



Subcommittee on Pure Water Southern California
and Regional Conveyance

Pure Water Southern California Quarterly Update

Item 3b
June 25, 2024

Item 3b
PWSC
Quarterly
Update

Subject

Pure Water Southern California Quarterly Program 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
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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

USBR Grant Award Ceremony

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



Grace F. Napolitano PWSC Innovation Center

Timeframe
to Spend
Grant Funds
Nov. 2026

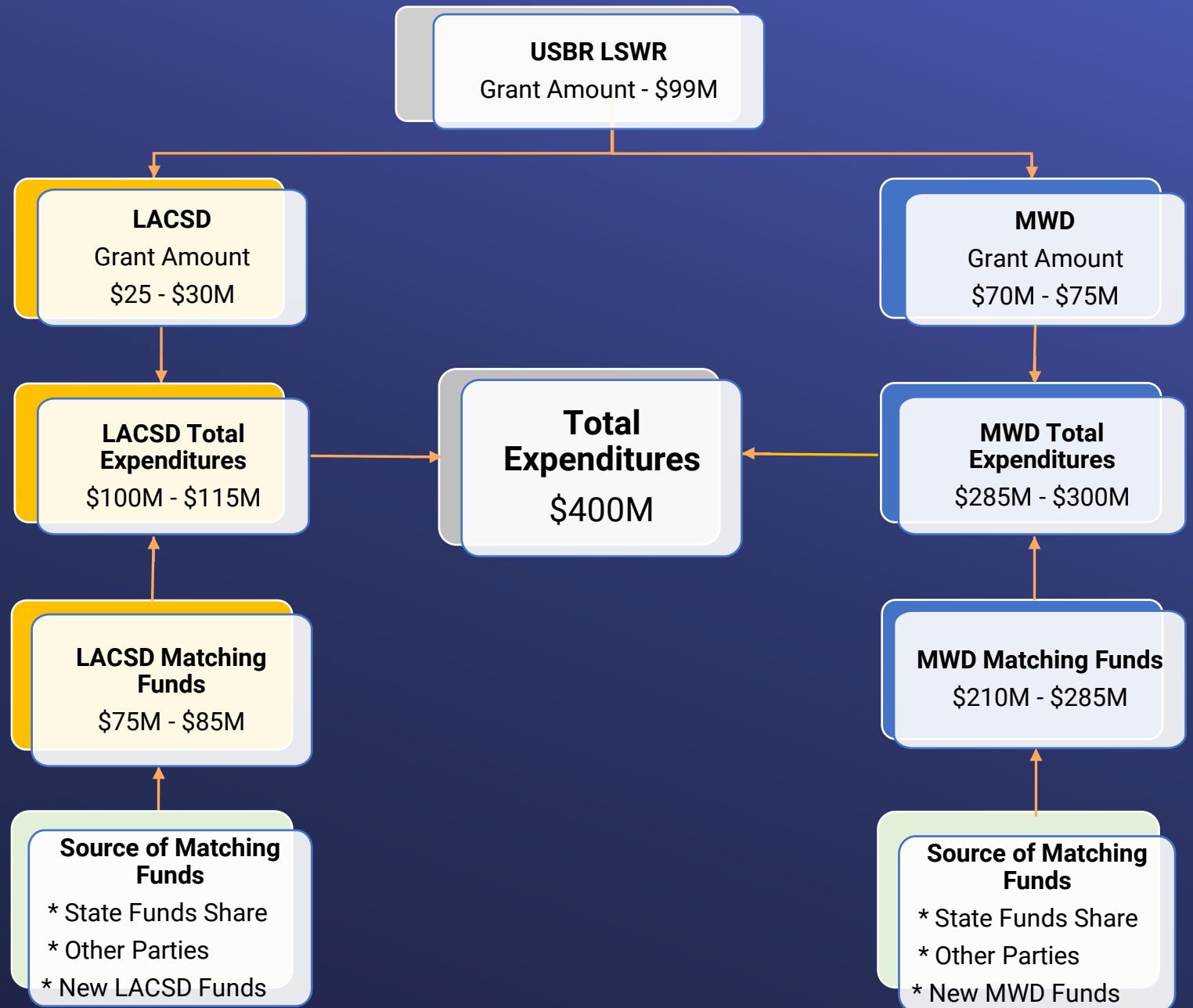
Scope of Work for Grant and Match Funds

- 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

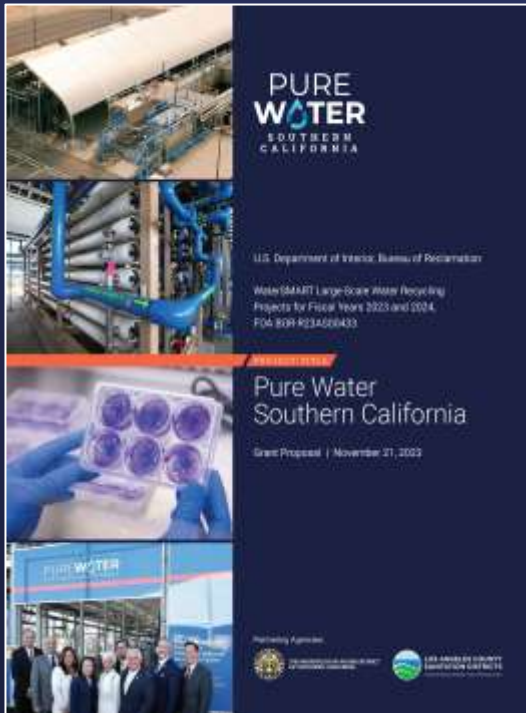
All numbers are preliminary and subject to negotiation and update



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

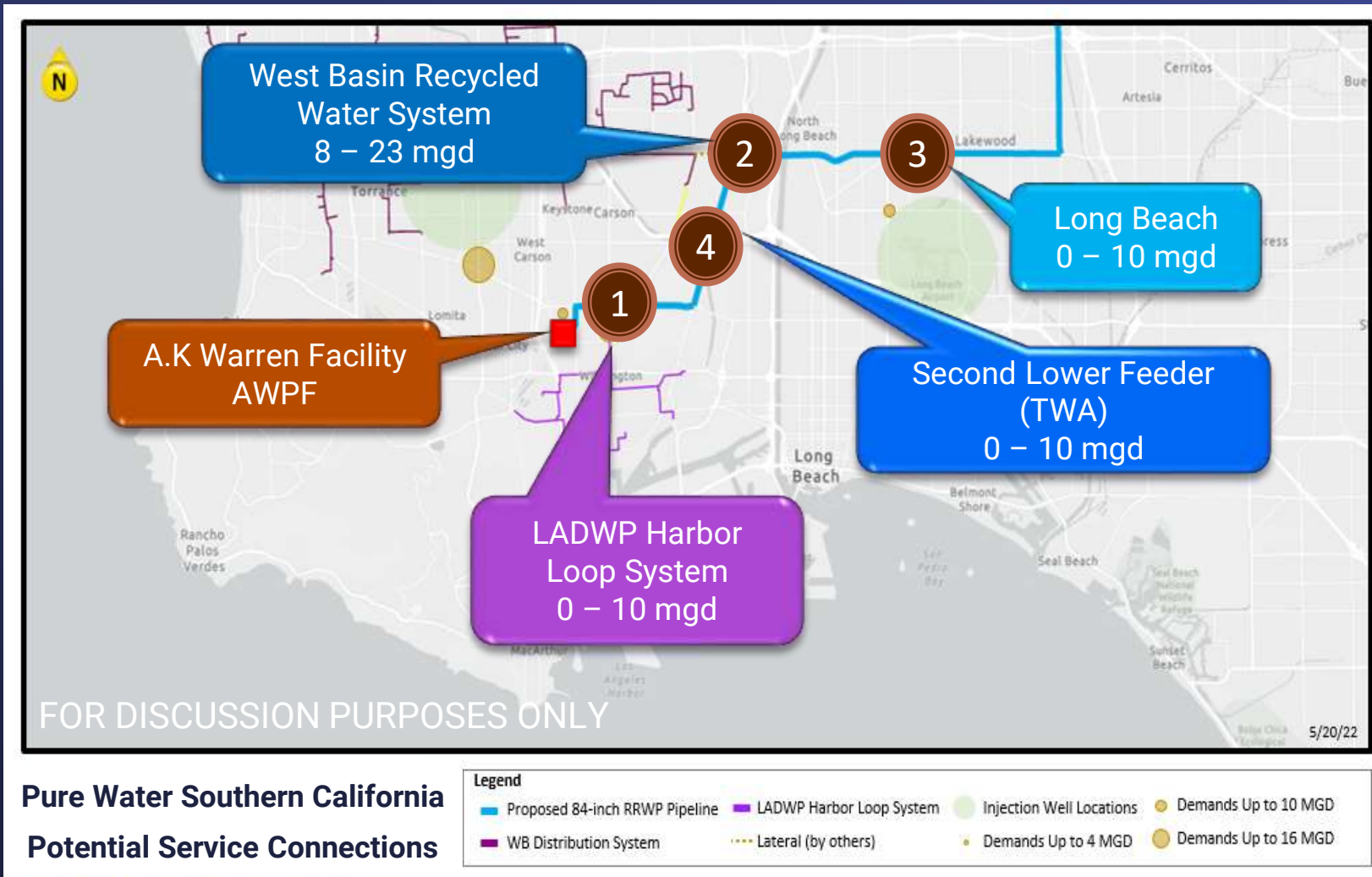
Development of Alternatives

- 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



Example from March 2024

Potential 30 MGD Phase I Alternative



Key Components

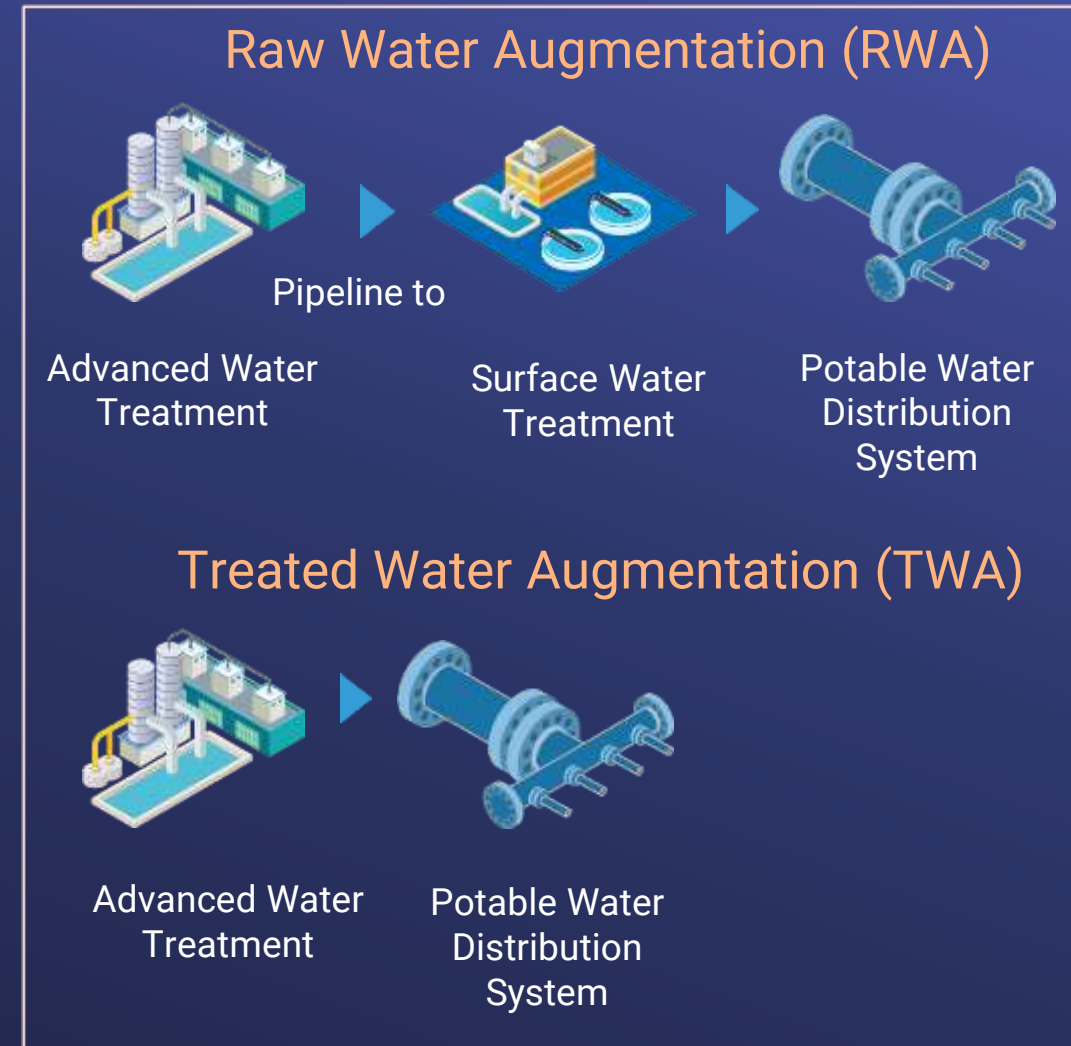
- **±30 MGD AWTF**
- **± 10 miles of conveyance pipeline (Carson to Long Beach)**
- **Initially provides IPR supply to multiple service connections**
- **Future Opportunity for DPR (TWA) at Second Lower Feeder**

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

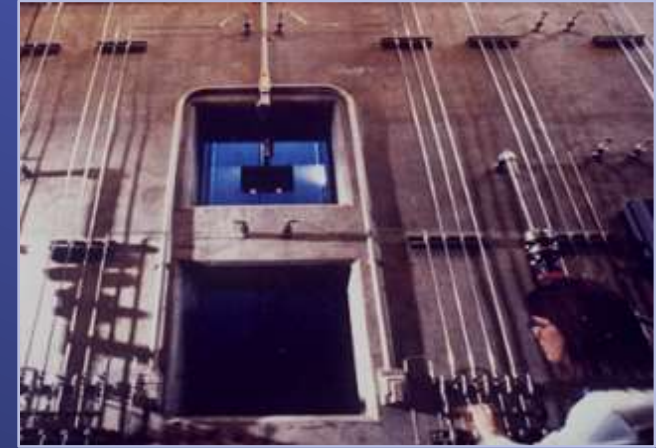
White Paper

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

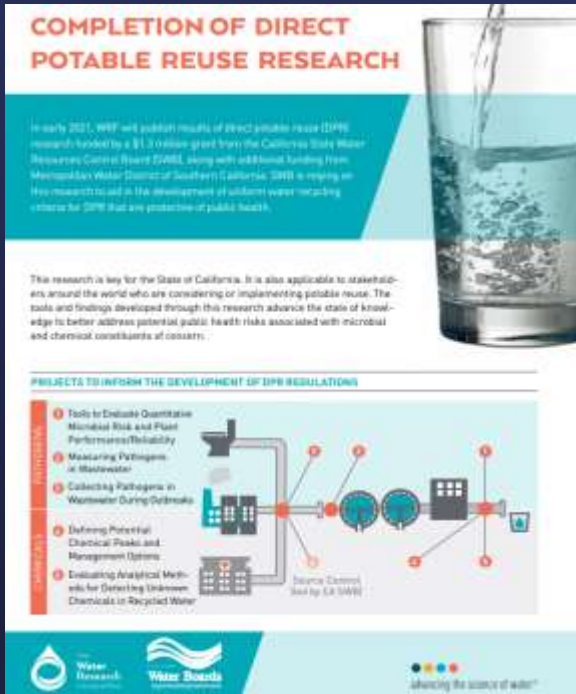


PWSC Demonstration Testing, 2019 - present

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
1st or 2nd
Quarter 2025

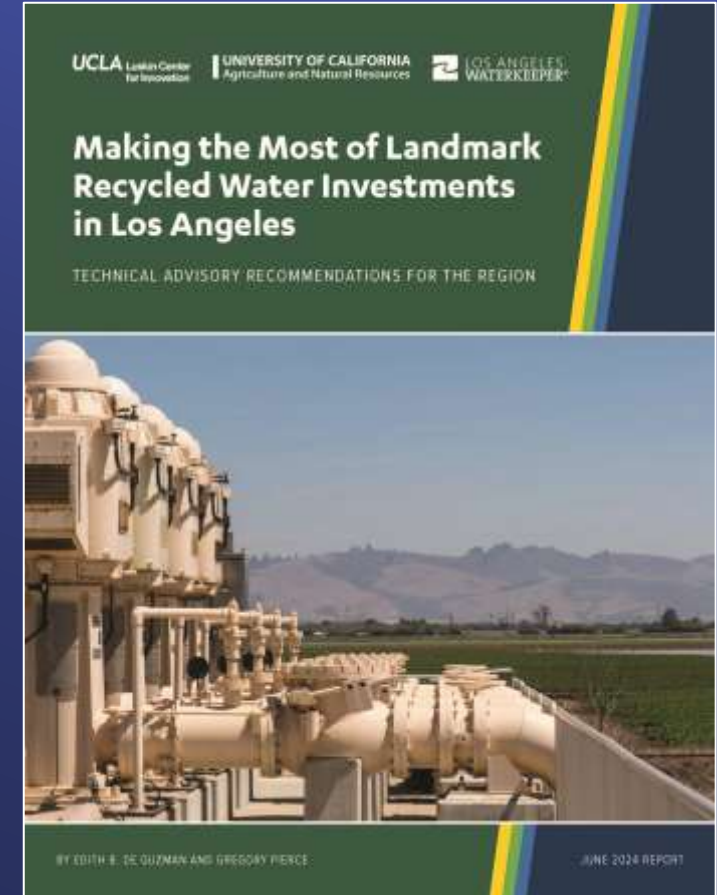
Final EIR
4th Quarter 2025
or
1st Quarter 2026



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)



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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

