

Subcommittee on Pure Water Southern California and Regional Conveyance

# Pure Water Southern California Quarterly Update

Item 3b June 25, 2024

#### Subject

Pure Water Southern California Quarterly Program Update

# Item 3b PWSC Quarterly Update

#### Purpose

To provide an update on the PWSC recent program tasks and accomplishments

#### Next Steps

Continue planning and design efforts and work to meet the Program goals and objectives

# Item 3b PWSC Quarterly Update



# Agenda

- Grant update
- Program phasing
- DPR Roadmap and evaluations
- Environmental planning update
- Independent review of Regional Reuse Programs
- Next Steps

# Grant Update



#### **USBR Grant Award Overview**

- LSWR Grant Program
  - Requested \$125M
  - Received \$99,199,096
  - All federal grants have a 3x match requirement
  - At request of USBR, a second application has been submitted for remainder of original request (\$26M)
- Metropolitan will share approximately 25 percent of the grant with LACSD for MBR facilities
- Awards ceremony held on May 28, 2024

# Grant Recipients

- Metropolitan/LACSD: PWSC
- City of LA: LA Groundwater Replenishment Project
- City of Ventura: VenturaWaterPure Program
- Washington County Water Conservancy District, Utah: Regional Reuse System

# **USBR Grant Award Ceremony**

May 28, 2024



Grace F. Napolitano PWSC Innovation Center

### Timeframe to Spend Grant Funds Nov. 2026

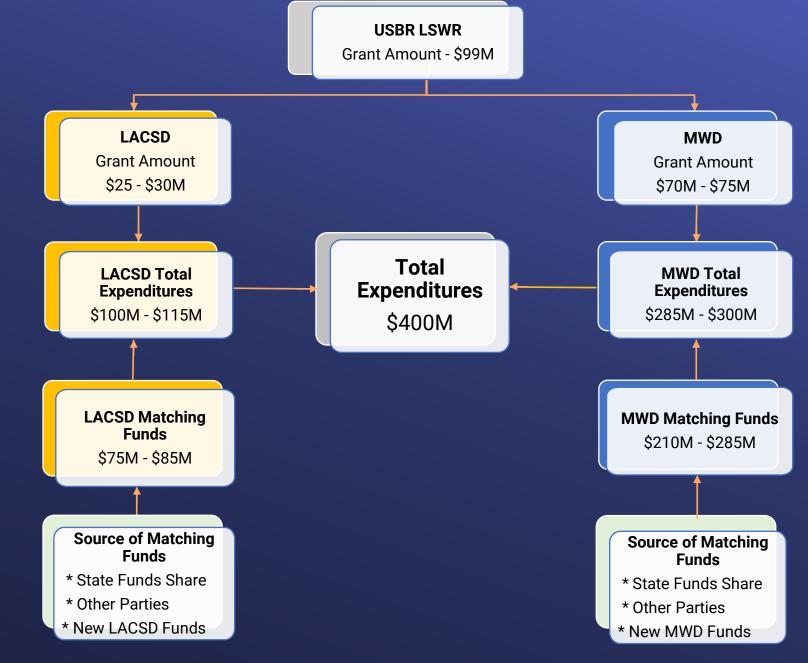
# Scope of Work for Grant and Match Funds

- Planned scope of work to match funding
  - On-board treatment plant design-build team
  - Progress treatment plant design up to 60%
  - Complete pipeline designs for Reaches 1 & 2
  - Begin acquisition of rights-of-way
  - Continue program management & public outreach
  - Conduct Demo Plant testing/research
- Continue to work with LACSD to prepare an agreement amendment to share PWSC AWPF responsibilities and grant funding

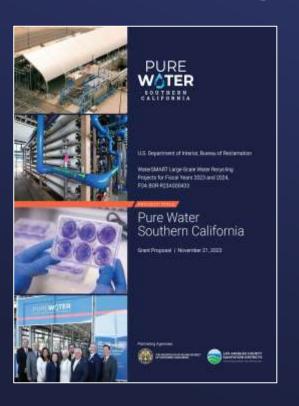
# Grant Update Potential Expenditures and Funding Sources

#### **NOTE**

All numbers are preliminary and subject to negotiation and update



# Finalize Grant Planning



# Upcoming Activities

- Negotiate agreement with USBR for receipt of grant
- Finalize negotiations with LACSD
- Prepare cost loaded schedule and finalize work/spending plan for the grant
- August 2024, informational item on upcoming actions
- September 2024, Board authorization to:
  - accept grant award
  - commitment of matching funds
  - approve LACSD agreement amendment

### Potential Phasing Alternatives

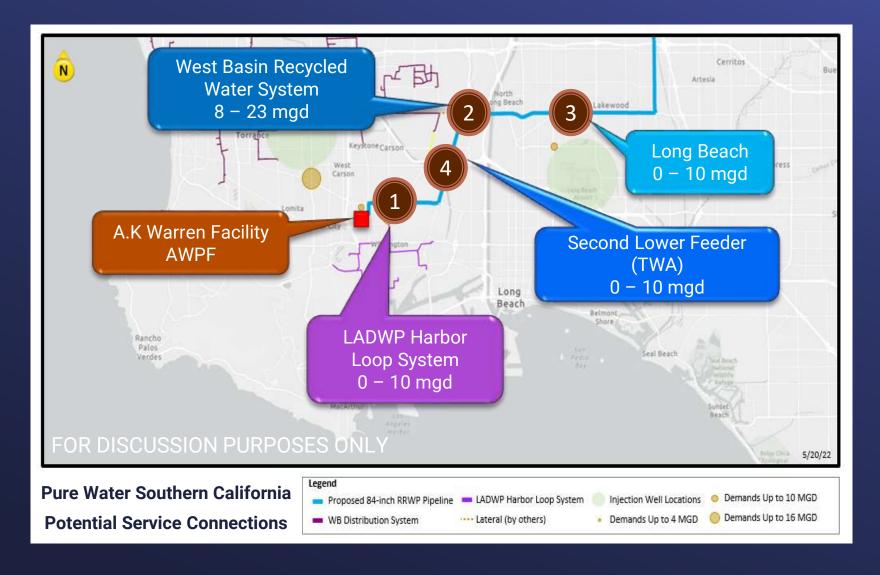


Example from March 2024

# Development of Alternatives

- Concept introduced at the March 2024 Subcommittee
- Investigate alternative approaches to program phasing
  - Reduce initial scope and costs of Phase 1
  - Large enough capacity to achieve viability
- Alternative phasing discussions have focused on:
  - Coordination with Carson area demands
  - Smaller treatment plant and shortened conveyance
  - Potential incorporation of DPR
- Multiple alternatives to be developed
  - For consideration and discussion by Board

#### Potential 30 MGD Phase I Alternative



#### **Key Components**

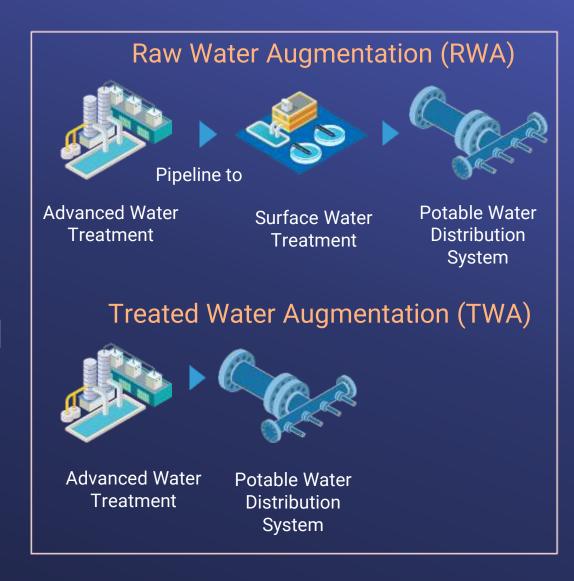
- ±30 MGD AWTF
- ± 10 miles of conveyance pipeline (Carson to Long Beach)
- Initially provides IPR supply to multiple service connections
- Future Opportunity for DPR (TWA) at Second Lower Feeder

# Develop a Phased Program to Match Demands and Available Funding

- Consistent approach to other Metropolitan mega-projects (e.g., ozone retrofits at WTPs)
- Benefits of a smaller initial phase to program
  - Reduces initial complexity of program
  - Allows staff to gain operational knowledge before expanding
  - Reduces near-term cost impacts
  - Spreads out overall rate impacts
- Pursue property/ROW for full program where it makes sense
- CEQA, permitting, etc. would continue for the full program to minimize impacts on future phases

# Direct Potable Reuse (DPR) Regulations

- State Water Board DPR regulatory development
  - Mandated by SB918 and SB322
  - 2016 2019: Feasibility and Framework documents
  - Initially focused on RWA
- December 2023: Regulations adopted
  - Effective by Fall 2024
  - Regulations provide opportunity to consider implementing TWA



# Path to Implementing DPR

# White Paper

# Expanding DPR Assessment to Include RWA and TWA

#### Purpose

 Provide an overview of considerations for implementing RWA and TWA in PWSC program

#### Scope

- PWSC program evolution and regulatory requirements
- Comparison of RWA and TWA
- Key information and data gaps
- Considerations for integration into system operations
- Next steps and research needs

#### Schedule

 Complete assessment over summer and present at upcoming PWSCRC subcommittee meeting

# DPR Research Roadmap

- DPR research will be similar to prior Metropolitan programs to investigate alternative treatment processes
  - Extensive research on ozone prior to implementation
  - IPR research began in 2010 and demo testing started in 2019
- DPR research program to address both RWA and TWA
  - Contaminants and treatment strategies
  - Monitoring and response time
  - Water quality and distribution system impacts
  - Hydraulics and system integration
- DPR Research Plan to be developed in summer/fall 2024
- Additional treatment processes to be added at demo plant for DPR testing
  - Ozone, GAC, UV, Microfiltration, Chlorine dioxide

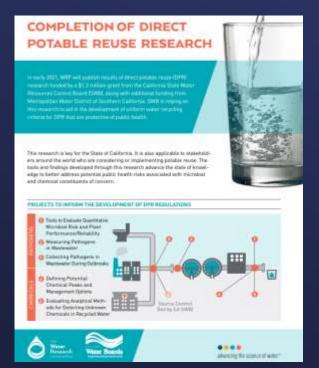


Ozone Demonstration Testing, 1990s



PWSC Demonstration Testing, 2019 - present

# DPR Research



## Leadership and Coordination

- Consider funding opportunities to advance DPR research
  - Metropolitan provided \$975,000 to Water Research Foundation to co-fund several research projects to inform California DPR regulatory development
- Regional collaboration and technical exchange with partners on water reuse
- Engagement with Independent Science Advisory
   Panel and regulators on approach to DPR
- Public opinion research on DPR

Metropolitan-Funded DPR Research

# Environmental Planning Efforts

- Continue to prepare technical reports & studies, writing/reviewing EIR sections
- Developing an approach to utilize SB 149 for PWSC
  - SB 149 legislation passed in July 2023
  - Sites Reservoir first to receive certification
  - Begin discussions with State on approach for PWSC
- Potential benefits include
  - Streamlined CEQA litigation process
  - Designation of program as a critical water infrastructure
  - Potential benefit to future funding opportunities
- Requires early preparation of Administrative Record
- EIR cost and schedule impacts are to be determined

#### PEIR/EIR

**Draft EIR** 1<sup>st</sup> or 2<sup>nd</sup> Quarter 2025

Final EIR

4<sup>th</sup> Quarter 2025

or

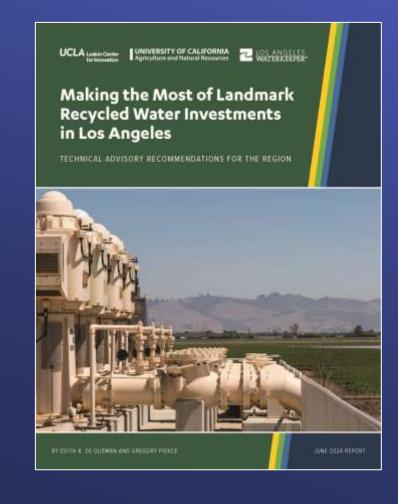
1<sup>st</sup> Quarter 2026



# Independent Review of Regional Reuse Programs

# TAC Independent Review

- Technical Advisory Committee (TAC) workshop (Feb. 2024)
- TAC: Universities, agencies/GMs, NGOs
- Agencies: MWD, LACSD, City of LA, WBMWD, Las Virgenes MWD
- Summary Report (June 2024)









# Item 3b PWSC Quarterly Update

# Next Steps

- Continue alternative phasing investigations
- Plan for LSWR grant implementation
- Continue work on agreements
- Board schedule
  - August Board informational item to EO&T Committee
  - September Board actions
    - Accept LSWR grant
    - Authorize matching funds
    - Authorize LACSD agreement amendment

