



Nitrate Initial Assessment

Fresno-Clovis Regional Wastewater Reclamation Facility

Community Meeting

April 15, 2021

Introductions

City of Fresno

- Michael Carbajal, Director of Public Utilities
- Rosa Lau-Staggs, Wastewater Manager



Carollo Engineers

- Jeff Stovall, PhD, PE, Principal Technologist, Water Resources Modeling



- Translation
 - Information is available in Spanish and Hmong
- Questions
 - Please ask questions via Q&A feature
 - Press *9 to “raise hand” if you are participating by phone
 - Press *6 to unmute your phone
- Recording
 - We are recording this meeting. The recording will be available on the City of Fresno website

The screenshot shows a Zoom meeting slide with a blue header containing the City of Fresno logo and the title 'Nitrate Initial Assessment'. The main content area is white with the heading 'Introductions'. It lists participants from the City of Fresno and Carollo Engineers. At the bottom, there is a green bar with a navigation menu. A red circle highlights the 'Q&A' icon in the menu.

CITY OF FRESNO
Nitrate Initial Assessment

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City of
FRESNO
WATER DIVISION

carollo

Raise Hand Q&A Leave

We reserve the right to monitor, filter, and remove any content (text, links, video, etc.) that is deemed inappropriate

Discussion Topics

- Nitrate in Drinking Water
- Central Valley Nitrate Control Program
- City of Fresno Nitrate Initial Assessment
- Analyzing Groundwater Conditions
- Alternative Water Supplies
- Working with Neighbors and Stakeholders
- Alternative Compliance Plan
- Next Steps
- Q&A
- Information Resources



Nitrate in Drinking Water

Nitrate Sources:

- Naturally in soils
 - Increased levels from:
 - Chemical runoff from most fertilizers
 - Water from industrial facilities
 - Agricultural/farming operations runoff
 - Wastewater treatment facility discharge
- Naturally occurring in soils
 - Increased levels can enter groundwater from multiple sources
 - CCR Title 22 limit: 10 milligrams per liter
 - Above CCR Title 22 limit is unsafe to drink, especially for infants and pregnant women
 - Elevated nitrate levels in private wells can only be detected through testing

Central Valley Nitrate Control Program

- Extensive program to control nitrate levels in Central Valley drinking water supplies
- Coordinated by the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) and Central Valley Regional Water Resources Control Board
 - CV-SALTS: Growers, dairies, local industries, communities, environmental organizations, and the State of California working together



Focus: To develop sustainable salinity and nitrate management planning for the Central Valley and provide safe drinking water supplies.

City of Fresno – Nitrate Initial Assessment

Nitrate Sources:

- Naturally in soils
- Increased levels from:
 - Chemical runoff from most fertilizers
 - Water from industrial facilities
 - Agricultural/farming operations runoff
 - Wastewater treatment facility discharge

- Wastewater treatment facilities can be a source of nitrate
- The City of Fresno operates the Fresno-Clovis Regional Wastewater Reclamation Facility (RWRF)
- The City of Fresno is doing its part to assess potential impacts of RWRF on private drinking water wells and to take action if needed

Water provided through the City's public drinking water system is already regularly tested for nitrate and other contaminants

Fresno-Clovis Regional Wastewater Reclamation Facility

- Located at Jensen and Cornelia
- Treating at a secondary level since 1975
- Receiving 59 million gallons per day
- Treated water:
 - Disinfected Tertiary level (5 millions) is used for landscape and crop irrigation
 - Undisinfected Secondary level
 - Small portion goes to direct irrigation of non-food crops
 - The rest goes to percolation ponds
 - Reclamation wells pump water from beneath ponds

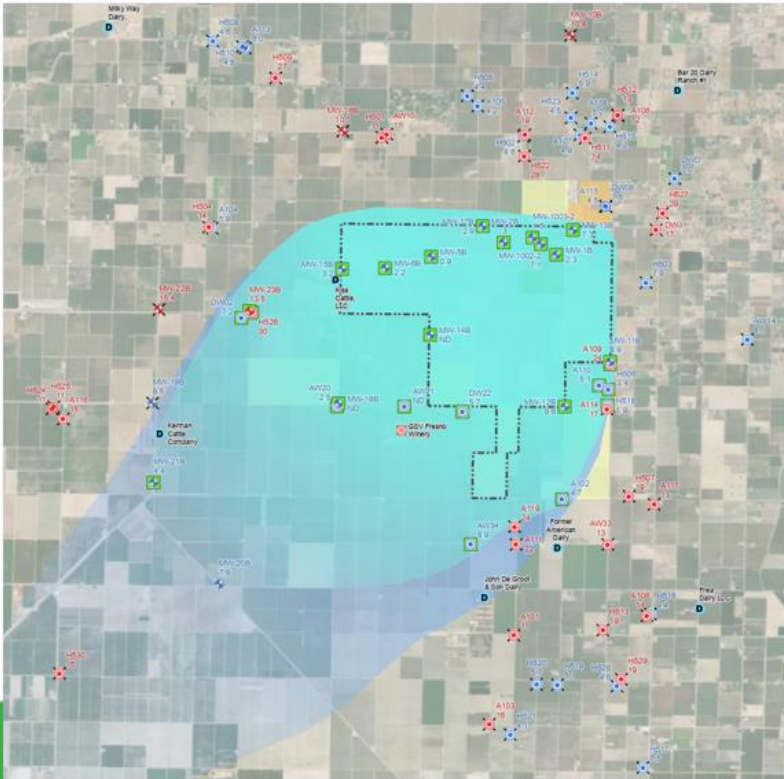


Analyzing Groundwater Conditions

Purpose: Determine if RWRf is impacting nitrate levels on local domestic drinking water wells

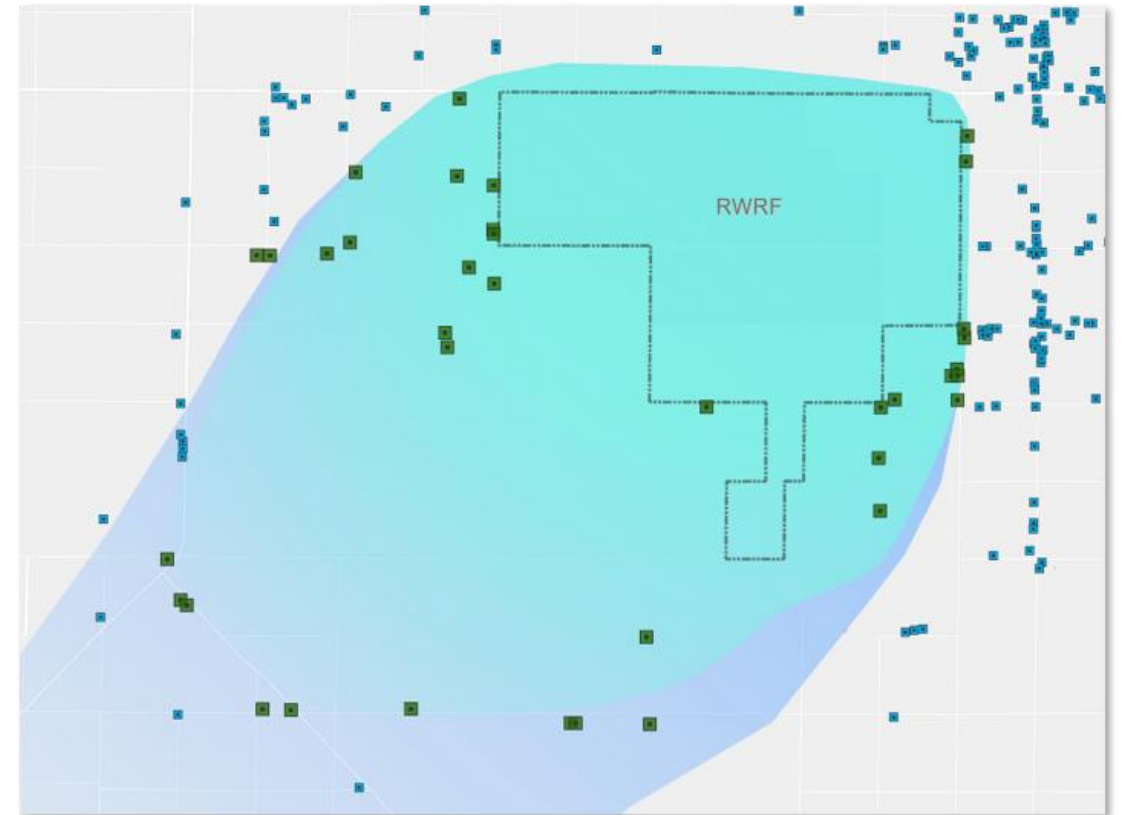
Water Quality Analysis:

- City of Fresno groundwater monitoring wells
- Domestic and agricultural wells near the RWRf
- Measured constituents and compiled data to determine “Area of Nitrate Contribution” of RWRf



Area of Nitrate Contribution

- Approximately 34 private domestic wells identified in that area.
- Others should be within Kings Water Alliance area



Monitoring for Nitrates & Alternative Water Supplies

The City will coordinate directly with property owners to test domestic wells

- Determine if nitrate concentration is greater than ($>$) 10 mg/L
- Results will take a few business days to complete

Process

- If nitrate levels $>$ 10 mg/L , City will coordinate bottled water deliveries
- City will coordinate other alternative water supply after bottle water deliveries begin
- City will follow up with property owners within:
 - 1 month of initiation of alternative water supply service
 - 6 months after initiation alternative water supply service
 - Annually

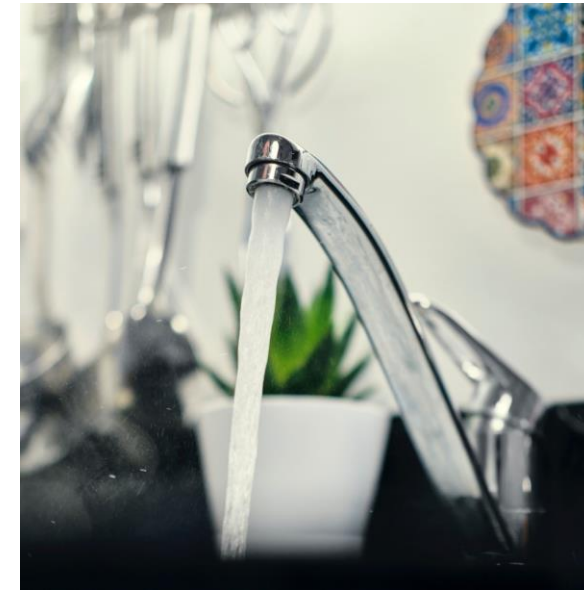
Property owners will have the option to have domestic wells re-tested annually

Alternative Water Supply

- Alternative water supply will be made available if nitrate levels are >10 mg/L in wells within “Area of Nitrate Contribution”
- Important property owner input on interim drinking water solutions will be included in the City’s “Early Action Plan” due May 2021
- Options include:
 - Coordinating bottle water delivery
 - Installing point-of-use treatment systems at individual homes
 - Establishing drinking water fill stations



Kings Water Alliance



Alternative Water Supply Implementation



- The City will contract with a third-party vendor
 - Vendor will coordinate directly with property owners to implement and maintain the alternative water supply
 - The City will cover associated costs
- The City will only visit properties to test domestic wells and will not visit during implementation and maintenance efforts

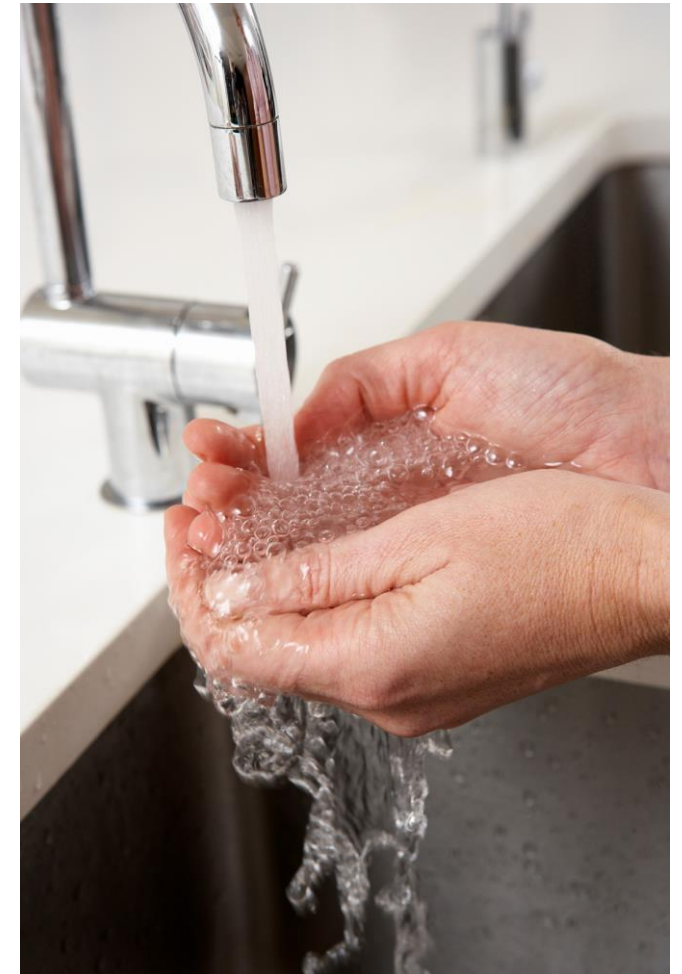
Alternative Compliance Plan (ACP)

- **Purpose:** Describe near- and long-term projects to improve water quality in the City's discharge to the aquifer
- The City is preparing ACP to be submitted along with the Early Action Plan in **May 2021**



Next Steps

- Continued property owner discussions and coordination
- Submit Early Action Plan - May 2021
- Begin Plan implementation no later than 60 days after EAP submittal
- Share test results promptly with property owners
- Provide interim water supply if nitrate levels above limit
- Continue coordination with property owners toward long-term solution
- Always maintain open lines of communication



How to Get Information

- Contact: Rosa Staggs, Rosa.Staggs@fresno.gov
- Website: <https://www.fresno.gov/publicutilities/sewer-wastewater/salinity-and-nitrate-control-program/>
- Informational Materials (English, Spanish, Hmong)