



Engineering, Operations, & Technology Committee

Pure Water Southern California Program Update

Item 6a

April 7, 2025

Item 6a
PWSC
Program
Update

Subject

Update on Pure Water Southern California Program

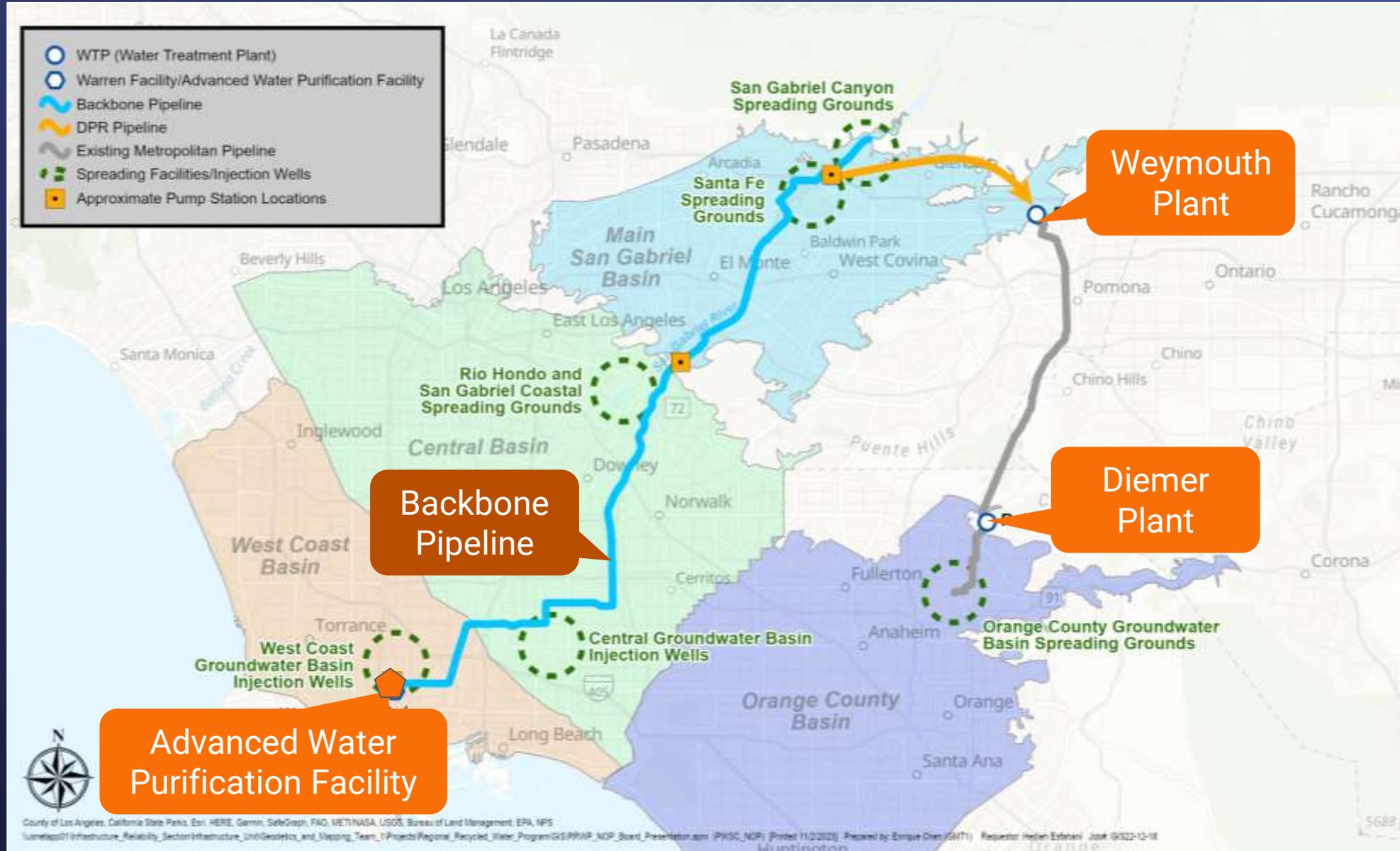
Purpose

Provide briefing on status of the PWSC

Next Steps

Continue demonstration testing & preparation of environmental documents, agency agreements & conceptual planning to advance the PWSC

Program Map



PWSC
Program
Update

Environmental Planning

- EIR
 - Preparation underway for draft EIR review & public outreach/engagement activities
 - EIR certification anticipated in early 2026
- SB 149 – Streamlining of CEQA process
 - Met with the State in January 2025
 - Provided general program information & potential community benefit opportunities
 - Prepared updated economic impact study

PWSC
Program
Update

Member Agency Term Sheets

- Sent draft term sheets to member agencies
- Preparing for workshops for:
 - Member agency managers (April)
 - Board (May)
- Preparing for Board action this summer

Conceptual Planning & Engineering

- AWT Facilities
 - Receiving SCE Method of Service study
 - Updating conceptual facilities plan
 - Continued preparation of RFQ
- Conveyance Facilities
 - Initiated SCE lease agreement discussions
 - Completed final back-check of Conceptual Design Report
 - Conducted Reach 1 & Reach 2 market sounding
 - Continued preparation of RFQ

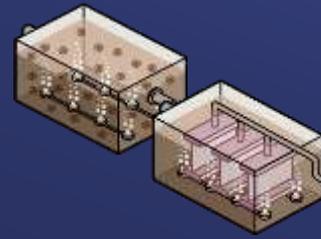
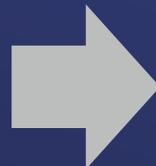


Soil Resistivity Testing in
SCE Transmission
Corridor

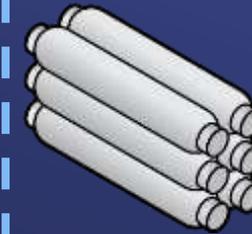
Demonstration Plant Treatment Processes

Grace F. Napolitano Innovation Center
Pure Water Southern California

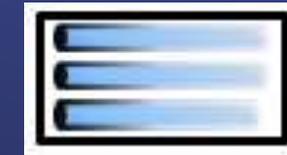
Warren Facility
Primary Effluent or
Secondary Effluent



"Flex" MBR →



RO →



UV/AOP

AWT Processes

AWT Product and Concentrate

Legend

AWT: Advanced Water Treatment

RO: Reverse Osmosis

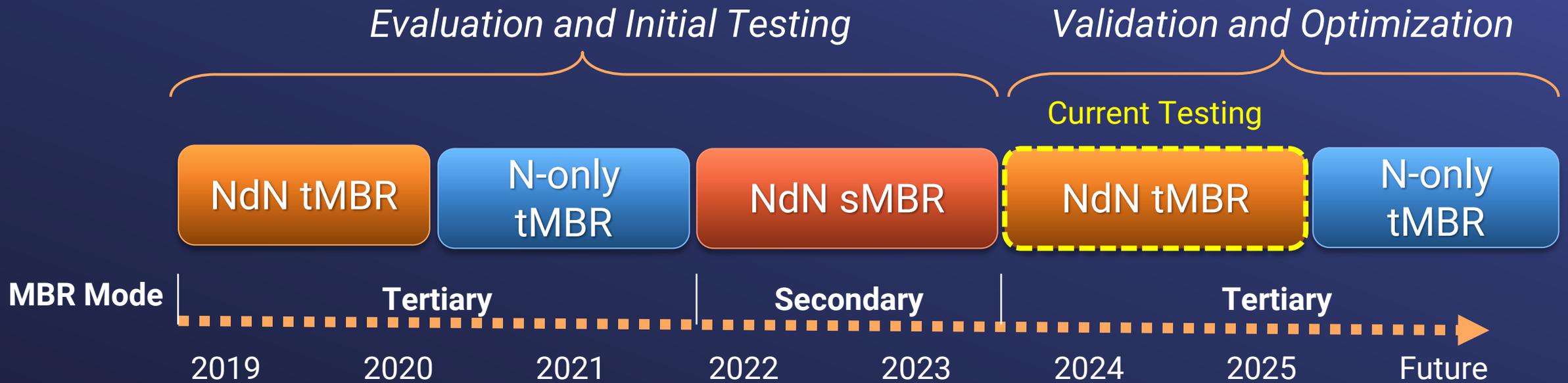
UV/AOP: Ultraviolet/Advanced
Oxidation Process

Treatment Objectives

- Nitrogen reduction for potable reuse and ocean discharge
- RO pretreatment

Demonstration Plant Testing Schedule

- Current Testing Objective:
 - Validated treatment processes
 - Optimized system performance



Legend

NdN: Nitrifying-denitrifying

N-Only: Nitrifying-only

Demonstration Testing and Maintenance Activities

- Completed tests:
 - Spiking VOCs into the MBR system
 - Spiking CECs into the UV/AOP system
 - Virus removal by the RO system
- Supported LACSD toxicity test on RO concentrate
- Continued monitoring and maintenance
- Security lights and laboratory upgrades



Upgraded Laboratory



Crane Removing MBR for Inspection



Upgraded Security Lights



Staff Monitoring WQ During Test

Technical Collaboration and Industry Engagement

- Joint safety training session with LACSD
- Discussed demonstration testing with Singapore's Public Utilities Board
- Discussed DPR testing plan with the Independent Science Advisory Panel
- Supported technical tours with regulators and industry
- Presented testing results at Membrane Technology Conference



Staff Giving a Tour to SWRCB



Sharing Results with PUB Delegation



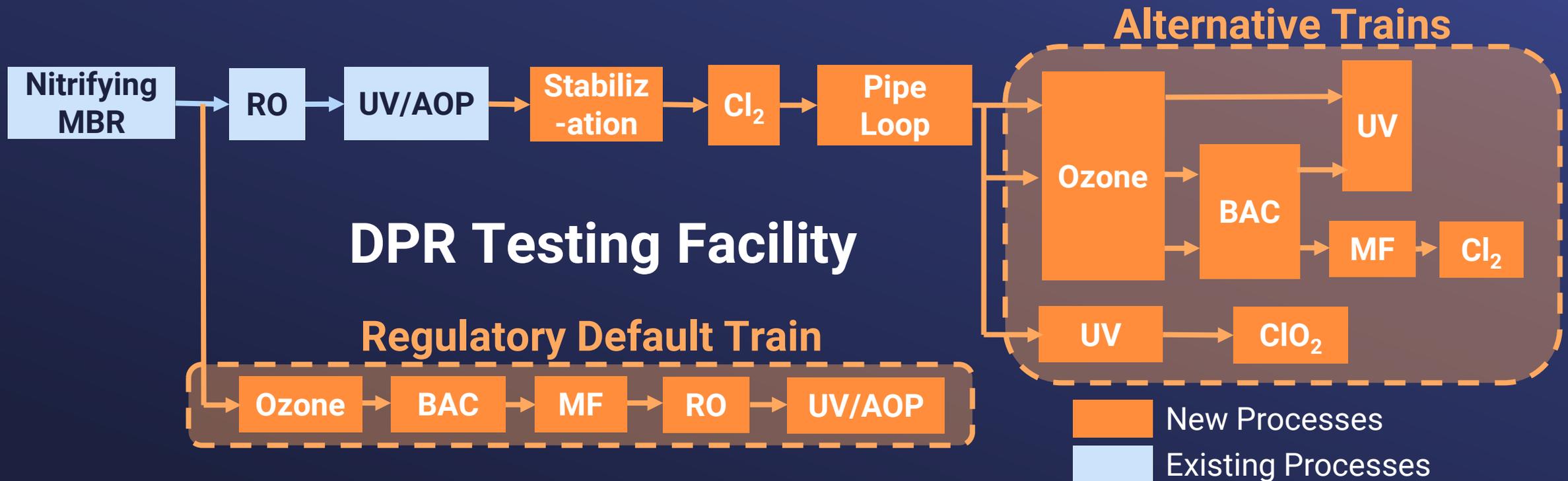
Joint Training with LACSD



MTC Conference in Long Beach

DPR Pilot and Demonstration Testing

- Comprehensive DPR Research Plan – Ongoing
- Equipment procurement – Summer 2025
- Finalize DPR pilot/demonstration design – Summer 2026
- Complete DPR construction – Early 2028



Quarterly Program Outreach Update

- Continued community engagement and outreach
- Tours, briefings & conferences
- New informational program video



Quarterly Public Tour



South Bay Cities Council of Governments General Assembly



Updated Program Video



UCLA Nursing Program



Irwindale City Council

Public Engagement Plan for Draft EIR

- Public meetings (in-person & virtual)
- Community events
- Collaboration with Member Agencies
- Partnerships with community-based organizations
- Engagement Resources
 - Printed & digital materials
 - Dedicated webpage
 - “How to Participate” videos
 - Social media
 - Press release & newspaper ads



Community Benefits Program Research

- October 2023 - Research initiated to benchmark community benefits programs & review best practices
- May 2024 – Development of potential framework



- Next Steps: Present research findings & proposed framework for discussion and feedback in June 2025

Program Schedule

