Overview for Los Angeles Neighborhood Council Coalition

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Introductions

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Pure Water Los Angeles (LASAN)
Program Management

Erin Maciel

Pure Water Los Angeles (LADWP)
Program Management

PURE WATER LOS ANGELES

Water Supply Sources

Historical Imports

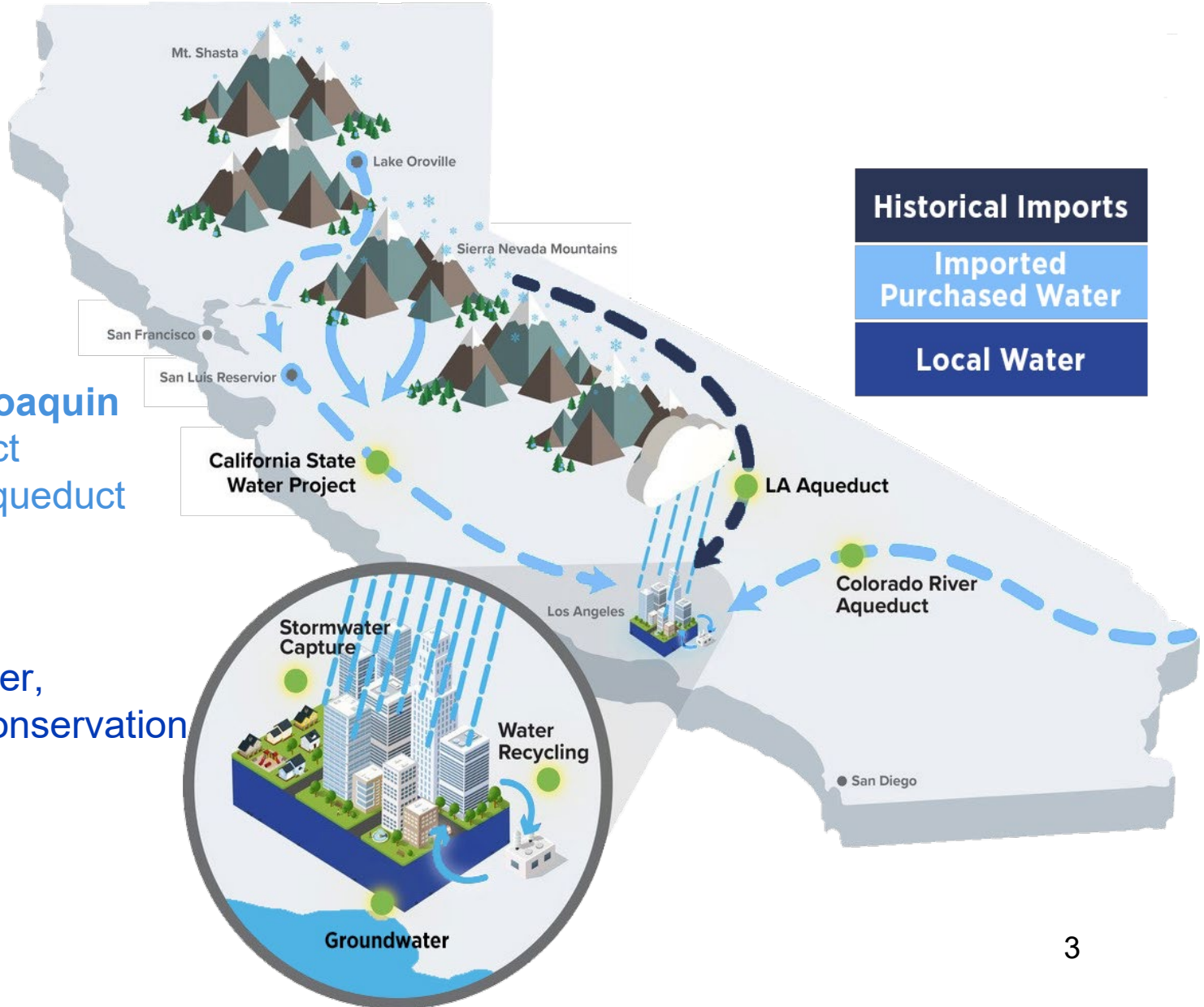
- **Eastern Sierras** via the Los Angeles Aqueduct

Imported Purchased Water

- **Northern Sierra and Sacramento-San Joaquin Delta** via the California State Water Project
- **Colorado River** via the Colorado River Aqueduct

Local Water

- Local Water Supplies including groundwater, recycled water, stormwater capture and conservation



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Increasing Local Water Supplies

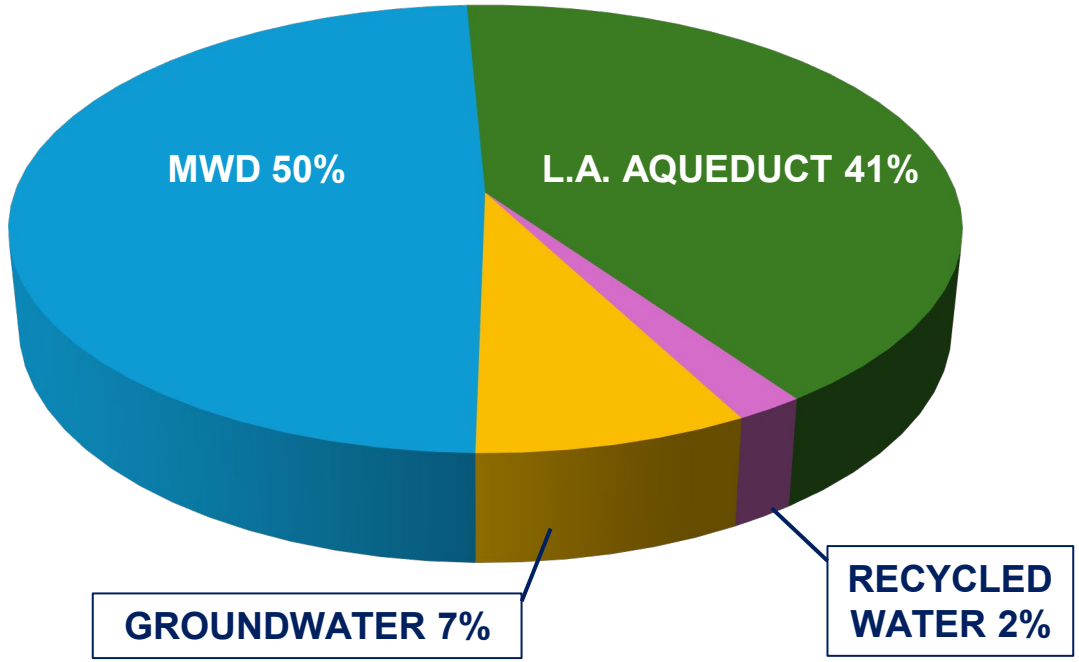
The Pure Water Los Angeles program aims to provide purified recycled water from LASAN's Hyperion Water Reclamation Plant by using advanced treatment and purification processes, which will create a new, sustainable water resource that will diversify the supply for L.A. and the region.

LADWP is forecasting over 70 additional stormwater projects over the next 15 years to double its capacity.

LADWP is remediating the San Fernando Valley Basin, which restores the capacity of the San Fernando Basin as a drinking water source and groundwater storage.

WATER SUPPLY SOURCES

(5-year average, FY 2020-2024)



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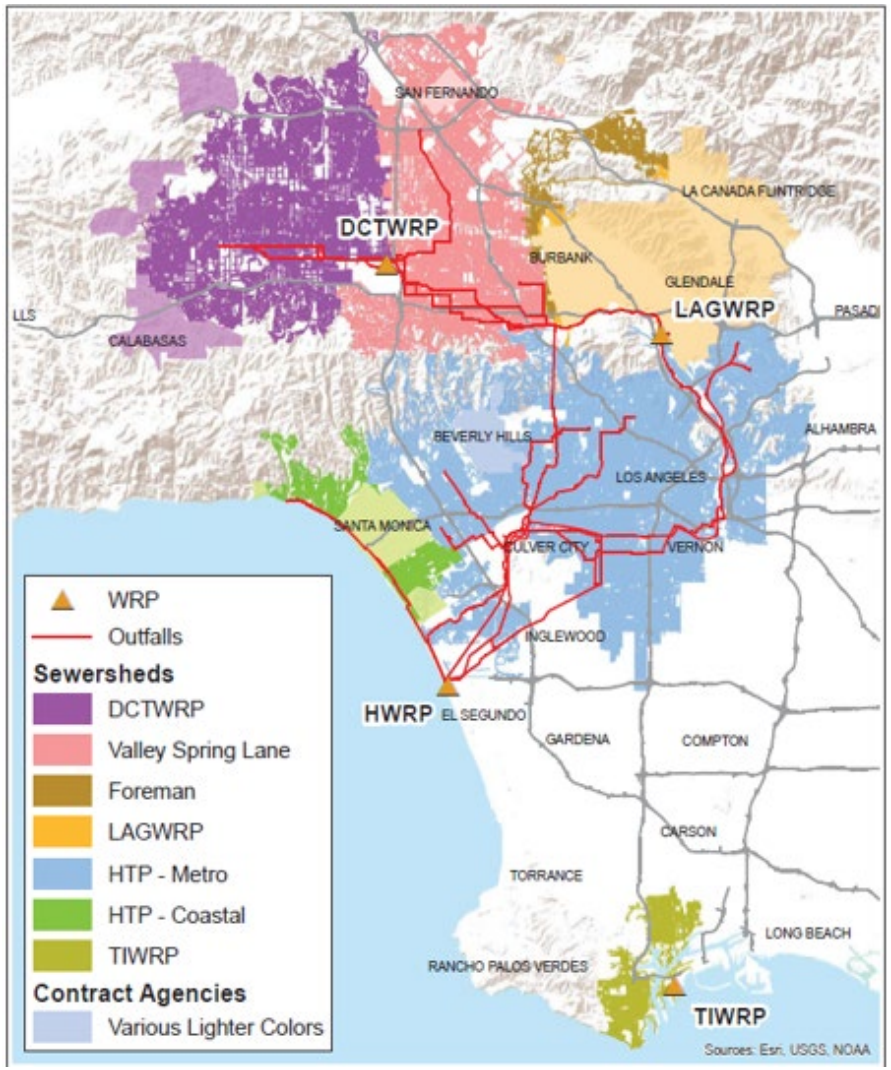
Wastewater System Overview



- 4.7 million people
- 600 square miles
- 29 contract agencies
- 6,700 miles of sewers
- Hyperion Water Reclamation Plant treats an average of 270 million gallons per day

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Two Departments Deliver One Major City Initiative

LA Sanitation & Environment
Source Water

+

LA Department of Water and Power
Finished Water & Distribution

=

Pure Water Los Angeles

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One Water

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Purified Recycled Water

National Advanced Purified Water Program

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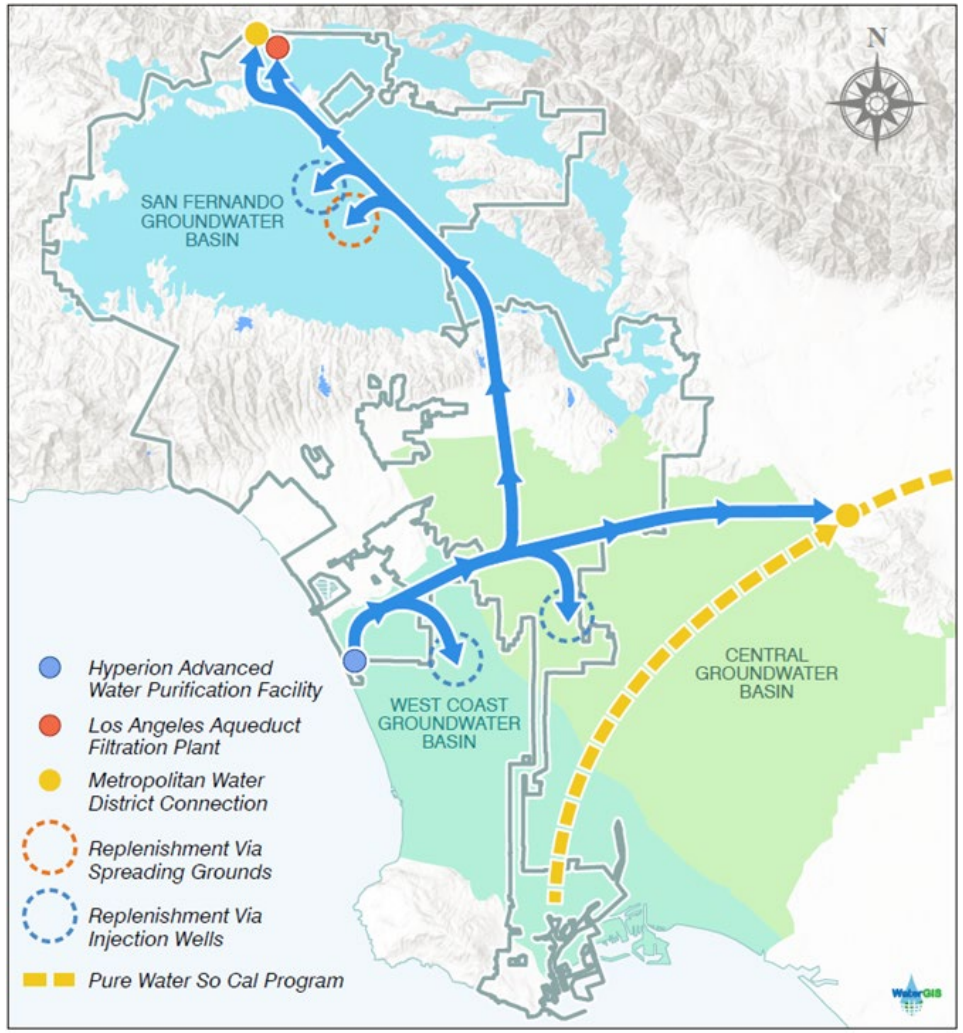
Pure Water Los Angeles



GOALS

- GOAL 1: Maximize Wastewater Reuse
- GOAL 2: Construct/Upgrade Cost-Effective Infrastructure
- GOAL 3: Diversity LA's Water Supply Portfolio
- GOAL 4: Resiliency, Reliability, and Sustainability
- GOAL 5: Enhance Ecosystem Health
- GOAL 6: Community & Equity Benefits

STRATEGY

IPR:
Replenishment of local groundwater basins

(Approved in 2014)

DPR:
Introduction of purified water upstream of Water Treatment Plant

(Approved in 2023)

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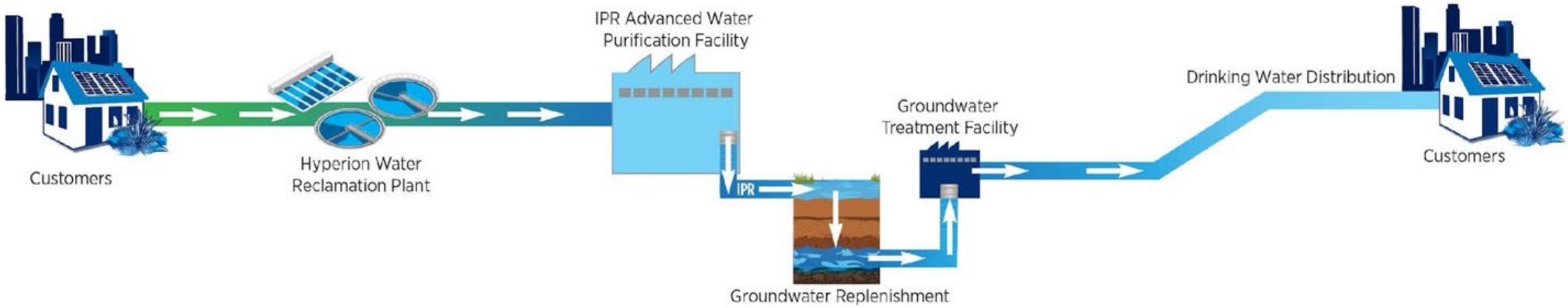
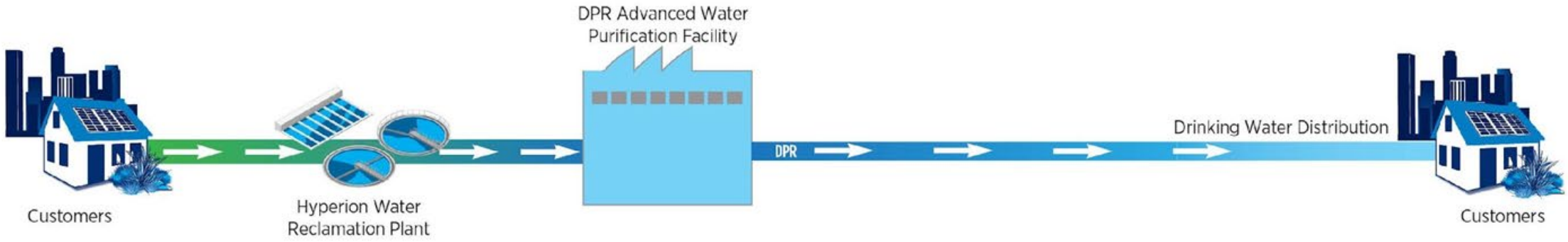
Indirect Potable Reuse (IPR) & Direct Potable Reuse (DPR)

IPR - Indirect Potable Reuse



DPR - Direct Potable Reuse



Construction and Implementation Phases

at Hyperion Water Reclamation Plant

Phase 1 (50 MGD):
Foundational infrastructure and initial water production

Phase 2 (50 MGD):
Expansion of treatment, increased water production

Phase 3 (up to 130 MGD):
Complete build out, maximization of water production

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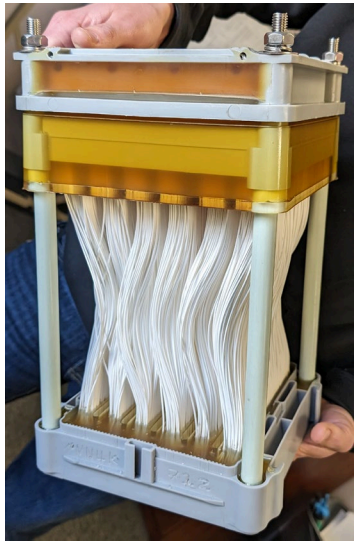
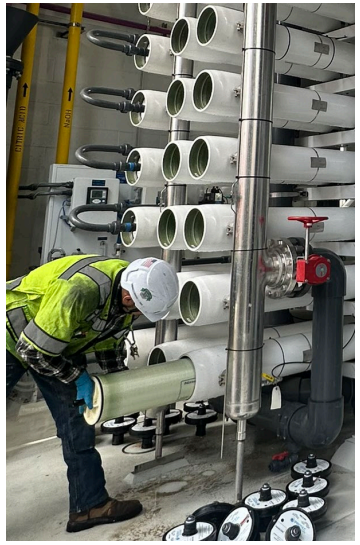
Potable Reuse Technology Terminology



Membrane Bioreactors (MBR)

organic matter and, potentially, nutrients such as nitrogen and phosphorus (depending on the MBR) are removed using biological processes. Next, membranes remove microscopic particles including microorganisms. Removes: nitrogen and microbial solids



Reverse Osmosis (RO)

Pressure is used to force the water through a semi-permeable membrane that transmits the water but stops most dissolved materials from passing through the membrane. Removes: minerals, bacteria, pathogens

Ultraviolet Advanced Oxidation (UV/AOP)

a purification process where powerful oxidants are formed and then used to break down chemicals and disinfect water. Removes: organic pollutants, microbes, and recalcitrant chemical contaminants

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Current Projects at Hyperion Play Critical Role

Hyperion Advanced Water Purification Facility

- Proof of Concept
- Construction completed
- Water production anticipated June 2025

Membrane Bioreactor Pilot Facility

- Regulatory acceptance and research
- Construction completed
- Testing to begin late 2025

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Benefits from Implementation of MBR

Environmental Benefit for Santa Monica Bay

- Use of Membrane Bioreactor (MBR), provides two major benefits:
  - Cleaner water for subsequent purification
  - Significant reduction of pollutants discharged

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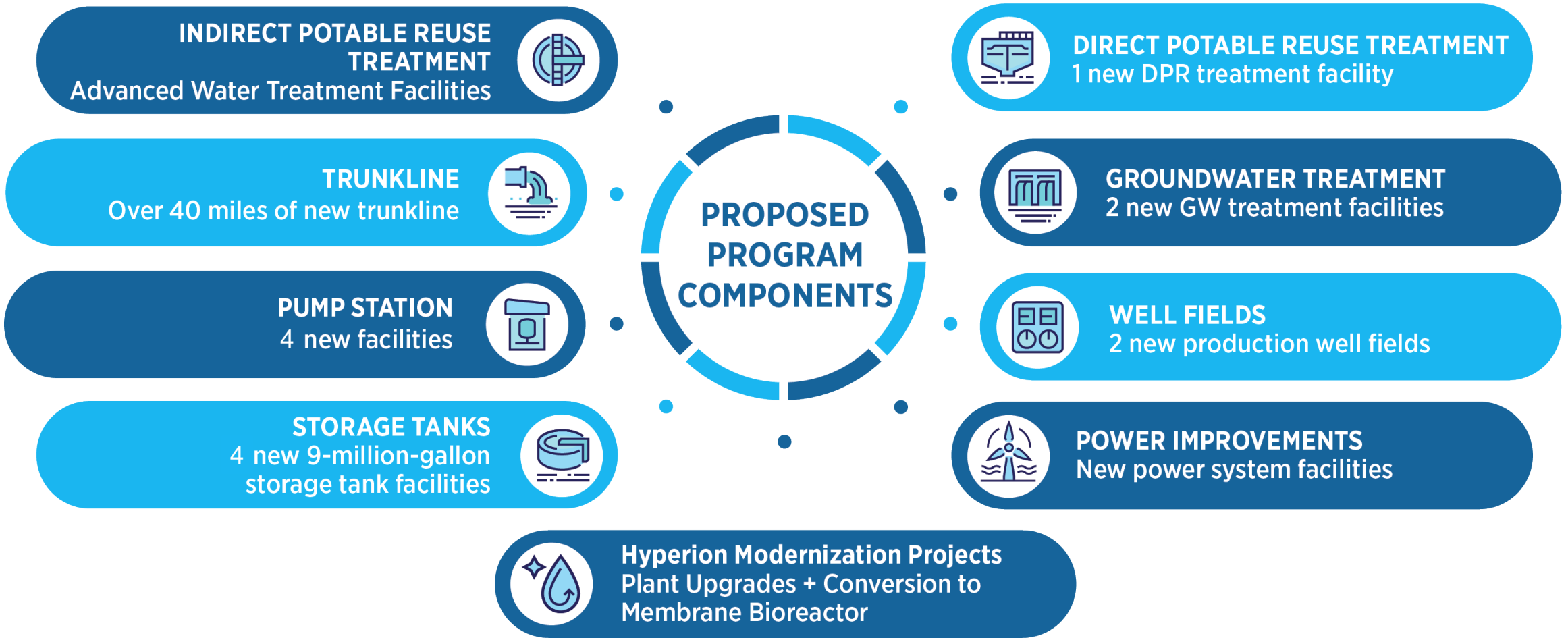
Projected Capital Improvements



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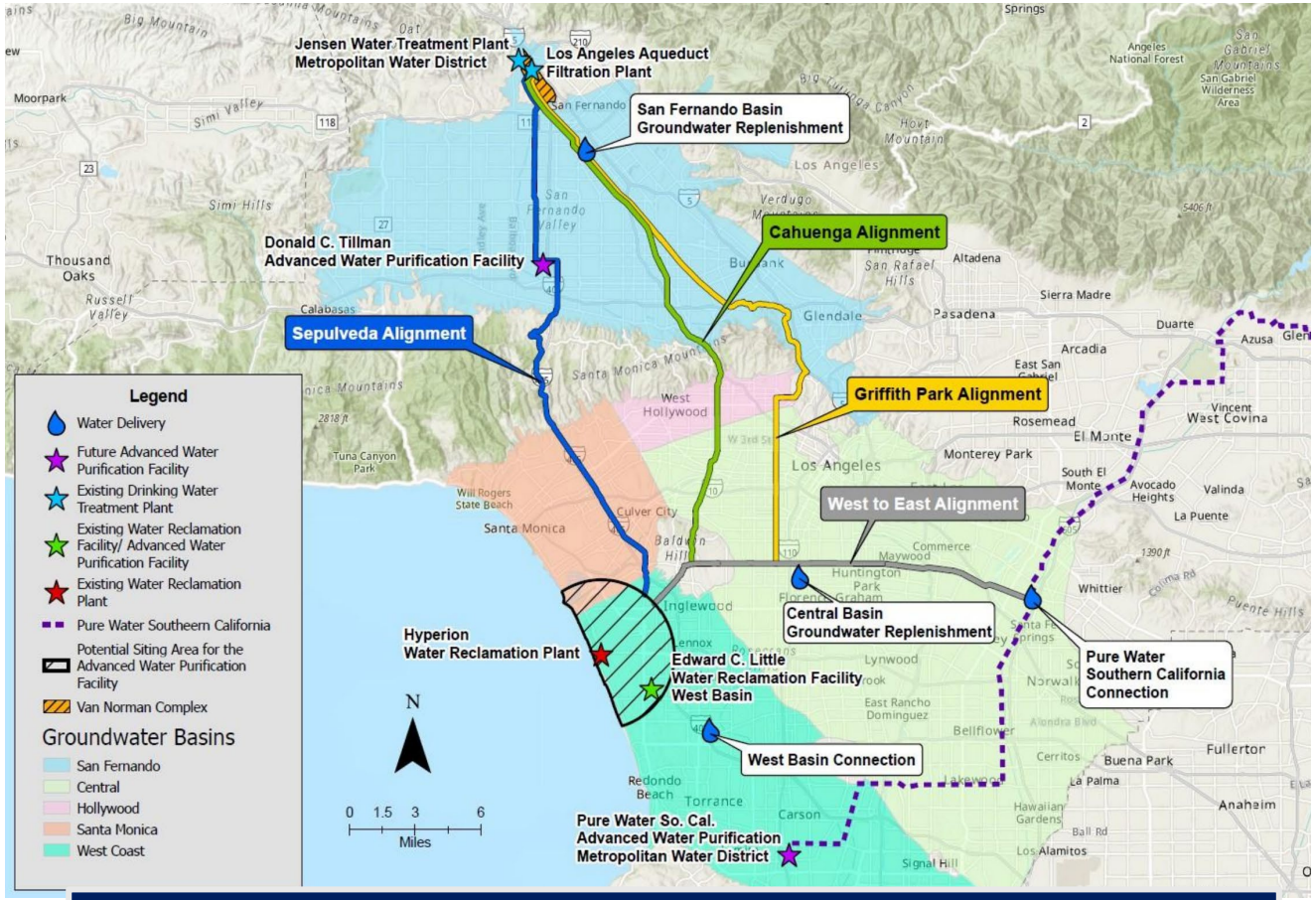
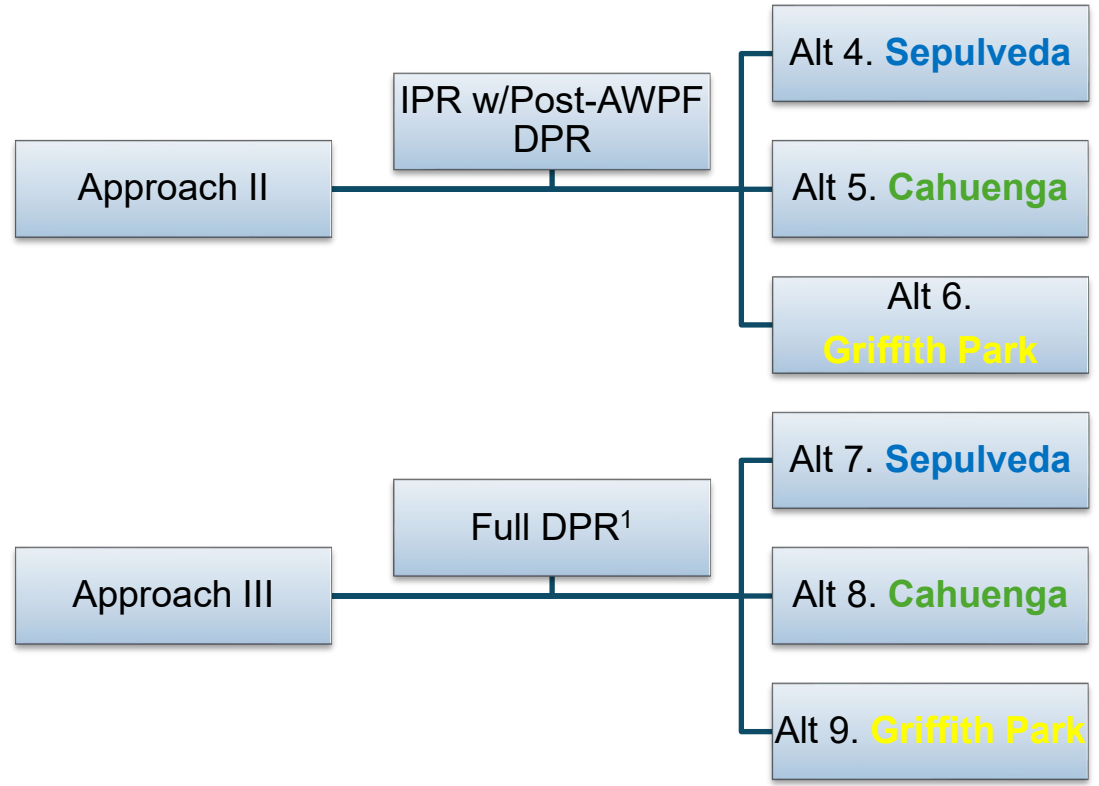
Treatment and Conveyance Strategies



DPR Regulations Approved by State on December 19, 2023



[1] – Approach III is IPR initially, then phased to full DPR.
[2] – All Alternatives include a connection to MWD's Pure Water Southern California Program.

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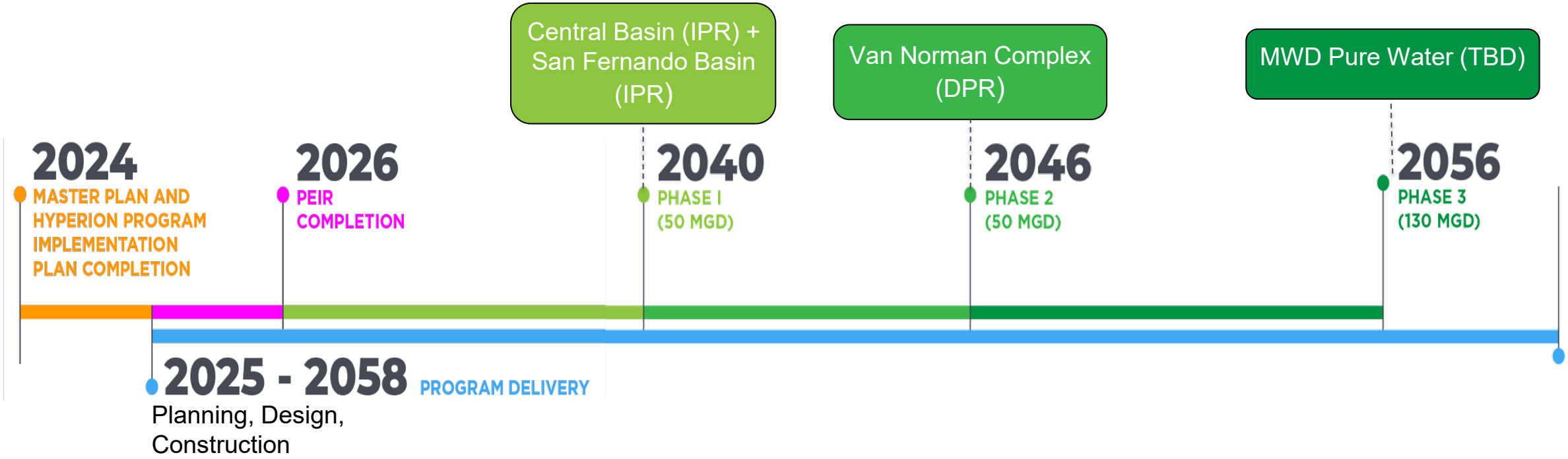
Program Phasing Schedule and Cost



Program Capital Cost Range:
$20.9 - $25.8B

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Program Benefits

EQUITY
invests in communities

CLIMATE JUSTICE
safeguards the availability of water for all Angelenos

ENVIRONMENTAL
protects the Santa Monica Bay

WORKFORCE DEVELOPMENT
generates good paying sustaining jobs

ECONOMIC
maximizes cost-effective production

TRANSPARENCY
ensures stakeholders are well-informed

PARTNERSHIPS
leverages regional participation

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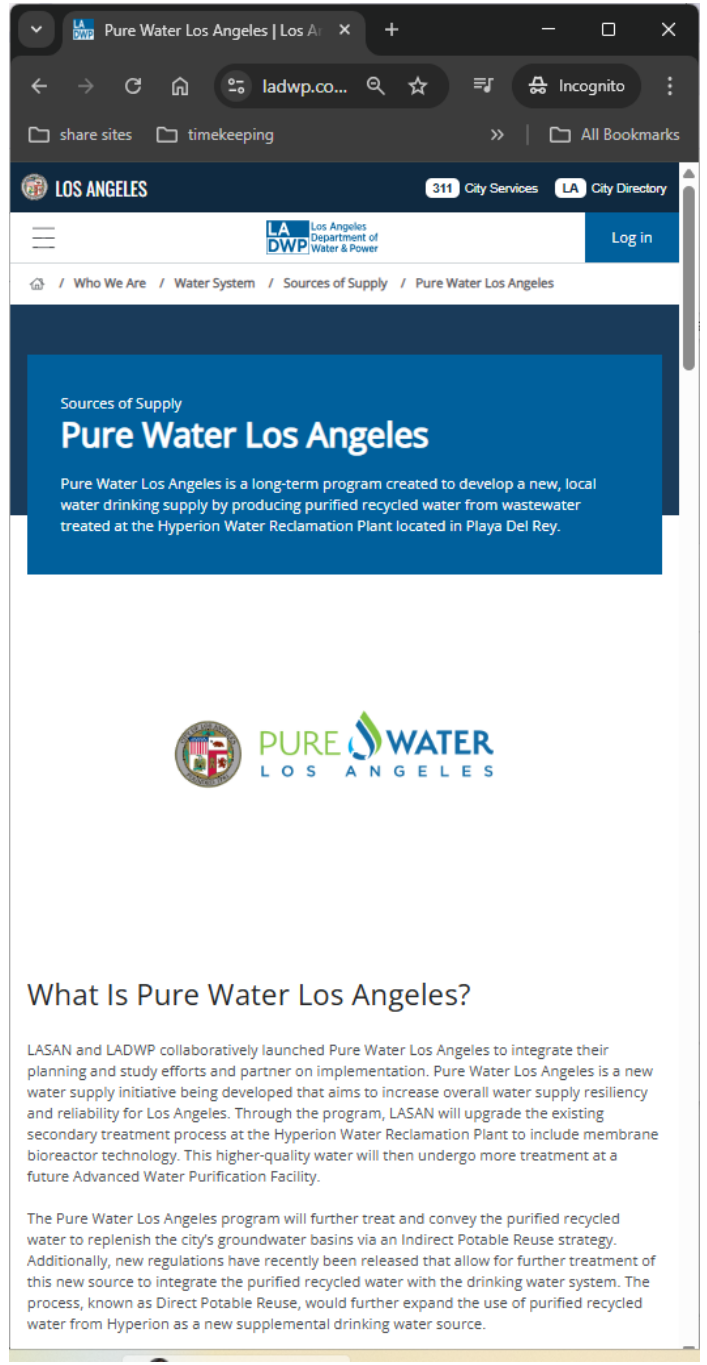
Resources on the Program Website

- Master Plan by LADWP
- Program Implementation Plan by LASAN
- An Introduction to the Master Plan and the Program Implementation Plan
- Program Factsheet
- Program Presentation
- ladwp.com/purewaterlosangeles
- Email: PureWaterLosAngeles@ladwp.com



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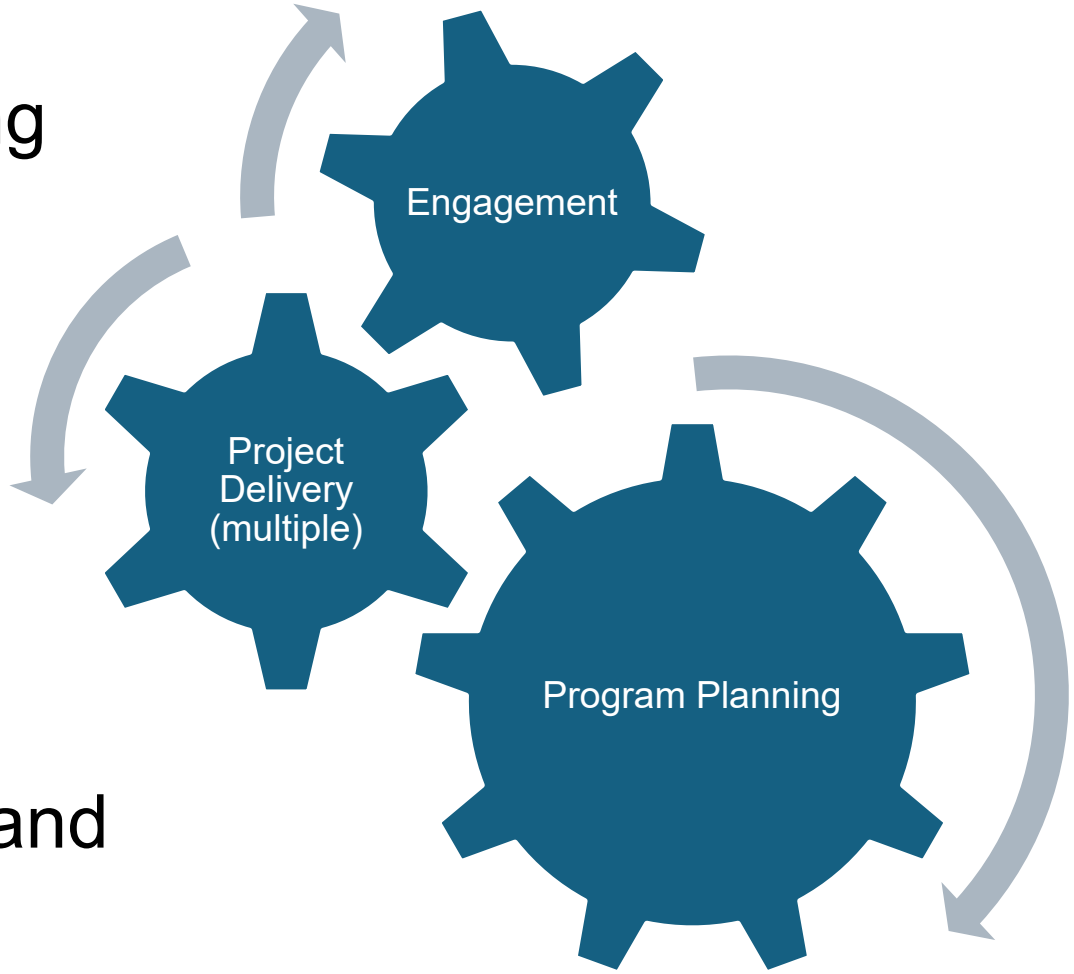
Program Evolution

Preliminary program planning completed

Programmatic EIR is next

Many program refinements and decisions yet to come



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Questions?