

May 19, 2023

# Central San's Recycled Water Past, Present and Future

WaterReuse California Association  
NorCal/Central Valley Joint  
Chapter Meeting

**Melody LaBella, P.E.,**  
Resource Recovery Program Manager

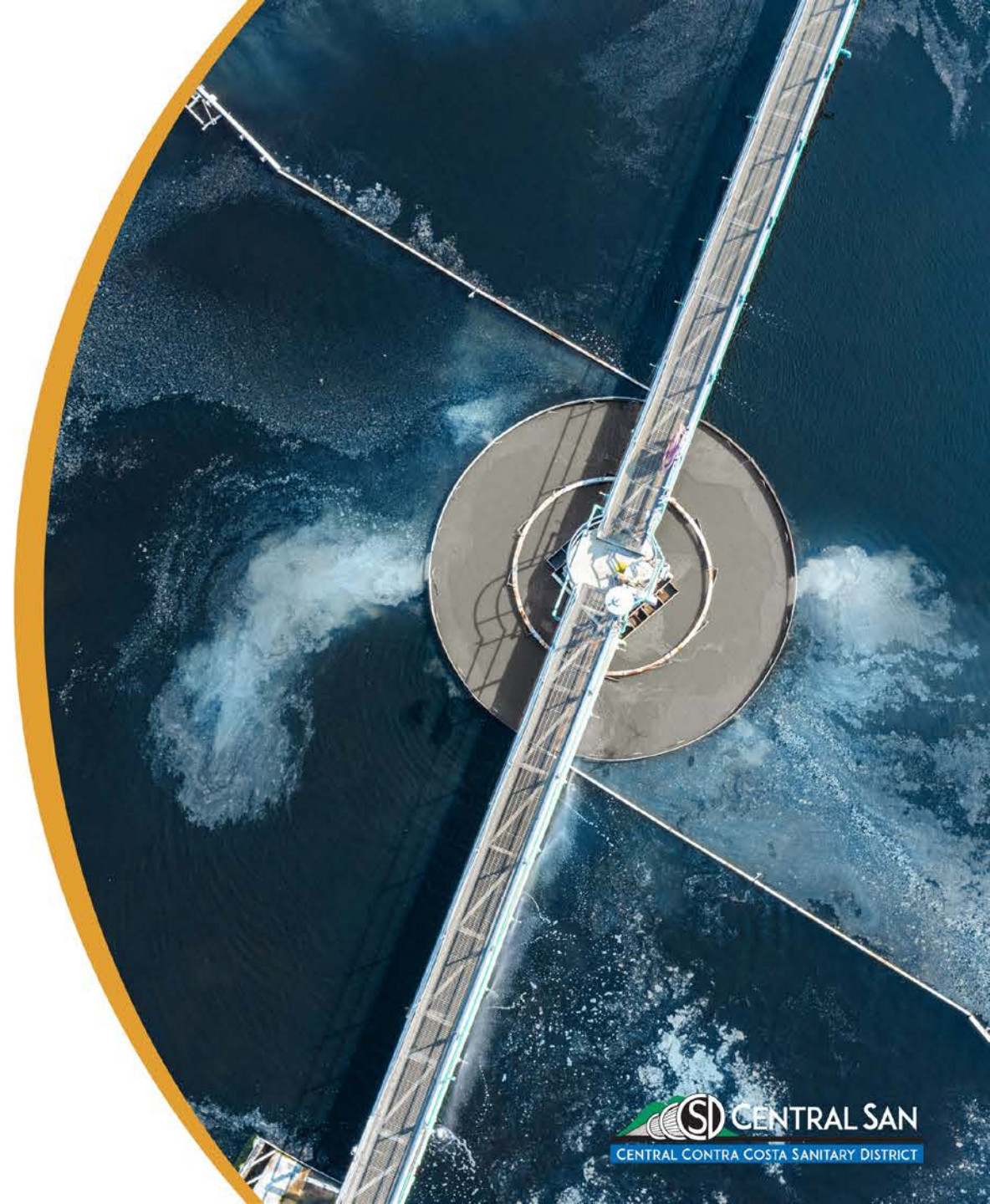


# About Central San



- 146 sq. mile service area
- Serve ~500,000 residents and 3,000+ businesses
- >1,500-mile sewer system
- 53.8 MGD-rated treatment plant
- 2022 Average Daily Flow was ~34 MGD
- Primarily domestic flow
- Currently recycle only 5%

# Central San's Recycled Water Past



# Central San's Treatment Plant in 1968



# Central San's Treatment Plant Today\*



# Recycled Water Facilities

## Forebays, Applied Water Pumps, Filter Facility



# Recycled Water Facilities

## Dual-Media Filters



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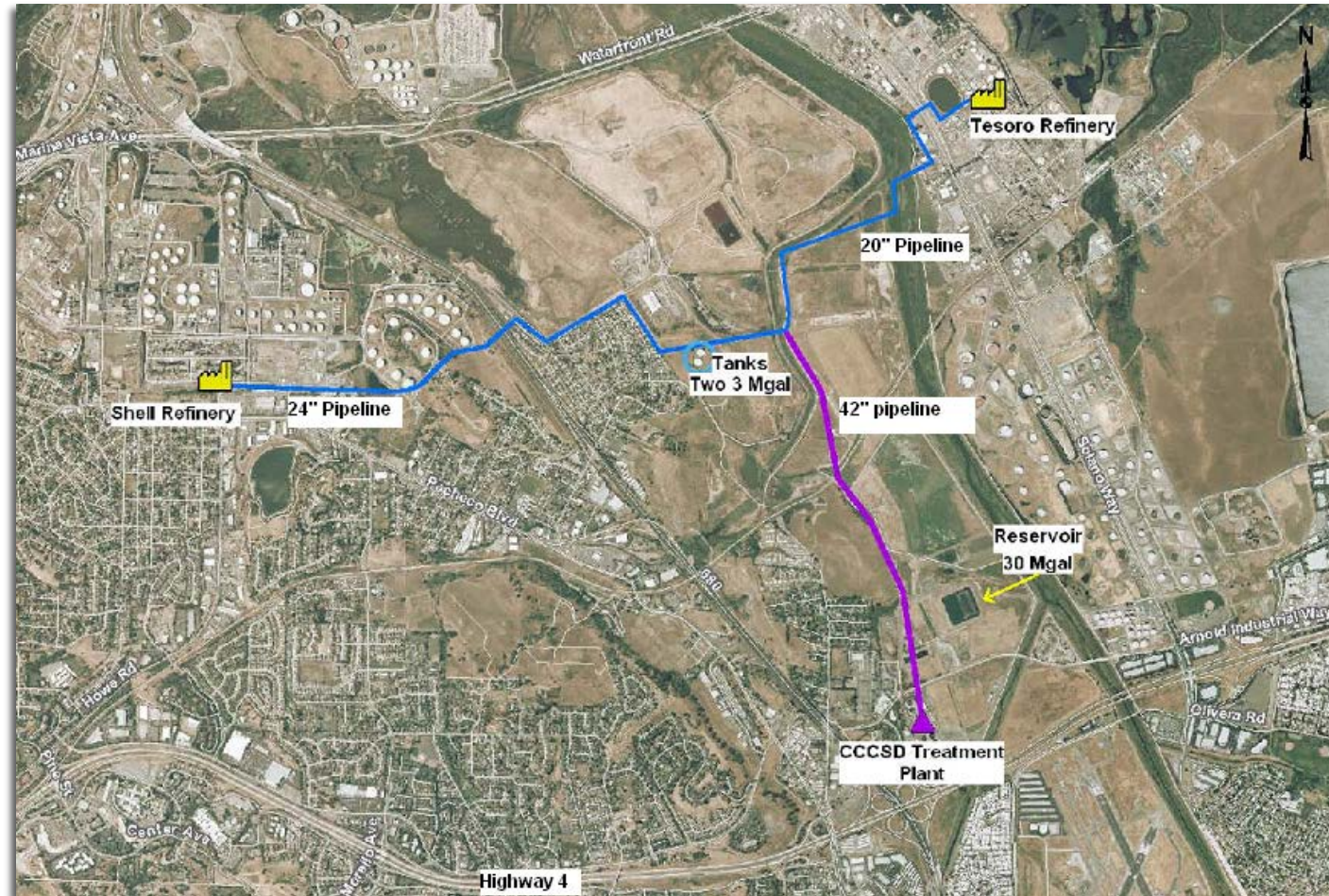
# Recycled Water Facilities

## Clearwell Storage Reservoir



# Recycled Water Facilities

## Distribution Pipelines



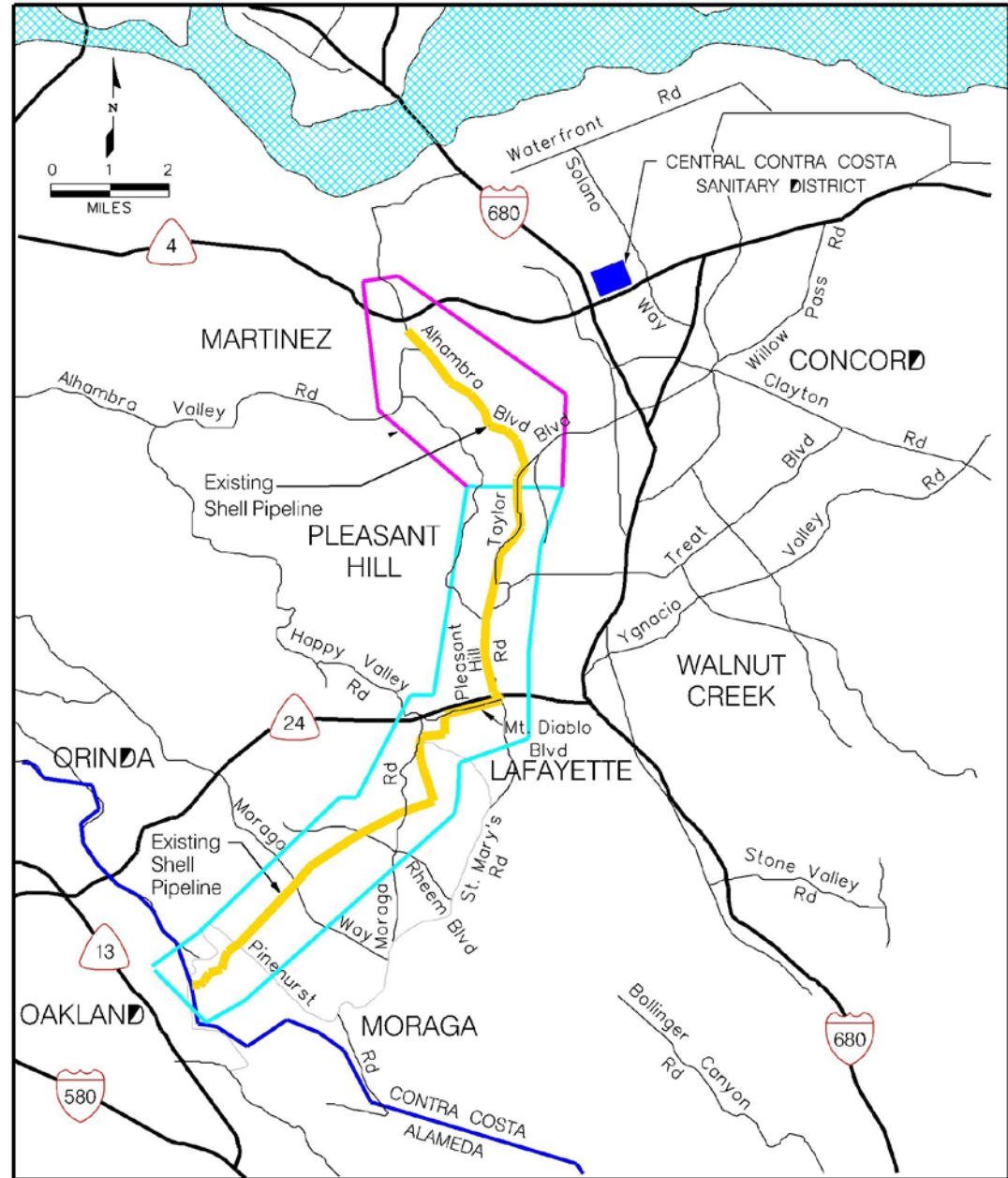
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PLAN B

~~PLAN A~~

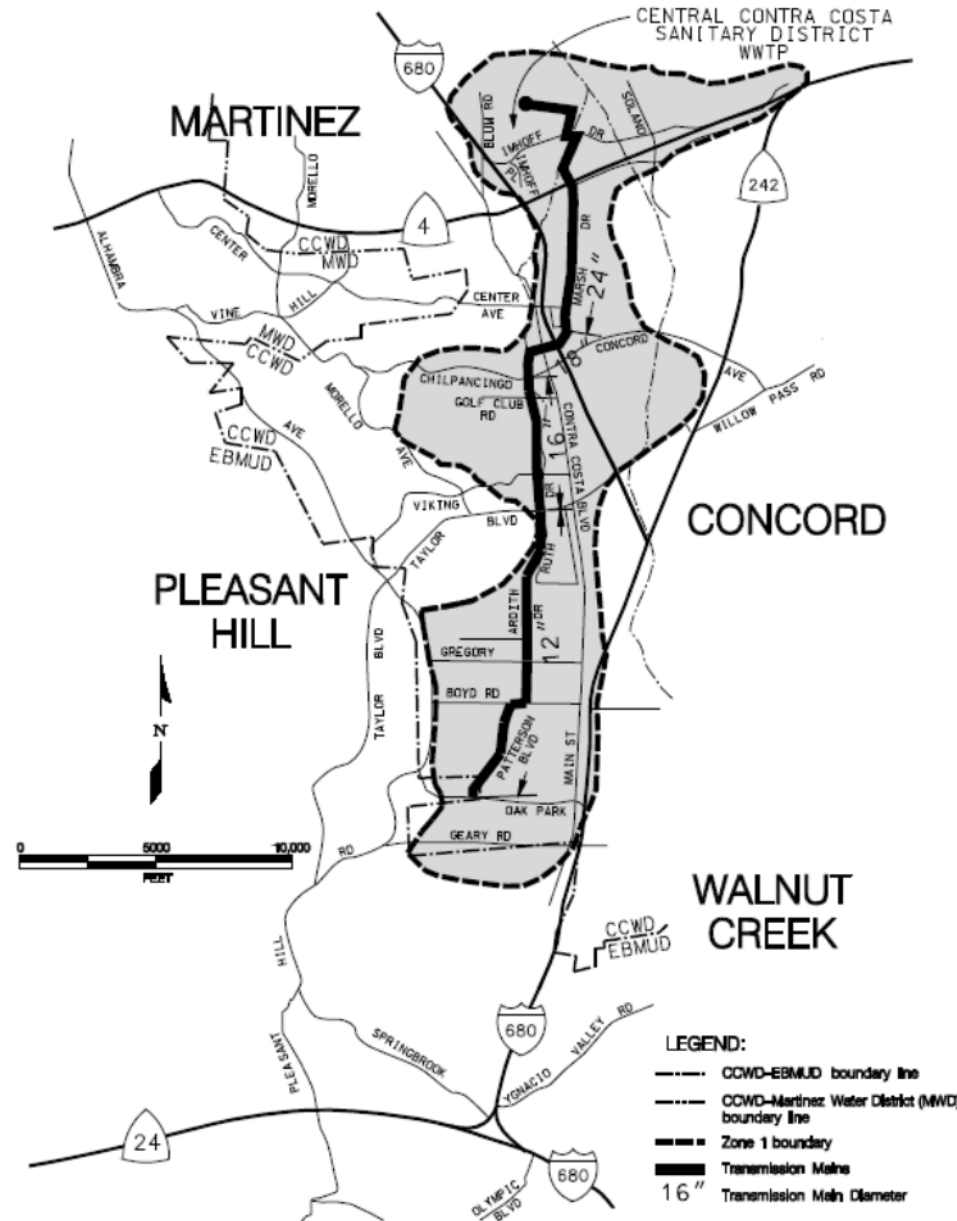
A hand holding a grey marker is shown in the lower right portion of the image. The hand is positioned as if it has just finished drawing a large red 'X' over the words 'PLAN A' and is now pointing towards the words 'PLAN B' above it. The hand is wearing a light-colored, long-sleeved shirt.

# Lamorinda Project





# ZONE 1 RECYCLED WATER PROJECT



# Central San's Recycled Water Present

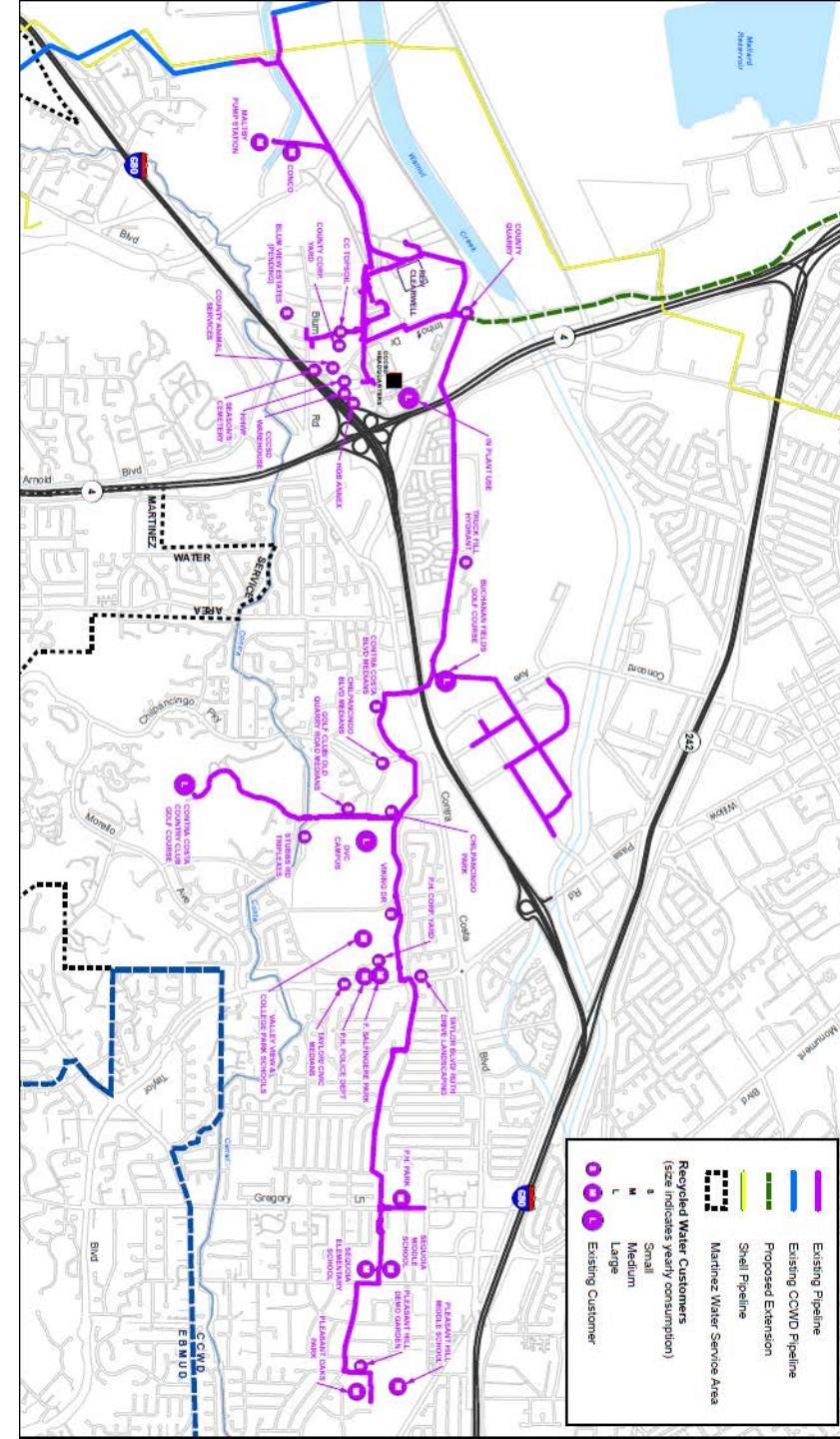
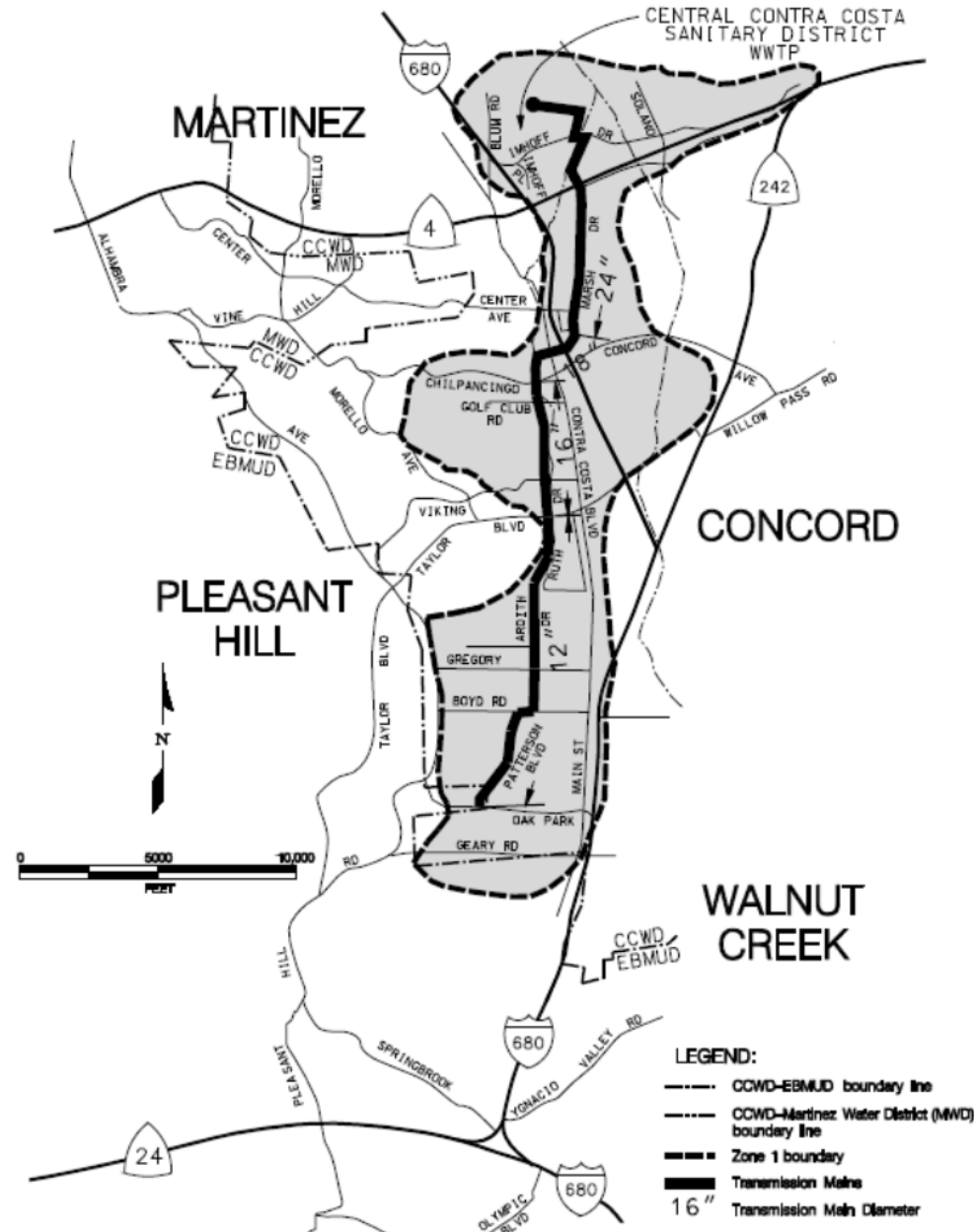


# Central San's Recycled Water Program





# ZONE 1 RECYCLED WATER PROJECT

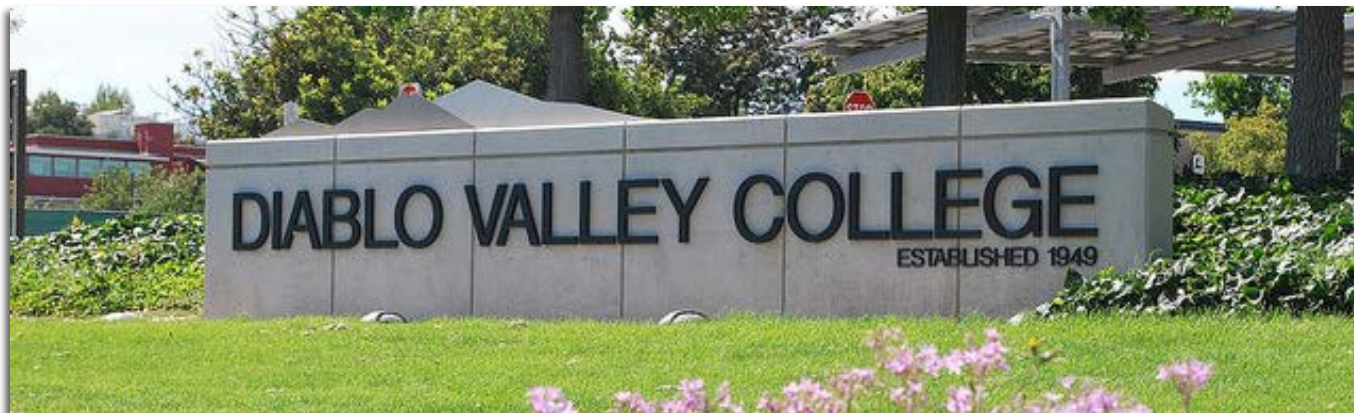


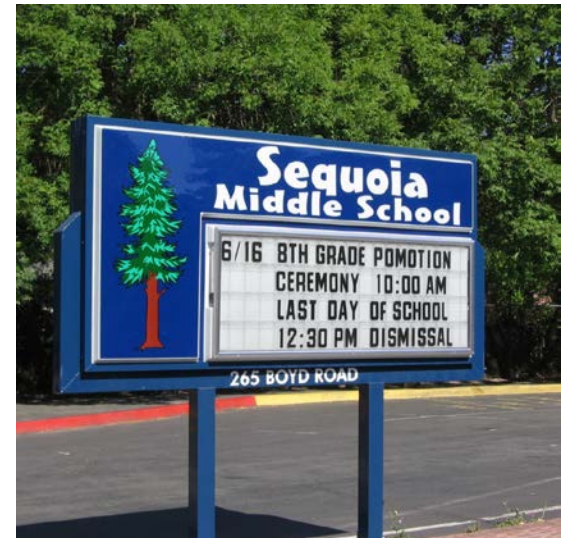
# Buchanan Fields Golf Course



# Contra Costa Country Club Golf Course







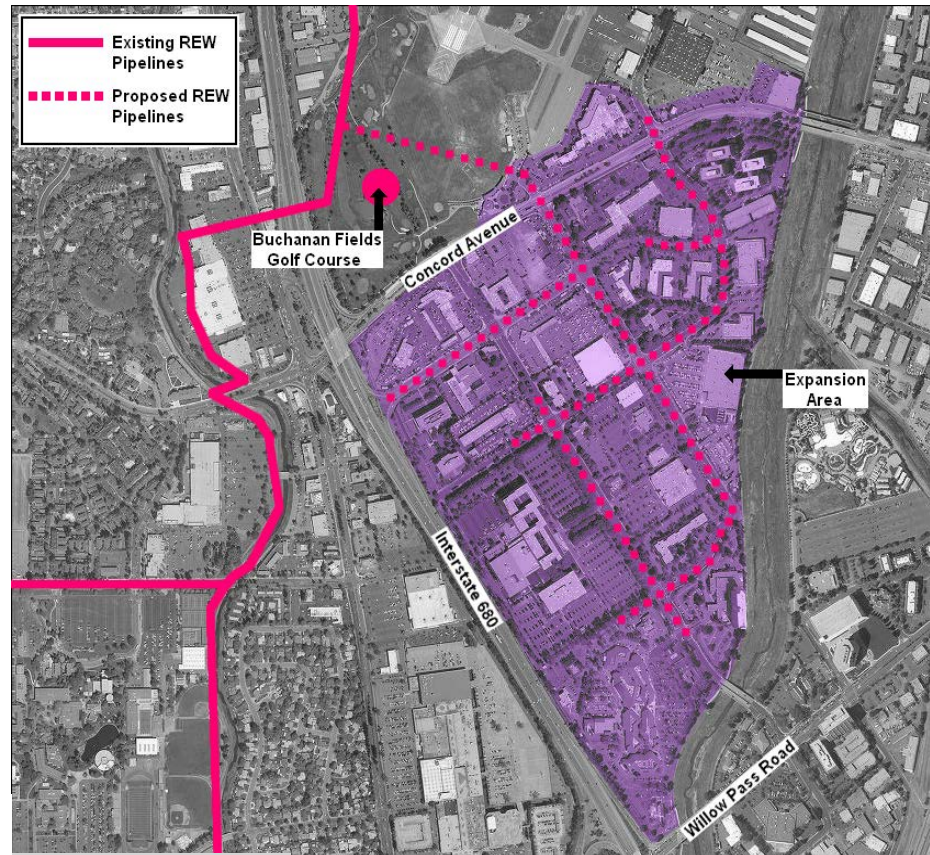
# Mt. Diablo Unified School District

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# Pleasant Hill Recreation & Park District

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# Concord Recycled Water Project

# DVC DIABLO VALLEY COLLEGE



RESTROOM

TO CONSERVE WATER,  
THIS BUILDING USES  
RECYCLED WATER  
TO FLUSH TOILETS AND URINALS.

# Toilet & Urinal Flushing



TO CONSERVE WATER,  
THIS BUILDING USES  
**RECYCLED WATER**  
TO FLUSH TOILETS  
& URINALS.



# Commercial Truck Fill Program

- Provides recycled water to licensed contractors for construction activities such as dust control, soil compaction, and plant establishment
- Contractors can access recycled water via purple fire hydrants or from Central San's Commercial Fill Station.
- First 100,000 gallons of recycled water is free of charge.



One of Central San's three hydrants (left) and a portable meter (middle) that contractors can use to obtain Central San's recycled water. Central San's Fill Station (right).

# Residential Fill Station



The Residential Fill Station Program allows central Contra Costa County residents to pick up recycled water free of charge at our HHW facility in Martinez for hand-watering lawns, landscaping and gardens.

## **How to use this program:**

- Complete an Application/Use Agreement and a brief training class on the proper use of recycled water
- Brings containers with water tight lids; 1 gallon minimum to 300 gallon maximum
- Use appropriately-sized containers and vehicles for transport (water is heavy!)
- Unlimited trips allowed

# AgLantis

CoCo San Sustainable Farm





# Pleasant Hill Library

# DERWA Temporary Wastewater Diversion Project



# AGREEMENTS

## AGREEMENT FOR THE TEMPORARY DIVERSION OF WASTEWATER BETWEEN DUBLIN SAN RAMON SERVICES DISTRICT – EAST BAY MUNICIPAL UTILITY DISTRICT RECYCLED WATER AUTHORITY AND CENTRAL CONTRA COSTA SANITARY DISTRICT

This Agreement for Temporary Diversion of Wastewater between the Dublin San Ramon Services District – East Bay Municipal Utility District Recycled Water Authority (DERWA) and Central Contra Costa Sanitary District (Central San) ("Agreement") is made and entered into this 4<sup>th</sup> day of February, 2019. DERWA and Central San are individually referred to as "Party," and collectively as "Parties."

### WITNESSETH

WHEREAS, DERWA, a joint powers authority of Dublin San Ramon Services District (DSRSD) and East Bay Municipal Utility District (EBMUD), has a temporary need for supplemental wastewater influent to serve as a source for tertiary-treated recycled water throughout the EBMUD and DSRSD service areas; and

WHEREAS, DSRSD provides potable and recycled water to the Dougherty Valley portion of the City of San Ramon and wastewater collection and treatment to the southernmost portion of the City of San Ramon, and EBMUD provides potable water to all other areas of the City of San Ramon and recycled water to a portion of the City of San Ramon; and

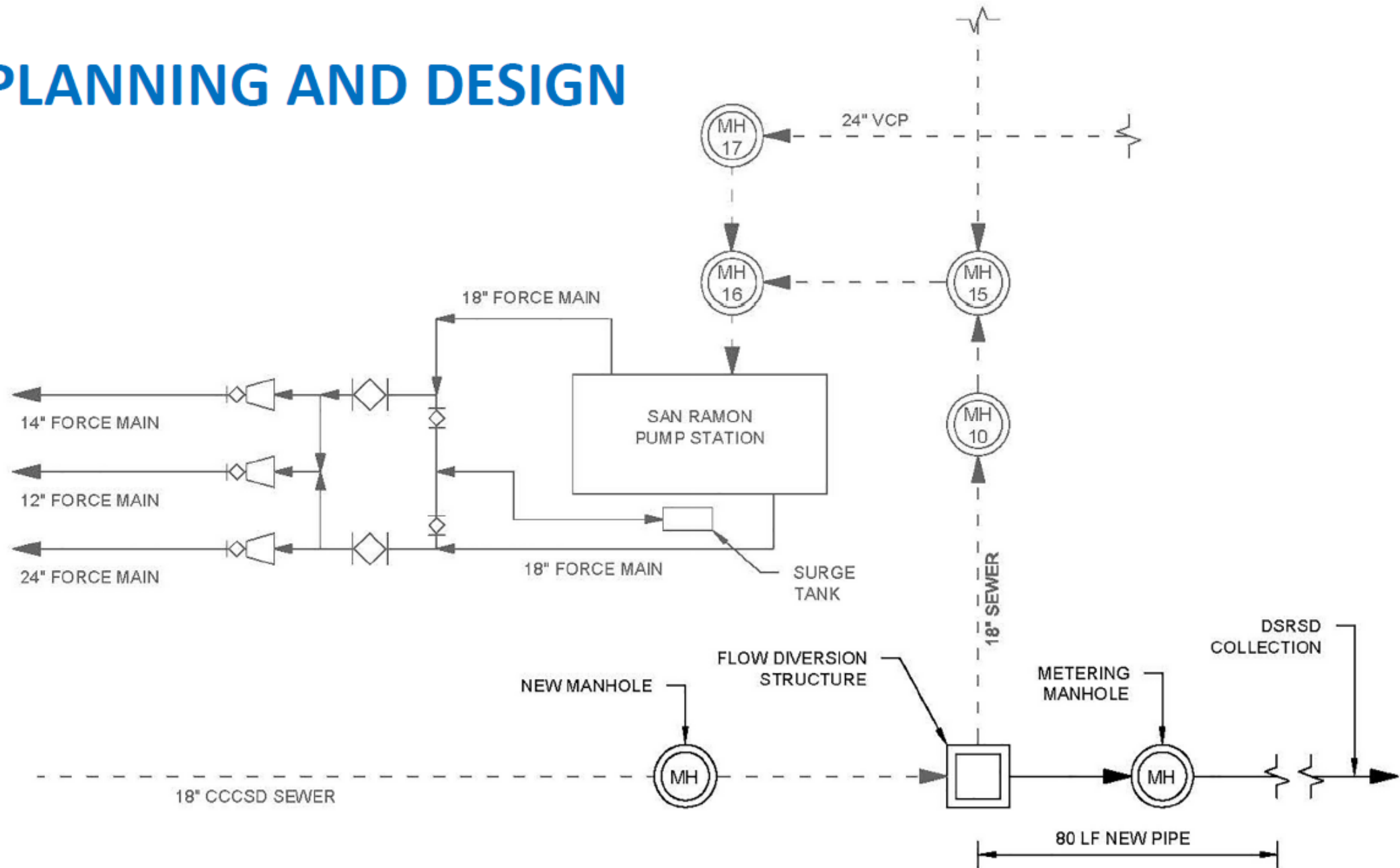
WHEREAS, Central San provides wastewater collection, treatment, and disposal services to a major portion of the City of San Ramon, including the Dougherty Valley and has the temporary ability to redirect some of its wastewater to the DSRSD collection system; and

WHEREAS, DERWA has requested to temporarily divert a portion of Central San's wastewater upstream of the San Ramon Pumping Station to serve as a source for the production of tertiary-treated recycled water at DSRSD's treatment plant to help meet immediate recycled water demands in the EBMUD and DSRSD service areas while long-term supply options are identified; and

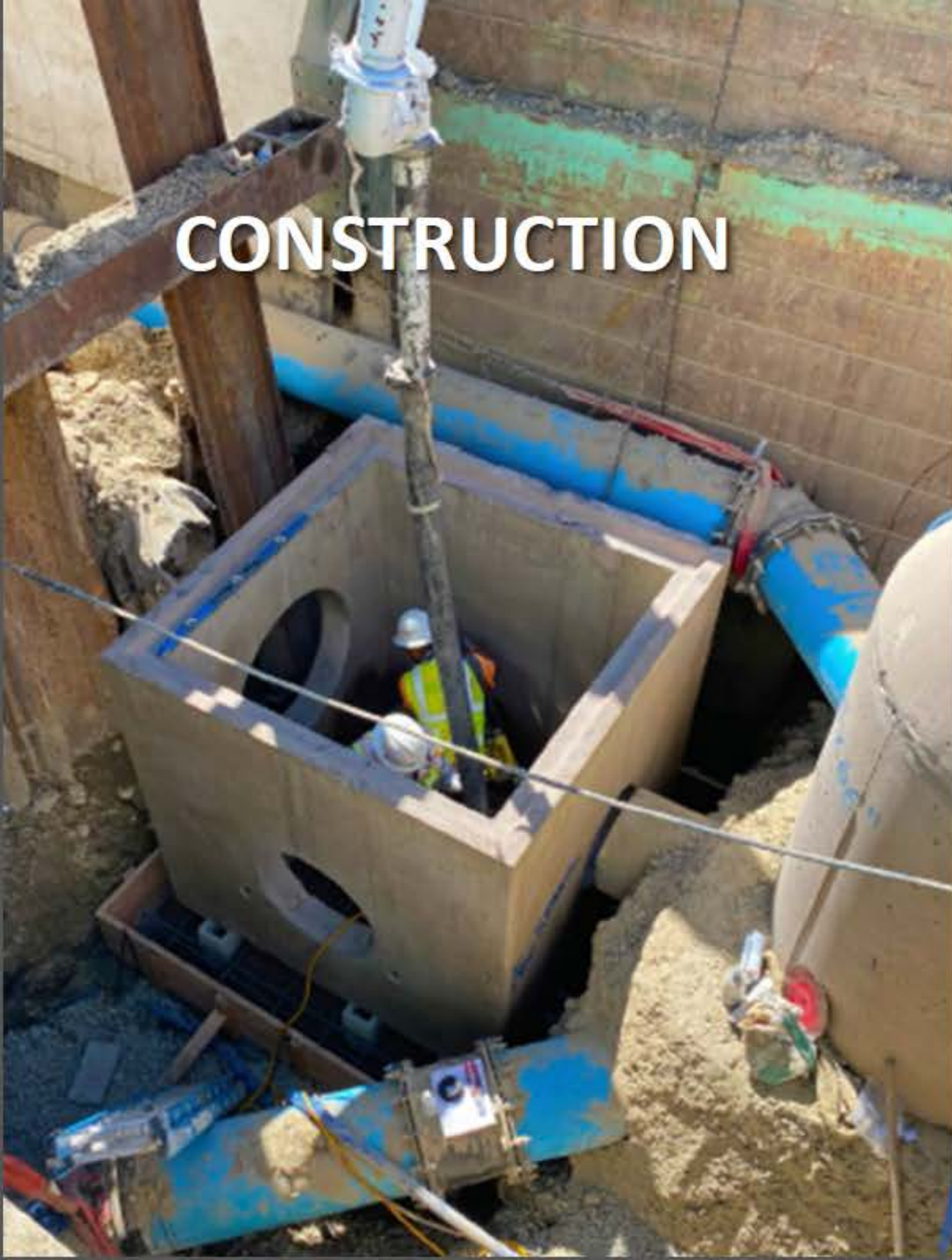
WHEREAS, Central San has completed a "Wholesale Recycled Water Opportunities Study" to identify potential large-scale recycled water projects at its main treatment plant with year-round demand that will maximize the beneficial use of its wastewater; and

WHEREAS, Central San, Contra Costa Water District (CCWD) and Santa Clara Valley Water District (SCVWD), are currently evaluating the feasibility of implementing the Refinery Recycled Water Exchange Project, in which Central San would provide, all year round, 20 million gallons per day (MGD) of recycled water to CCWD to serve to the Martinez refineries

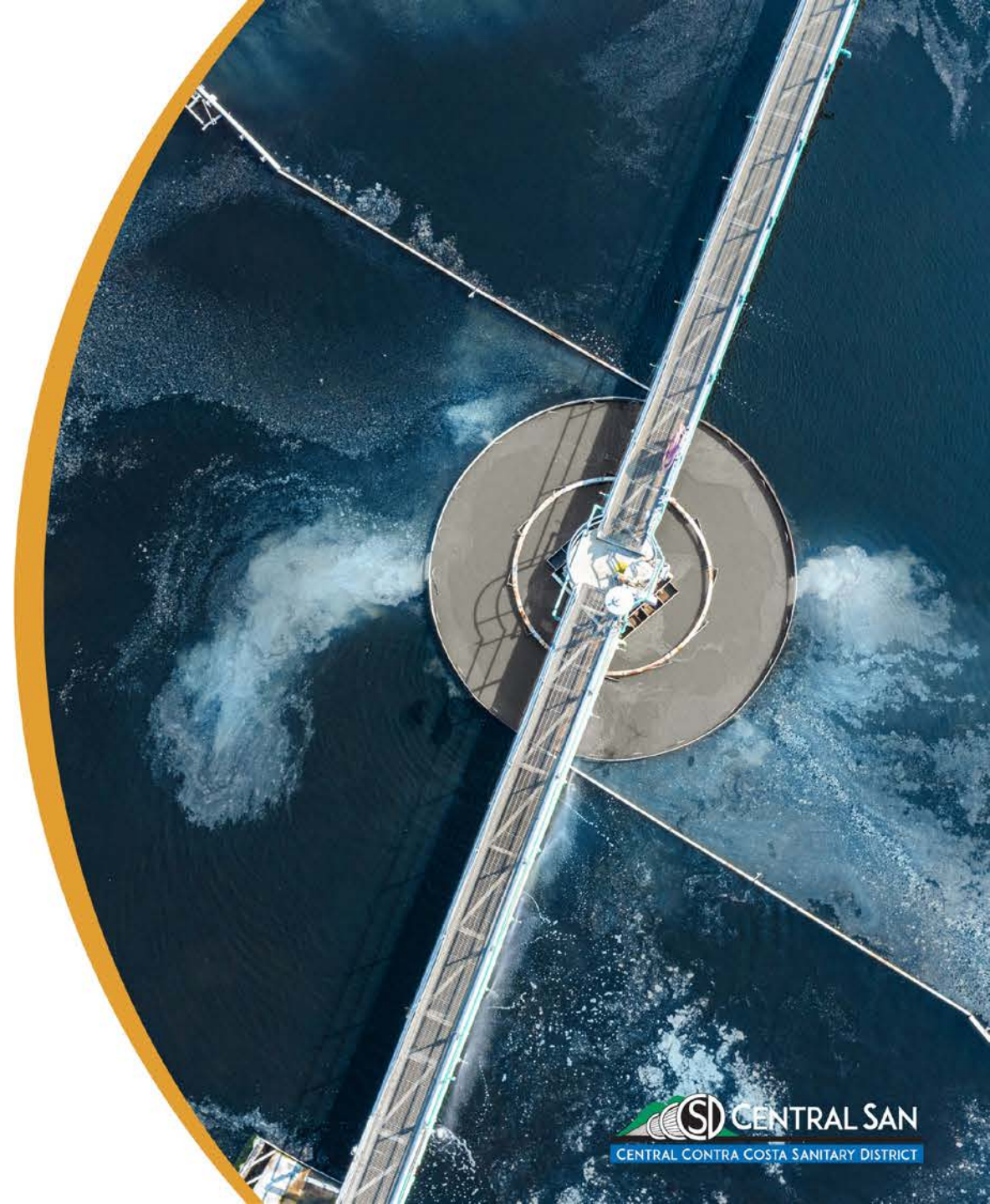
# PLANNING AND DESIGN



# CONSTRUCTION



# Central San's Recycled Water Future?





## RECYCLED WATER PLANNING EFFORTS



# Diablo Country Club Satellite Water Recycling Facility (SWRF)



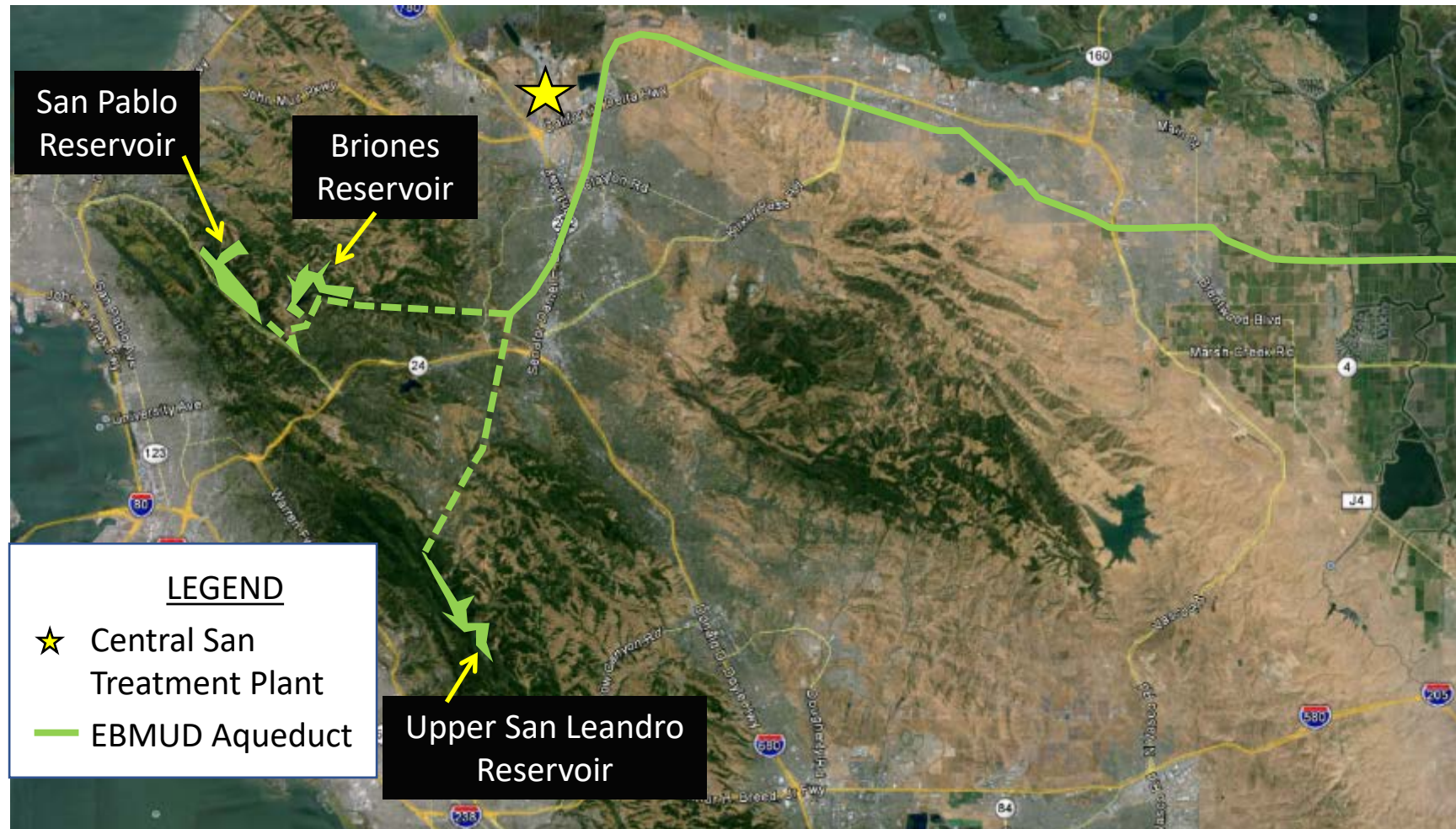
# Diablo Country Club SWRF Project Concept



# Refinery Recycled Water Exchange Project Concept



# Potential for Potable Reuse with EBMUD



**Questions or Comments?**

