

A desert landscape at sunset. The sun is low on the horizon, casting a warm orange glow across the sky. In the foreground, there is a dirt path leading through sparse, dry vegetation. In the middle ground, a house is visible on the left, and several Joshua trees are scattered across the landscape. In the background, there are low mountains under a clear sky.

# Rosamond: Collaborative Permitting Achieves Beneficial Incidental Recharge in an Adjudicated Groundwater Basin

Steve A. Perez, Rosamond CSD General Manager

Greg Wood, Rosamond CSD Board Member

Sergio Alonso, Staff - Lahontan Regional Water Quality Control Board

# Steve A. Perez

- RCSD General Manager
- Received Waste Discharge Requirements from Lahontan
- Met with Engineers to finalize Project
- Began the Bid Process Award Project
- Reviewed and Approved or denied all submittals
- Monitored and Commented on Prevailing wage issues
- Regular updates from my management staff
- Regular onsite review
- Develop mitigation of old settling ponds

# Greg Wood

- RCSD Board Member
- Worked 37 years experience in water reclamation.
- Joined RCSD Board in 1996.
- Faced unforeseen problems and challenges during the construction of a Title 22 Water Reclamation Facility in Rosamond.
- Worked with Lahontan Water Board to improve the RCSD.

# Sergio Alonso

- Worked for the Water Board for the last three years.
- Regulate facilities of different sizes and levels of treatment.
- Worked on the 2019 permit that regulates RCSD.
- Currently the staff assigned to regulate RCSD compliance with permit.

# RCSD History

- Waste Discharge Requirements (WDRs) established WDRs in 1966.
- Historically, wastewater flow is discharged to soil lined facultative pond lagoons.
- Over time, ponds were expanded to 16 ponds.
- Long term leakage from the ponds caused elevated total dissolved solids (TDS) and nitrate in groundwater.



# 2006-2015

- 2006 – State Board funding for a 0.5 MGD tertiary treatment plant to produce recycled water.
- No recycled water users identified.
- Tertiary plant effluent disposed to ponds.
- High costs of producing tertiary treated recycled.
- Placed tertiary plant in reserve.

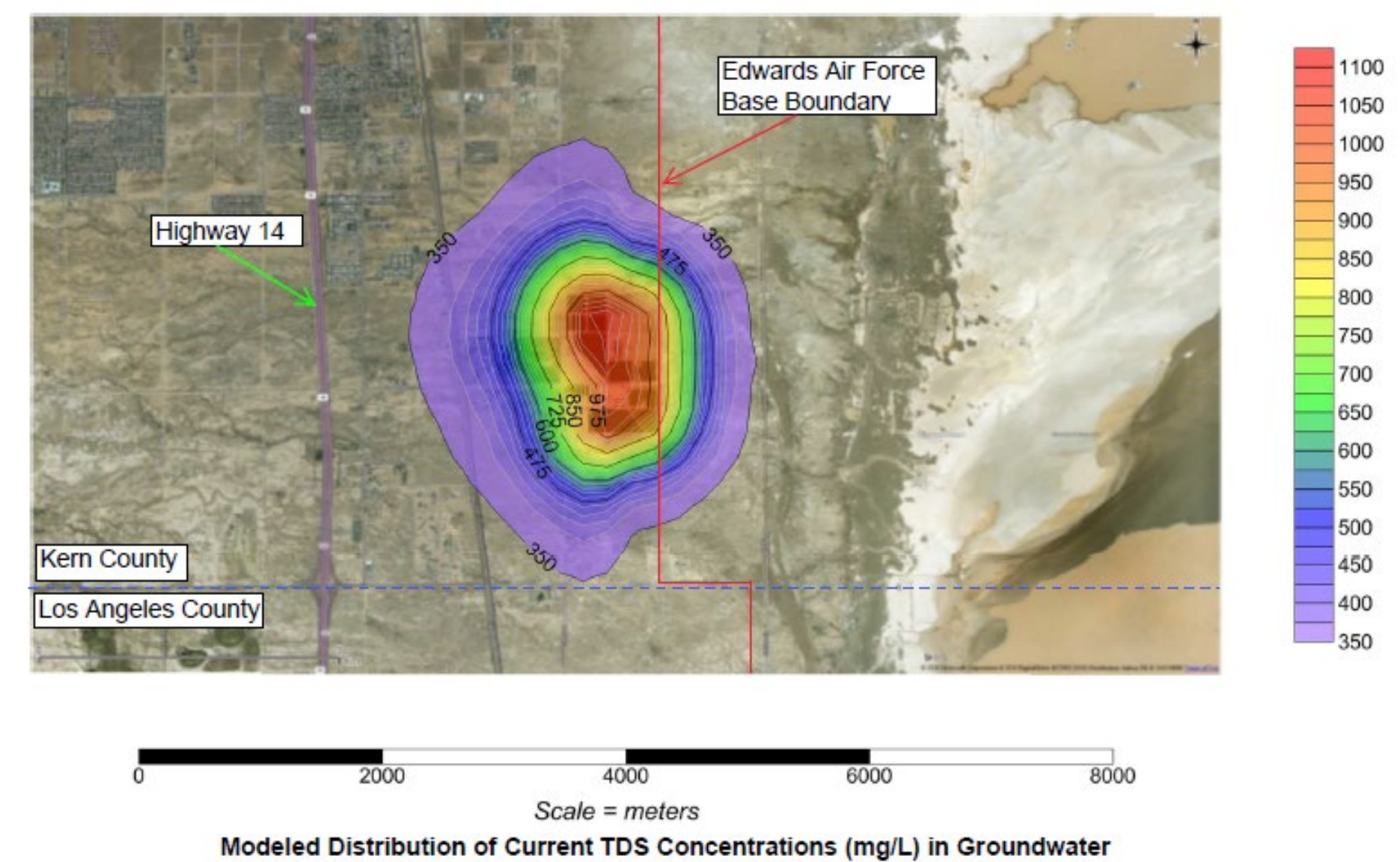


# 2015-2019

- WDRs revised in 2015.
- Time schedule requires:
  - Upgraded wastewater treatment, or
  - Construct lined ponds that meet CCR title 27 requirements.
- Eliminate the source of elevated TDS and nitrate.
- District opted to upgrade treatment.



# Estimate of TDS Groundwater Concentrations





# 2019 - Present

- WDRs revised in 2019 that would follow through on improved treatment.
- Construction in progress and will be completed in 2021.
- The improvements will include:
  - Design flow of 1.27 MGD
  - Produce denitrified undisinfected secondary effluent
  - Discharge to three new percolation ponds.
  - Existing facultative ponds discontinued and cleaned.



# Effects of Plant Improvements

- Improved effluent quality.
- Incidental groundwater discharge, despite the District not falling under Recycled Water Project regulations.
- The District meets adjudication requirements.
- Avoids compliance with title 27 requirements requiring lined ponds in exchange for improved treatment.

# Benefits for Small Agencies

- Agencies in adjudicated basins can continue to receive percolation credits.
- Continued recharge during droughts.
- Continued beneficial use for the community despite funding limitations.

Thank You