

# Chapter Meeting

June 12, 2024 | Barona Indian Reservation

*Thank you  
to our sponsor!*





Welcome to 2024! Please remember to sign-in!

# Agenda

1

## Welcome to Barona Indian Reservation!

2

## Chapter Updates

- Sponsor Highlight
- Regulatory Update
- Funding Update
- Recent and Upcoming Events

3

## WaterReuse Scholarships

*Greater San Diego Science & Engineering Fair*

4

## Barona Recycled Water Program

*Robert Key, Barona*

5

## Ramona Recycled Water Program

*Erica Wolski, Ramona MWD*

6

## Ramona-Barona Connection Project

*Mike Metts, Dudek*

*Thank you  
to our sponsor!*



**Welcome to Barona!**

# Chapter Updates

WateReuse San Diego Officers



# 2024 Officers



**Past-President**  
Lindsey Stephenson  
Olivenhain MWD



**President**  
Rosalyn Prickett  
Rincon Consultants



**President-Elect**  
Mitch Bartolo  
Trussell Technologies



**Treasurer**  
Aaron Cook  
Fallbrook PUD



**Secretary**  
Jessica Cleaver  
San Diego CWA



**Director of PR**  
Antonia Estevez-Olea  
Water Systems  
Consulting



**Newsletter Editor**  
Megan Drummy  
Hazen and Sawyer



**Chapter Representative**  
Tom Falk  
San Elijo JPA

# Regulatory Update

## Recycled Water Permit Fee

- Approved in 2023 budget change proposal
- Water Board proposing two options
- June 13 Water Board workshop
- Adoption expected in September

## Making Conservation a CA Way of Life

- Third draft released in May
- WRCA comments
- Adoption possible in July, effective 2025

## Clean Water State Revolving Fund

- Draft Intended Use Plan released
- Cutoff score of 12
- 14 new projects added to fundable list
- \$50M cap
- Option to increase to \$100M, but no new projects in 25-26
- Water Board workshop July 2 or 3

## Climate Bond

- Possible climate bond of \$6-10B
- WRCA coalition letter accepting signatures
- Requesting \$1B for water recycling

# Funding Update

## USBR WaterSMART

### *Environmental Water Resource Projects*

- Supply reliability for ecological benefits
- Up to **\$3M** for projects completed in 3 years
- Deadline extended to June 25, 2024

## USBR WaterSMART

### *Title XVI Water Reclamation & Reuse Desalination Projects*

- Water reuse and seawater/brackish groundwater
- **\$30M** with approved Feasibility Study
- Applications due September 30, 2024

## USBR WaterSMART

### *Water & Energy Efficiency (WEEG)*

- **\$500k - \$5M**
- Applications due October 30, 2024

## EPA Webinar on Funding to Advance Water Reuse

- June 26th  
1pm - 2:30pm EST
- Will cover CWSRF, DWSRF, WIFIA, Title XVI, etc.



# WaterReuse Recent Events

## Welcome Lunch for WaterReuse California's New Managing Director Brenley McKenna



### 2024 WaterReuse National Conference

- March 11-14, Denver CO

### 2025 WaterReuse National Conference

- March 16-19, Tampa FL
- Call for presentations - due August 16

# Upcoming Events

## 2024 WateReuse CA Conference

- Sept 15-17, 2024
- Garden Grove, CA
- Hotels and registration
- Abstracts due this Friday 6/14
- Awards closed

## WRSD Q3 Chapter Meeting

- Location and date TBD
- Will have call for 2025 chapter officer nominations

## WRSD Q4 Chapter Meeting

- 2025 chapter elections
- Networking
- Location and date TBD

## WateReuse Committees

- CalVal (California Validation) Committee - Antonia Estevez-Olea
- Potable Reuse Permitting & Regulatory Committee - Antonia & Rosalyn

# Sign up for the Potable Water Reuse Report!

## Potable Water Reuse Report

Published by the University of Southern California ReWater Center in cooperation with Trussell

Series 1, Issue 1

8 March 2024

### Direct Potable Reuse Regulations and the Importance of Adaptability in a Rapidly Evolving World: A California Case Study

#### Welcome to the Potable Water Reuse Report!

A collaboration between the University of Southern California ReWater Center and Trussell, this publication is intended to connect the potable water reuse community — including practitioners, regulators, and academics — to keep them up-to-date with the industry's rapidly evolving developments.

In this first of three issues focusing on the development of regulations for direct potable reuse (DPR), we examine the development of California's recently adopted DPR regulations and their implications for the industry at large.

#### Direct Potable Reuse (DPR): Welcome to Primetime

After an intensive 13-year effort, California recently adopted regulations for DPR, joining Colorado to become the second state with finalized requirements. With the proverbial dam now broken, several additional states are considering or actively moving forward with DPR regulatory development.

There is no debating that California has been a national leader in potable reuse, and while many states will likely choose to deviate from the specifics of California's DPR regulatory requirements, it is an opportune moment to look back at the DPR regulatory development process and reflect on what went well and what could be improved.

Now that California's DPR regulation is complete, learning the lessons from California's experience will position other states to more thoughtfully plot their own course to DPR requirements.

#### 1. What Went Well

The California water industry used several legislative mandates (i.e., Senate Bills 938 and 222, Assembly Bill 576) to drive the fast pace of DPR regulatory development from its inception in 2010 to its close in 2023. Throughout this period, California invested in several strategies that played valuable roles in shaping the DPR requirements (Figure 1).

#### Research Investment

Given the industry's limited experience with DPR, California pursued an intensive research effort to identify and address knowledge gaps. This took the form of the California DPR Initiative, a research collaboration between *WaterSense California* and *The Water Research Foundation*, that provided over \$24 million of funding for 34 research projects. These projects proved fundamental in answering the questions that arose as regulators and experts thought about this new paradigm. The research helped confirm the feasibility of developing DPR regulations in 2016 and pointed toward a final set of priority research topics. An additional \$2 million was invested for this final phase in support of DPR regulatory development. The massive research investment can be credited with rapidly bringing DPR out of its infancy and informing many of the requirements in the Regulation.

#### Guidance from Other Applications

The impact of California's 60+ year experience with indirect potable reuse (IPR) cannot be understated. Many of the challenges associated with protecting public health in DPR are also considerations for IPR. The long history and evolution of IPR requirements for the control of pathogens and chemicals, the role of source control and monitoring, treatment, operations, staffing, and governance all informed the DPR requirements.

<https://rewater.usc.edu/potable-water-reuse-report/>



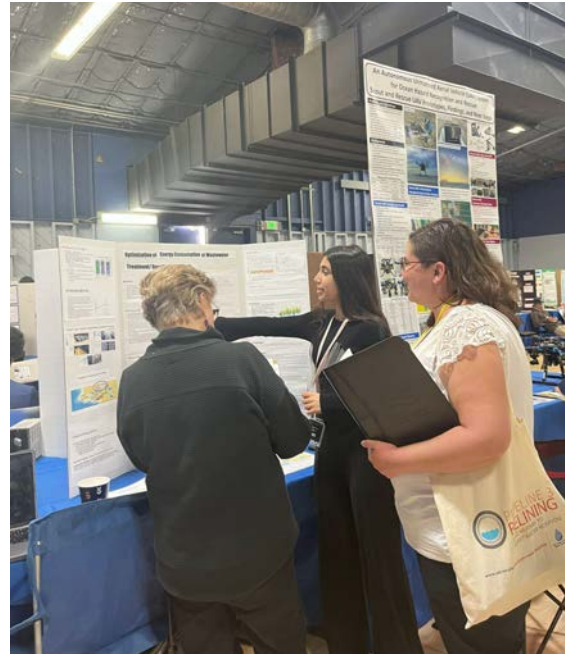
**ReWater**  
C E N T E R

# WaterReuse Scholarships

*Greater San Diego Science &  
Engineering Fair*

# WaterReuse Scholarships

- Thank you to our volunteer judges!!
- 6 scholarships - 3 senior and 3 junior
- \$200 each
- **Project Highlight - Aminah Siddiqui**





**RAMONA**  
MUNICIPAL WATER DISTRICT

# RMWD Recycled Water Program

Erica Wolski, General Manager, RMWD





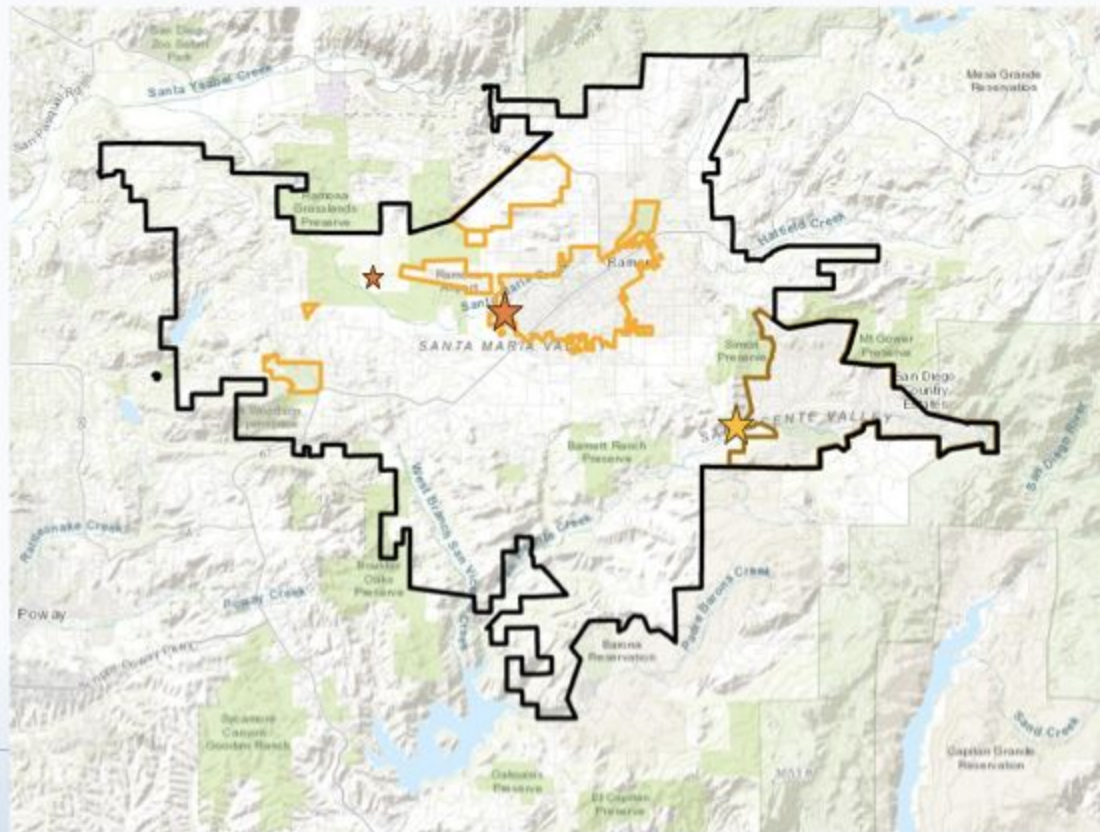
# RMWD's Recycled Water Systems

WaterReuse – San Diego Chapter  
June 11, 2024

# Sewer Service

2 sewer service areas

- ★ Santa Maria - downtown and Mt Woodson
- ★ San Vicente - San Diego Country Estates and Ryland HOA
- Approx 1/3 still on septic



# Santa Maria WRP

- 1.0 MGD
- 0.35 MGD tertiary
- Will run out of plant capacity in 10 years? (TBD)
- Brand new headworks!
- 1.0 MGD Primary Eq Basin
- 2 aeration basins with mechanical aeration
- 4 secondary clarifiers
- Solids handling - centrifuge and hauling





# Santa Maria Ponds and Sprayfield

- Tertiary plant
  - Floc tank
  - Dynex sand filter
  - Chlorine disinfection
- Plant is “on demand” and only serves Mt Woodson Golf Course
- Looking to modify distribution system with untreated ag system de-commissioning



# San Vicente WRP

- 0.8 MGD
- Built out, no expansion planned
- New headworks to be built in 2025
- 2 oxidation ditches
- 4 secondary clarifiers
- 0.25 MG secondary EQ basin





# San Vicente WRP - Tertiary Plant

- Dual Media Pressure Filters- need replacement
- Ultrafiltration
- RO with 3 stages
- Chlorine Disinfection
- Only 1 customer currently: San Vicente Golf Course





## FY 2024-2025 Plans

- Wastewater Master Plan RFP to be released in late summer 2024
- Let us know if you are interested and would like a tour before the RFP is released!



# Thank you!

Erica Wolski, [ewolski@rmwd.org](mailto:ewolski@rmwd.org)



# Barona Recycled Water Program

Robert Key, Facilities Director, Barona Band of Mission Indians

The Barona Water Reclamation Facility, designed by PERC Water, has been in operation since the first Barona Big Top Casino, which opened in 1994.

The facility was expanded to accommodate the larger Barona Resort and Casino, which opened in 2002.

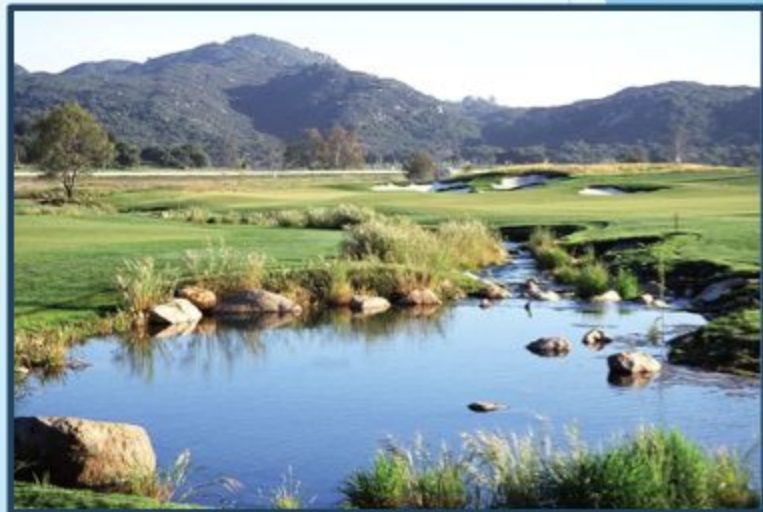


**BWRF recycles nearly 100% of the water:**

- Barona Resort and Casino
- Barona Government Building
- Twelve tribal homes
- Barona Indian Charter school
- Barona Cultural Center and Museum
- Barona Community Center



- Capacity to process maximum of 750,000 gallons per day.
- Recycled water is transferred to ponds throughout resort property.
- Ponds are able to store roughly 100,000,000 gallons of water.
- Annual evaporation rate is approximately 30%.
- Water is reused throughout the Resort and then recycled again.







**You're Invited! Barona Water Reclamation Facility Tour**



**RAMONA**  
MUNICIPAL WATER DISTRICT



# Ramona-Barona Connection Project

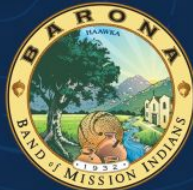
Mike Metts, Principal Engineer, Dudek



# Ramona/Barona Recycled Water Pipeline

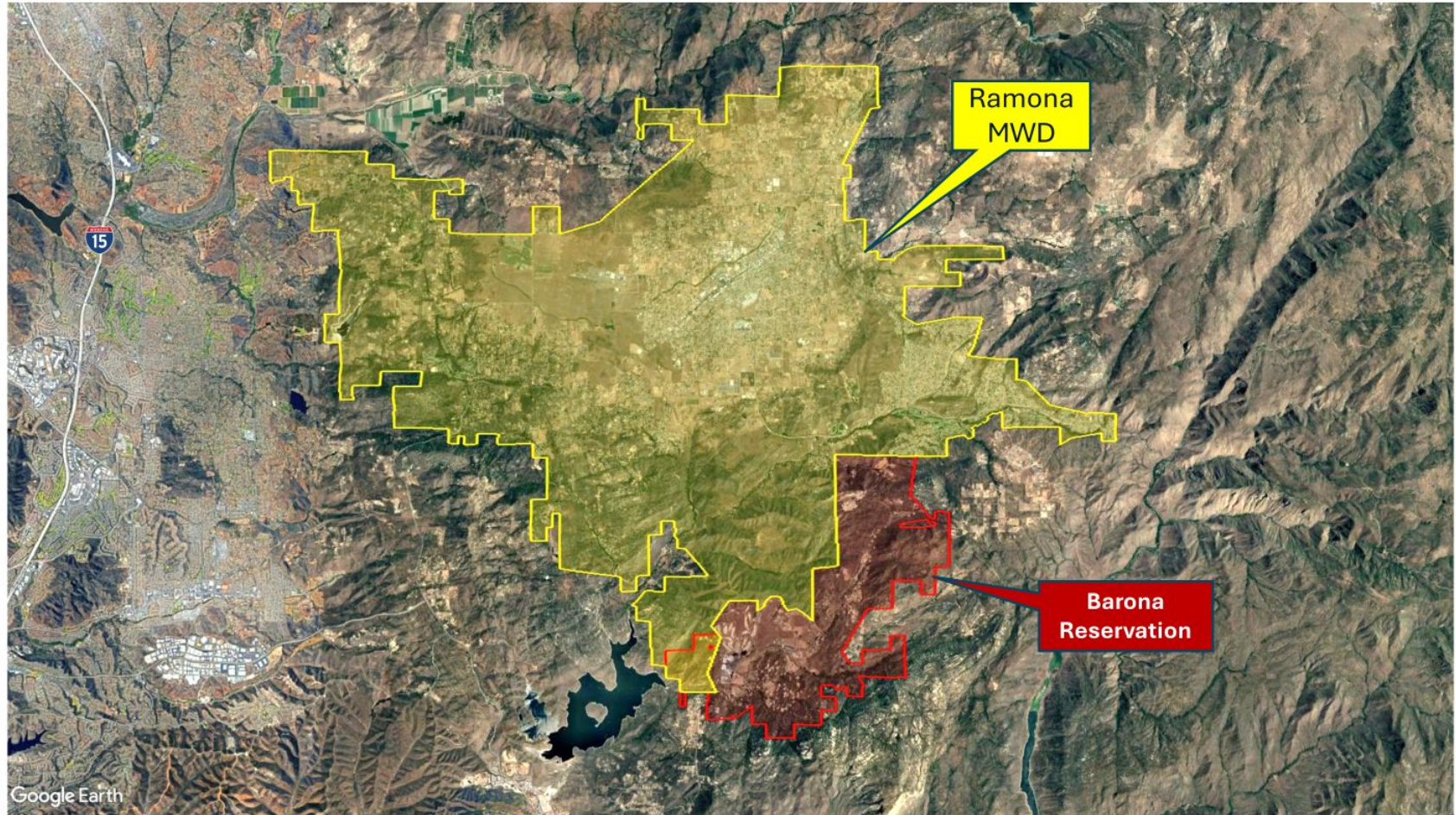
Increasing Water Reliability for Future Tribal Generations

PRESENTED: JUNE 12, 2024





# Ramona MWD Water Service Area + Barona Reservation



Ramona  
MWD

Barona  
Reservation

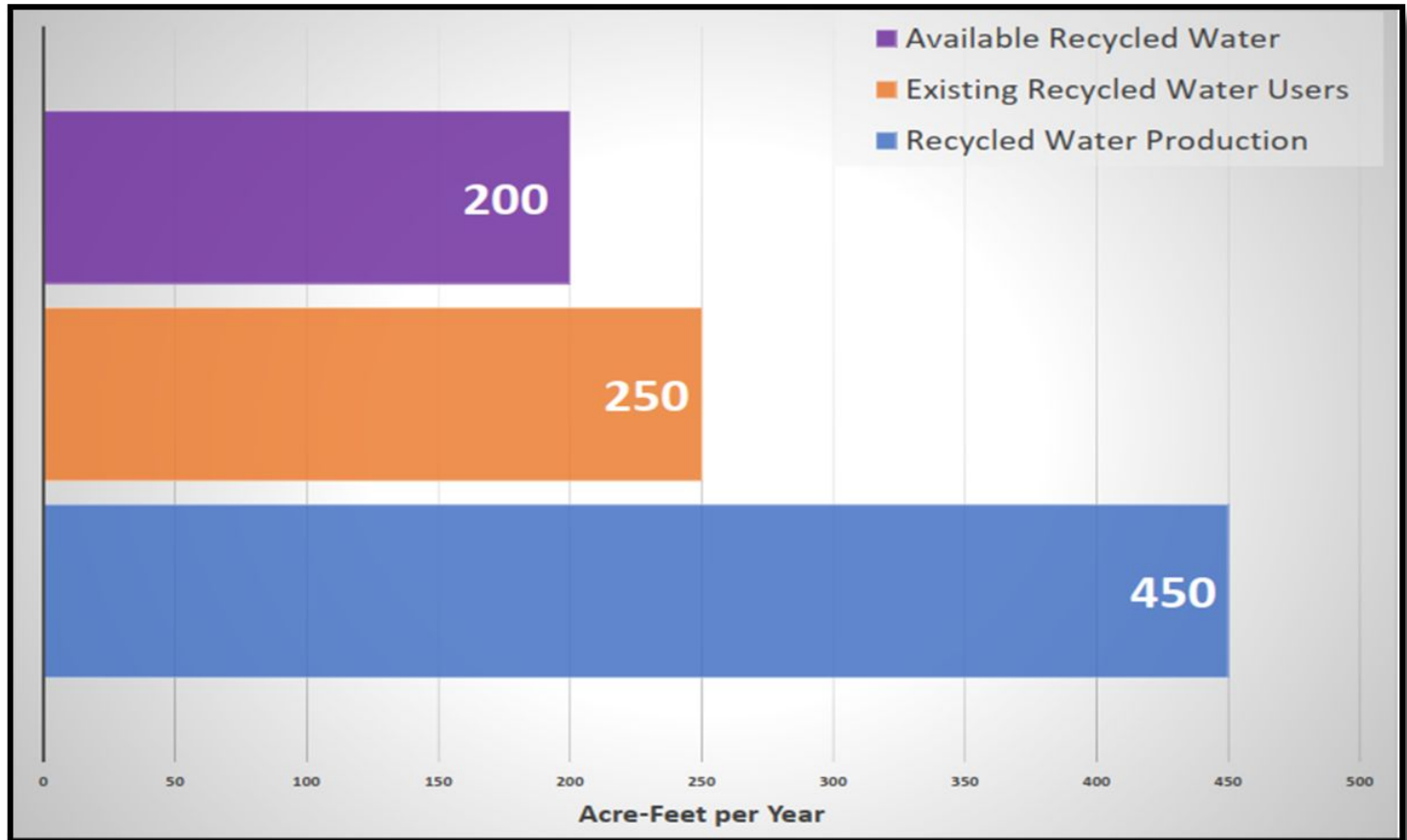




Pumping Capacities:  
280 gpm & 1,000 gpm

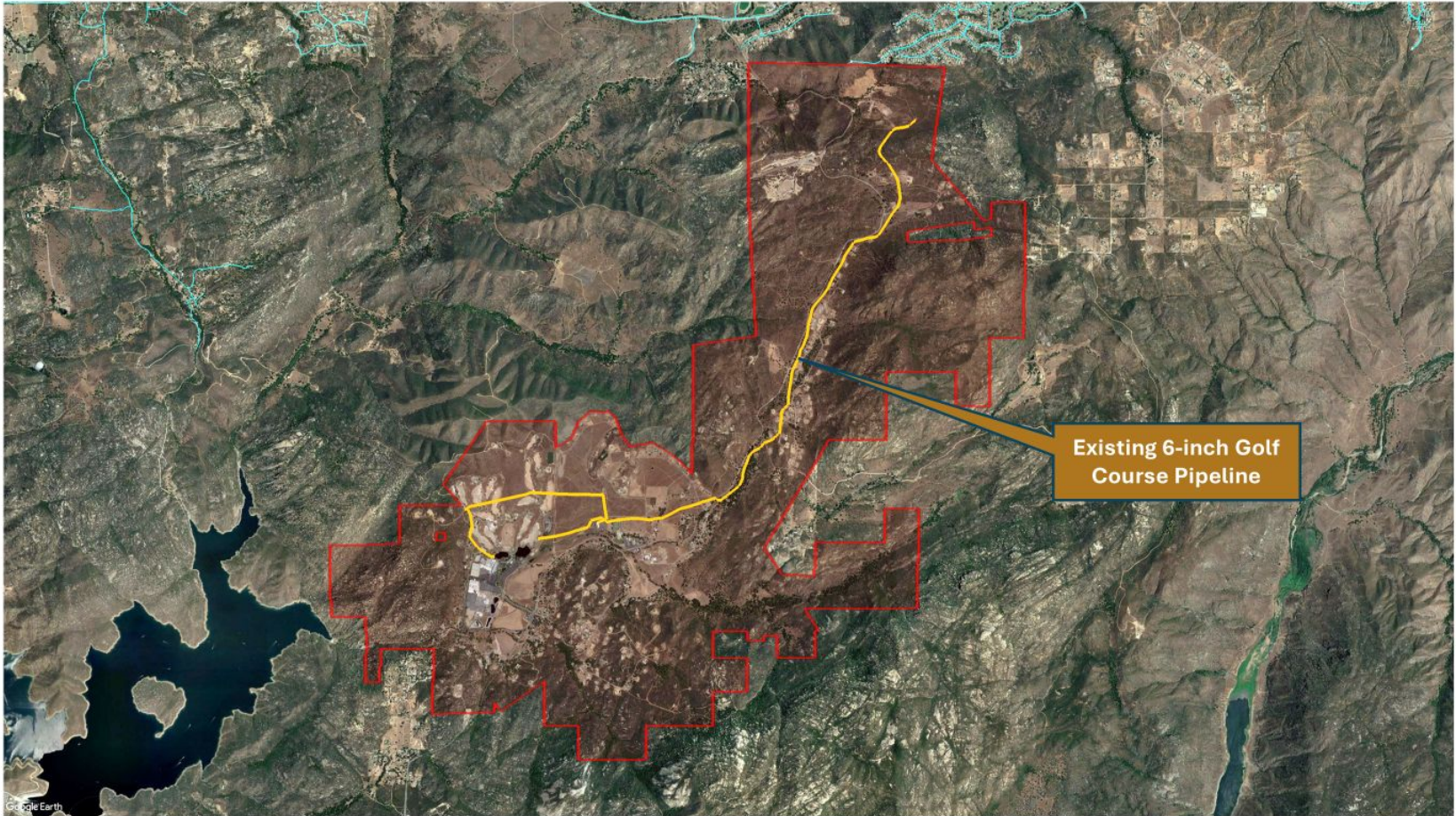
RW Pump Station

# Recycled Water Availability



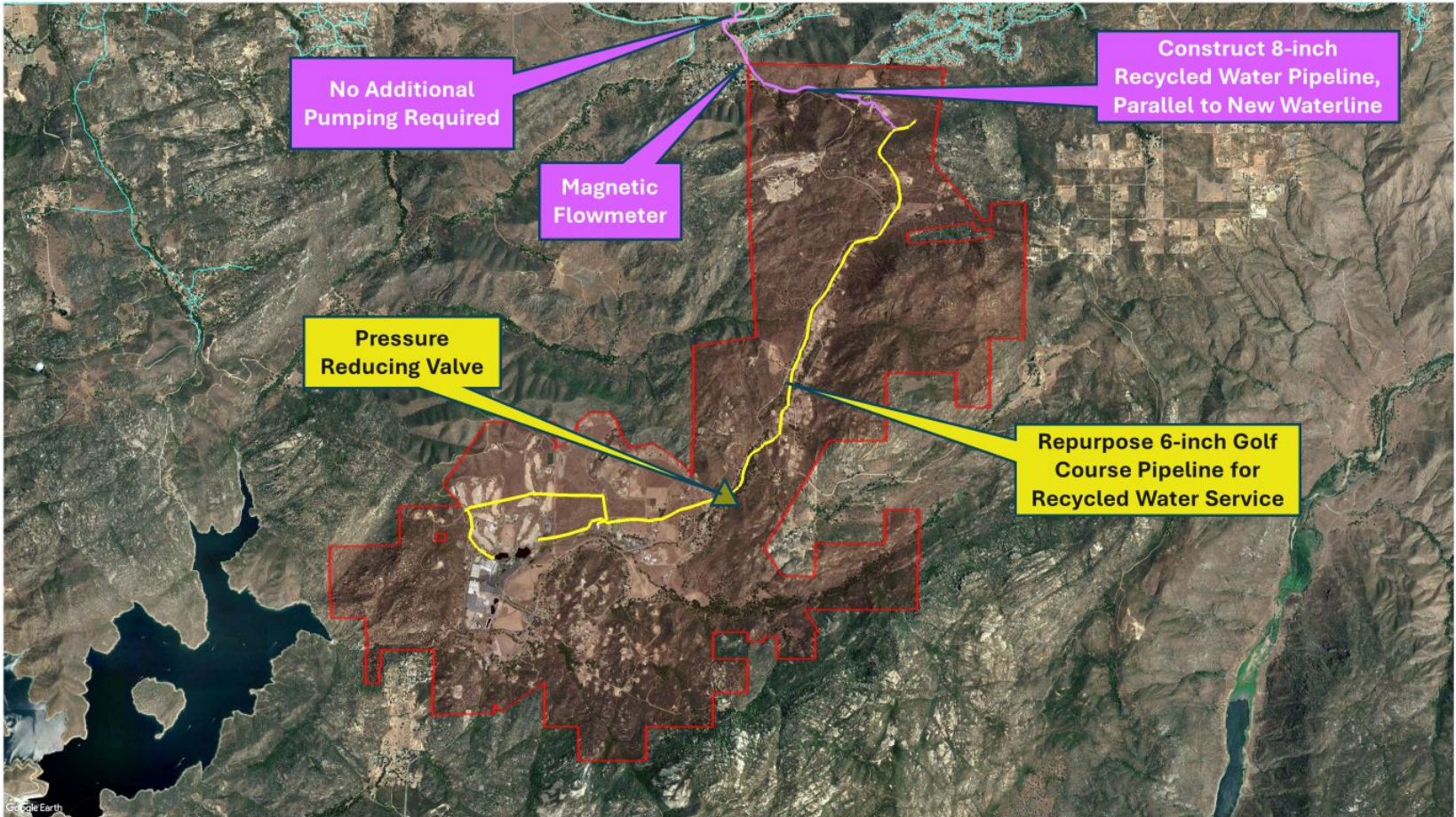


# Existing Barona Non-Potable Pipeline

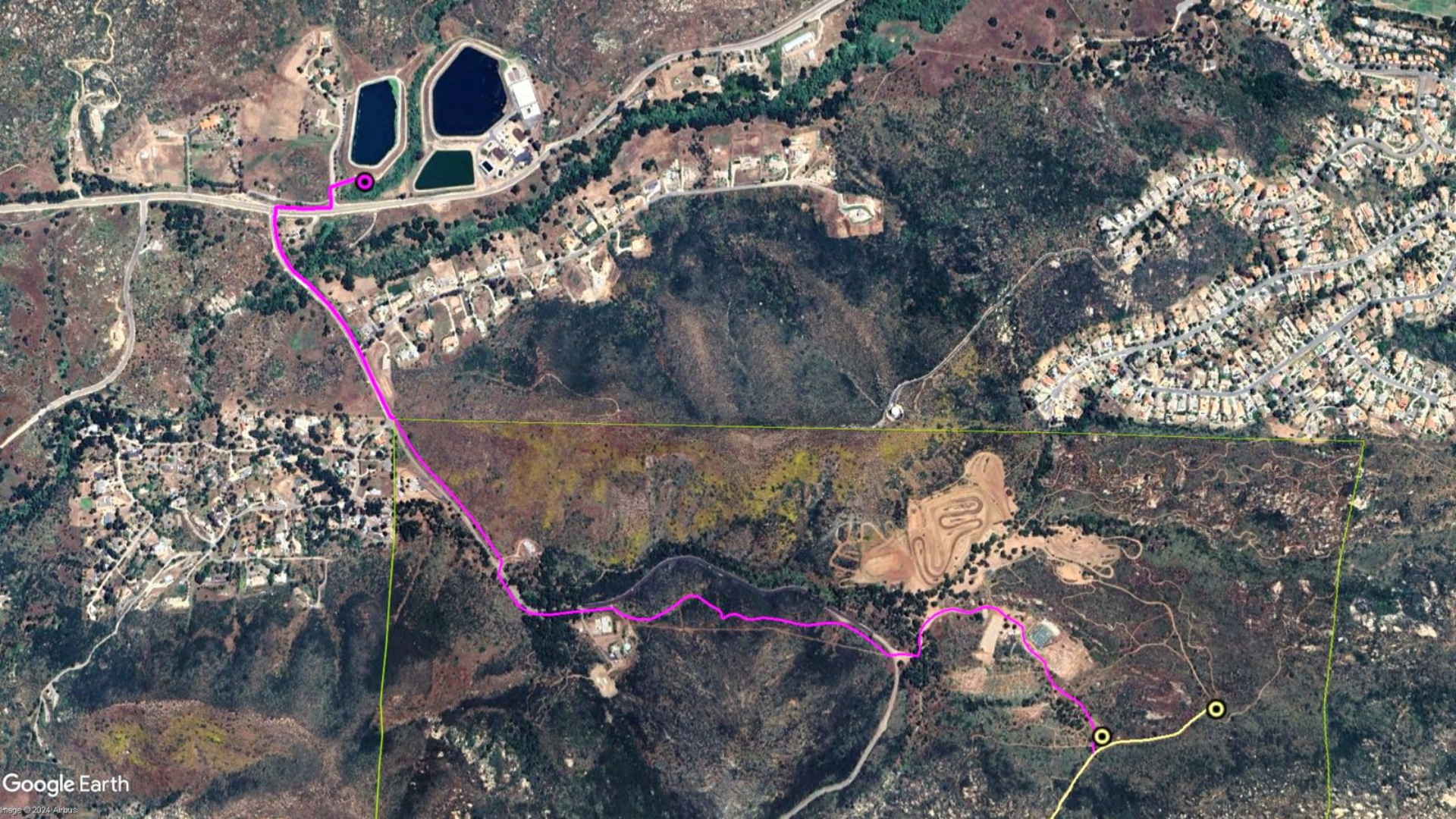




# Proposed Recycled Water Improvements











Google Earth



Google Earth





Google Earth





Google Earth





Existing Well

Existing Well



# Recycled Water Cost Details (up to 250 afy)

## Project Cost Estimate



✓ Grant Award is 100% of Recycled Water Project Cost for DAC Tribal Status



Please join us  
for a tour of  
the Barona  
WRF!

# Directions to Barona WRF

