## Pure Water Southern California Welcome!

September 23, 2023



Metropolitan Overview

 Service area of 19 million people, 5,200 square miles, parts of six counties

 Supports \$1.6 trillion regional economy (ranks 11th in the world)

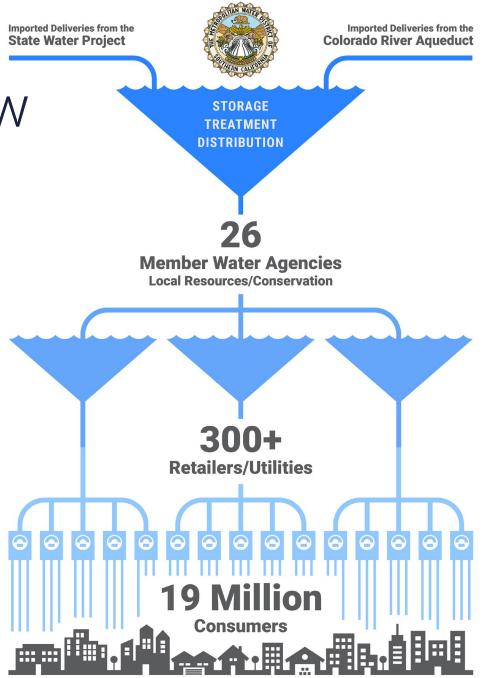




## Metropolitan Overview

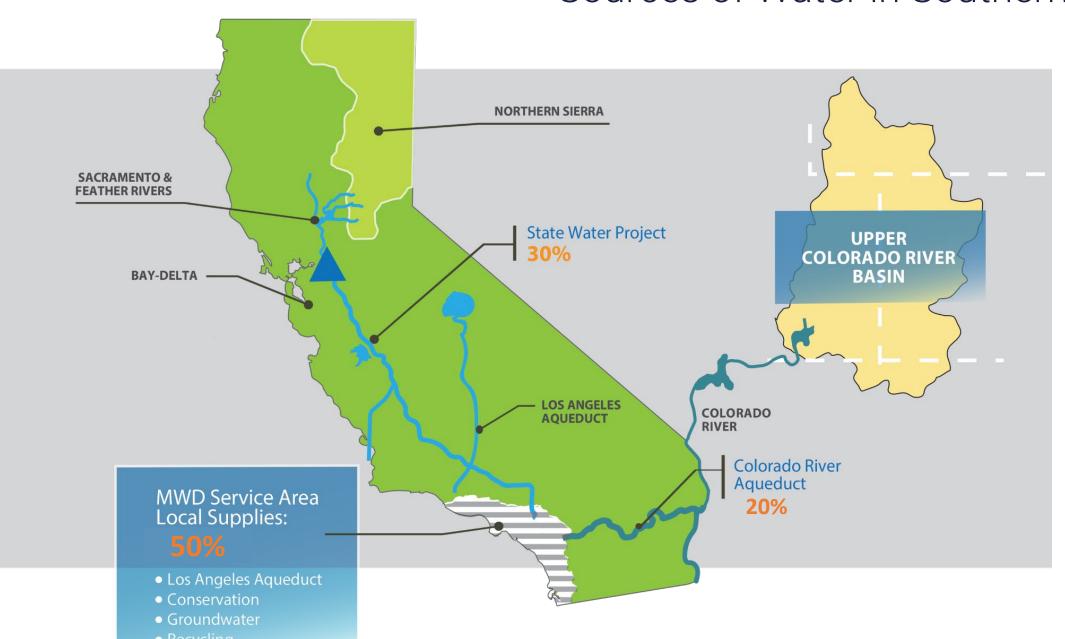
 Nation's largest wholesale water provider governed by 38 Member Board from 26 public member water agencies

 Imports water from Colorado River, Northern Sierra, invests in local projects & conservation





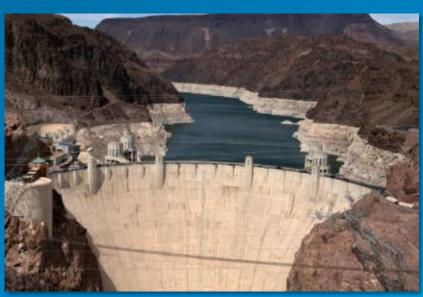
#### Sources of Water in Southern California





# Impacts of Climate Change











## Water Supply Strategy

Average Year Water Supply 1990 vs. 2035

**Local Supply Target** 

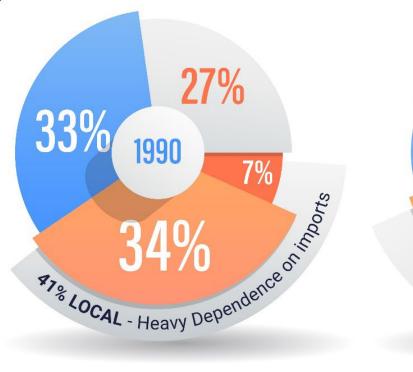
45 Year Goal Projection

Colorado River Aqueduct

State Water Project

Other Local Supply

Conservation & Recycling







## Pure Water Southern California Program

How it works













Used water (wastewater) from homes, businesses, and industries in LA County



Cleaned at Sanitation Districts' Joint Water Pollution Control Plant



Purified at Metropolitan's advanced water purification facility



Conveyed
through over 60
miles of
pipeline to
groundwater
basins,
industries, or
Metropolitan's
drinking water
plants



A new climateresilient source of water for Southern California



#### Pure Water Southern California

*In numbers* 



Up to 150 million gallons per day



Enough water for over 1.5 million people

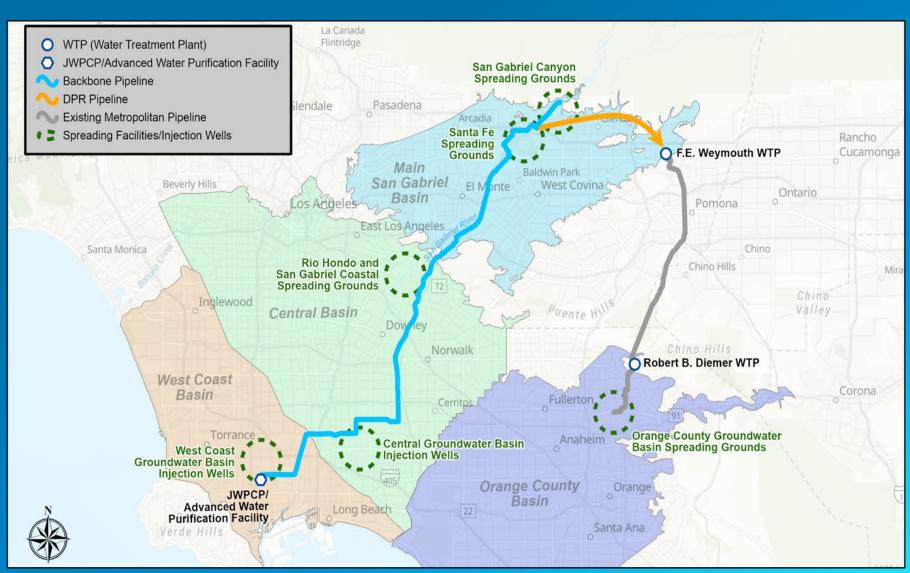


One of the largest programs of its kind in world



#### Program Facilities

- Advanced Water Purification facility
- Conveyance pipelines
- Pump stations
- Spreading facilities
- Injection wells
- A regional water reuse system



## California Recycled Water Regulations



Non-Potable Reuse

Irrigation
Industrial Uses

2000



Indirect
Potable Reuse

Groundwater Replenishment

2014



Indirect
Potable Reuse

Reservoir Water Augmentation

2018



Direct
Potable Reuse

Raw and Treated
Water
Augmentation
2023

Increasing requirements for public health protection



## Program Overview

Non-potable reuse 24 mgd

• Harbor Area

Indirect Potable Reuse 66 mgd

- Main San Gabriel
- Central/West Coast

DPR via RWA 60 mgd

 Weymouth and Diemer

Phase 1: 115 mgd

Phase 2: 35 mgd



## Joint Water Pollution Control Plant



- Average flow of ~250 million gallons daily
- Agency serves
   ~5.6 million people in
   L.A. County
- Cleaned water flows to the ocean
- Largest untapped source of treated wastewater





#### Program Partners



#### Metropolitan Member Agencies















#### Groundwater Basin Managers





#### Colorado River Partners







#### Other Key Partners











## Project History

- Pilot Scale Studies (2010-2012)
- Feasibility Study Report (2013-2016)
- Conceptual Planning Studies (2017-2019)
- Demonstration Plant (2017- present)
- Environmental Planning (2021-2024)
- Preliminary Design (start 2023)





## Program Benefits

#### Water Supply Benefits









#### **Environmental Benefits**







#### **Economic Benefits**







## Program Schedule

2021-2024

Environmental Planning

2023-2031

Design & Construction

2032

Primary Startup & Operations





## Unique Elements

- Design Build and Alternate Delivery Methods
- Project Labor Agreement
- Grant and Partnership Funding



### Pure Water Southern California Demonstration Plant

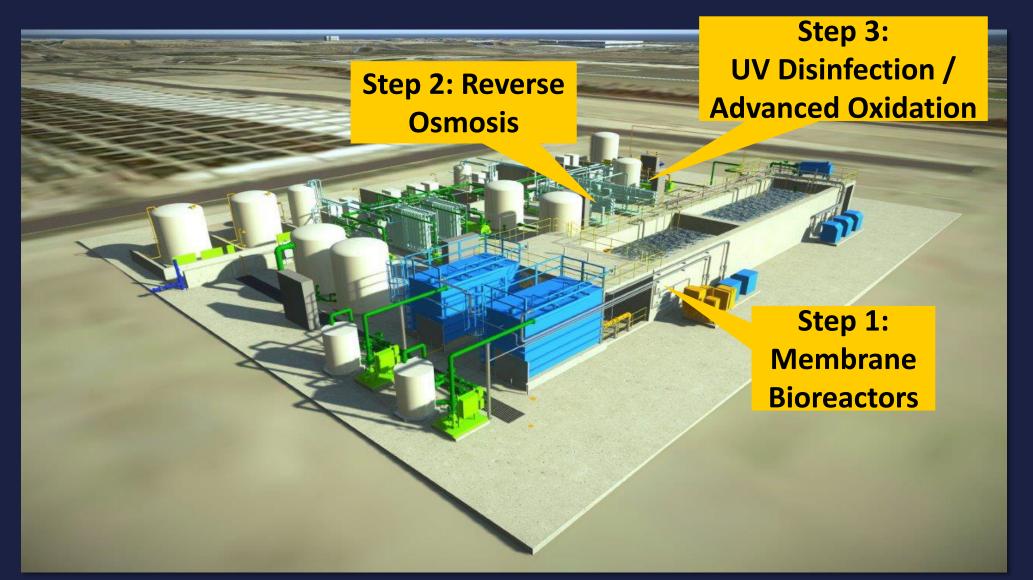




#### Demonstration Plant Overview

- Tests an innovative purification process
- Obtain regulatory approval of process
- Provides costs and data for fullscale facility
- Gain public support

## Purification Process





## Let's Take a Tour





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#### Metropolitan Pure Water Website

#### www.mwdh2o.com/purewater





# PUREW STER SOUTHERN CALIFORNIA



