

Modesto-Turlock Management Zone Coordination with GSAs

December 9, 2020

*Parry Klassen
Executive Director
Valley Water Collaborative*



VALLEY WATER
COLLABORATIVE
www.valleywaterc.org

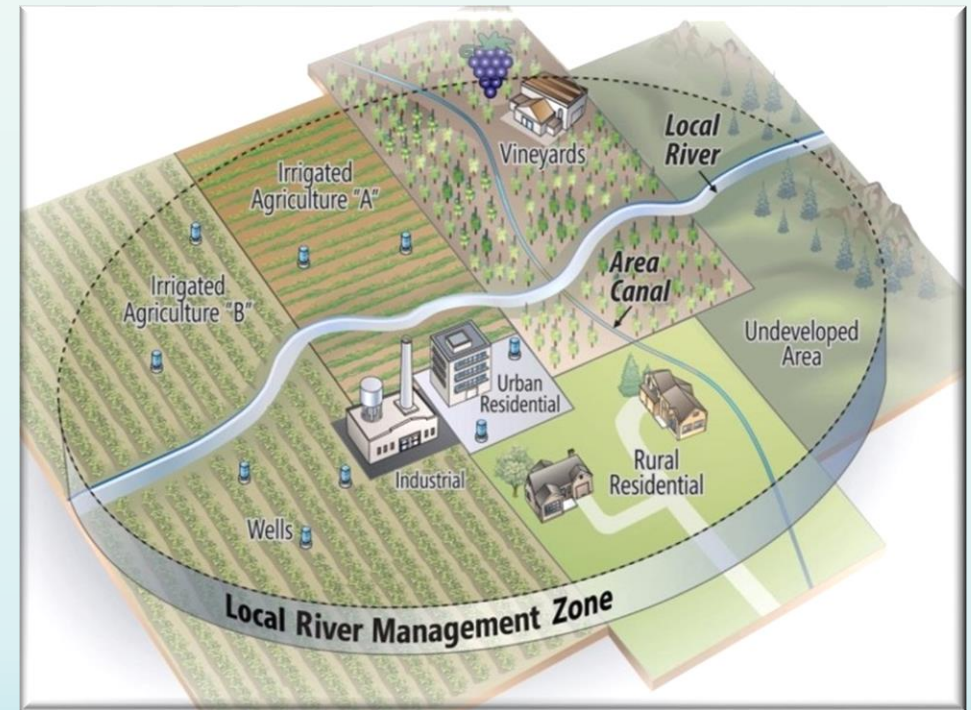
NITRATE CONTROL PROGRAM (“PROGRAM”)

- Program became effective on January 17, 2020
- Program Goals
 - Provide safe drinking water to residents impacted by high nitrate in their drinking water
 - Reduce nitrate impacts so that permitted dischargers do not cause or contribute to exceedances of the nitrate water quality objective in groundwater
 - Restore groundwater quality (where reasonable, feasible and practicable) so that it meets the nitrate water quality objective
- Program Implementation
 - Central Valley groundwater subbasins prioritized
 - Modesto and Turlock Subbasins two of six groundwater subbasins designated Priority 1
 - Permitted dischargers mailed a Notice to Comply with Program May 29, 2020

Priority 1 Groundwater Subbasins	
No.	Name
5.22.02	Modesto
5.22.03	Turlock
5-22.05	Chowchilla
5-22.08	Kings
5-22.11	Kaweah
5-22.13	Tule

RESPONSE TO NOTICE TO COMPLY – SELECT COMPLIANCE PATHWAY

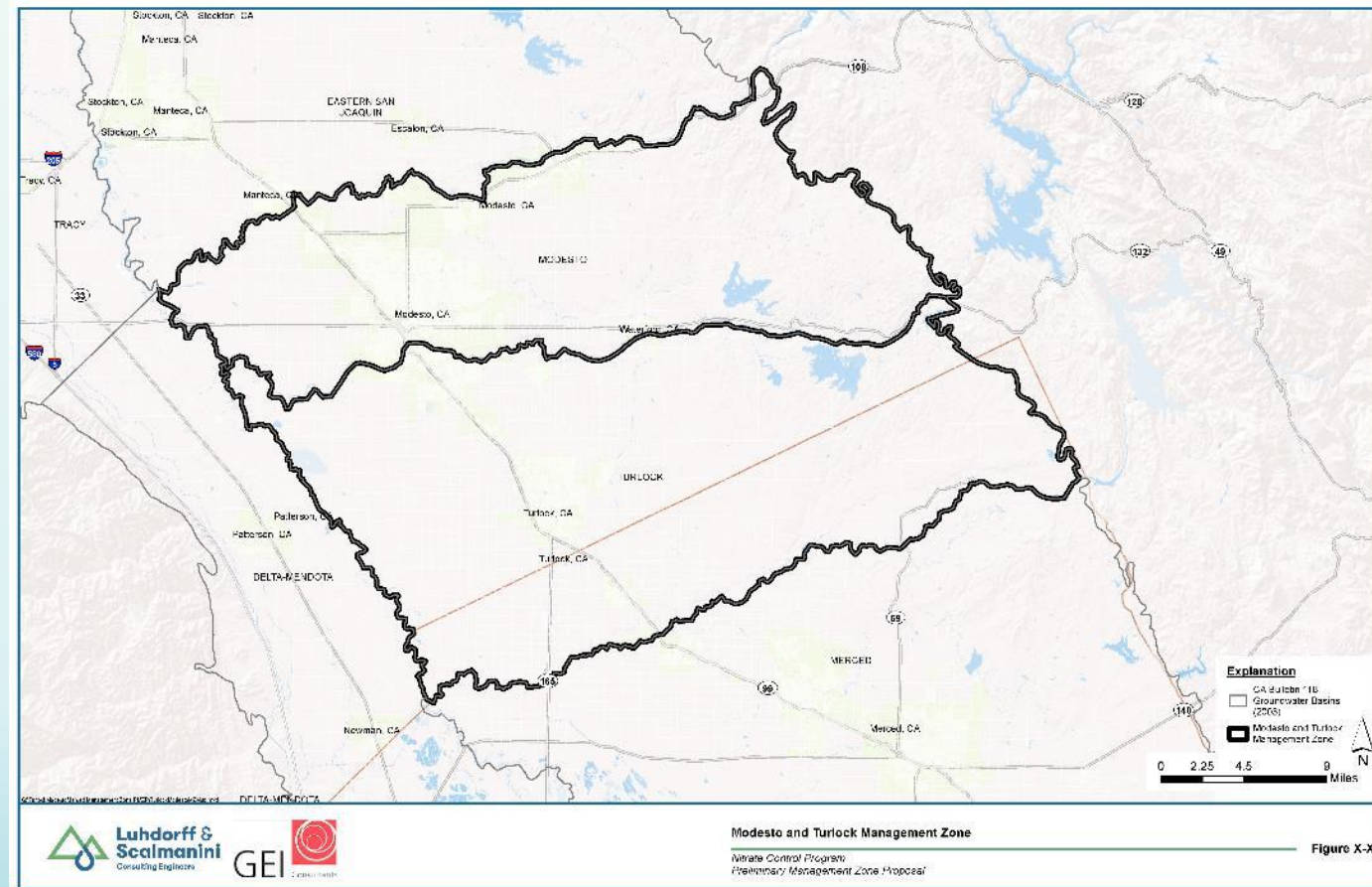
- Select compliance pathway and prepare required materials for submittal to the Regional Board:
 - **Path A** – Discharger elects to comply with Nitrate Control Program requirements as an individual entity
 - **Path B** – Through establishment of a Management Zone, permitted dischargers opt to work collectively to comply with Nitrate Control Program requirements



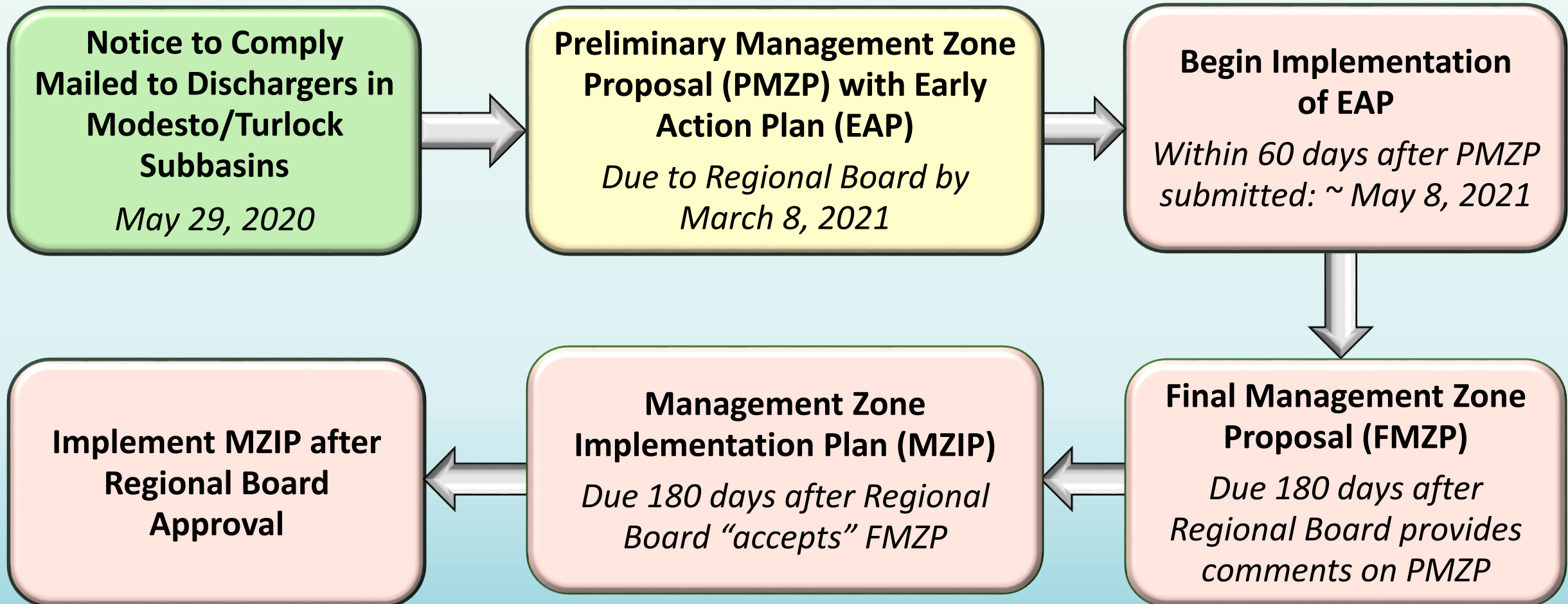
WHAT IS A MANAGEMENT ZONE?

Key Elements of the Basin Plan Regulatory Definition

- A discrete and generally hydrologically contiguous area...
- Permitted discharger(s)...collectively work to meet the goals of the Nitrate Control Program...
- Regulatory compliance evaluated based on the permittees collective impact...
- Where Management Zones cross groundwater basin or subbasin boundaries, regulatory compliance is assessed separately for each basin or subbasin.

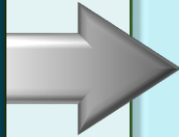


MANAGEMENT ZONE DELIVERABLE SCHEDULE



PRELIMINARY MANAGEMENT ZONE PROPOSAL

**Preliminary Management
Zone Proposal (PMZP) with
Early Action Plan (EAP)**
Due by March 8, 2021



Key Elements

- ✓ Proposed Management Zone Boundary
- ✓ Identification of participating permitted dischargers
- ✓ Initial assessment of nitrate conditions in groundwater
- ✓ Potentially impacted public water supplies/domestic wells where nitrate exceeds water quality objectives
- ✓ Existing nitrate management practices of participating permitted dischargers
- ✓ **Early Action Plan** to assure safe drinking water in the short-term while long-term solutions developed and implemented

VALLEY WATER COLLABORATIVE (VWC)

- **Organization Structure**

- A non-profit, public benefit California corporation, established July 7, 2020
- The corporation's activities and affairs are managed, and all corporate powers are exercised, by or under the direction of the VWC Board of Directors
- Based in Modesto, CA

- **Mission**

The mission of Valley Water Collaborative is to maintain and improve the quality of life in the northern San Joaquin Valley by implementing programs that provide access to safe drinking water for residents, and by engaging in activities with the goal of protecting or enhancing the quality of groundwater used as drinking water for residents in the region.

Central Valley Water Board Nitrate Permitting Program: Multiple Management Zone Governance and Implementation Approach

Modesto Subbasin
(Priority 1)

Turlock Subbasin
(Priority 1)

Merced Subbasin
(Priority 2)

Valley Water Collaborative (VWC)

Business Management

Board of Directors

Implementation

Modesto Subbasin
Committee

Turlock Subbasin
Committee

Merced Subbasin
Committee
(Priority 2)

- ### Committee Roles
- Provide budgets, localized input on plans to Board of Directors
 - Facilitate: local outreach; water delivery activities
 - Committee includes EJ / other stakeholders on committee

VALLEY WATER COLLABORATIVE BOARD

- **Board Officers**

- Alan Reynolds, Chair (Gallo Vineyards/ East San Joaquin Water Quality Coalition)
- David Brush, Secretary (Grower/Mid-Valley Agricultural Services/East San Joaquin Water Quality Coalition)
- Ray Prock, Treasurer (Ray-Lin Dairy)

- **Board Members**

- David Belt (California Poultry Federation)
- Jeremy Damas (City of Ceres)
- Justin Gioletti (Robert Gioletti and Sons Dairy)
- Paul Huckaba (Bronco Wine Company)
- Ben Koehler (City of Modesto)
- Art Riddick (Darling Ingredients)
- Tom Roduner (Grower/East San Joaquin Water Quality Coalition)
- Antonio Tovar (Salida Sanitary District)
- Michael Wood (Hilmar Cheese Company)

VALLEY WATER COLLABORATIVE STAFF AND CONSULTANTS

- **Staff**
 - Parry Klassen, Executive Director
 - Courtney Jallo, Program Manager
 - Maureen Thompson, Program Manager
- **Consultants**
 - Richard Meyerhoff, GEI Consultants Inc.
 - Vicki Kretsinger, Luhdorff and Scalmanini Consulting Engineers, Inc.
- **Affiliated Organizations**
 - California League of Food Producers
 - California Poultry Federation
 - Central Valley Dairy Representative Monitoring Program
 - Central Valley Salinity Coalition
 - East San Joaquin Water Quality Coalition
 - Pacific Egg and Poultry Association

EARLY ACTION PLAN: KEY ELEMENTS



COMMUNITY OUTREACH

- Provide Well Data
 - Do you own a domestic well? Do you know the nitrate level in your well water?
- Provide Input to the Management Zone
 - Participate in development of Early Action Plan
 - Review and comment on Management Zone Documents as they develop
- Tell Your Neighbors about the Project
- Sign-up to receive program updates at www.valleywaterc.org

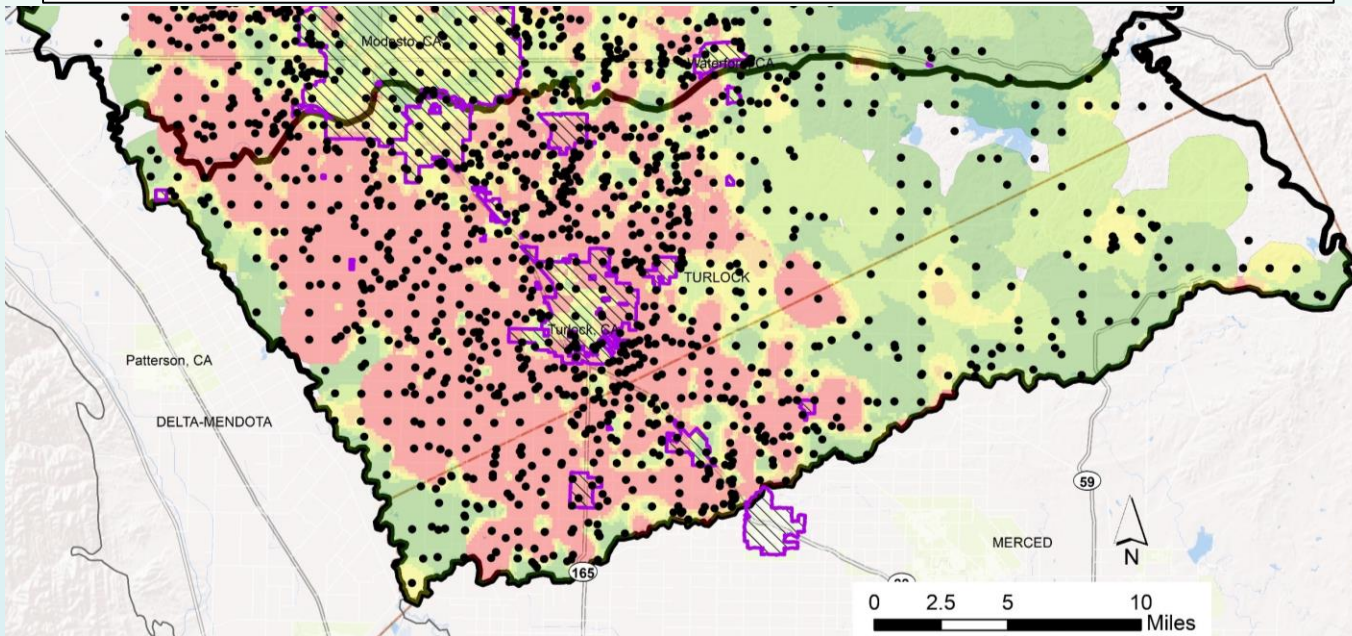


INITIAL ASSESSMENT OF GROUNDWATER CONDITIONS

- Hydrogeology – Source: Groundwater Sustainability Plan (GSP)
- Groundwater Elevations and Flow Directions – Source: GSP, Department of Water Resources
- Upper Zone Delineation – Source: Central Valley Salinity Alternatives for Long-term Sustainability (CV-SALTS)
- Nitrate Water Quality
 - Publicly available data (DWR, Division of Drinking Water (DDW), US Geological Survey (USGS), Geotracker, Groundwater Ambient Monitoring Assessment (GAMA), etc.)
 - County-specific data (well permit tests, small water systems)
 - Stakeholder input

HOW MIGHT THESE CONDITIONS AFFECT YOU?

Drinking water sources: TURLOCK MANAGEMENT ZONE

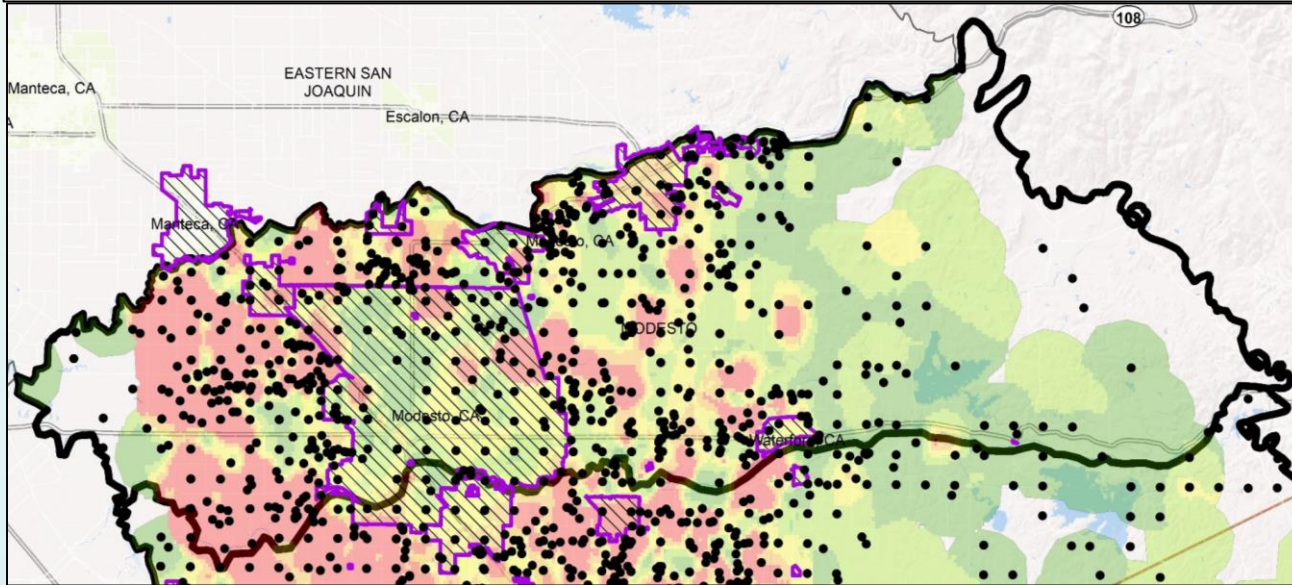


- We estimate that up to 48,000 people (about 24% of the population) obtain drinking water from domestic wells impacted by elevated nitrate (orange and red areas combined)

- About two-thirds or 63% of all domestic wells in this Management Zone are located outside of a Public Water System and may have elevated nitrate conditions:
 - **Orange Areas** = “elevated nitrate conditions” (nitrate concentration is between 7.5 and 10.0 mg/L); we estimate about 450 domestic wells are in these areas
 - **Red Areas** = “unsafe nitrate conditions” (nitrate concentration is greater than 10.0 mg/L); we estimate about 1,700 domestic wells are in these areas

HOW MIGHT THESE CONDITIONS AFFECT YOU?

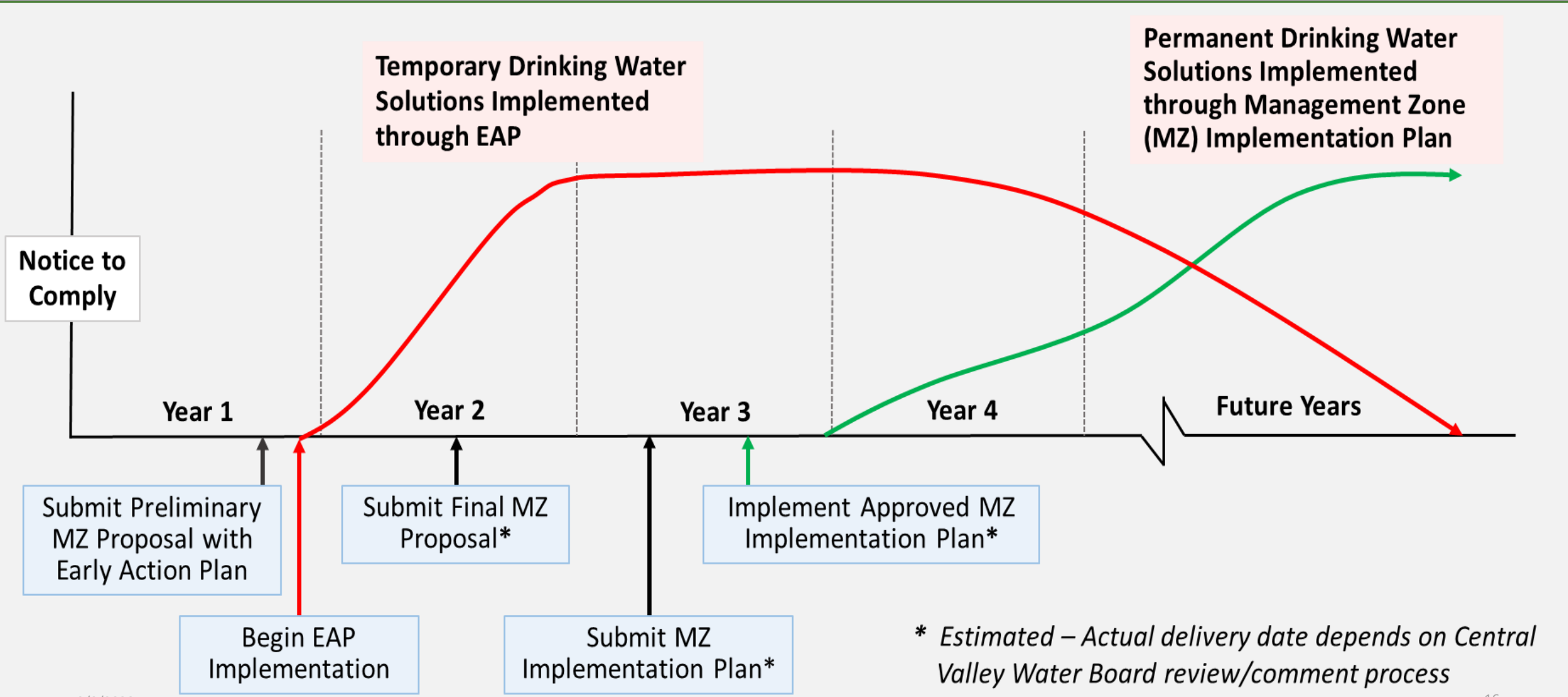
Drinking water sources: MODESTO MANAGEMENT ZONE



- We estimate that up to 7,200 people (about 2% of the population) obtain drinking water from domestic wells impacted by elevated nitrate (orange and red areas combined)

- About one-third or 32% of all domestic wells in this Management Zone are located outside of a Public Water System and may have elevated nitrate conditions:
 - **Orange Areas** = “elevated nitrate conditions” (nitrate concentration is between 7.5 and 10.0 mg/L); we estimate about 190 domestic wells are in these areas
 - **Red Areas** = “unsafe nitrate conditions” (nitrate concentration is greater than 10.0 mg/L); we estimate about 350 domestic wells are in these areas

PURPOSE OF EARLY ACTION PLAN (EAP) WITHIN CONTEXT OF OVERALL NITRATE CONTROL PROGRAM



POTENTIAL AREAS OF COLLABORATION

1. Need to evaluate and monitor groundwater conditions and quality as related to the purposes of the program in question (i.e., SGMA and Nitrate Control Program).
2. Need to engage with community organizations and local residences in the development and implementation of GSPs and Management Zone Implementation Plans.
3. Common set of stakeholders impacted by both programs, fiscally and otherwise.

POTENTIAL AREAS OF COLLABORATION

1. Costs to implement both programs largely assessed on same groups of businesses/individuals (e.g., dairies, farmers).
2. Long term goals for ensuring sustainability of groundwater supplies that are safe for municipal drinking water uses.
3. Solutions for sustainability and managed restoration for nitrate contamination may be the same or similar.

POTENTIAL APPROACH TO WORK OUT COLLABORATION

- 1) Create a small working group that includes representatives from Valley Water Collaborative and relevant GSAs. Working group should consist of upper-level staff from the programs.
 - 1) Additional staff or counsel to participate as determined necessary or appropriate depending on the issue for discussion.
- 2) Set a schedule for working group meetings/calls
- 3) Working group to first identify list of common issues, objectives and purposes for working group discussion.

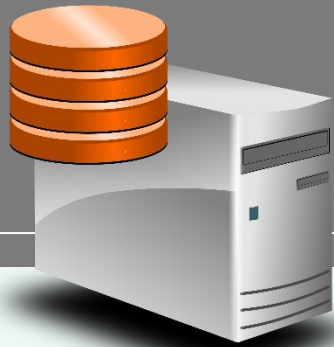
Examples may include as follows:

- a. Form of agreement or arrangement between programs (i.e., constraints and options)
- b. Cost sharing arrangements (e.g., monitoring of groundwater wells)
- c. Information sharing arrangements (e.g., data and related information)
- d. Monitoring requirements for each program
- e. Community engagement requirements and efforts
- f. Content of implementation plans (i.e., GSPs and Management Zone Implementation Plans)
- g. Shared or coordinated communications to rate/fee payers
- h. Coordination for implementation of projects that are common to both implementation programs

CENTRAL VALLEY GROUNDWATER MONITORING COLLABORATIVE (CVGMC)

Key Objectives:

- Collaboration among the coalitions to characterize groundwater quality across the Central Valley
- Streamline monitoring, data management and reporting associated with the Groundwater Quality Trend Monitoring Plans
- In depth regional characterization of groundwater quality
- Model for SAMP



Irrigated
Lands

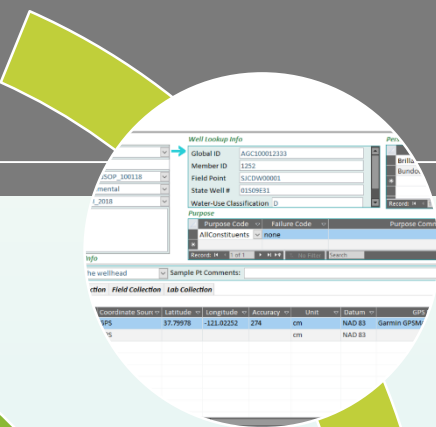


Management
Zones



GSAs

CVGMC DMS



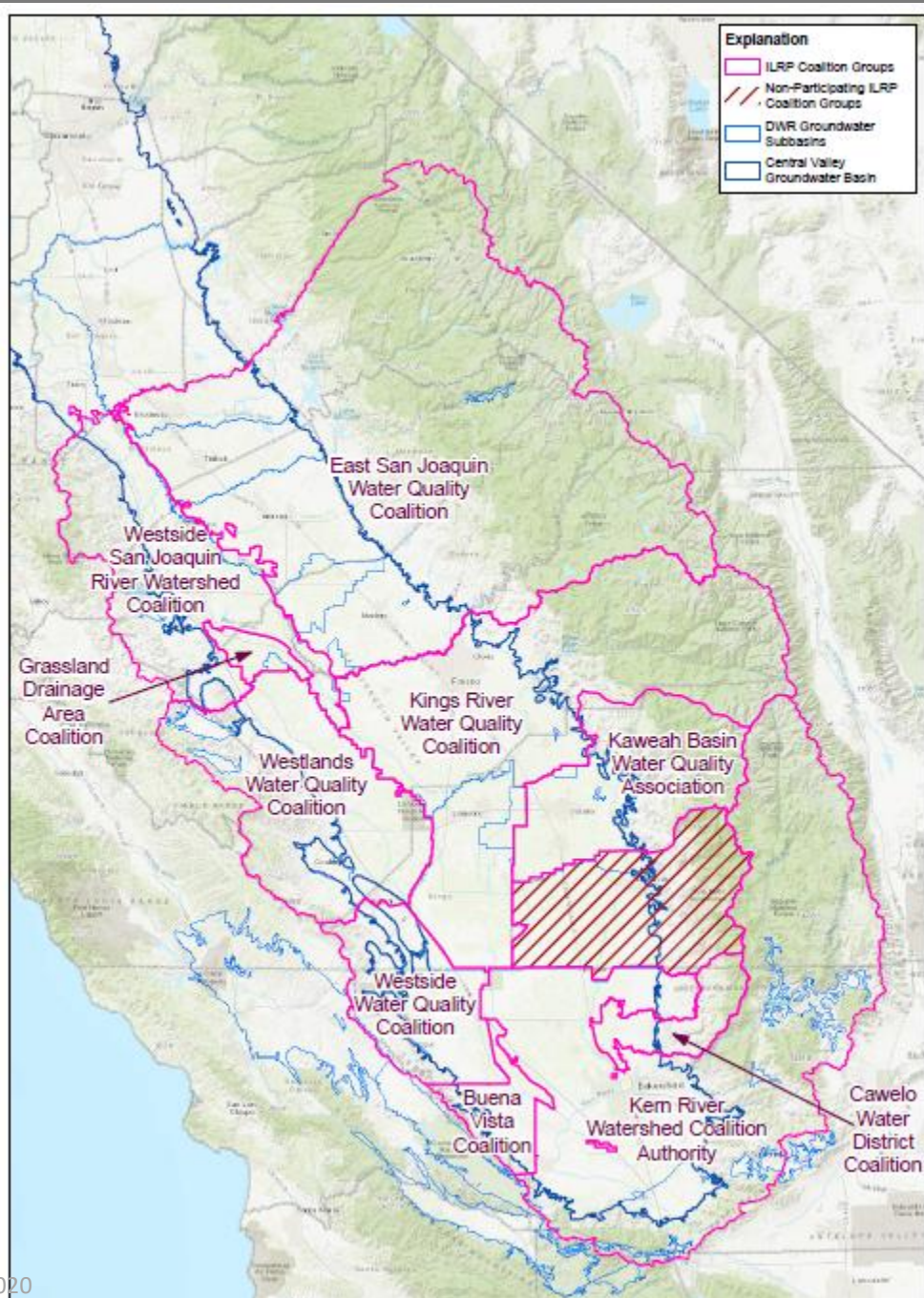
Online
Field Sheet
Data Entry



Online
Query &
Export Tool



GIS Applet



1. Buena Vista Coalition
2. Cawelo Water District Coalition
3. East San Joaquin Water Quality Coalition
4. Grassland Drainage Area Coalition
5. Kaweah Basin Water Quality Association
6. Kern River Watershed Coalition Authority
7. Kings River Water Quality Coalition
8. Westlands Water Quality Coalition
9. Westside San Joaquin River Watershed
10. Westside Water Quality Coalition

MORE INFORMATION...

- Nitrate Control Program
 - <https://www.cvsalinity.org/nitrate-control-program>
- Valley Water Collaborative
 - www.valleywaterc.org
- Contact Parry Klassen
 - klassenparry@gmail.com
- Go to website www.valleywaterc.org for:
 - Today's and future presentations; related information about Management Zone activities in the Central Valley
 - Sign up for program updates



Questions

Valley Water Collaborative: www.valleywaterc.org

Contact Parry Klassen: klassenparry@gmail.com