerhoff**

**GEI**

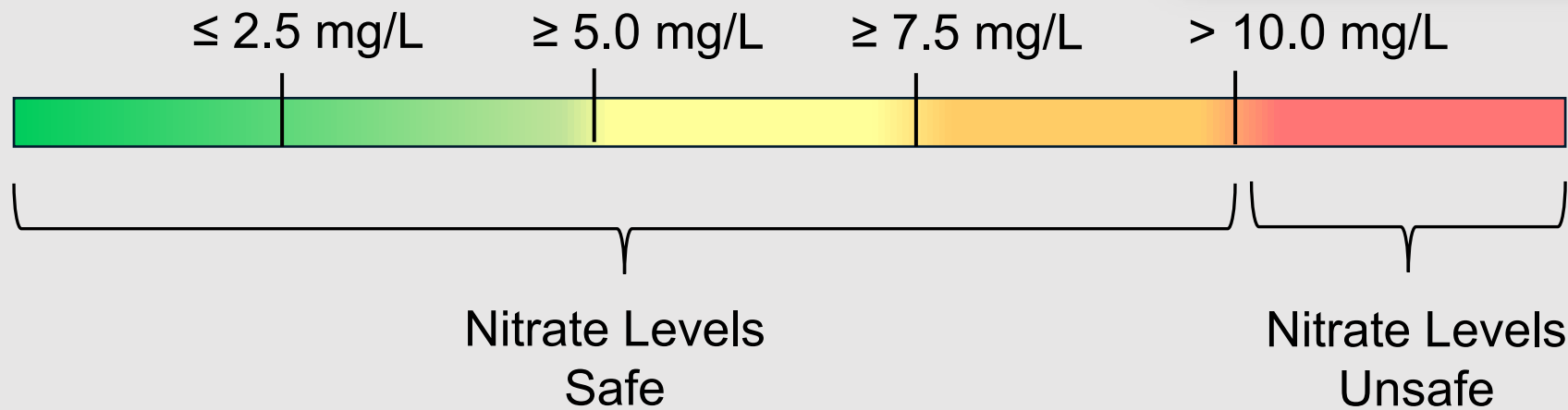
**CONSULTANTS**

# SESSION 4 TOPICS

- **What is the Early Action Plan?**
- **What options will be available to receive safe drinking water?**
- **How can I receive bottled water or have a Point-of-Use (POU) system installed?**
- **How do I know what the nitrate level is in the well at my home?**
- **What is an alternative to bottled water or POU treatment system services?**
- **As we implement the Early Action Plan, how will we connect with you?**

# WHAT IS THE EARLY ACTION PLAN?

- A plan to provide access to safe drinking water for those who are dependent on groundwater from wells that exceed the nitrate safe drinking water standard





# WHAT OPTIONS WILL BE AVAILABLE TO OBTAIN 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 CAN I RECEIVE BOTTLED WATER OR HAVE A POINT-OF-USE SYSTEM INSTALLED?

- **Services may be provided if you meet these three criteria**

**My home is in the Kings Water Alliance Management Zone**



**I am willing to sign an agreement with the service provider**



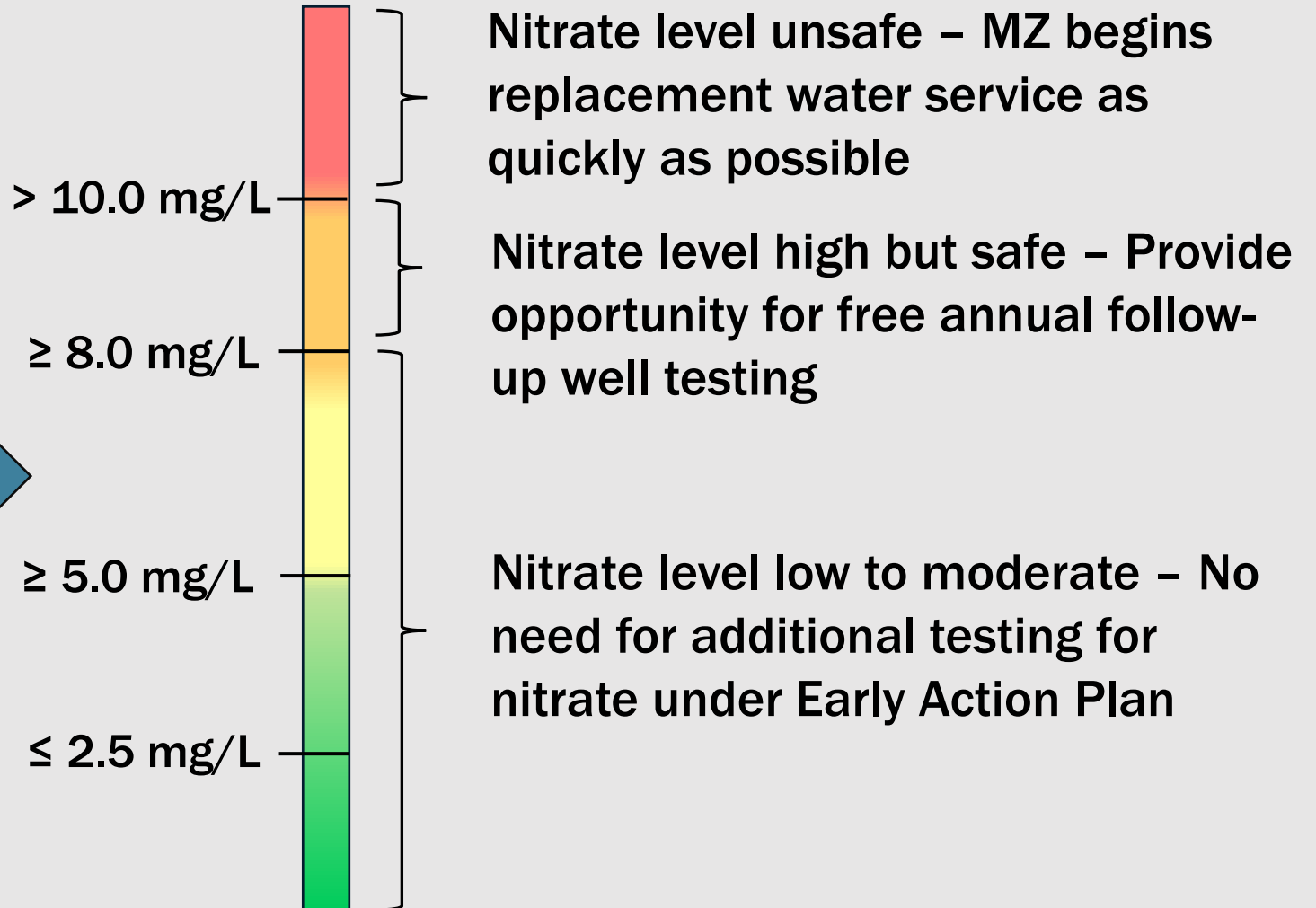
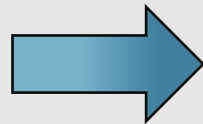
**My well has unsafe nitrate levels ( $> 10$  mg/L-N)**



# HOW DO I KNOW WHAT THE NITRATE LEVEL IS IN THE WELL AT MY HOME?

- **Representative from the Management Zone (MZ) will come to your home to test your well water for nitrate at no cost to you**

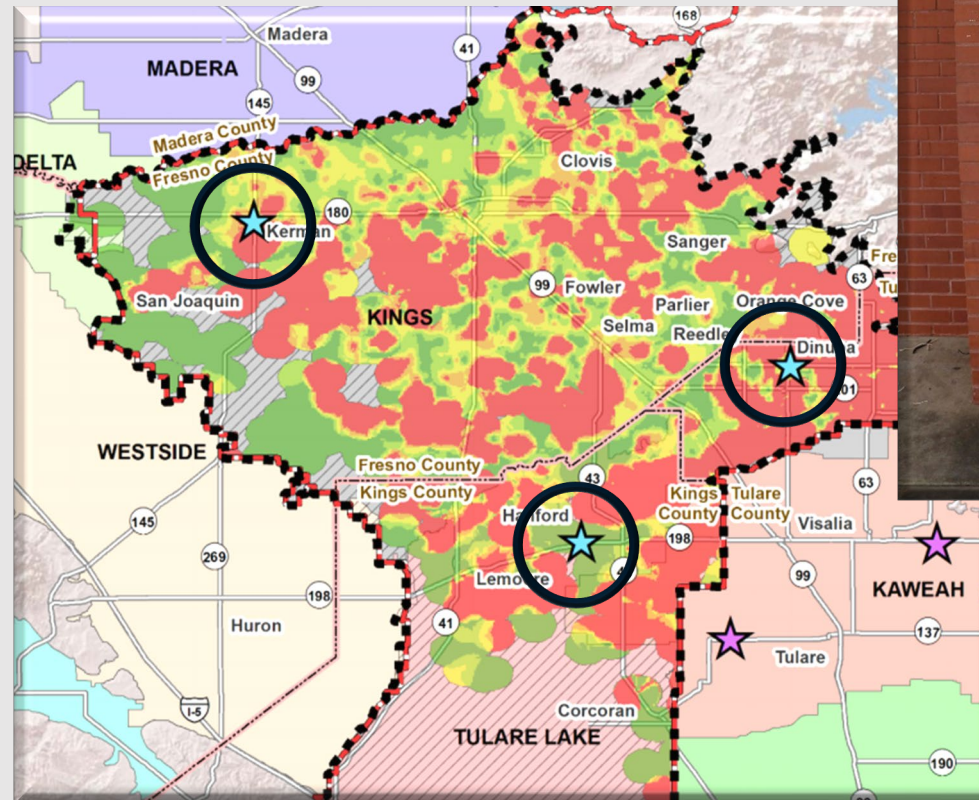
- **Results will be provided to you**
- **Test result determines next steps**





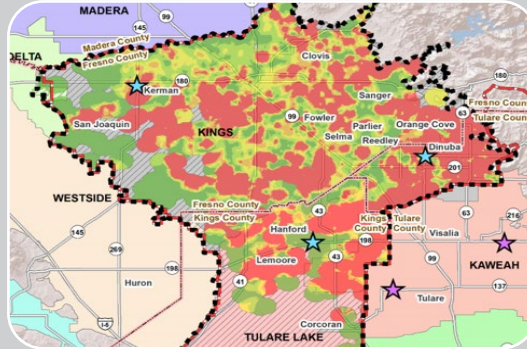
# WHAT IS AN ALTERNATIVE TO BOTTLED WATER OR POU TREATMENT SYSTEM SERVICE?

- **Water Fill Stations**
  - Trusted source of safe and free drinking water available to the entire community
  - Three stations are currently open
  - Development of more stations under consideration



# AS WE IMPLEMENT THE EARLY ACTION PLAN, HOW WILL WE CONNECT WITH YOU?

- **Implementation of the Early Action Plan begins soon - by May 7, 2021**
- **Three ways to connect...**



**Targeted Outreach to You – Focus is on Suspected Areas with Unsafe Nitrate Levels...**



**General Outreach to Everyone in the Community...**



**But...Contact Us Anytime to Have Your Well Tested for Nitrate**



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# **SESSION 5**

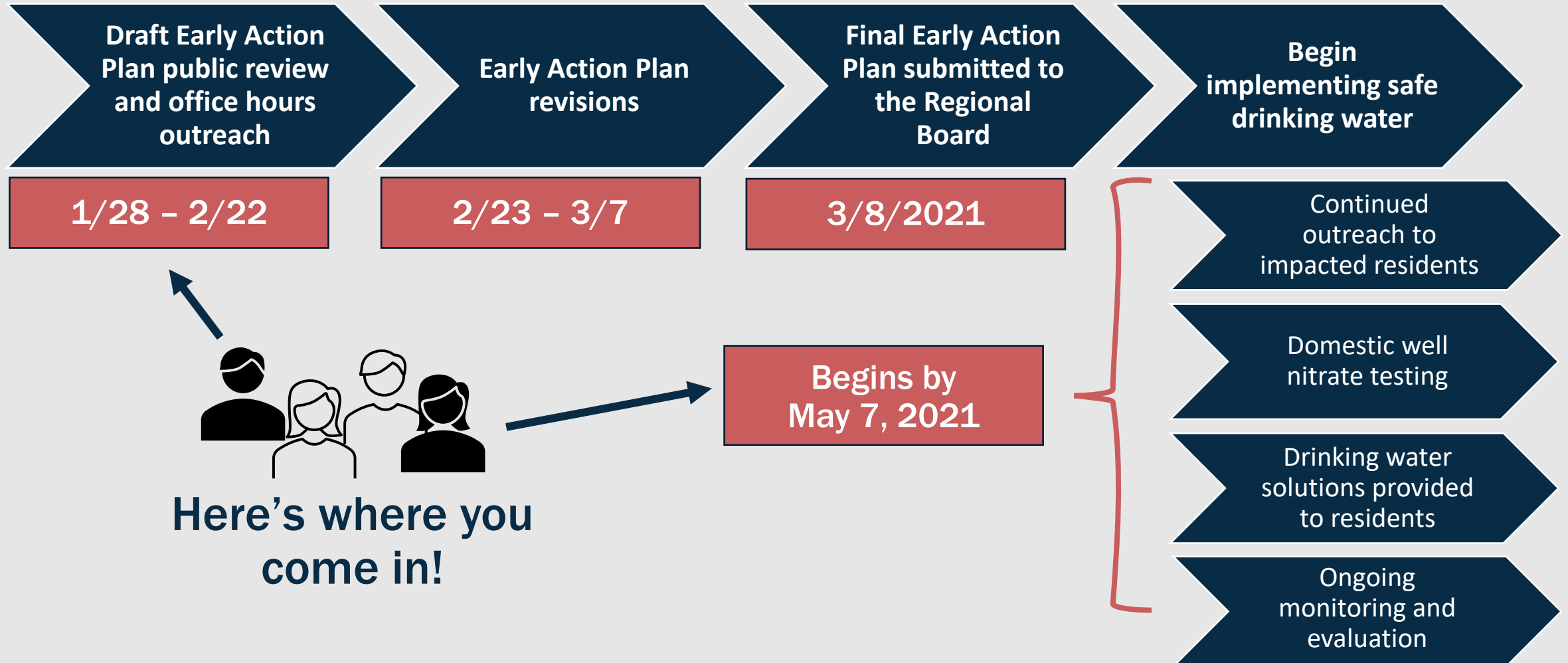
# **STAKEHOLDER CALL TO ACTION & IMPLEMENTATION**

**Charlotte Gallock & Debra Dunn**

# SESSION 5 TOPICS

- **What comes next?**
- **What is the safe drinking water solution roll out?**
- **Early Action Plan public input opportunities**
- **Next steps for the public**

# WHAT COMES NEXT?



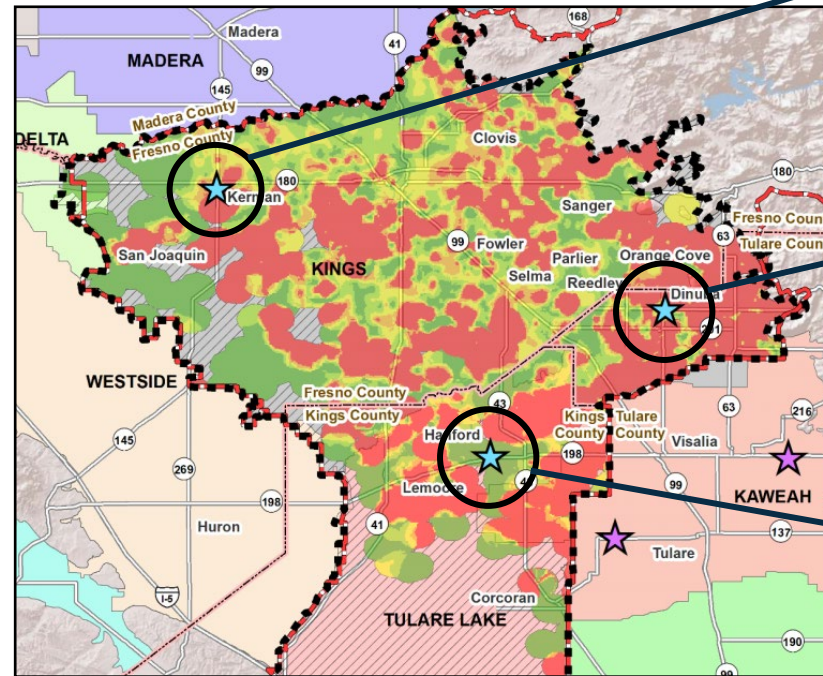
# HOW WILL THIS ROLL OUT?

- **Drinking water solutions in progress**
  - **3 fill stations installed: Dinuba, Kerman, Hanford**
- **Early Action Plan implementation will begin by May 2021, but potentially impacted residents can contact us about well testing ASAP.**
- **The first step is continued and expanded outreach to impacted residents. Look out for more information from us on how you can access safe drinking water solutions soon.**



# FILL STATION LOCATIONS

You can access safe drinking water NOW!



## KERMAN

15101 W Kearney Blvd  
Kerman, CA 93630

## DINUBA

150 S I Street  
Dinuba, CA 93618

## HANFORD

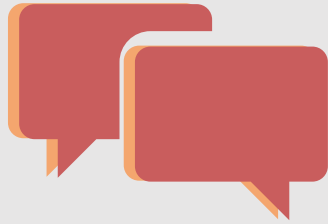
KART Transit Center  
504 W. 7<sup>th</sup> Street  
Hanford, CA 93230

# EARLY ACTION PLAN PUBLIC INPUT OPPORTUNITIES

- **Comment on the draft Early Action Plan by February 22<sup>nd</sup>**
  - Website comment form at [www.kingswateralliance.org/eap](http://www.kingswateralliance.org/eap)
  - Email comments to [info@kingswateralliance.org](mailto:info@kingswateralliance.org)
  - Call us at (559) 549-6747
- **Attend upcoming virtual “office hours”**
  - Wednesday, 2/10 @ 1:00 – 2:00 PM
  - Tuesday, 2/16 @ 4:30 – 5:30 PM
  - Sign up for the email list for more info at [www.kingswateralliance.org](http://www.kingswateralliance.org)!



# NEXT STEPS FOR THE PUBLIC



**Review & Comment on the draft Early Action Plan on our website by February 22.**

**Attend virtual office hours:**

- **2/10 from 1:00 – 2:00**
- **2/16 from 4:30 – 5:30**



**Join our email list so you know how and when drinking water solutions will be implemented near you.**



**Contact us if you would like to have your well tested for nitrates.**

**[www.kingswateralliance.org](http://www.kingswateralliance.org) | (559) 549-6747 | [info@kingswateralliance.org](mailto:info@kingswateralliance.org)**

**LIVE POLL**



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# QUESTIONS & ANSWERS

**CONTACT US**

**[www.kingswateralliance.org](http://www.kingswateralliance.org)**

**(559) 549-6747**

**[info@kingswateralliance.org](mailto:info@kingswateralliance.org)**



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**THANK YOU!**