Master Planning for CCCSD's Recycled Water Program

Back to the Future and Beyond

Melody LaBella & Nate Hodges WateReuse NoCal Chapter Meeting December 4, 2015



Central Contra Costa Sanitary District





Central Contra Costa Sanitary District (CCCSD)



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

2014 Stats

- Treated ~36 MGD wastewater (avg. daily)
- Produced ~530 million gallons of recycled water



CCCSD's Original Treatment Plant



CCCSD's Treatment Plant Today



Water Reclamation Facilities

Forebays, Applied Water Pumps, Filter Plant





Water Reclamation Facilities Filters



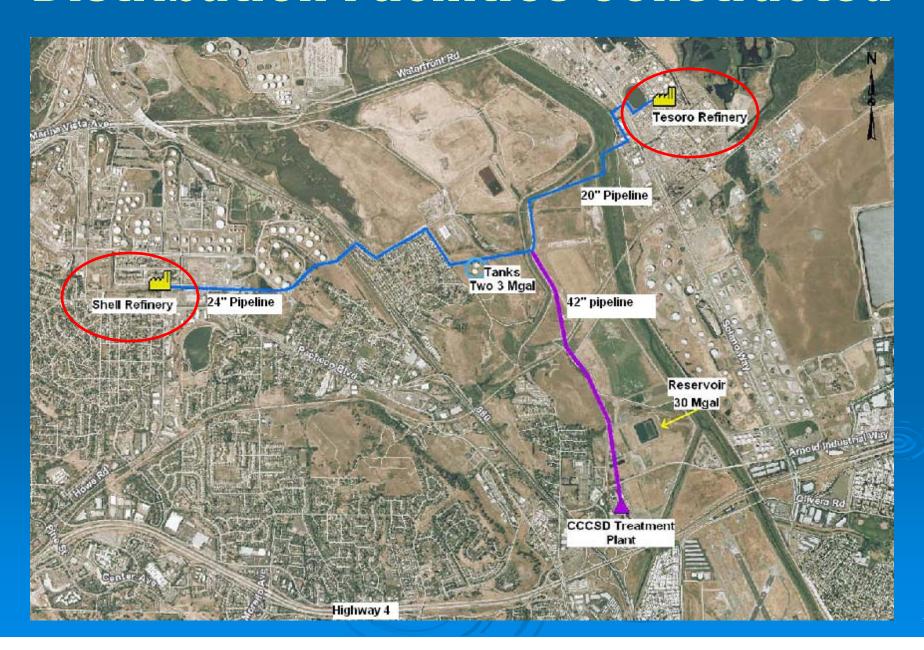


Water Reclamation Facilities

30 MG Storage Reservoir



Distribution Facilities Constructed





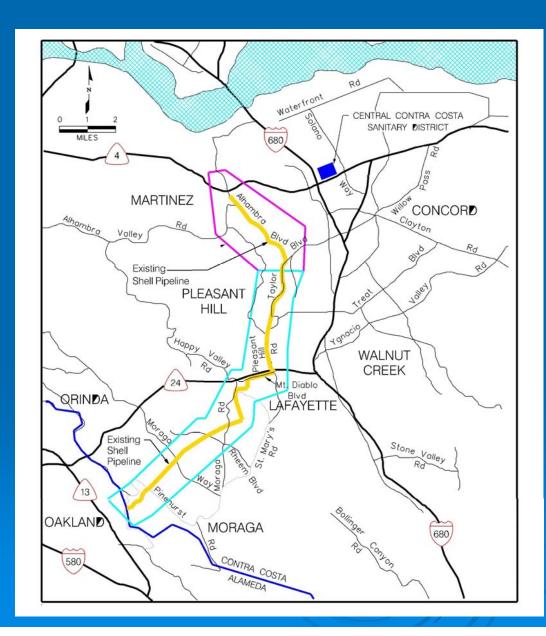






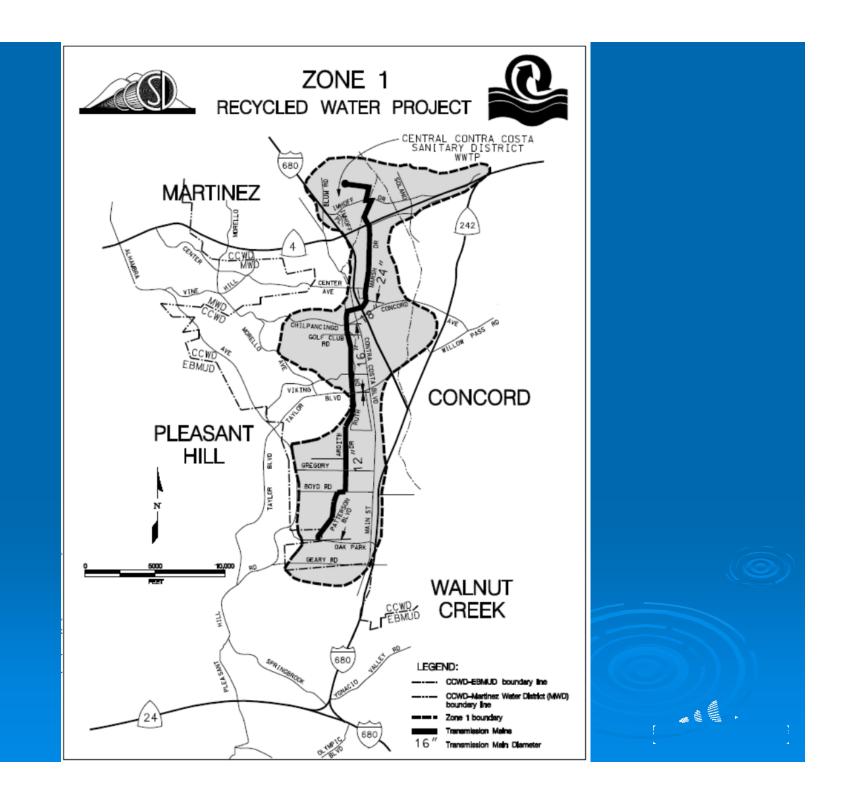


Lamorinda Project





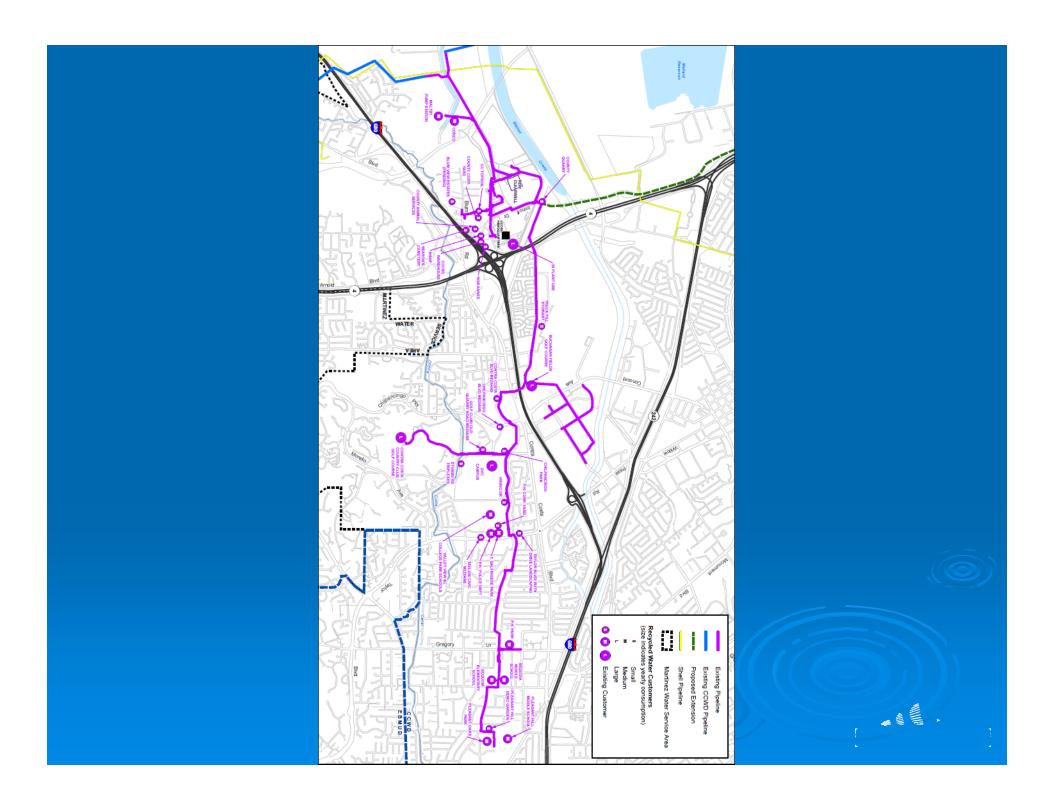




Recycled Water Program







Contra Costa Country Club



Buchanan Fields





Diablo Valley College

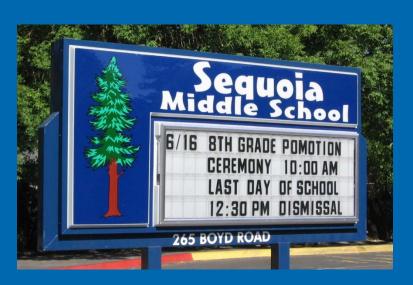


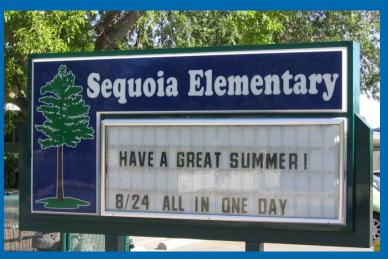


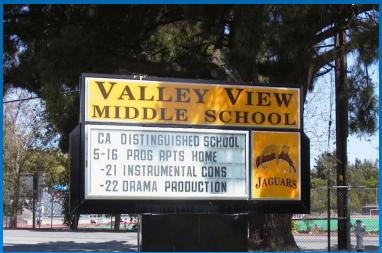




Mt. Diablo Unified School District

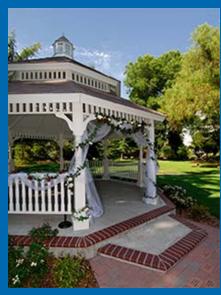




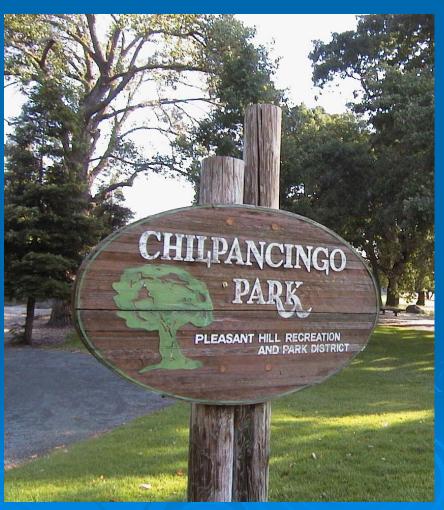




Pleasant Hill Park & Recreation District









Contra Costa County Animal Services







Hydrant Truck Filling Program



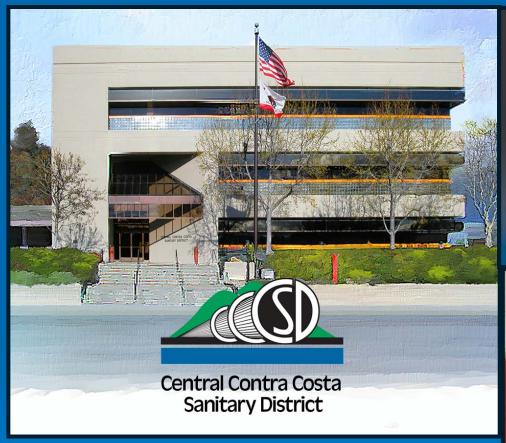




Toilet & Urinal Flushing



Toilet & Urinal Flushing



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



Concord Landscape Project



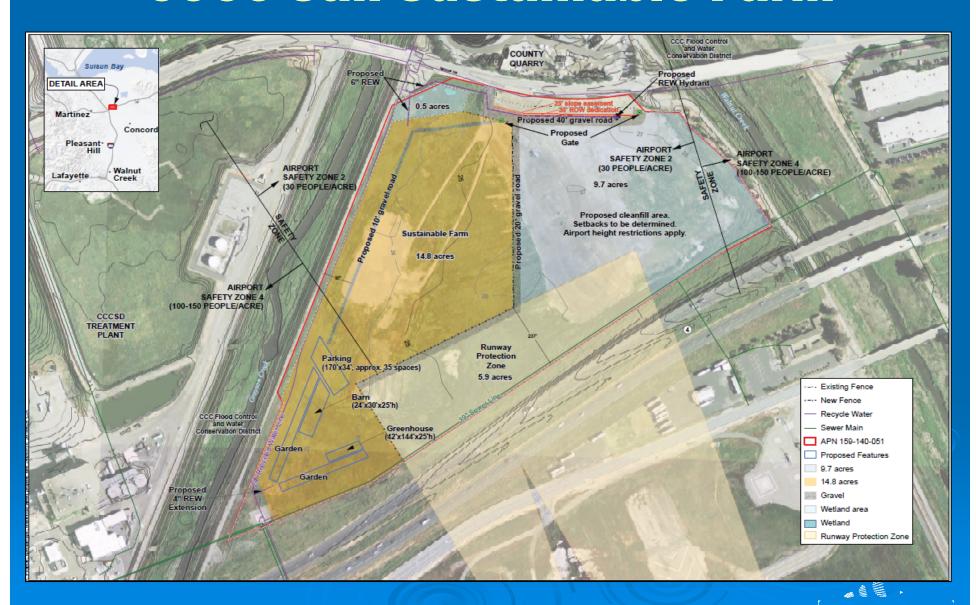
Residential Fill Station



www.centralsan.org/recycledwater



CoCo San Sustainable Farm



CoCo San Sustainable Farm







Automated Fill Station



0.5 MGD Refinery Project





Protecting Public Health and the Environment



Concord Naval Weapons Station Redevelopment





Protecting Public Health and the Environment









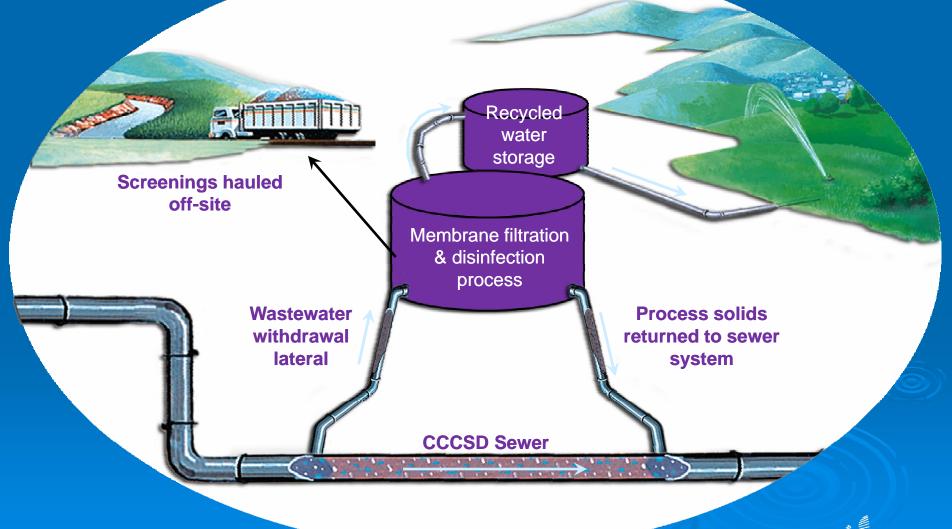
Diablo Country Club Satellite Facility















Recycled Water Wholesale Opportunities

Central Contra Costa Sanitary District

Board Meeting November 5, 2015

Complex Challenges | Innovative Solutions

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

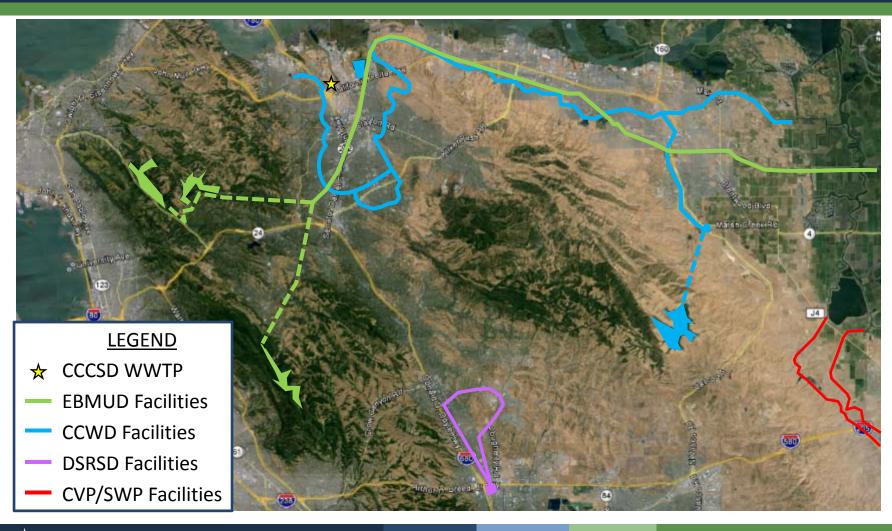
Shell Refinery (CCWD) - 0.5 mgd

Potential Available Recycled Water 25.7 mgd

(S) = seasonal

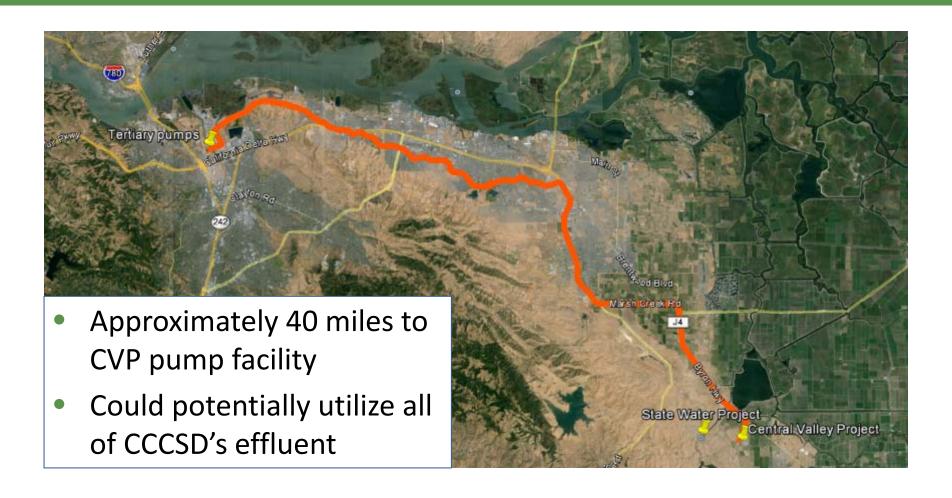


Overview Map of Potential Opportunities



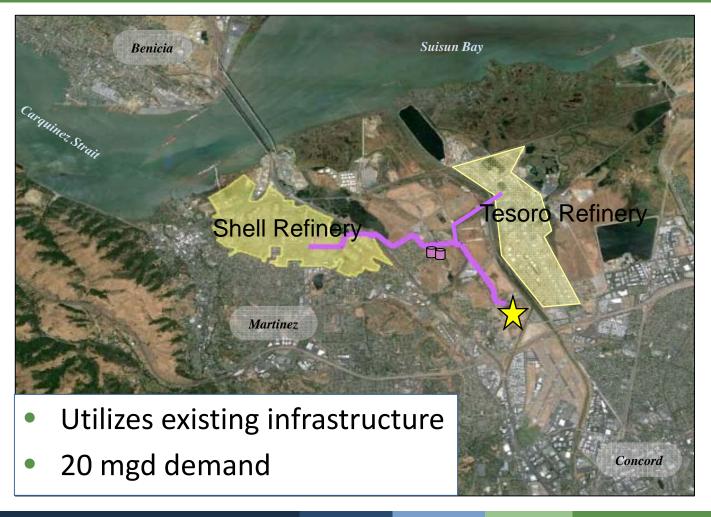


Recycled Water to Ag



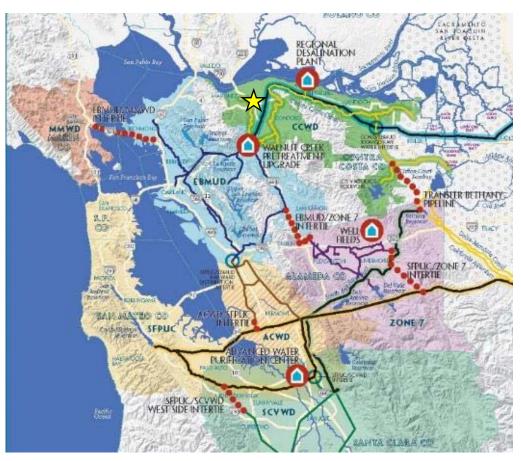


Recycled Water to Refineries





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)





25 MGD Drought-Proof Water Supply

(925) 228-9500



Questions or Comments?



