

# ***Overview of CCCSD's Recycled Water Program***

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**Melody LaBella, P.E.  
LAFCO Board Meeting  
November 18, 2015**



**Central Contra Costa Sanitary District**

*Protecting Public Health and the Environment*

# Central Contra Costa Sanitary District (CCCSD)



- 146 sq. mile service area
- Serves ~475,000 residents and 3,000+ businesses
- >1,500 mile sewer system

## 2014 Stats

- Treated ~36 MGD (average daily)
- 17 years of full NPDES compliance
- Produced ~530 million gallons of recycled water
- Collected >1 million lbs of HHW and >12,500 lbs of unwanted pharmaceuticals



# CCCSD's Original Treatment Plant



# CCCSD's Treatment Plant Today



# Water Reclamation Facilities

Forebays, Applied Water Pumps, Filter Plant



# Water Reclamation Facilities

## Filters

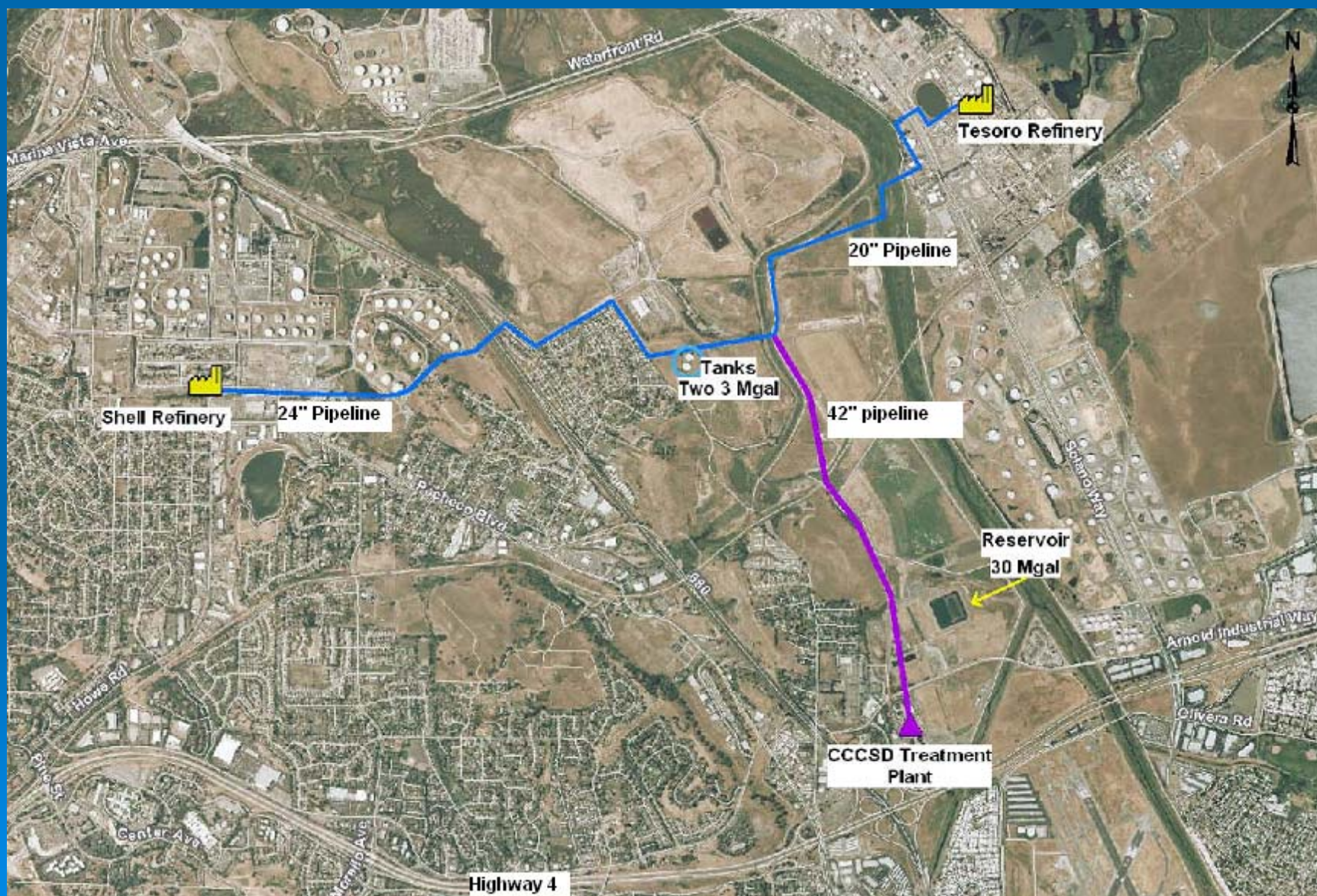


# Water Reclamation Facilities

## Pipeline and Clearwell Storage Reservoir



# Distribution Facilities Constructed



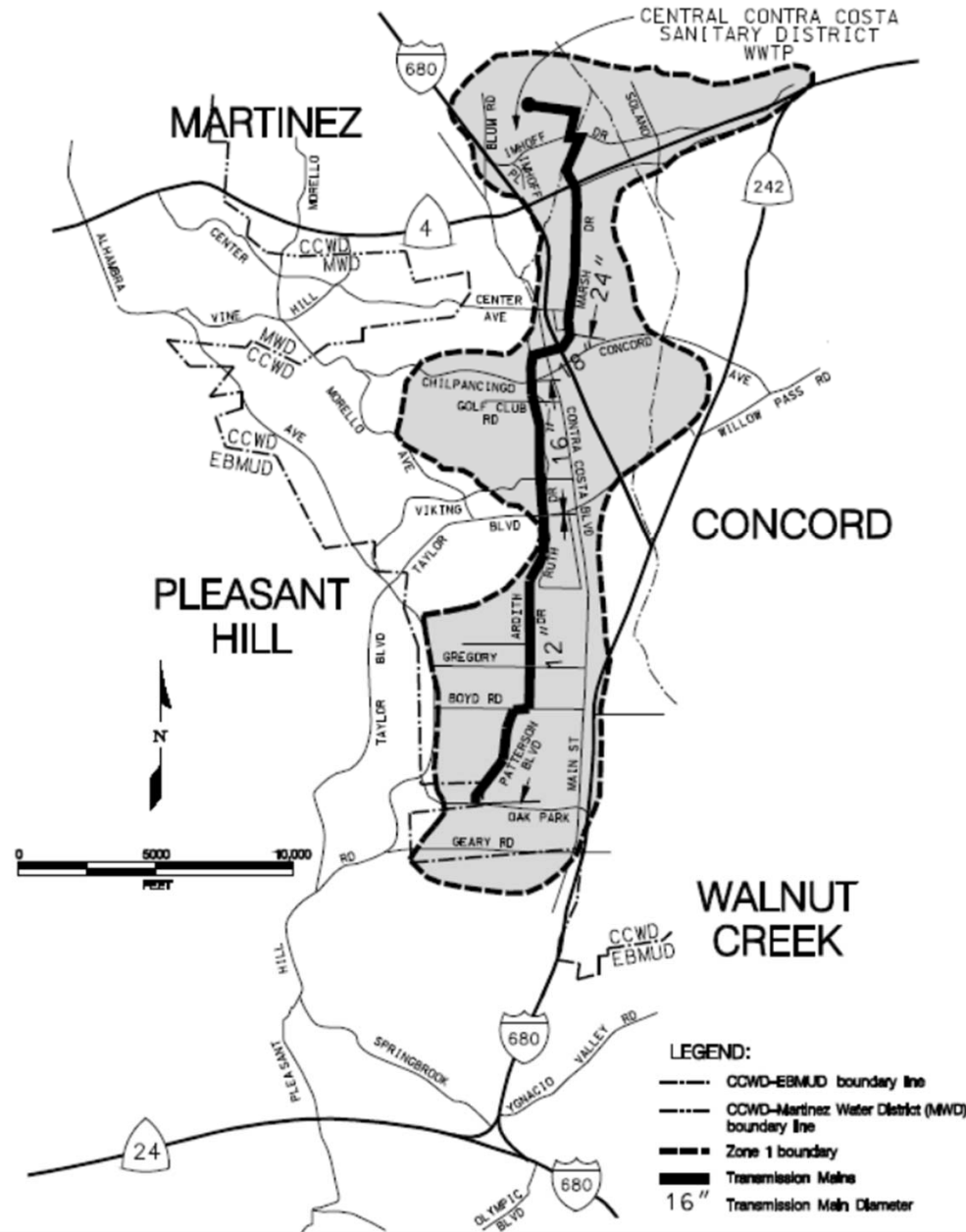


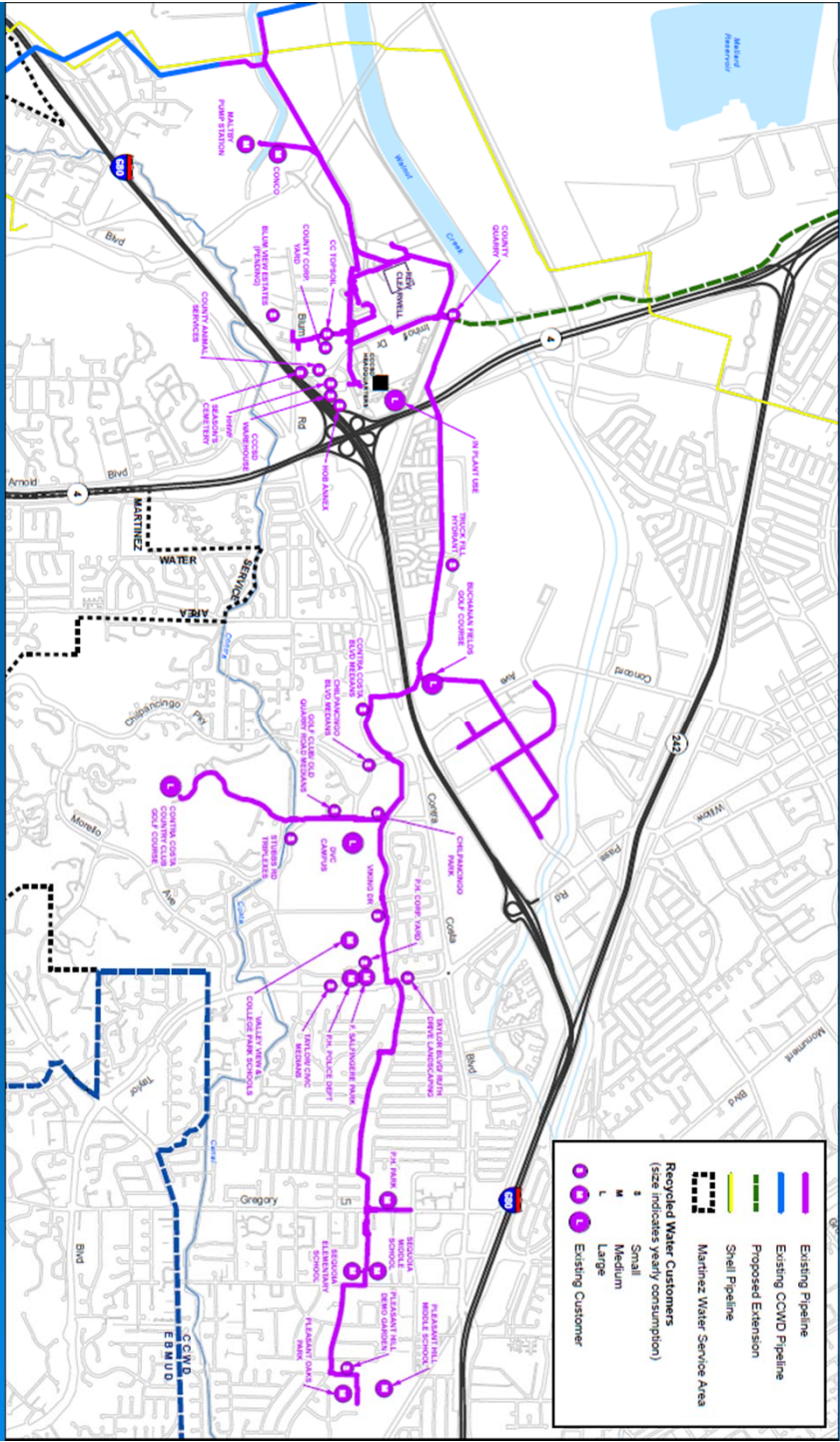
# Recycled Water Program





# ZONE 1 RECYCLED WATER PROJECT





# Contra Costa Country Club



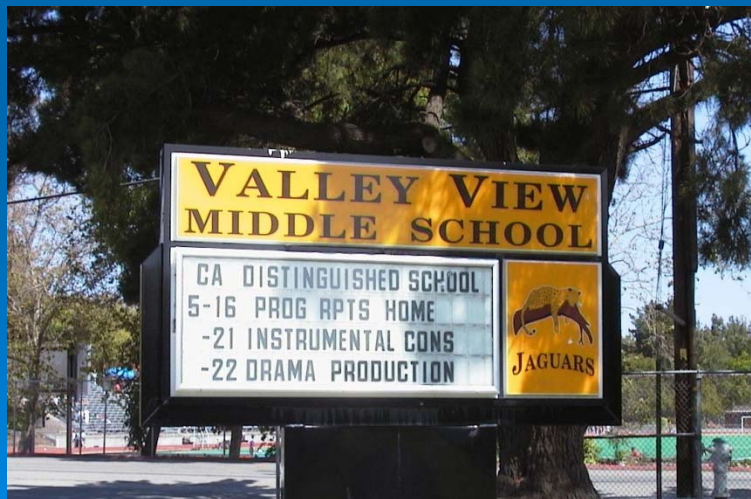
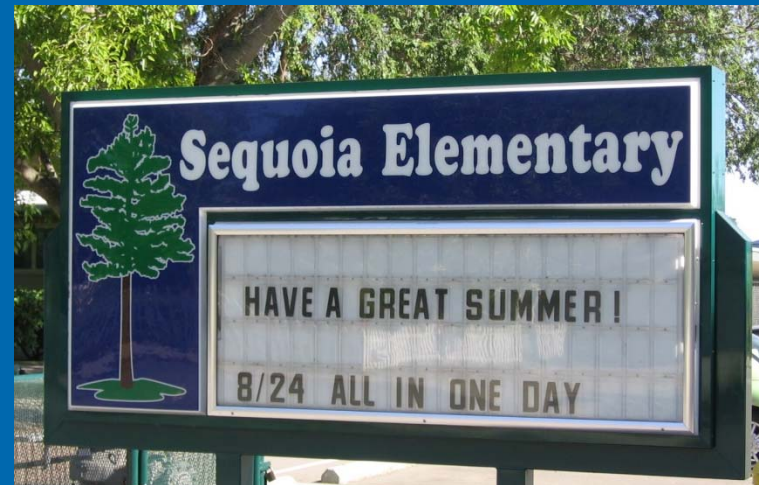
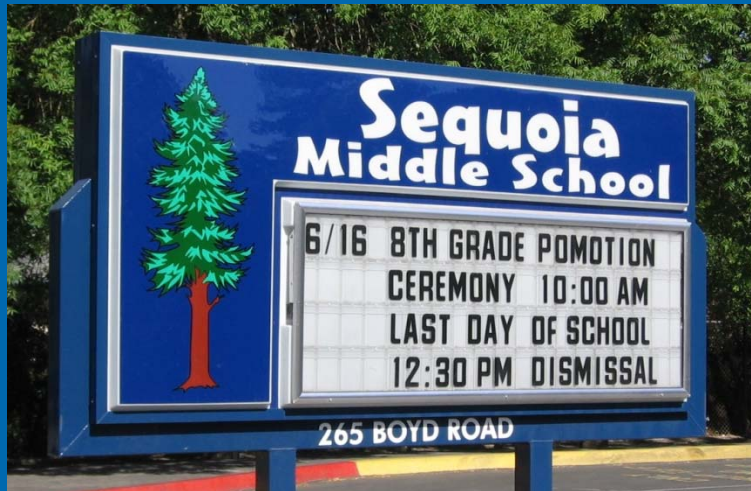
# Buchanan Fields



# Diablo Valley College



# Mt. Diablo Unified School District



# Pleasant Hill Park & Recreation District





# Contra Costa County Animal Services



# Toilet & Urinal Flushing

**DVC** DIABLO VALLEY COLLEGE



RESTROOM

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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.



The text is presented in white, bold, sans-serif font against a dark blue background. Below the text is a white icon of a water drop being recycled into a wave, with wavy lines underneath. A small number '6009-1212' is visible in the bottom right corner of the text box.



# Concord Landscape Project



# Hydrant Truck Filling Program



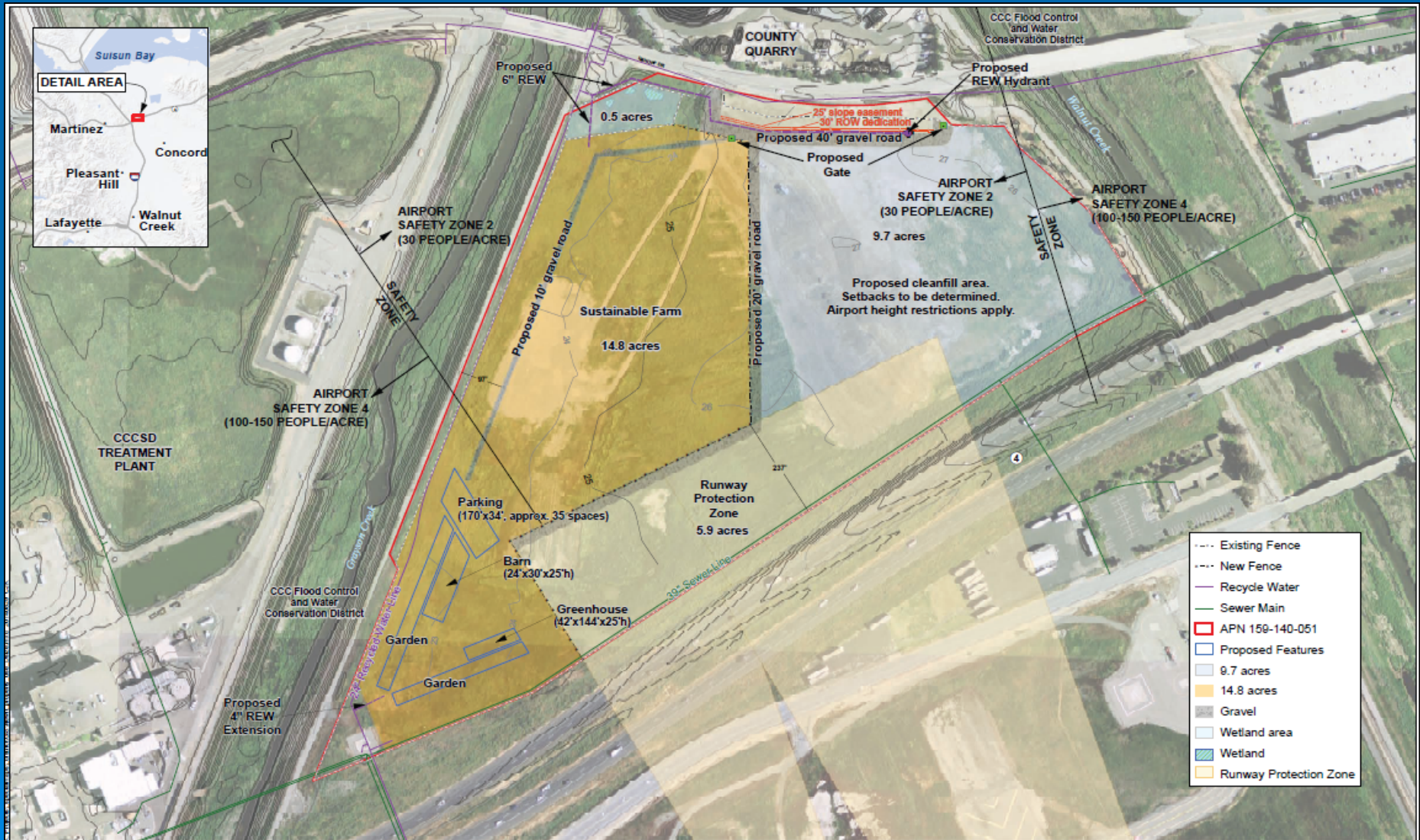
# Residential Fill Station



[www.centrialsan.org/recycledwater](http://www.centrialsan.org/recycledwater)



# CoCo San Sustainable Farm



# CoCo San Sustainable Farm





# 0.5 MGD Refinery Project



**Central Contra Costa  
Sanitary District**

*Protecting Public Health and the Environment*

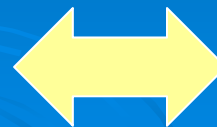


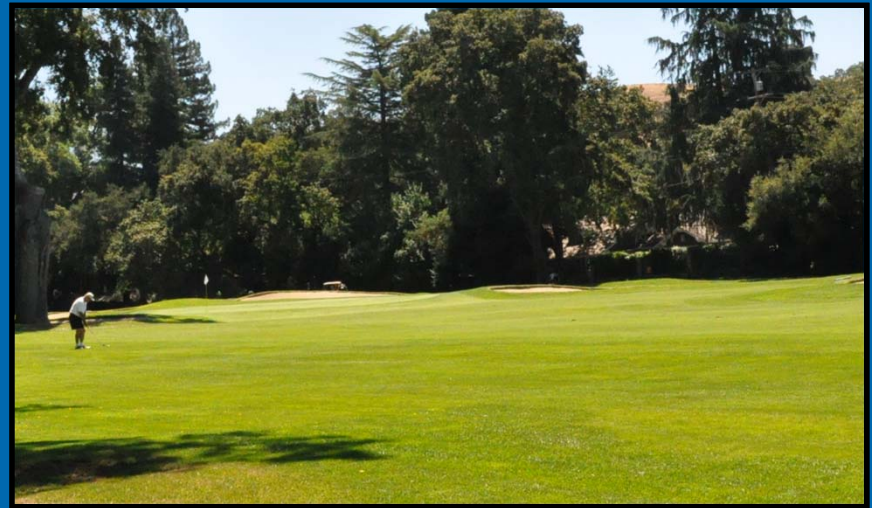
**CONTRA COSTA  
WATER DISTRICT**

# Concord Naval Weapons Station Redevelopment



**Concord**  
Community Reuse Plan

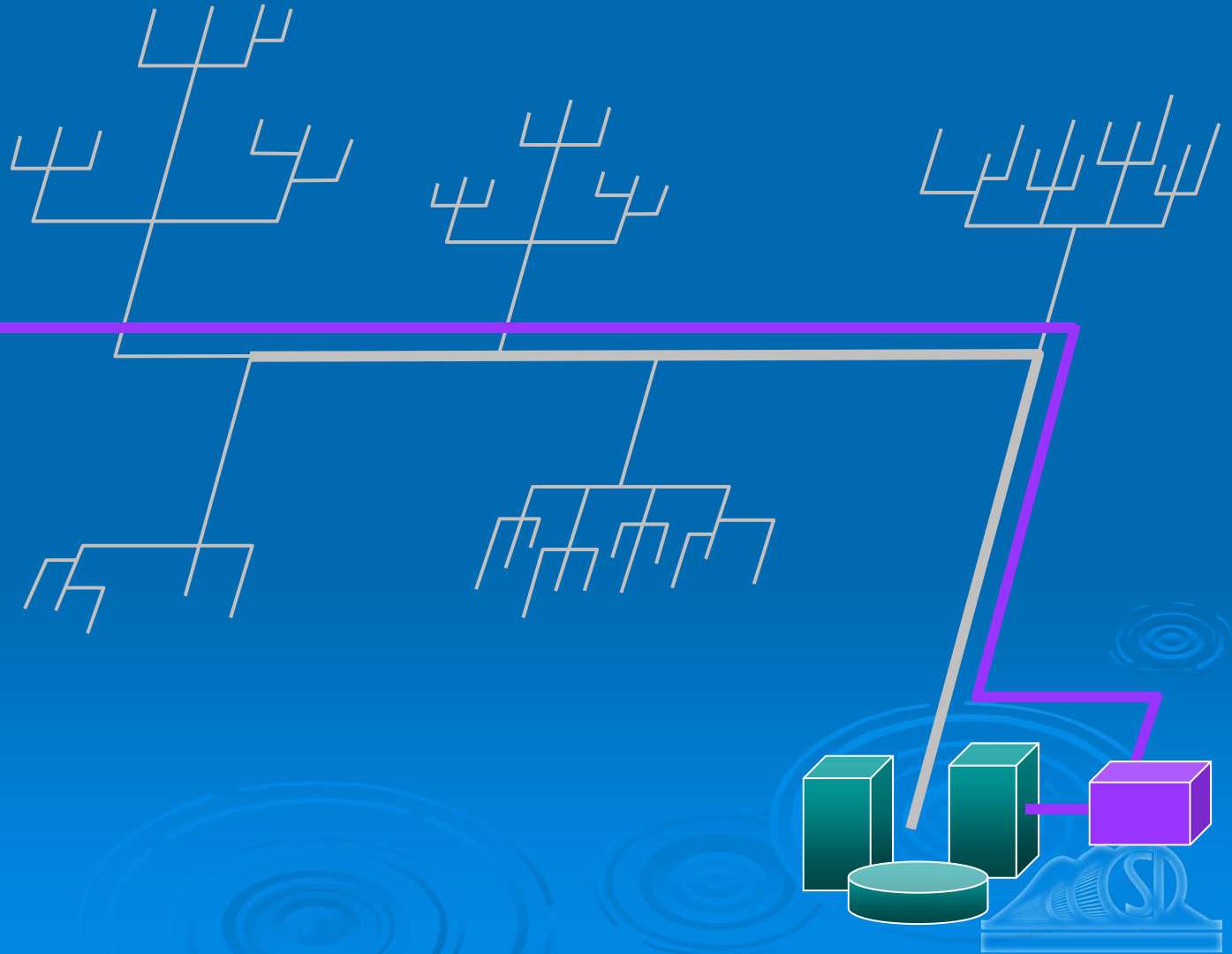
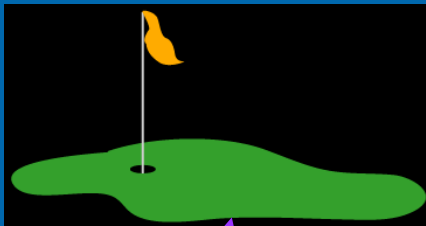




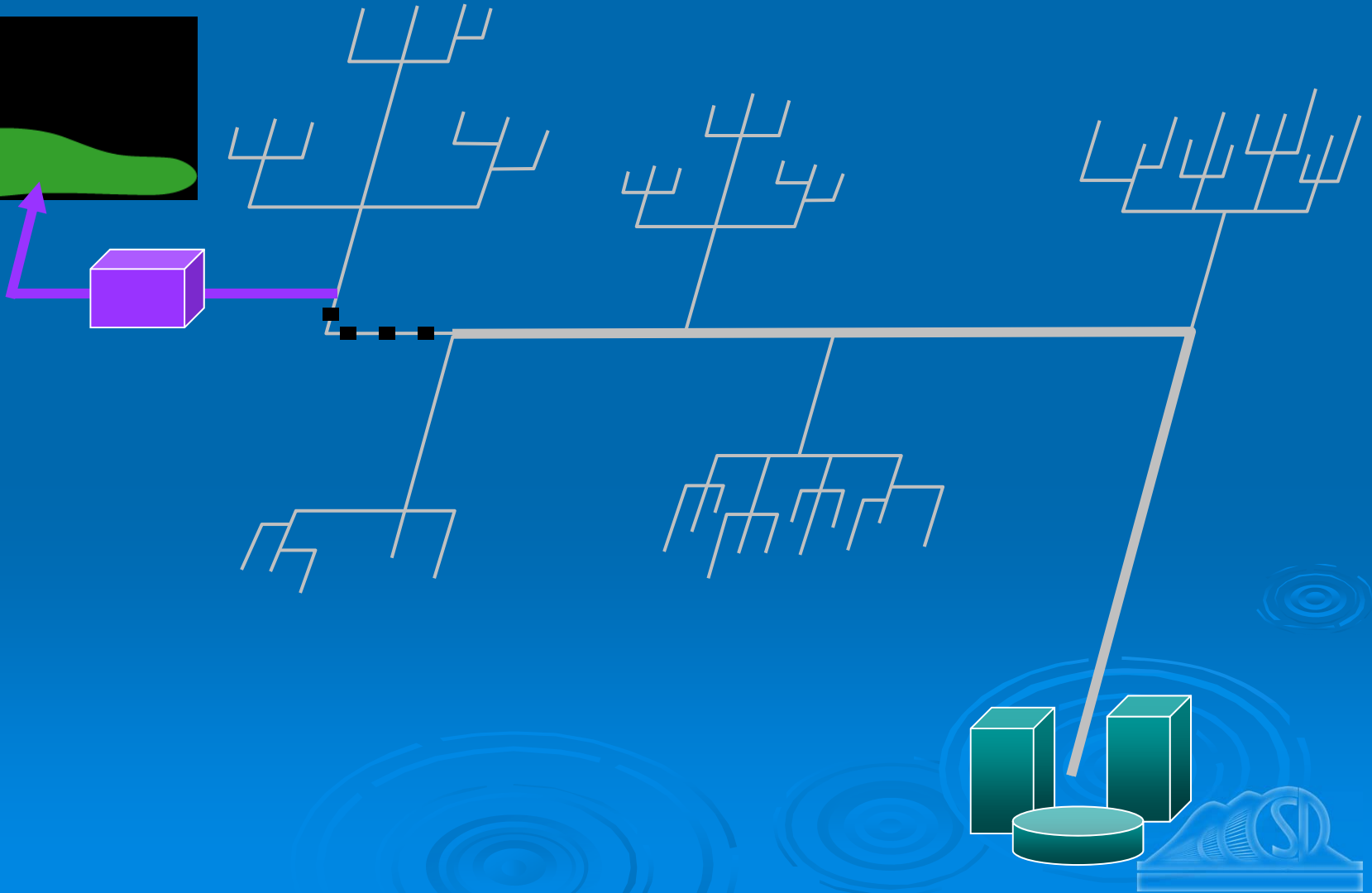
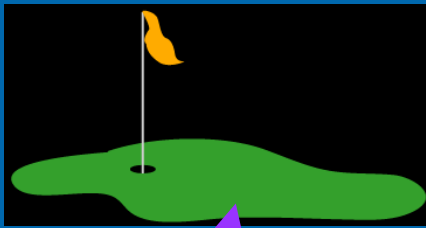
# Diablo Country Club Satellite Facility



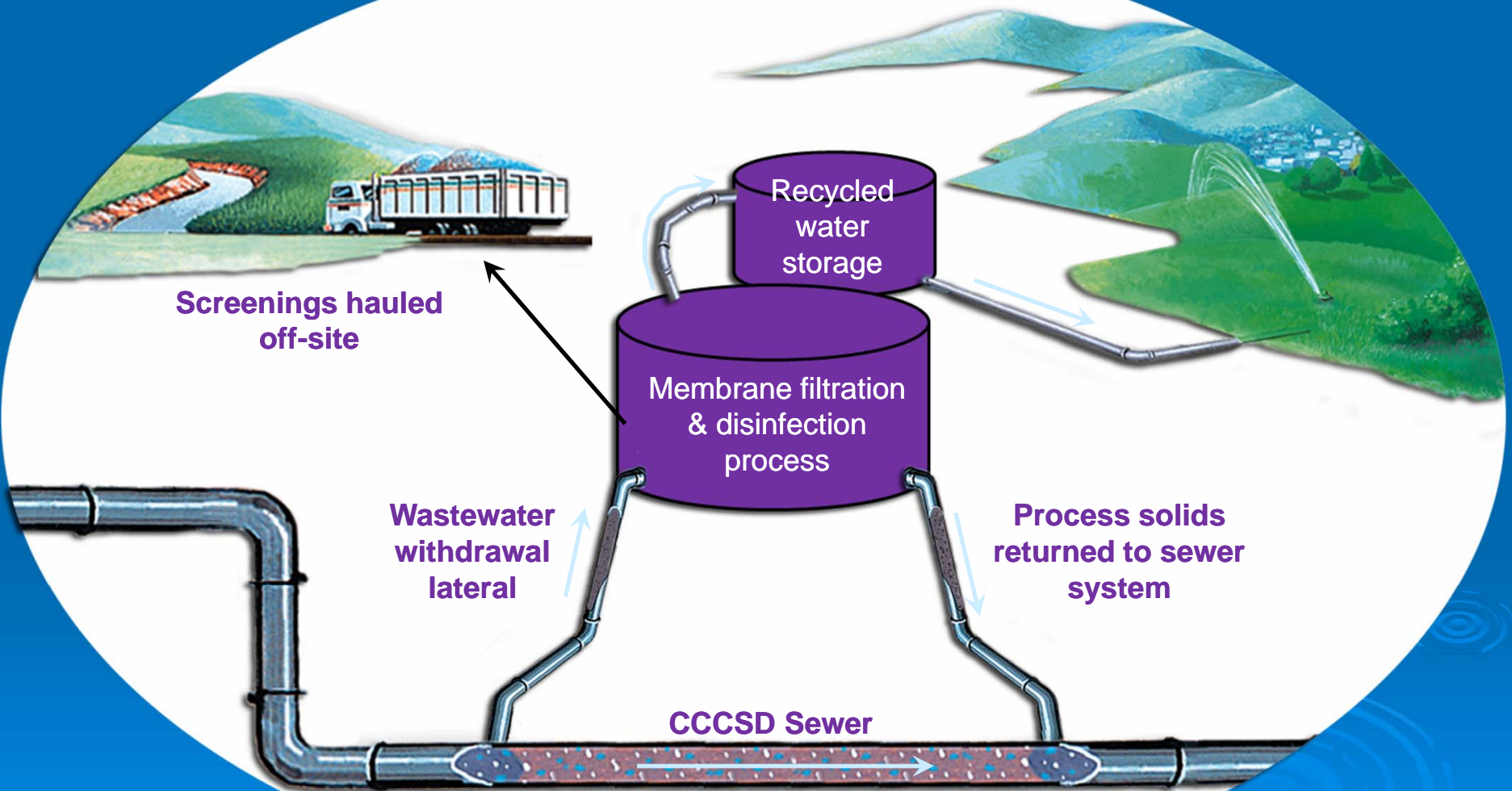
# Centralized Treatment



# Satellite Treatment



# Satellite Recycled Water Facility Concept





# Recycled Water Wholesale Opportunities

## Central Contra Costa Sanitary District

Board Meeting  
November 5, 2015

Complex Challenges | Innovative Solutions

[rmcwater.com](http://rmcwater.com)

# CCCSD Non-potable Recycled Water Projects-2015

Average Dry Weather Flow – 30.4 mgd

In-plant – 1.1 mgd

Current Zone 1 (S) – 0.5 mgd

Zone 1 Future Commitment (S) – 0.1 mgd

Concord Naval Weapons Station (S) – 2.5 mgd

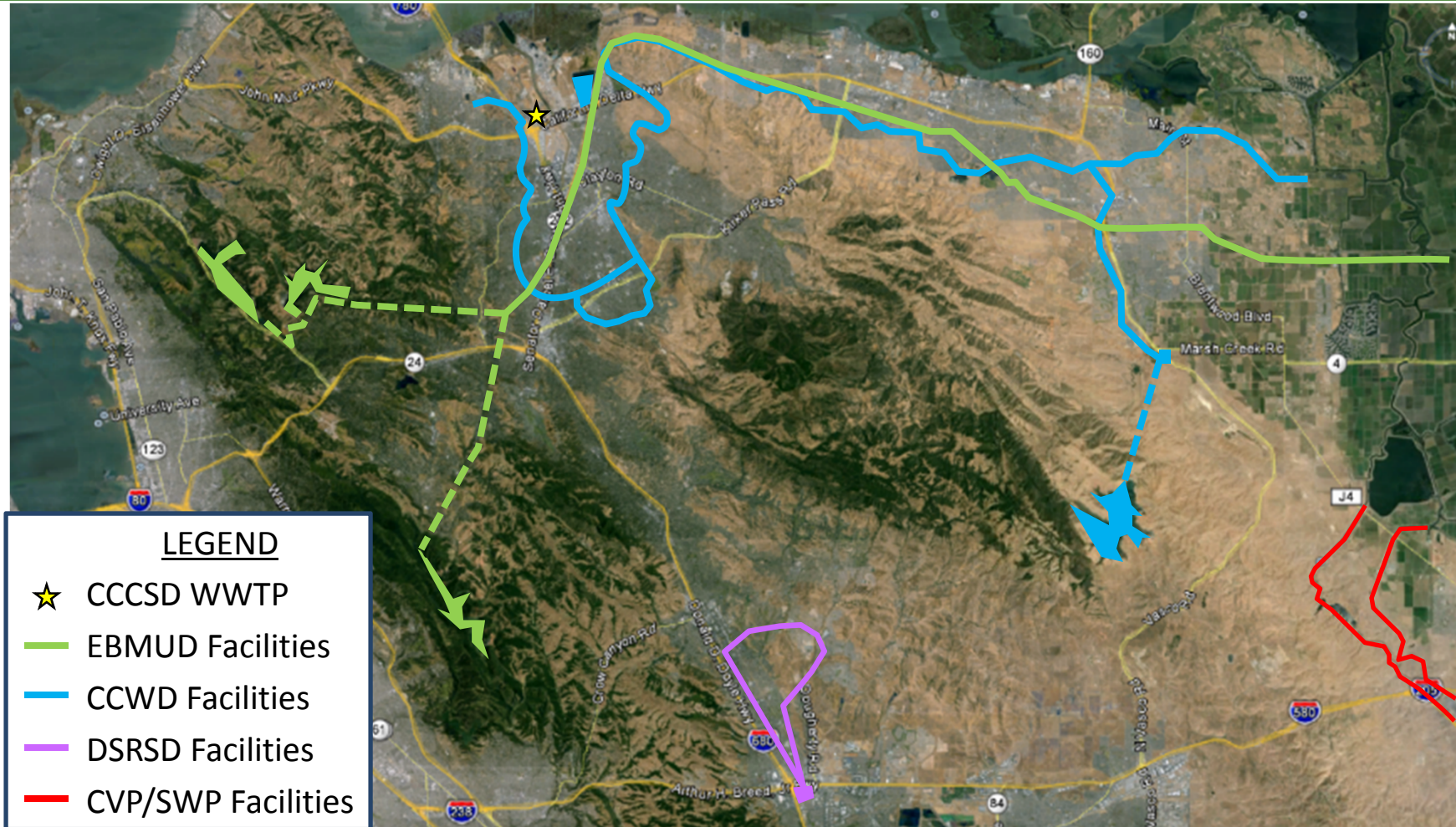
Shell Refinery (CCWD) – 0.5 mgd

**Potential Available Recycled Water 25.7 mgd**

(S) = seasonal



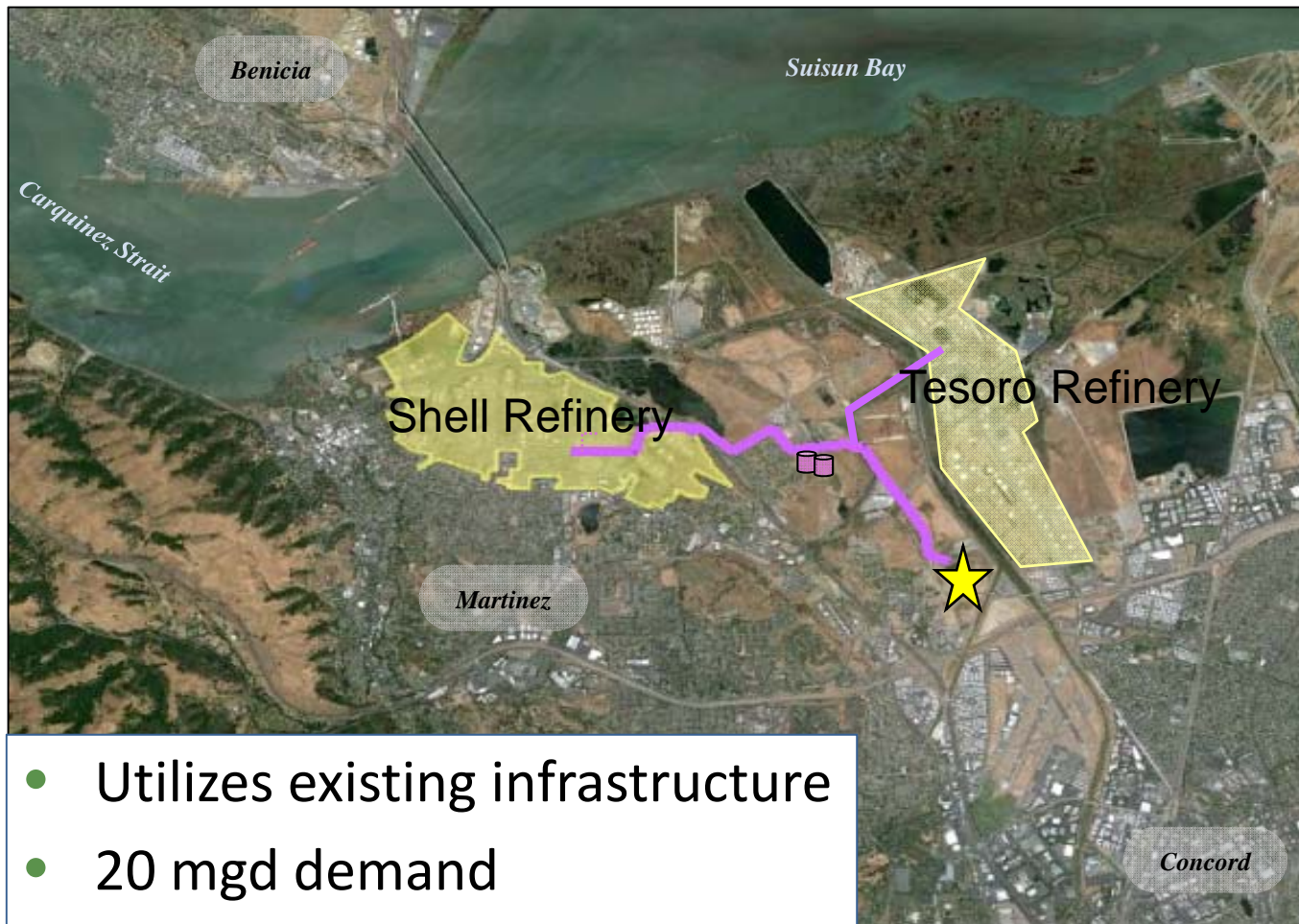
# Overview Map of Potential Opportunities



# Recycled Water to Ag?



# Recycled Water to Refineries?



# Augment Regional Water Supplies?



- DSRSD
- Regional Reliability Partners
  - CCWD
  - EBMUD
  - San Francisco PUC
  - Alameda Co. WD
  - Santa Clara Valley WD
  - Zone 7
  - Marin Municipal WD
  - Bay Area Water Suppliers & Conservation Agencies (BAWSCA)

# Any Questions?

