



# Recycle, Recharge, & Reuse – Innovative Solutions to California's Water Challenges

Presented to

**WaterReuse LA**

Presented by

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Hydrogeologist

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# INTERA Overview

Purpose Statement:

***Innovation and Stewardship for a Sustainable Tomorrow***

A staff of more than 250 scientists and engineers

- Geologists
- Hydrogeologists
- Geochemists
- Toxicologists
- Hydrologists
- QA Specialists
- GIS Specialists
- Environmental Scientists
- Hydraulic Engineers
- Risk Assessors
- Environmental Engineers
- Water Resource Engineers



# Supporting Clients across Multiple Lines of Business

## Water Resources & Supply



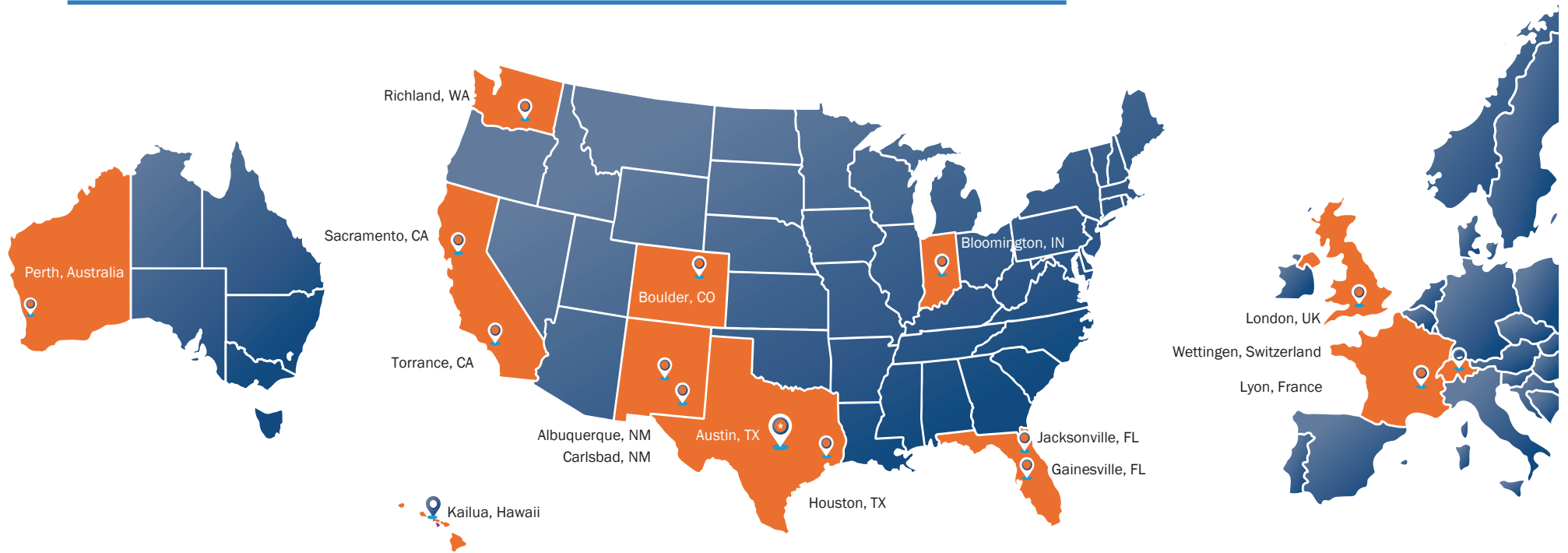
## Mining & Environmental



## Federal, Coastal, & International



# INTERA Locations





# INTERA CULTURE – Core Values



## Stewardship

We are dedicated to sustaining and enhancing our human and natural resources. We thoughtfully approach our decisions and actions with a long-term mindset.



## Safety

We execute our mission with the highest regard for the safety, health, and wellbeing of our colleagues, contractors, and the public.



## Innovation

We cultivate innovation and continuous improvement, while balancing creativity with accountability.



## Accountability

We take individual and collective ownership of our words, actions, and commitments.



## Integrity

We conduct ourselves with honesty, openness, and respect for all persons and organizations.



## Teamwork

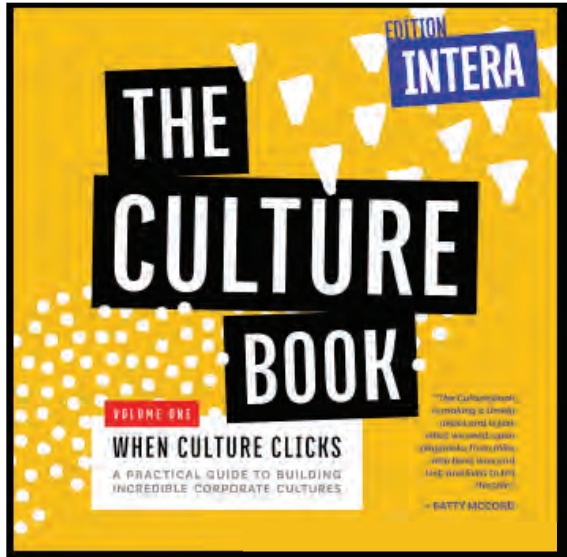
We foster teamwork through collaboration, synergy, and empowerment of each valued member in the INTERA community.



## Quality

We are committed to achieving and delivering the highest quality solutions that provide the best value to our clients, colleagues, and communities.

# Recognized Culture and Workplace



2025 Culture Excellence  
Top Workplace Award





# GIVING BACK – WELL AWARE (KENYA)



Dear Marsh,  
It was such an honor to have you at our event, and Alana! We can't thank you enough for your support. Thank you for your support over the years and being a big part of the lasting impact of Well Aware.  
With deep gratitude,  
Sarah

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2020

## OUR IMPACT

We provide innovative and sustainable solutions to water scarcity and contamination in East Africa.

**TO DATE, WE HAVE TRANSFORMED MORE THAN A QUARTER OF A MILLION LIVES THROUGH CLEAN WATER.**

Our life-saving clean water systems drive economic development and empower communities.

Since 2010, we've completed over **70 projects** across East Africa.



KENYA  
TANZANIA

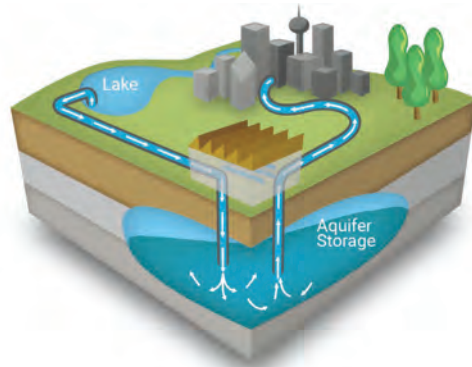
Where we are  
**TODAY**

Well Aware is a 501(c)(3) nonprofit with headquarters in Austin, Texas

# Water Resources & Supply - LoB



Water  
Planning



Aquifer, Storage,  
& Recovery  
(ASR/MAR)



Supply  
Development





# Specialized Expertise in Recycled Water Recharge

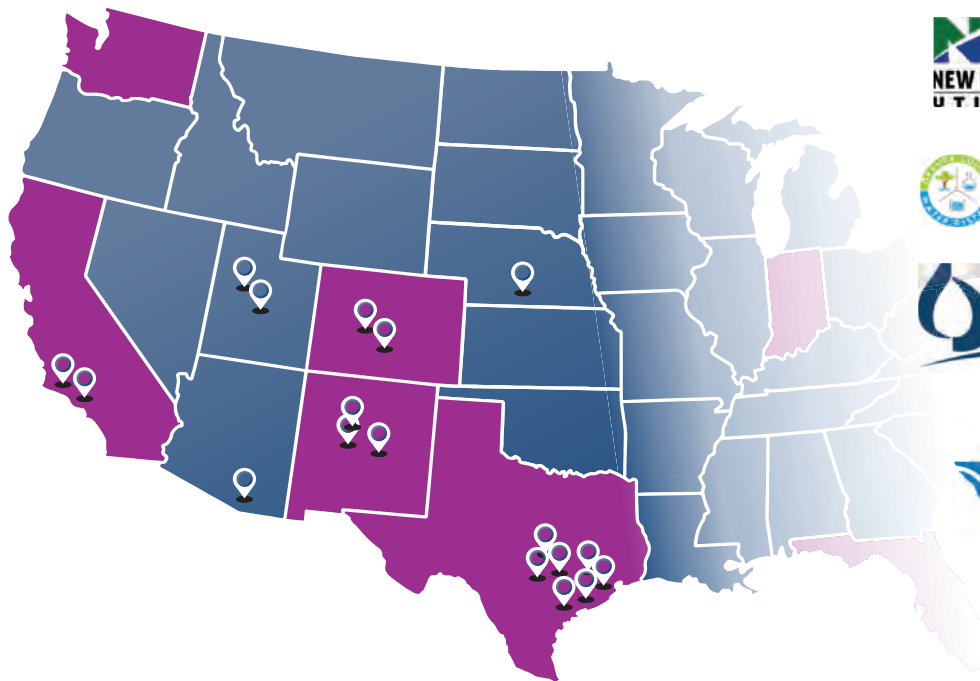
- Planning and Feasibility Studies
- Hydrogeologic Data Collection & Characterization
- Water Systems and Groundwater Modeling
- Title-22 Permitting & Regulatory Compliance
- Well Design and Installation
- Groundwater Monitoring
- Tracer Study Design & Implementation
- Operational Optimization







INTERA brings the requisite expertise to fully assess and implement Recycled Water Recharge Strategies



INTERA's Managed Aquifer Recharge (MAR) Projects





Thank You

# Albert Robles Center for Water Recycling and Environmental Learning



Case Study: Design vs. Actual

**SECURING OUR WATER FUTURE TODAY**



# WRD is a Groundwater Management Agency



- 43 Cities in Southern L.A. County
- 420 Square Miles
- 4 Million People
- Over 10% of California's Population
- Second Largest Water District by Population in California
- Groundwater Makes up Nearly 50% of the Region's Water Demand
- 450,000 Acre-Feet (150 Billion Gallons) of Useable Groundwater Storage



# WRD Operates Three Facilities that Benefit the Basins

## Albert Robles Center for Water Recycling & Environmental Learning



WRD's Albert Robles Center purifies 14 million gallons of water per day, providing a locally sustainable water supply for groundwater replenishment while bolstering drought-resiliency.

## Leo J. Vander Lans Advanced Water Treatment Facility



The Leo J. Vander Lans Facility purifies 8 million gallons of water per day for use in coastal injection wells, preventing seawater intrusion and providing supplemental groundwater replenishment.

## Robert W. Goldsworthy Groundwater Desalter



The Goldsworthy Desalter uses reverse osmosis to treat 5 million gallons per day of brackish (salty) groundwater that is trapped inland due to historical seawater intrusion.

# WRD Manages the Basins through Multiple Roles



Replenishment



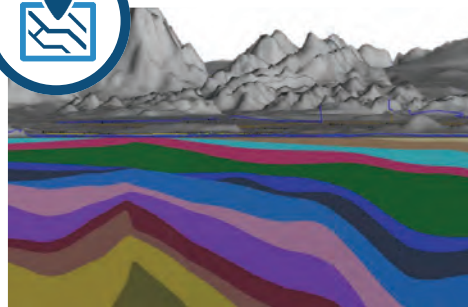
Monitoring



Cleanup



Water Recycling



Basin Modeling



Regional Watermaster



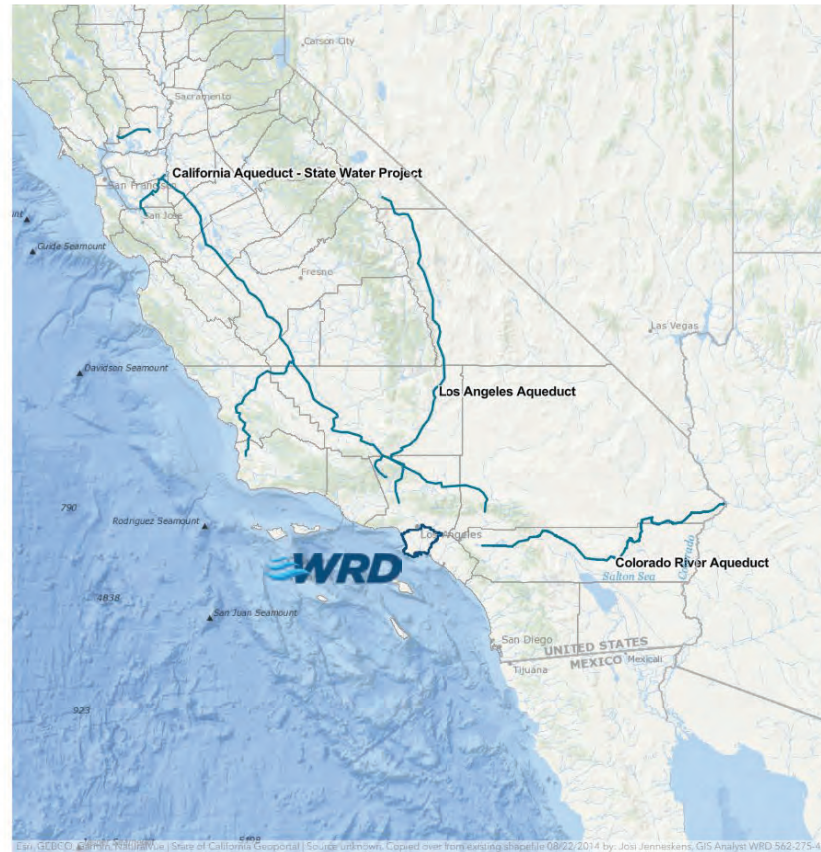
# What is "Imported Water"?



Colorado River Aqueduct. Image courtesy of the Metropolitan Water District



State Water Project Water Deliveries



Imported water is surface water (largely snowmelt) transported from watersheds hundreds of miles away

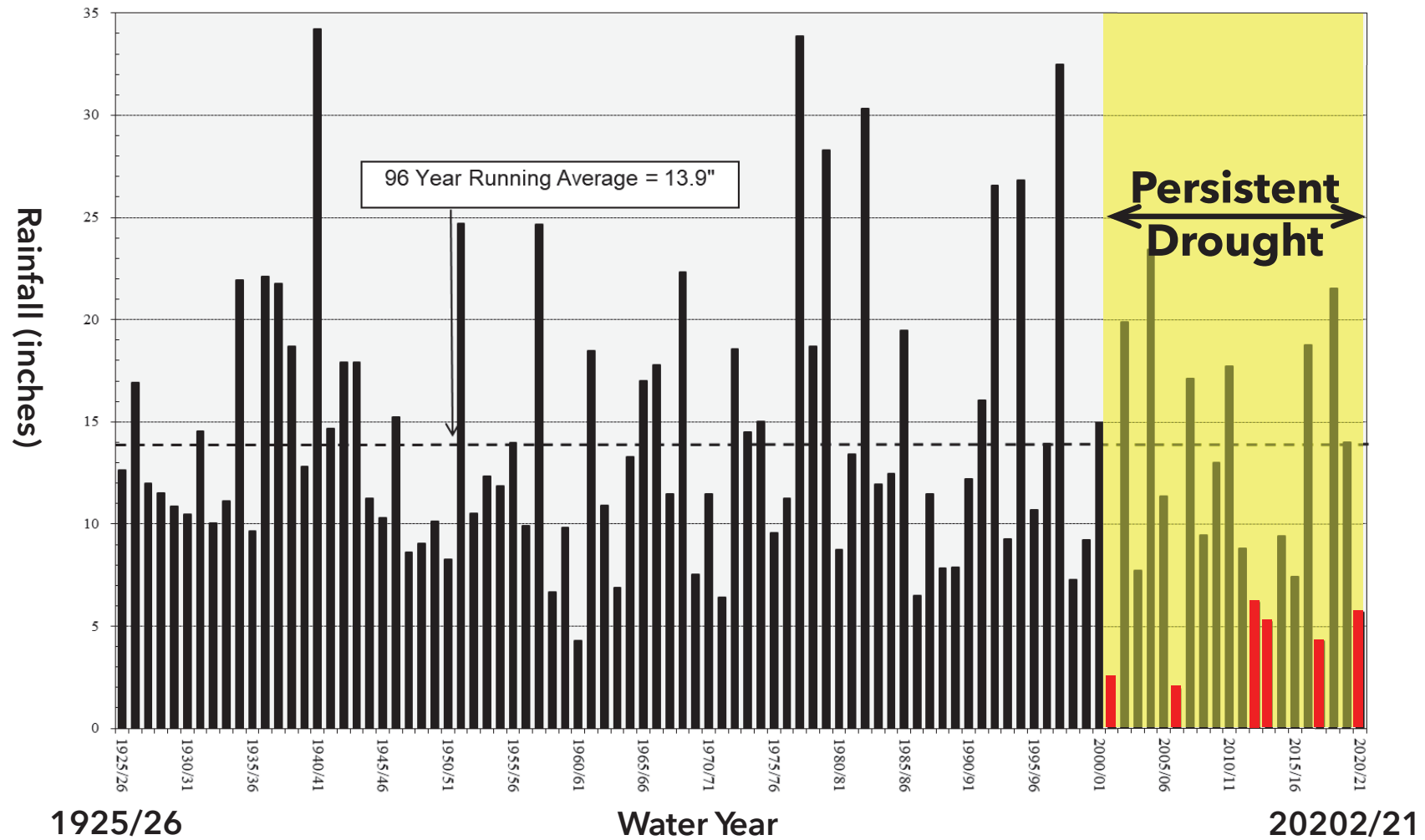
**Los Angeles Aqueduct**  
LA Dept of Water & Power

**California Aqueduct**  
Metropolitan Water District

**Colorado Aqueduct**  
Metropolitan Water District



# Persistent Drought for Two Decades

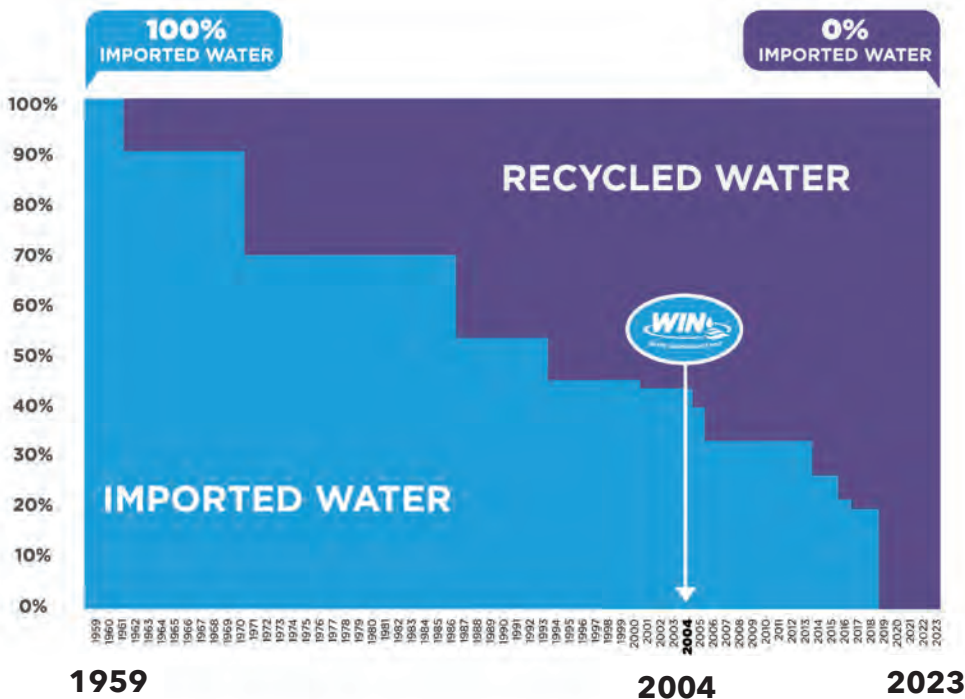


# WRD Completed Water Independence Now Program (WIN)

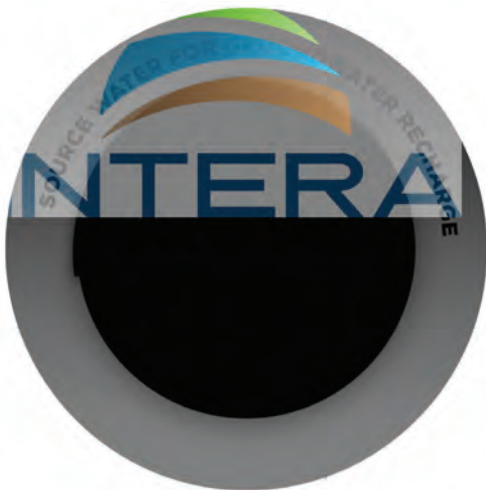


Collection of projects that offset the demand for imported water to replenish the Montebello Forebay groundwater aquifers.

## ARC AWTF was capstone of WIN



BEFORE WIN



AFTER WIN



# Welcome to WRD's Albert Robles Center!



ARC AWTF constructed in 2019



Produces 14.8 MGD of advanced treated recycled water for groundwater recharge



Features a museum-grade learning center



LEED Platinum Certified



995 Solar Panels



Rooftop Garden



# ARC's Secondary Purpose is Water Education



40 bilingual water exhibits throughout the facility

Over an acre of demonstration gardens





LACSD SJCWRP



Tertiary RW Pipeline



Montebello Forebay Spreading Grounds