

# The Metropolitan Water District of Southern California

# Agenda

The mission of the Metropolitan Water District of Southern California is to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

## **PWSCRC Committee**

M. Camacho, Chair  
J. Morris, Vice Chair  
D. Alvarez  
J. Crawford  
A. Fellow  
L. Fong-Sakai  
R. Lefevre  
M. Luna  
J. McMillan  
K. Seckel

## **Subcommittee on Pure Water Southern California and Regional Conveyance - Final**

Wednesday, January 22,  
2025

09:00 a.m. PWSCRC

Meeting with Board of Directors \*

**January 22, 2025**

**9:00 a.m.**

**Agendas, live streaming, meeting schedules, and other board materials are available here:**

**<https://mwdh2o.legistar.com/Calendar.aspx>. Written public comments received by 5:00 p.m. the business days before the meeting is scheduled will be posted under the Submitted Items and Responses tab available here:**

**<https://mwdh2o.legistar.com/Legislation.aspx>.**

**If you have technical difficulties with the live streaming page, a listen-only phone line is available at 1-877-853-5257; enter meeting ID: 873 4767 0235.**

**Members of the public may present their comments to the Board on matters within their jurisdiction as listed on the agenda via in-person or teleconference. To participate via teleconference 1-833-548-0276 and enter meeting ID: 876 9484 9772 or to join by computer [click here](#).**

---

**MWD Headquarters Building • 700 N. Alameda Street • Los Angeles, CA 90012**

**Teleconference Locations:**

**3024 Fairview Drive • Vista, CA 92084**

**30378 Canyon Trail Court • Menifee, CA 92584**

**Western MWD • 14205 Meridian Parkway • Riverside, CA 92518**

---

\* The Metropolitan Water District's meeting of this Committee is noticed as a joint committee meeting with the Board of Directors for the purpose of compliance with the Brown Act. Members of the Board who are not assigned to this Committee may participate as members of the Board, whether or not a quorum of the Board is present. In order to preserve the function of the committee as advisory to the Board, members of the Board who are not assigned to this Committee will not vote on matters before this Committee.

- 1. Opportunity for members of the public to address the committee on matters within the committee's jurisdiction (As required by Gov. Code Section 54954.3(a))**

**\*\* CONSENT CALENDAR ITEMS -- ACTION \*\*****2. CONSENT CALENDAR OTHER ITEMS - ACTION**

- A. Approval of the Minutes of the Subcommittee on Pure Water Southern California and Regional Conveyance Meeting for September 24, 2024 (Copies have been submitted to each Director, Any additions, corrections, or omissions) [21-4172](#)

**Attachments:** [01222025 PWSCRC 2A \(09242024\) Minutes](#)

**\*\* END OF CONSENT CALENDAR ITEMS\*\*****3. SUBCOMMITTEE ITEMS**

- a. Pure Water Southern California Quarterly Update [21-2951](#)

**Attachments:** [01222025 PWSCRC 3a Presentation](#)

- b. Regional Benefits of Pure Water Southern California [21-4173](#)

**Attachments:** [01222025 PWSCRC 3b Presentation](#)

- c. Pure Water Southern California - Update on Staging Options [21-4174](#)

**Attachments:** [01222025 PWSCRC 3c Presentation](#)

- d. Surface Water Storage Study [21-4175](#)

**Attachments:** [01222025 PWSCRC 3d Presentation](#)

- e. State Water Project Dependent Areas Drought Mitigation Update [21-4176](#)

**Attachments:** [01222025 PWSCRC 3e Presentation](#)

**4. FOLLOW-UP ITEMS**

NONE

**5. FUTURE AGENDA ITEMS****6. ADJOURNMENT**

**NOTE:** This committee reviews items and makes a recommendation for final action to the full Board of Directors. Final action will be taken by the Board of Directors. Committee agendas may be obtained on Metropolitan's Web site <https://mwdh2o.legistar.com/Calendar.aspx>. This committee will not take any final action that is binding on the Board, even when a quorum of the Board is present.

Writings relating to open session agenda items distributed to Directors less than 72 hours prior to a regular meeting are available for public inspection at Metropolitan's Headquarters Building and on Metropolitan's Web site <https://mwdh2o.legistar.com/Calendar.aspx>.

Requests for a disability-related modification or accommodation, including auxiliary aids or services, in order to attend or participate in a meeting should be made to the Board Executive Secretary in advance of the meeting to ensure availability of the requested service or accommodation.

# **THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA**

## **MINUTES**

### **SUBCOMMITTEE ON PURE WATER SOUTHERN CALIFORNIA AND REGIONAL CONVEYANCE**

**September 24, 2024**

Chair Camacho called the meeting to order at 9:00 a.m.

Members present: Directors Alvarez, Camacho, Fellow, Fong-Sakai, Lefevre (teleconference location posted), McMillan, Morris, Seckel, and Smith (teleconference location posted).

Members absent: Directors Crawford and Luna.

Other Board members present: Directors Ackerman, Bryant, Dennstedt, Dick, Erdman, Garza, Gold, Goldberg, Gray (teleconference location posted), Kurtz, Lewitt, McCoy, Miller, Ortega, Quinn, and Sutley.

Committee staff present: Bednarski, Chapman, Chaudhuri, Hattar, Martinez, and Schlotterbeck

#### **1. OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE COMMITTEE ON MATTERS WITHIN THE COMMITTEE'S JURISDICTION**

David Pedersen, General Manager, Las Virgenes Municipal Water District – Support item 3d

#### **CONSENT CALENDAR ITEMS ACTION-**

#### **2. CONSENT CALENDAR OTHER ITEMS ACTION**

- a. Approval of the Minutes of the Subcommittee on Pure Water Southern California and Regional Conveyance for June 25, 2024.

Director Seckel made a motion, seconded by Director Fellow, to approve the consent calendar consisting of item 2a.

The vote was:

Ayes:	Alvarez, Camacho, Fellow, Fong-Sakai, Lefevre, McMillan, Morris, Seckel, and Smith
Noes:	None
Abstentions:	None
Absent:	Directors Crawford and Luna

The motion for Item 2a passed by a vote of 9 ayes, 0 noes, 0 abstentions, and 2 absent.

**\*\* END OF CONSENT CALENDAR ITEMS \*\***

**3. SUBCOMMITTEE ITEMS**

- a.           Subject:           Pure Water Southern California Quarterly Update  
Presented by:   Kim Wilson, Team Manager – Program Management, Engineering  
Services Group

Ms. Wilson reported on the following:

- Summary of Work Completed
- Conveyance Reaches 1 & 2 Updates
- Potential Pure Water Southern California (PWSC) Deliveries
- Large-Scale Water Recycling Program Grant Updates
- Demonstration Testing Updates
- Outreach Updates

The following Directors provided comments or asked questions.

1. Smith
2. Gold

Staff responded to the Directors' questions and comments.

- b.           Subject:           White Paper on Direct Potable Reuse Roadmap for Pure Water  
Southern California  
Presented by:   Joyce Lehman, Team Manager, Water Reuse and Process  
Development

Ms. Lehman reported on the following:

- Described considerations for implementing Direct Potable Reuse (DPR) for PWSC
- Evolution of DPR in the PWSC program
- Regulatory requirements and implications
- Other DPR initiatives
- Metropolitan's research approach
- Benefits and challenges with DPR
- Operational and workforce readiness

The following Directors provided comments or asked questions.

1. Seckel
2. Gold
3. Smith
4. Sutley
5. Dick
6. Miller

Staff responded to the Directors' questions and comments.

- c.           Subject:           Pure Water Phasing Alternatives
- Presented by:   Bruce Chalmers, Program Manager – Pure Water Southern  
  California, Engineering Services Group

Mr. Chalmers reported on the following:

- Provided an update on PWSC alternative phasing opportunities including background, identification of alternative phasing pathways, cost considerations, and next steps.

The following Directors provided comments or asked questions.

1. Dick
2. Miller
3. Seckel
4. Sutley
5. Alvarez
6. Smith

Staff responded to the Directors' questions and comments.

- d.           Subject:           State Water Project Dependent Areas Drought Mitigation Update
- Presented by:   Winston Chai, Unit Manager, Engineering Services Group

Mr. Chai reported on the following:

- Provided an update on the progress of recommended drought mitigation actions
- Continuing implementation of projects that will provide timely drought relief to State Water Project Dependent Areas
- Continuing development of other projects to be evaluated in the CAMP4W process

The following Directors provided comments or asked questions.

1. Lewitt
2. Sutley

Staff responded to the Directors' questions and comments.

**4. FOLLOW-UP ITEMS**

None

**5. FUTURE AGENDA ITEMS**

None

The next meeting will be held in January 2025.

Meeting adjourned at 11:33 a.m.

Michael Camacho  
Chair



Subcommittee on Pure Water Southern California  
and Regional Conveyance

# Pure Water Southern California Program Quarterly Update

Item 3a

January 22, 2025



Item 3a  
PWSC  
Quarterly  
Update

## Agenda

- Partnership & Agreements
- Environmental Planning
- Advanced Water Treatment
- Conveyance System
- Upcoming Program Milestones
- Next Steps

## Item 3a PWSC Quarterly Update

# Partnership & Agreements

- Member Agencies
  - Discussed terms for water delivery
- Southern Nevada Water Authority
  - Discussed terms for investment in PWSC
- United States Bureau of Reclamation
  - Entered into agreement for LSWRP grant funding
    - Grant Total: \$125,472,855
    - Initial release: \$ 55 M
    - Pre-award start date: April 6, 2020
    - Agreement start date: January 10, 2025
    - Agreement duration: 3 years

# Large-Scale Water Recycling Program Scope of Work



## Planning & Design Activities

- Procure Membrane Bioreactor (MBR) & Advanced Water Treatment (AWT) Progressive Design-Build (PDB) entities to start AWPf design
- Continue Sanitation District's design of centrate pre-treatment process
- Continue design of pipeline reaches
- Procure alternative delivery entities for conveyance
- Evaluate treated water augmentation opportunities
- Continue program management & outreach
- Continue demonstration testing & research

## EIR Updates

- EIR preparation on-going
- Next Steps
  - Public review draft EIR: May – June 2025
  - Response to comments: Mid – Late 2025
  - Final EIR certification: Early 2026
- Pursuing SB 149 CEQA Litigation Streamlining

# Napolitano Innovation Center Demonstration Testing Update



## Recent Accomplishments

- Treatment validation testing with chemical spiking
- Draft Secondary MBR testing report
- Collaborated with LACSD on testing for ocean discharge evaluation



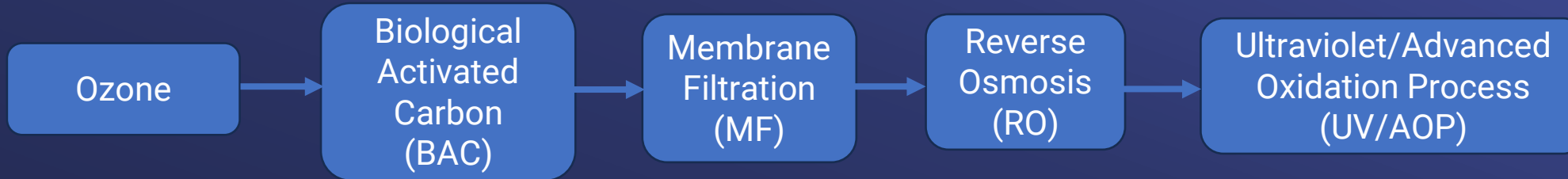
## Upcoming Activities

- Independent Science Advisory Panel meeting
- Complete nitrification-denitrification testing
- Transition to nitrifying-only tertiary MBR testing
- Plan evaluations of DPR treatment alternatives

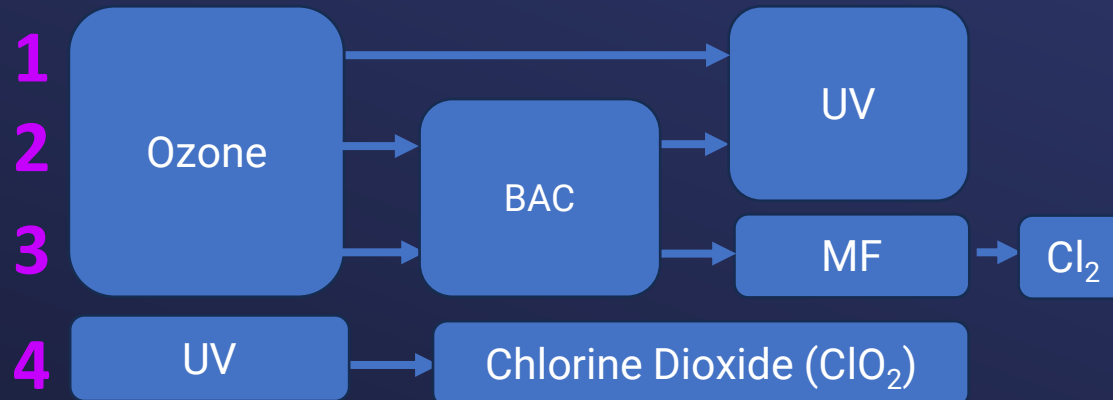
# DPR Demonstration Testing – Facility Planning

- DPR Treatment Trains

## Default Train (full-size MF/RO modules)



## Alternative Trains (pilot skids)



- Improvements to Existing Facilities



## Direct PR via TWA Feasibility Evaluation

### TWA Feasibility Evaluation Approach

- Establish potential TWA infrastructure
- Identify demands & operational constraints of nearby feeders
- Conduct hydraulic analyses
- Establish offsite facility requirements
- Evaluate water quality impact on existing feeders
- Estimate facility costs
- Evaluate alternatives for implementation
- Refine permitting & implementation schedules

# Conveyance System

- Presented to Pico Rivera City Council
- Received conditional approval of pipeline alignment from city of Azusa
- Initiated coupon testing for pipeline lining & coating materials at Metropolitan's corrosion lab in La Verne
- Conducted soil resistivity testing along backbone pipeline alignment within SCE rights of way
- Continued utility investigations & coordination with property owners



Corrosion Testing Coupons



Testing for Coatings & Linings



# PWSC Public Outreach Update



Mayor Karen Bass' Staff Tour



Assembly Member Tina McKinnor Tour

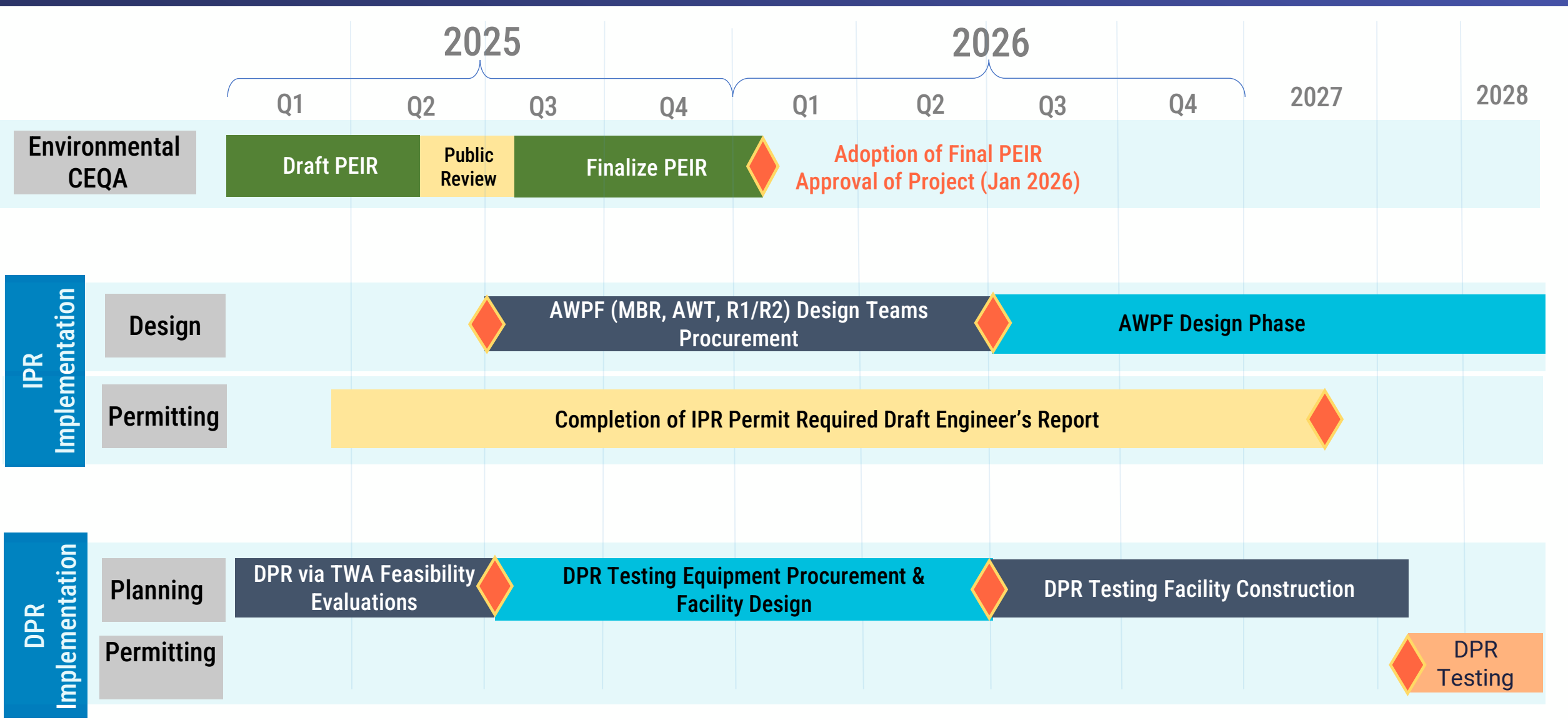


West Basin Water Harvest



Wate(R)evolution Symposium

# Program Near-Term Schedule



# Next Steps

- Prepare remainder of chapters for EIR & issue first admin draft
- Continue program phasing evaluation for implementation
- Continue planning for DPR demonstration testing
- Complete evaluation of program implementation with TWA options
- Conduct market sounding for conveyance projects
- Continue preparation of RFQs for AWPf PDB, and CM/GC for Reaches 1 & 2







Subcommittee on Pure Water Southern California  
and Regional Conveyance

# Regional Benefits of Pure Water Southern California

Item 3b

January 22, 2025

## Item 3b

### Regional Benefits of Pure Water Southern California

#### Subject

Regional Benefits of Pure Water Southern California

#### Purpose

Inform the committee about the need, regional benefits, and alignment of supply and demand for Pure Water Southern California

#### Next Steps

Continue planning and design efforts to determine program demands and regional benefits

# Need for Pure Water Southern California

## Risk of Shortage & Water Supply Allocation Plan (WSAP)

- Up to 1.22 MAF of net shortage by 2045
  - Would require up to 650 TAF of additional core supply
  - Needs primarily in the SWP-dependent areas
- Net Shortage of up to 66% of the time
- 2% chance that storage would go below 1 MAF

## Declining Groundwater Levels

- Despite favorable hydrologic conditions the past 2 years, 48 percent of the groundwater basins are still below their established operating ranges
- Loss of groundwater production by as much as 10 percent by 2040

## Slow Development of Local Supplies

- Despite significant investment in local supplies, the potential shortfall in development remains at ~ 400,000 AF

# Regional Benefits of Pure Water

Reduces Risk of  
Net Shortage by  
up to 14%

Reduces Risk of  
WSAP by up to  
50%

Reduces Reliance  
on SWP and  
Colorado River

Improves  
Groundwater  
Sustainability

Improves Local  
Supply  
Development

Increases  
Available Supply  
During Seismic  
Emergency by 15%

Increases  
Operational  
Flexibility

Generates up to  
50,000 New Jobs

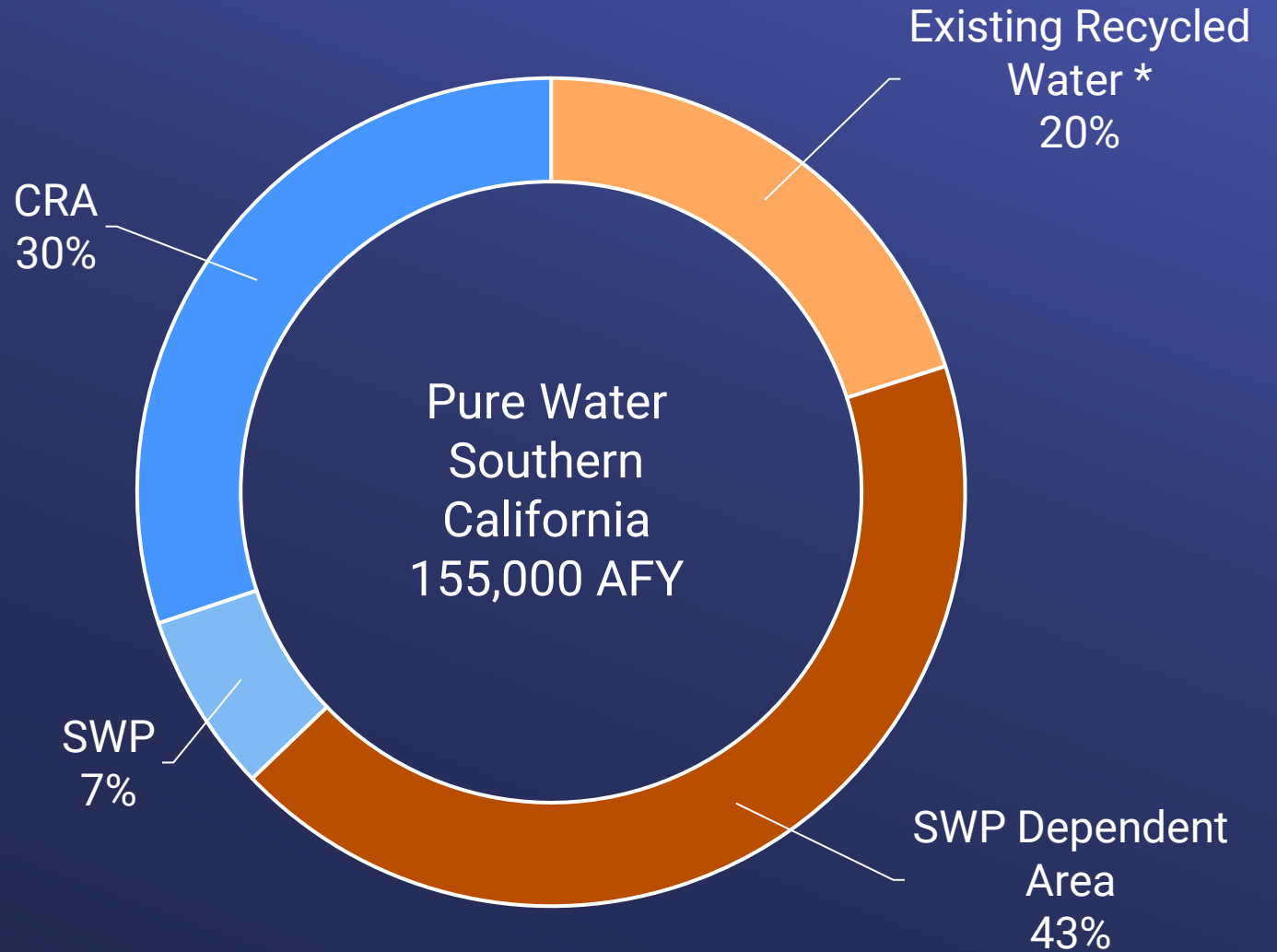


# Pure Water Southern California Offsets SWP and CRA

Pure Water Southern California production reduces reliance on imported water sources:

- 80% of PWSC reduces reliance on SWP & CRA
- 20% of PWSC replaces existing recycled water use

\* The existing West Basin recycled water may be used by the City of Los Angeles to reduce reliance on SWPDA



# Member Agency Discussions



Meetings  
(April-  
December  
2024)



Refinement of  
MA Demands

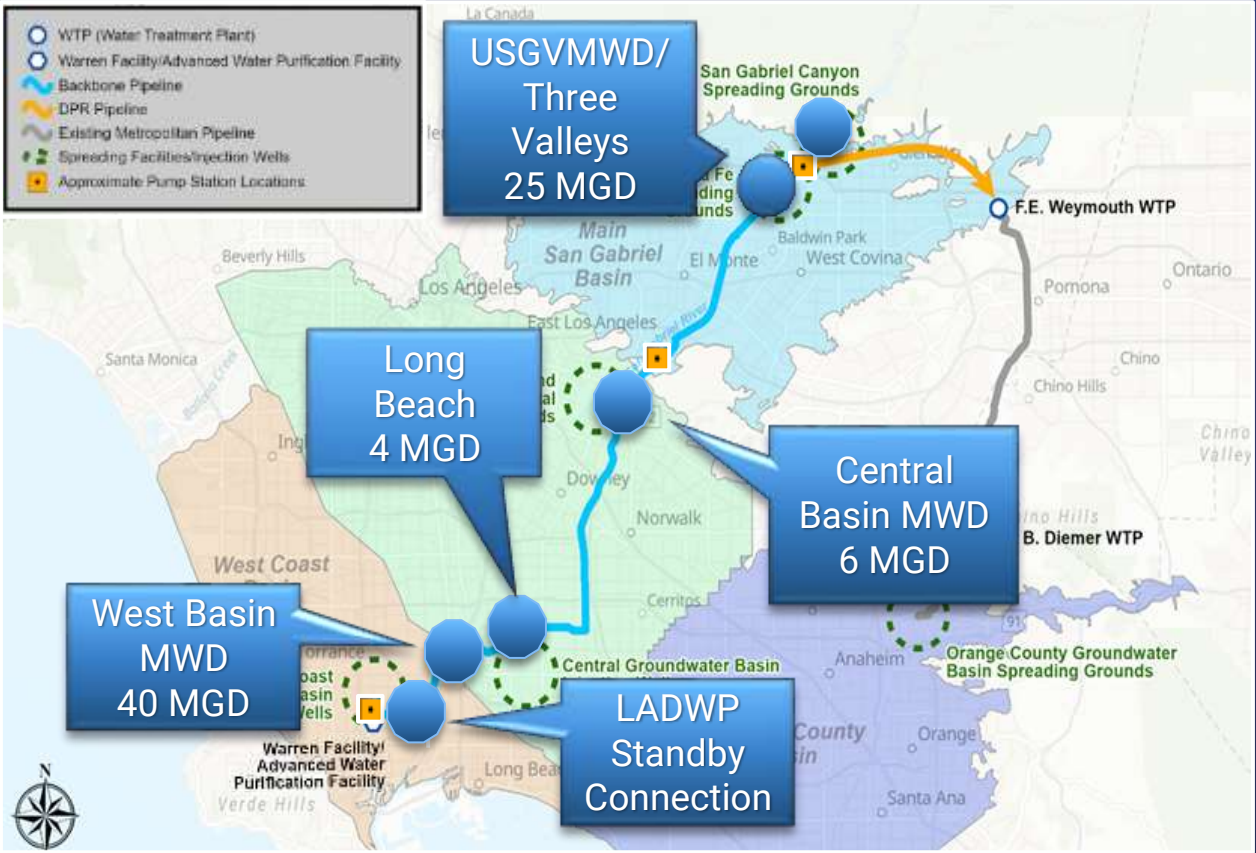
Development  
of Preliminary  
Term Sheets  
for Purchase  
and Delivery  
of Pure Water

# Potential Demand: ~45 mgd



Member Agency	Average Demand	Existing or New Demand
LACSD	<1 mgd	Existing effluent
LADWP	Standby	Existing recycled water
West Basin	40 mgd	Existing recycled / imported
Long Beach	4 mgd	New augmentation
Total	~45 mgd	—

# Potential Demand: ~75 mgd



\* Meets minimum demand for Main San Gabriel Basin.

Member Agency	Average Demand	Existing or New Demand
LACSD	<1 mgd	Existing effluent
LADWP	Standby	Existing recycled water
West Basin	40 mgd	Existing recycled / imported
Long Beach	4 mgd	New augmentation
Central Basin	6 mgd	Existing imported
USGVMWD	21 mgd *	Existing imported
Three Valleys	4 mgd *	New augmentation
Total	75 mgd	—



# Alignment of Supply and Demand Goals



Ability to meet production goals without storage (2019-2023 Daily Hydrology)



Account for downtime and maintenance



Account for spreading basin availability in Central and Main San Gabriel Basin



Account for range in expected demand (diurnal, peaking, and average demand)

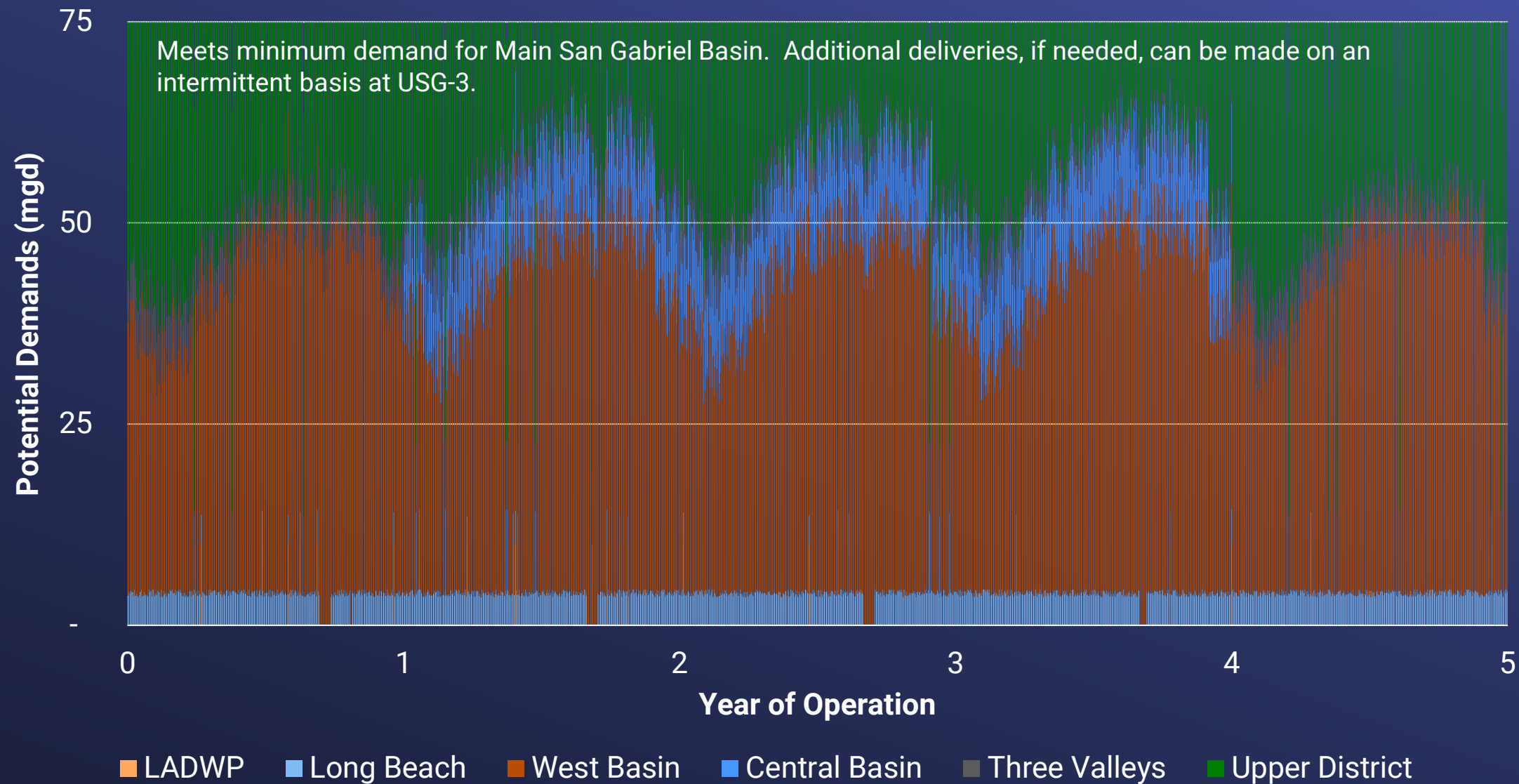
# Daily Demands Vary Significantly with an Initial Delivery of ~45 mgd

## Significant Member Agency Storage Likely Required



# Daily Deliveries Vary Less with an Initial Delivery of 75 mgd

## Dedicated Recharge in Main San Gabriel Basin Helps Control Demand Variability



# Summary of Demand Assessment

## 45 mgd

- Smaller initial construction package
- Demands vary significantly
- May require significant member agency storage to handle peaking & meet Metropolitan's goals

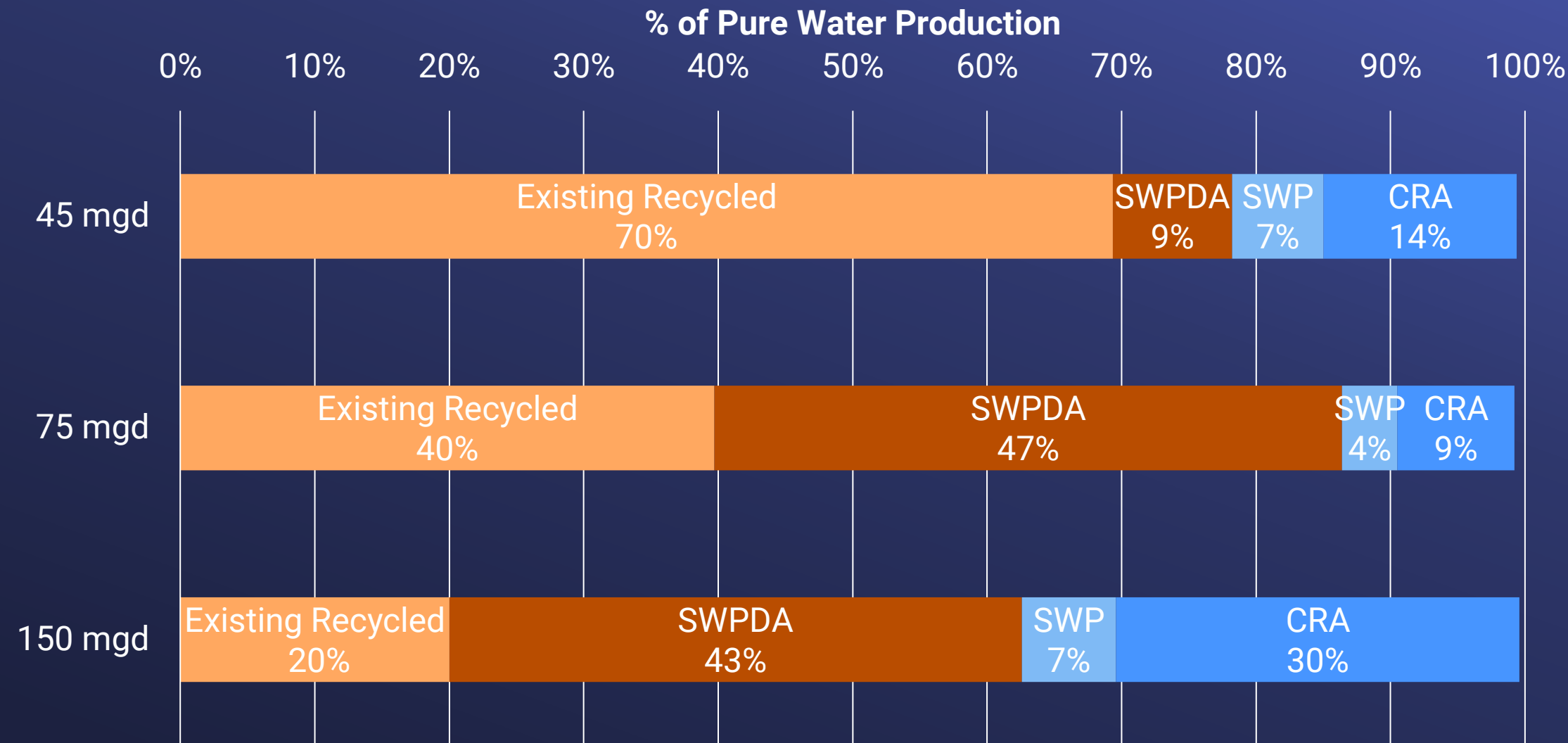
## 75 mgd

- Meets most of the IPR demand
- Addresses storage/peaking issues
- Will need to decide on backbone upsizing earlier



# Regional Benefits of Pure Water

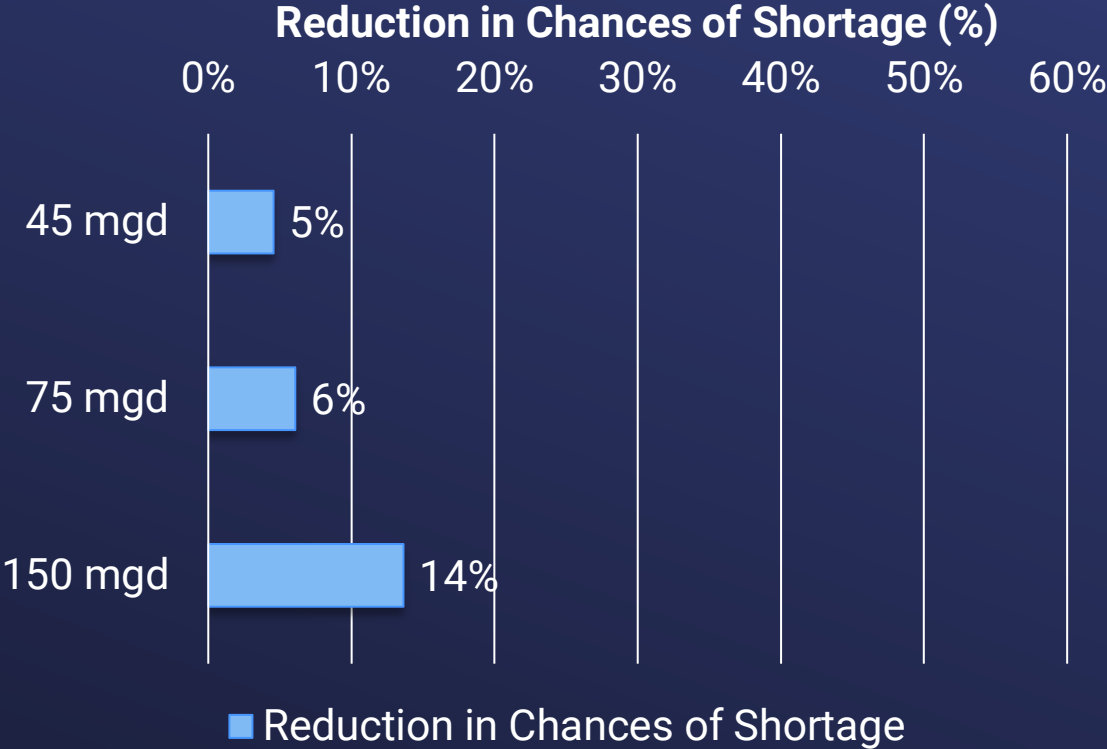
## Reduces Reliance on SWP & CRA



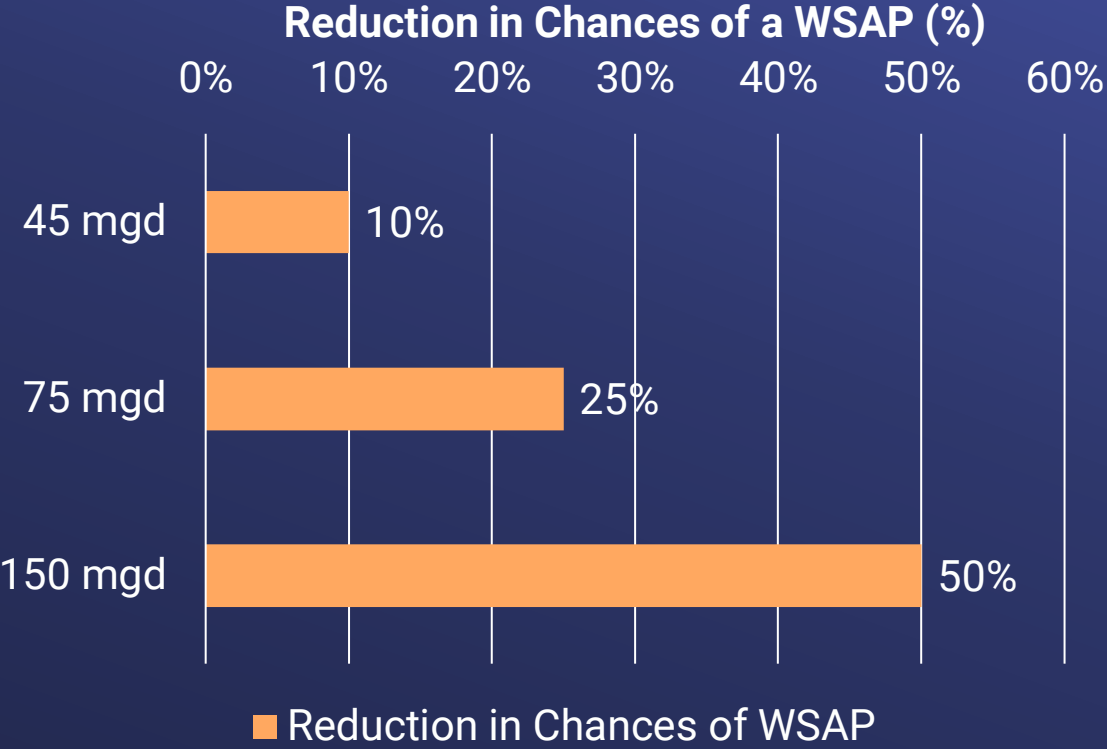
# Regional Benefits of Pure Water

## Reduces Chances of Shortage and WSAP

**% Reduction in Chances of Shortage  
with Pure Water**



**% Reduction in Chances of a WSAP  
with Pure Water**



# Summary

## Need for Pure Water

- Risk of shortage and WSAP
- Declining groundwater levels
- Slow development of local supplies

## Regional Benefits of Pure Water

- Reduces risk of shortage and WSAP
- Reduces reliance on SWP and Colorado River
- Improves groundwater sustainability and local supply development
- Increases operational and emergency flexibility
- Generates new jobs

## Demands

- 45 mgd: Operationally challenging to implement & doesn't meet Metropolitan goals.
- 75 mgd: Demand variations can be handled with new dedicated recharge in Main San Gabriel Basin.





Subcommittee on Pure Water Southern California  
and Regional Conveyance

# Pure Water Southern California – Update on Staging Options

Item 3c

January 22, 2025

Item 3c  
PWSC  
Update on  
Staging  
Options

## Subject

Pure Water Southern California (PWSC) Staging Options Update

## Purpose

To provide an update on the PWSC staging opportunities

## Next Steps

Continue planning & design efforts to determine program staging options



Item 3c  
PWSC Initial  
Phase  
Update

## Agenda

- Program goals and objectives
- Review of previous staging discussions
- Evaluation of staging options
- Comparison of options
- Staging coordination with the Sanitation Districts



## Summary of PWSC Program Goals

- Provide a new high-quality local water source that cost-effectively meets demands
- Diversify Metropolitan's water supply & increase operational flexibility
- Improve water supply resiliency & groundwater water quality
- Provide purification to maximize beneficial reuse of wastewater
- Reduce reliance on imported water
- Provide greater resilience to local water supplies

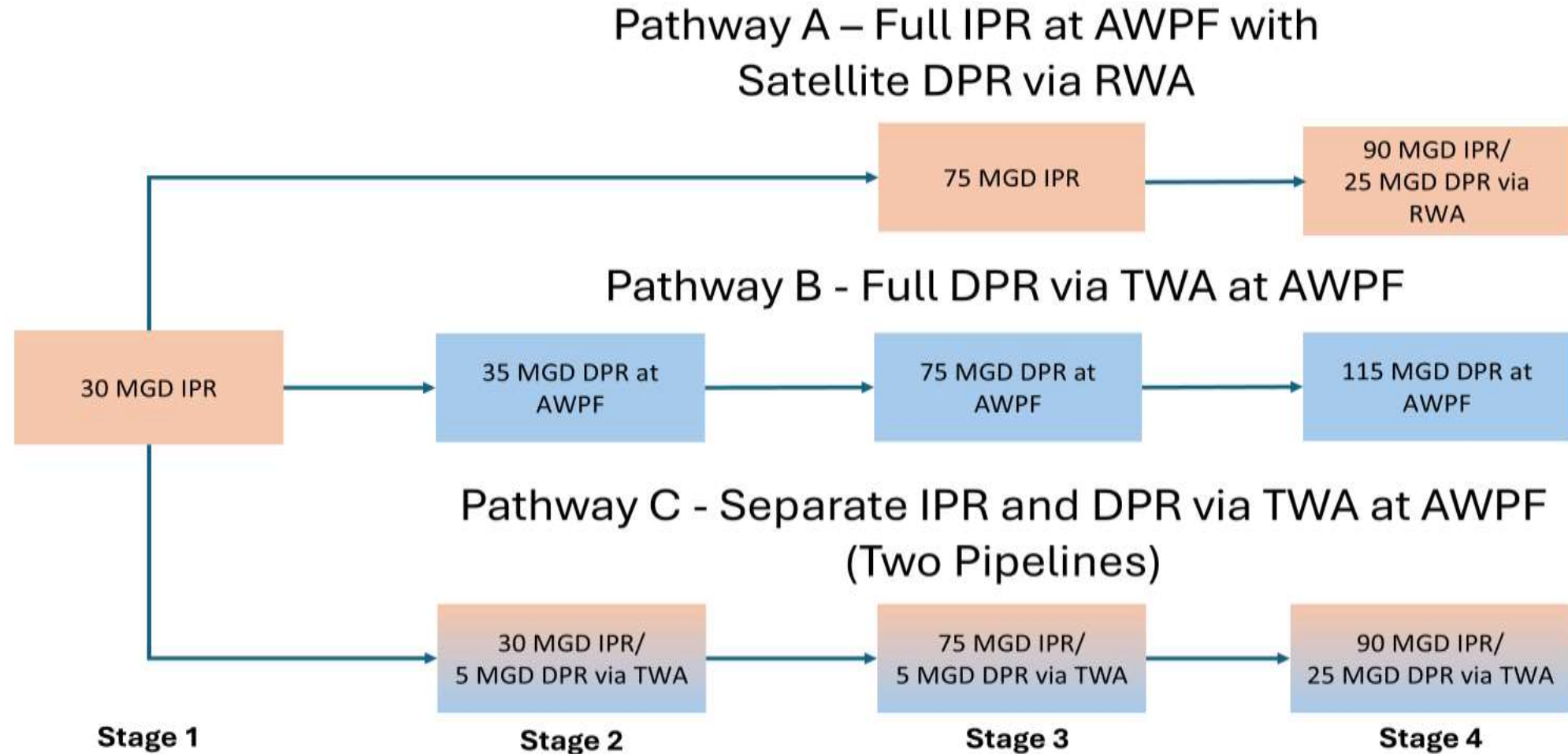


## Potential Staging Considerations

# Objectives for Staging Option Analysis

- Phasing in the EIR
  - Phase 1 – 115 mgd
  - Phase 2 – 150 mgd
- Investigate approaches to refine program staging
  - Reduce initial scope & cost of Phase 1 (115 MGD)
  - Investigate potential to incorporate Treated Water Augmentation (TWA)
  - Develop & evaluate multiple staging options
  - Prepare conceptual costs & schedules for each of the options

# Potential Pathways with Stages



*\*All pathways have an ultimate capacity of 150-MGD*

## Efforts since September Subcommittee Meeting

- Continued coordination of demands with member agencies
- Evaluated flexibility to meet demand variability
- Continued DPR via TWA investigations
- Revised program schedule
- Refined program costs
- Coordinated with LACSD
- Compared the options with the program goals

# Staging Options to Consider

## Option 1

45 MGD

IPR Water Quality

Meets demands to Long Beach

10 miles of pipeline

Industry/groundwater recharge

## Option 2

75 MGD

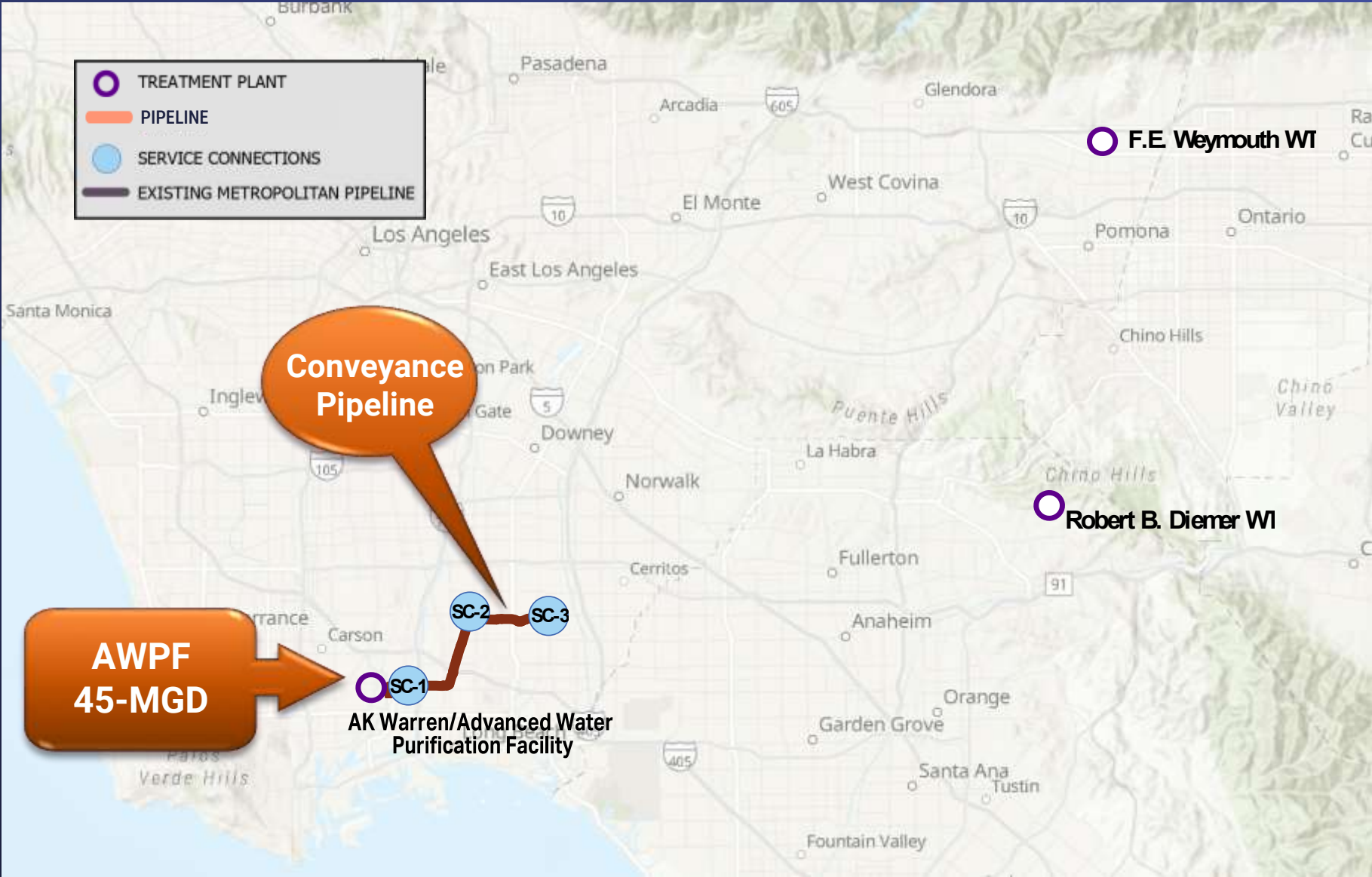
IPR Water Quality

Meets demands to Santa Fe  
Dam area

35 miles of pipeline

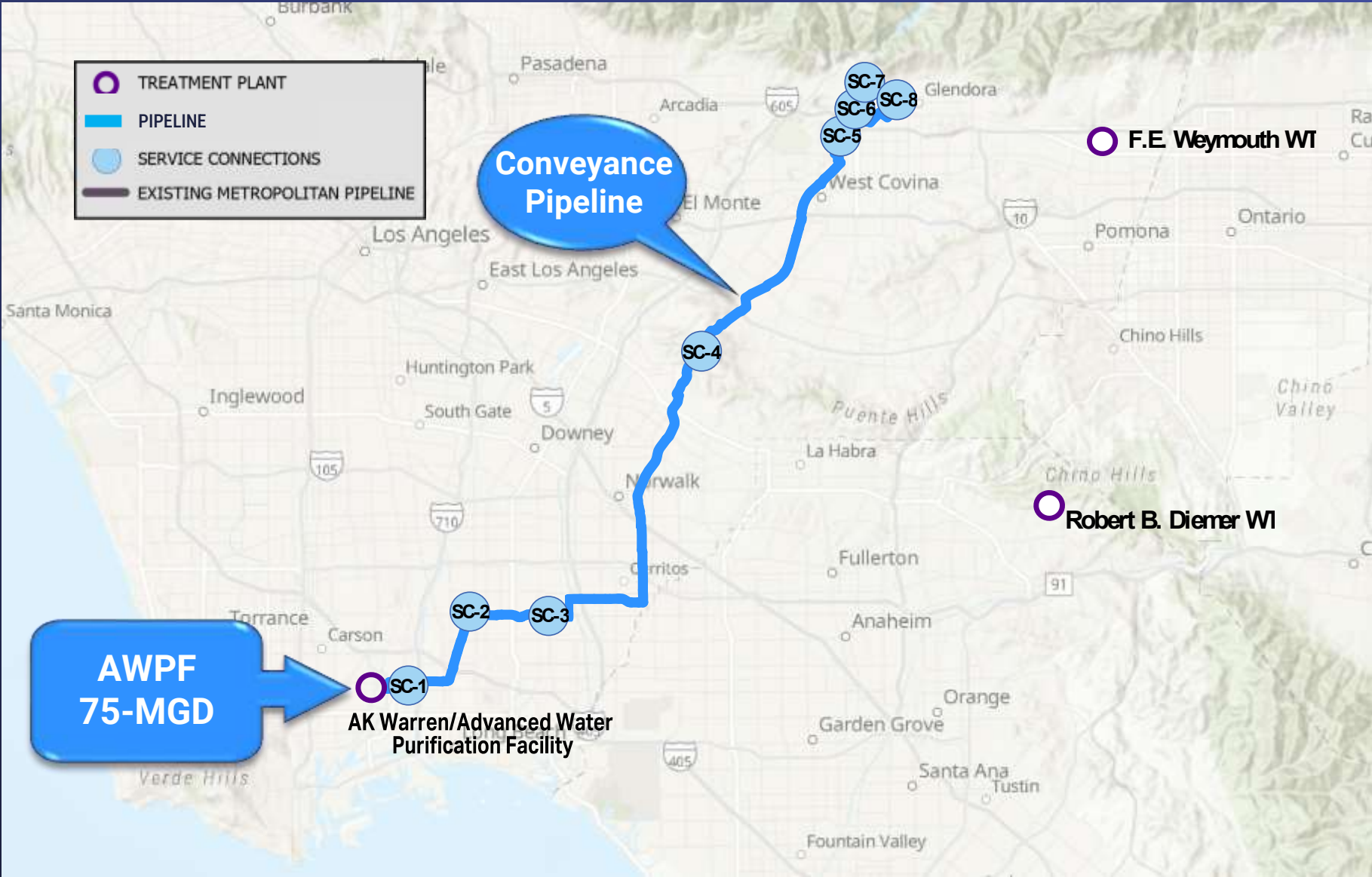
Industry/additional  
groundwater recharge

# Option 1 – IPR Treatment at AWPf to Long Beach





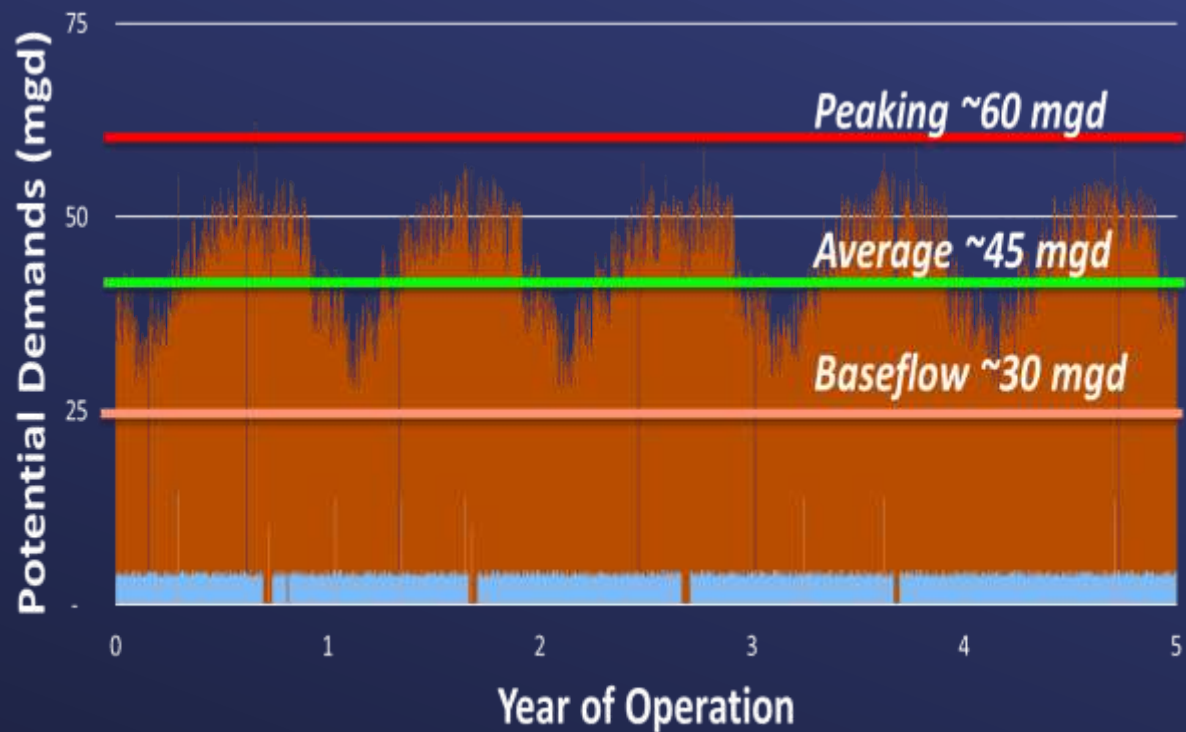
# Option 2 – IPR Treatment at AWPf to Santa Fe Dam





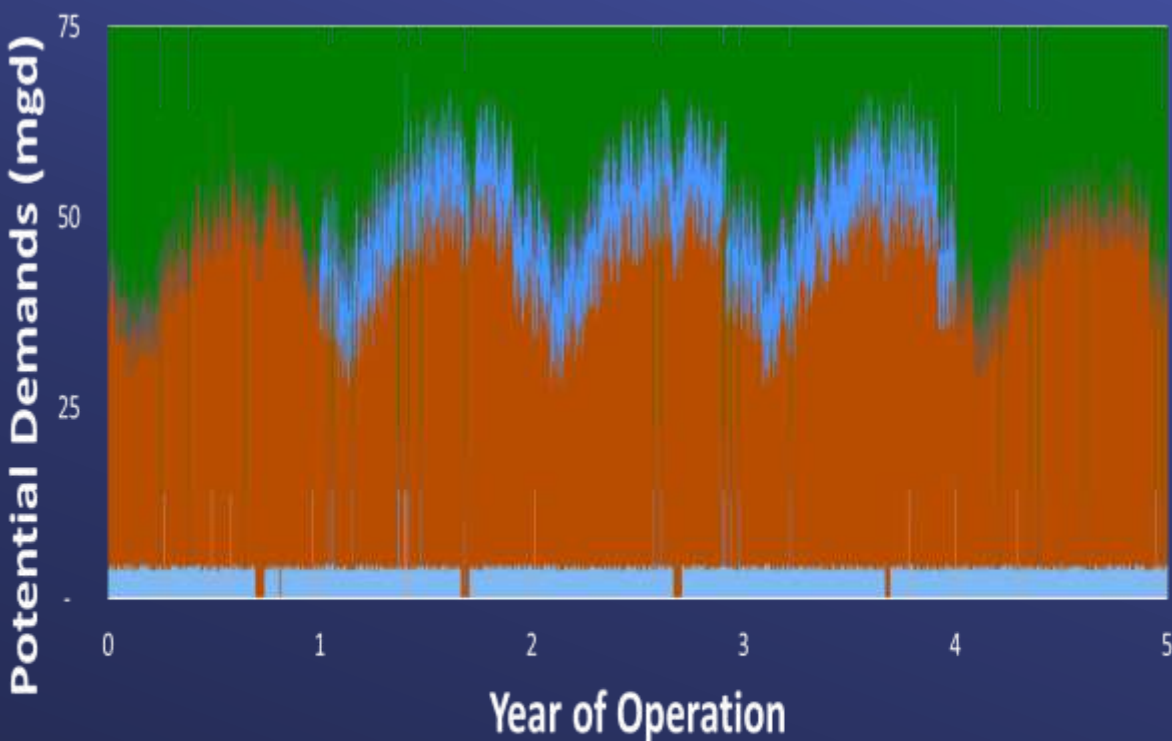
# Provide Operational Flexibility & Meet Demand Variability

Option 1 - 45 mgd



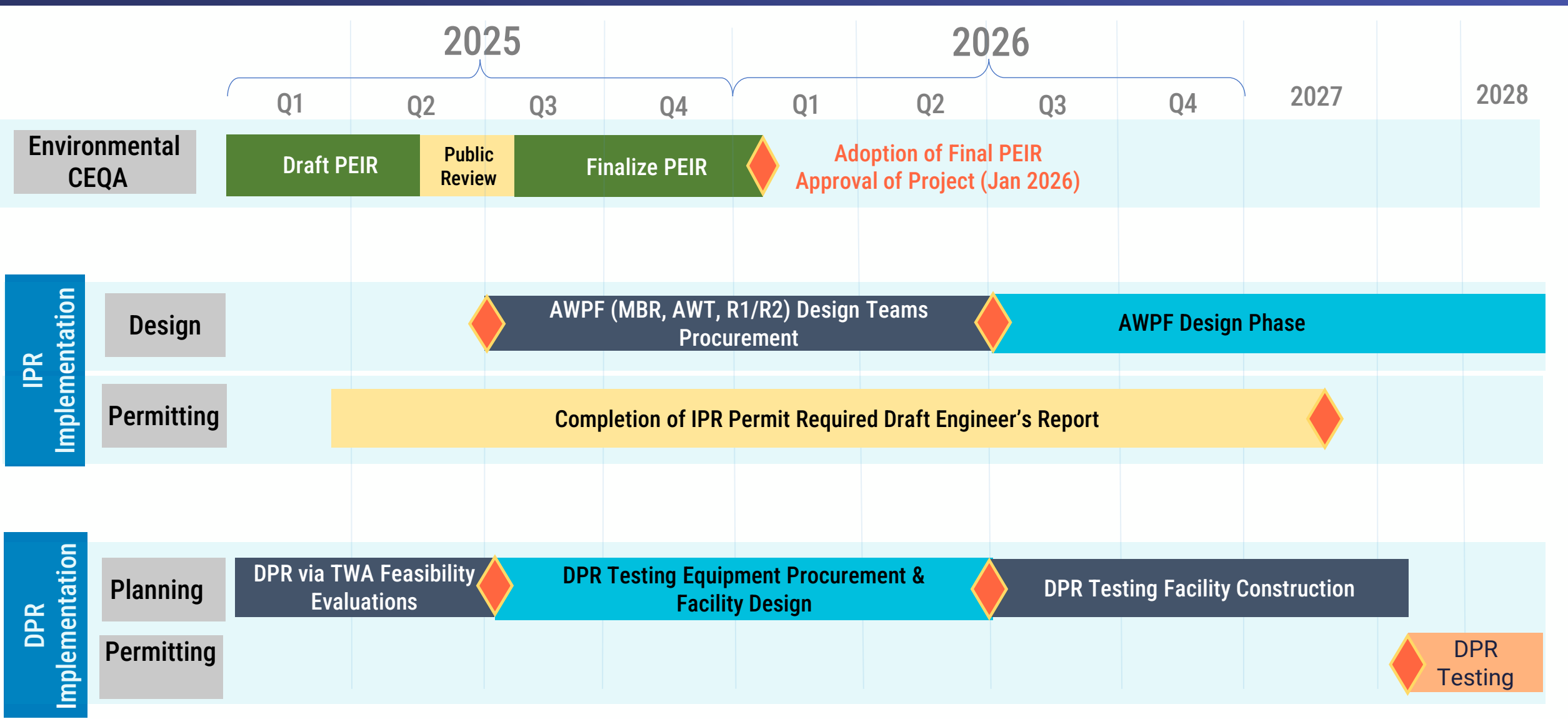
■ LADWP   ■ Long Beach   ■ West Basin

Option 2 - 75 mgd



■ LADWP   ■ Long Beach   ■ West Basin  
■ Central Basin   ■ Three Valleys   ■ Upper District

# Implementation Schedule with DPR Planning and Testing



## DPR/TWA Evaluation

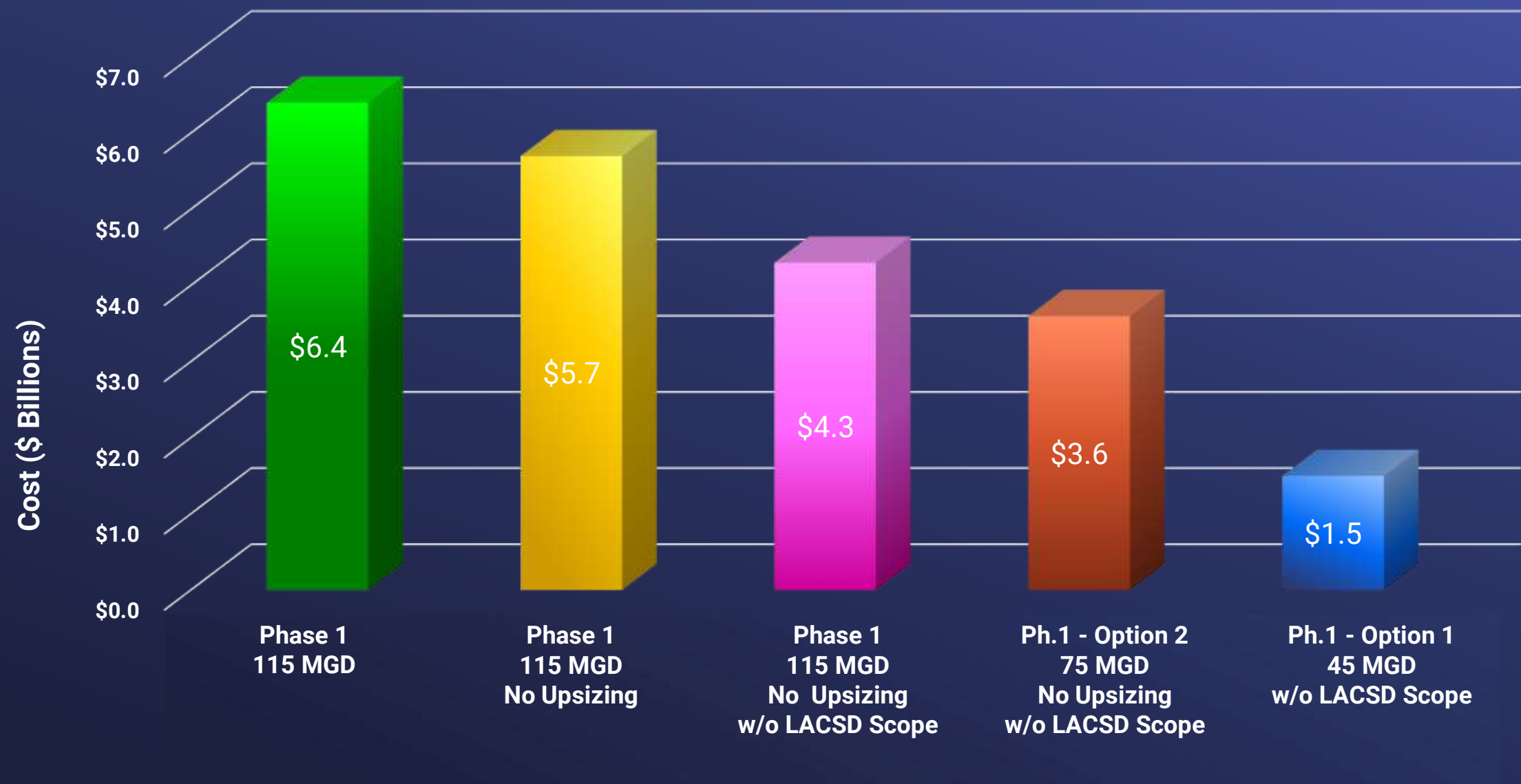
### Summary of DPR Considerations

- DPR (RWA and TWA) will take longer to permit and implement than IPR
  - TWA studies are still being evaluated
  - Pilot and demo testing must be completed prior to design of the DPR Facilities
- IPR only implementation for both options is recommended for the initial construction
- Flexibility to implement DPR into the PWSC after evaluations and demo testing is completed

# Overview of Updated Program Costs

- Based on program costs presented in November 2023
  - Phase 1 – 115 MGD
  - Upsized pipeline for LADWP PWLA Program
  - All treatment facilities – MBR, RO, UV-AOP, etc.
- Modifications since 2023
  - Agreement with LACSD assigns construction costs of pre-treatment facilities (MBR etc.) to LACSD

# Metropolitan Staging Cost Comparisons



# Comparison of Staging Options

Parameter	Option 1	Option 2
<b>AWPF Capacity (mgd)</b>	45	75
<b>Water Quality</b>	IPR	IPR
<b>Ability to Meet Production Goals w/o New Storage or Stranded Assets</b>	No	Yes
<b>Maximizes Beneficial Reuse of Recycled Water</b>	Low	High
<b>Agencies Served</b>	WBMWD, Long Beach	WBMWD, Long Beach, CBMWD, Upper District, 3 Valleys MWD
<b>Requires Dedicated Recharge Basin</b>	No	Yes
<b>Year of Operation</b>	2033	2034
<b>Metropolitan Estimated Cost</b>	\$1.5 billion	\$3.6 billion

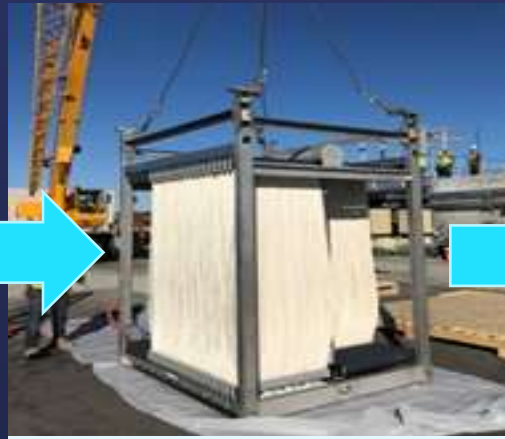


# Update from the Sanitation Districts

- Preparing procurement documents for MBR Progressive Design-Build
- Supporting Metropolitan on CEQA
- Research studies and supporting operations and testing at Grace F. Napolitano Innovation Center
- General Manager briefing Board today on PWSC Program efforts
- Considering the Program's rate impacts



*A.K. Warren Water Resource Facility*



*MBR Pre-treatment*



*Advanced Water Treatment*

# Staging Coordination with the Sanitation Districts

The Sanitation Districts supports staging options that:

- Maximize the beneficial reuse of recycled water
- Fully meet the PWSC Program Goals
- Are cost effective today and reduce future implementation costs
- Are 75 MGD (or larger) with a pipeline to Irwindale to recharge the Main San Gabriel Valley Groundwater Basin



*Recharge Facilities*







Pure Water Southern California and Regional  
Conveyance Subcommittee

# Surface Water Storage Study Update

Item 3d

January 22, 2025

# Item 3d Surface Water Storage Study Update

## Subject

Update on the feasibility of new surface water storage facilities

## Purpose

To share the study's progress and findings while gathering feedback on the proposed next steps

## Next Steps

- Complete the Phase 2 study to narrow down potential sites
- Proceed to site-specific assessments (Phase 3)
- Inform One Water and Stewardship Committee & CAMP4W Task Force on findings & recommendations

# Drivers, Objectives, & Approach

- **Drivers**

- Fluctuated SWP supply conditions
- Challenges to mitigate severe droughts and manage excessive surplus
- Core supply identified as a time-bound target in CAMP4W annual report

- **Objectives**

- Improve SWP supply reliability
- Enhance regional resilience
- Incorporate climate adaptation to align with CAMP4W objectives

- **Study Approach**

- Phase 1 – inventory & screening
- Phase 2 – comprehensive evaluation
- Phase 3 – site-specific assessment



# Evaluation of Potential Sites

## PHASE 1 Criteria

- Location
- Storage capacity (minimum of 30 TAF)
- General geological/geotechnical
- Institutional constraints
- Environmental protections

## PHASE 2a Criteria

- Distance from aqueduct & vertical lift
- Storage capacity (minimum 100 TAF)
- Land ownership and use
- Interference with flood protection
- Potential for partnerships

### Phase 1

Initial screening

91 Sites

### Phase 2a

Detailed screening

21 Sites

### Phase 2b

Evaluation

Phase 3 Sites

Over 300 Sites

Current Stage

# Sites Retained for Phase 2b Evaluation



# Phase 2b Quantitative Evaluation Criteria

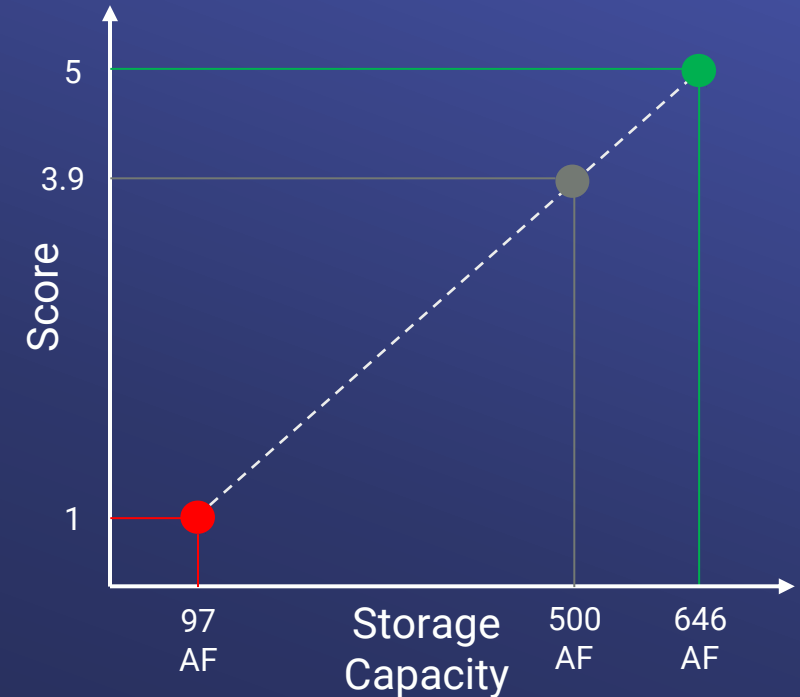
Criteria	Key Metrics
Facility Characteristics	<ul style="list-style-type: none"><li>• Storage efficiency and potential for sediment</li></ul>
Water Quality	<ul style="list-style-type: none"><li>• Risks of impairment to stored water supplies</li></ul>
System-Wide Considerations	<ul style="list-style-type: none"><li>• Contribution to storage objective and effects on SWP</li></ul>
Financial Affordability	<ul style="list-style-type: none"><li>• Capital cost per acre-foot of storage capacity</li></ul>
Climate Adaptability and Reliability	<ul style="list-style-type: none"><li>• Potential capacity for pumped storage hydropower</li></ul>

# Phase 2b Qualitative Evaluation Criteria

Criteria	Key Attributes
Facility Characteristics	<ul style="list-style-type: none"><li>• Dam, conveyance system, utility relocations</li></ul>
Water Quality	<ul style="list-style-type: none"><li>• Inflow water quality conditions</li></ul>
System-Wide Considerations	<ul style="list-style-type: none"><li>• Flexibility to serve Metropolitan service areas, proximity to population centers, potential downstream hazards</li></ul>
Geologic Considerations	<ul style="list-style-type: none"><li>• Seismicity, liquefaction, landslide risk</li></ul>
Environmental Considerations	<ul style="list-style-type: none"><li>• Environmental compliance complexity</li></ul>
Climate Adaptability and Reliability	<ul style="list-style-type: none"><li>• Seismic reliability to Metropolitan supply</li><li>• Site wildfire and heat risks</li></ul>

# Quantitative Example - Reservoir Storage Capacity

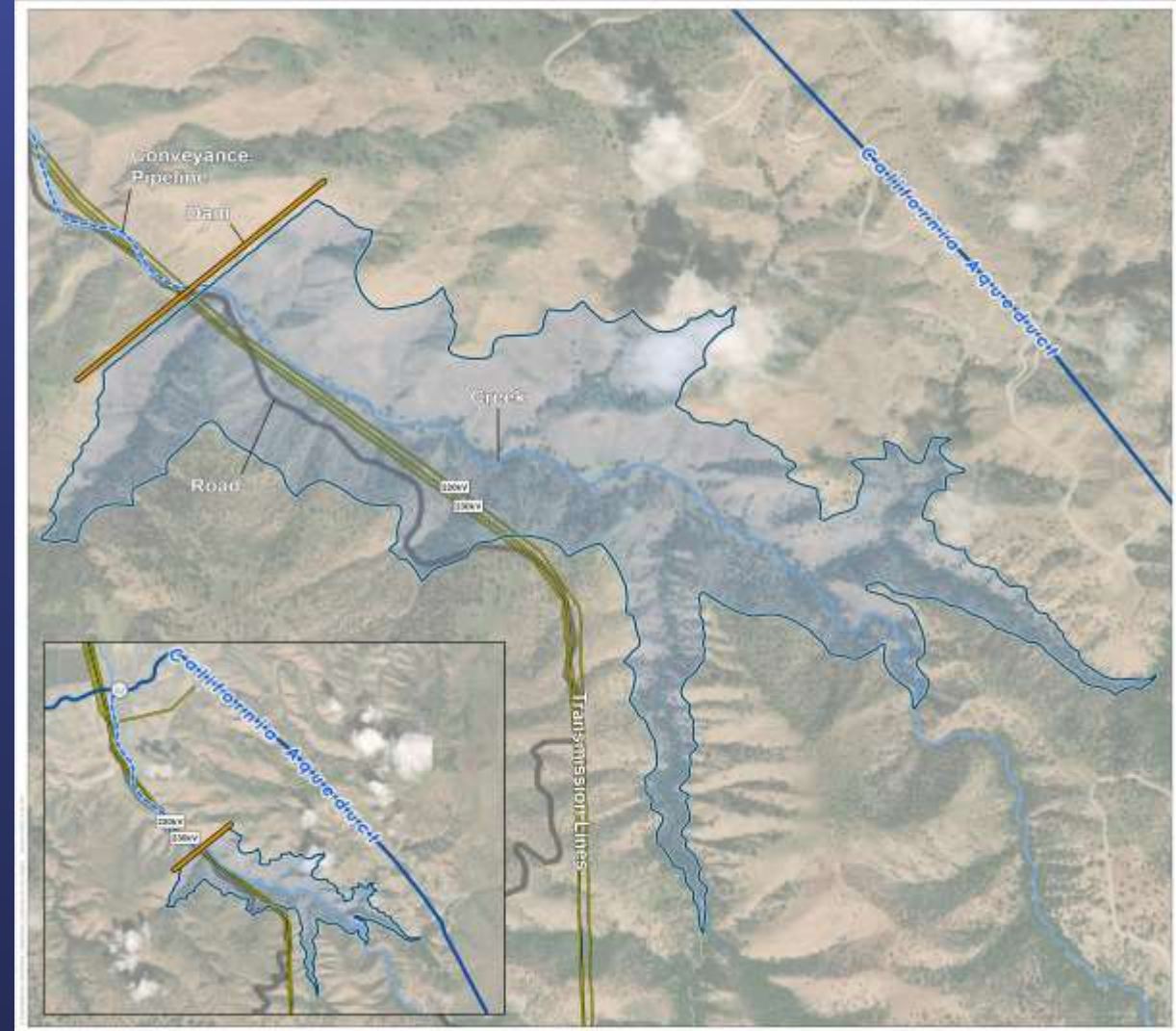
- Larger reservoirs provide greater contributions to Metropolitan's storage objective
- Larger reservoirs provide greater supply reliability
- Scoring Scale:
  - Largest storage capacity scores 5 points
  - Smallest storage capacity scores 1 point





# Qualitative Example–Pastoria Creek Reservoir Area Relocations

- Identifying existing utilities/facilities within the reservoir footprint, including:
  - Electrical transmission lines
  - Buried pipelines
  - Railroads
  - Structures
  - Wells
  - Roads
- Evaluating level of complexity and/or general risk involved in the relocations



**Most complex/ high-risk relocations required**  
**1**

**Many relocations required**  
**2**

**Several relocations needed**  
**3**

**Some relocations needed**  
**4**

**No major relocations required**  
**5**



# Next Steps

- **Complete Phase 2 evaluation**
  - Rank potential sites based on weighted scores
  - Categorize sites into geographical regions
  - Identify high-potential sites for Phase 3 study
- **Initiate Phase 3 study in Q1 2025**
  - Conduct site-specific assessment to recommend preferred sites
    - Additional site-specific criteria
    - Evaluation of co-benefits
    - System integration
  - Develop preferred sites to prepare for potential CEQA analysis
- **Present findings to One Water and Stewardship Committee**
- **Inform CAMP4W process with study findings**





Subcommittee on Pure Water Southern California and  
Regional Conveyance

# State Water Project Dependent Areas Drought Mitigation Update

Item 3e  
January 22, 2025

# Item 3e State Water Project Dependent Areas Drought Mitigation Update

## Subject

State Water Project Dependent Areas Drought Mitigation Update

## Purpose

To provide an update on the implementation status of near-term projects in the drought mitigation actions portfolio

## Next Steps

Continue implementation of Category 1 projects

Support Category 2 projects under evaluation by CAMP4W

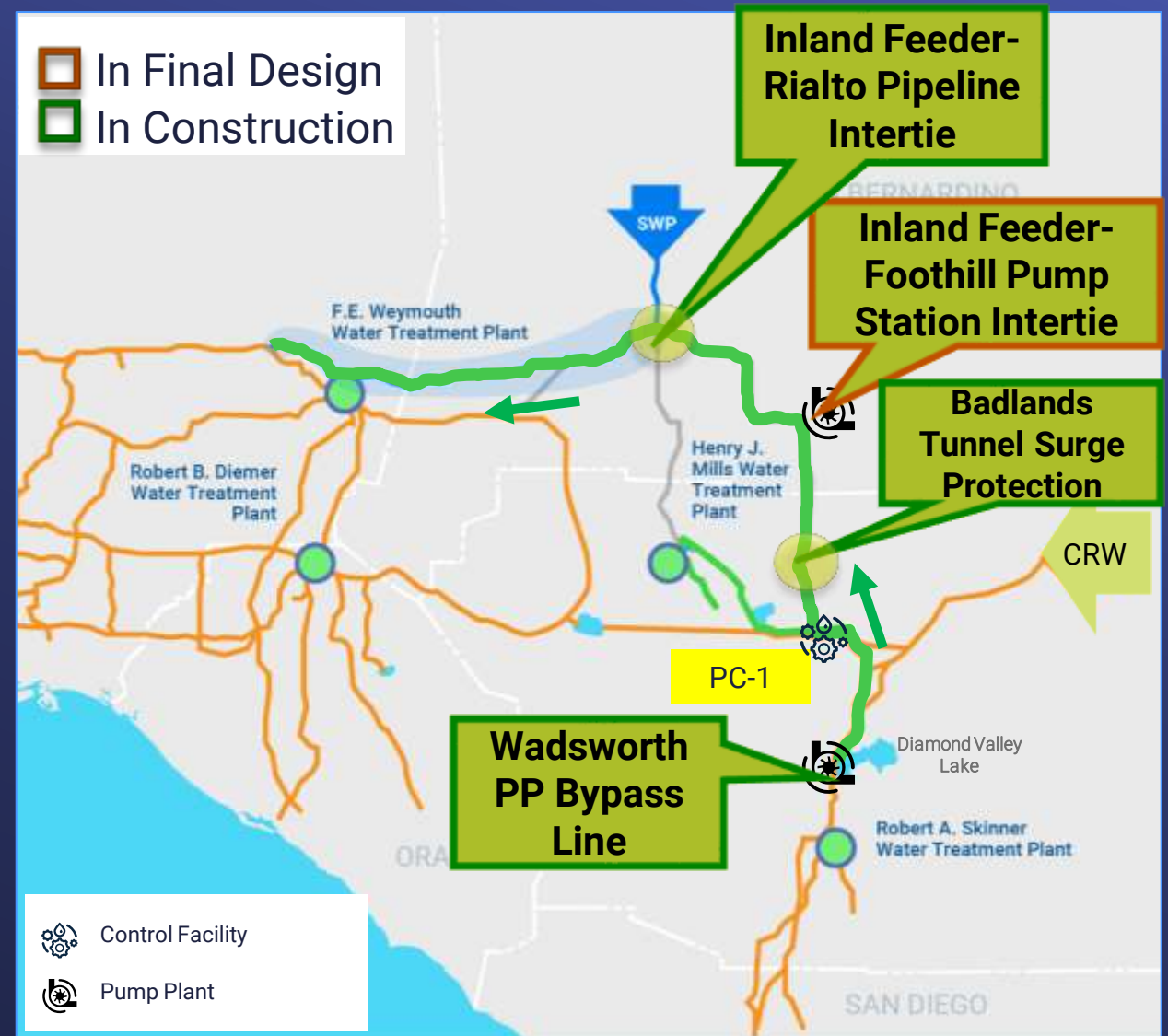


# Near-Term Drought Mitigation Projects



# DVL to Rialto Pipeline Delivery

- **Summary of program scope**
  - Four inter-related projects
  - Maximizes use of existing infrastructure
  - Up to 120 CFS with full build-out
- **Program status**
  - Three projects in construction
  - One project in final design & permitting
  - Estimated completion in late 2027
  - \$50M State grant
    - Invoiced State \$22.3 M to date





# Wadsworth Pump Plant Bypass Line

- **Contract Details**

- Amount: \$14,820,500
- Contractor: Steve P. Rados Inc.
- Award Date: Jan. 2023
- Planned Completion: Summer 2025

- **Current Status**

- 95% complete
- All pipeline tie-in work completed in Apr. 2024
- Delay in completion for long-lead equipment
- Added large valve installation by change order in Aug. 2024 board action

- **Upcoming Milestone**

- Spring 2025 shutdown for valve installation



Electrical Duct Bank

# Badlands Tunnel Surge Protection

- **Contract Details**
  - Amount: \$18,840,000
  - Contractor: Steve P. Rados Inc.
  - Award Date: Nov. 2023
  - Scheduled Completion: Summer 2025
- **Current Status**
  - 50% complete
  - Completed surge tank foundation
  - Completed vault walls conc. placement
  - Installed piping and 84-inch dia. valve
- **Upcoming Milestone**
  - Feb. 2025 shutdown for tie-in



Surge Tank Foundation



# Badlands Tunnel Surge Protection



Valve Vault Pipe Installation



Surge Tank Foundation Pipe Installation

# Inland Feeder-Rialto Pipeline Intertie

- **Contract Details**
  - Amount: \$15,681,000
  - Contractor: Steve P. Rados Inc.
  - Award Date: Sep. 2023
  - Scheduled Completion: Summer 2025
- **Current Status**
  - 70% complete
  - Completed vault wall conc. placement
  - Installed piping and 84-inch dia. valve
  - Pipe encasement work underway
- **Upcoming Milestone**
  - Feb. 2025 shutdown for tie-in



96-Inch Diameter Pipe Installation



# Inland Feeder-Rialto Pipeline Intertie

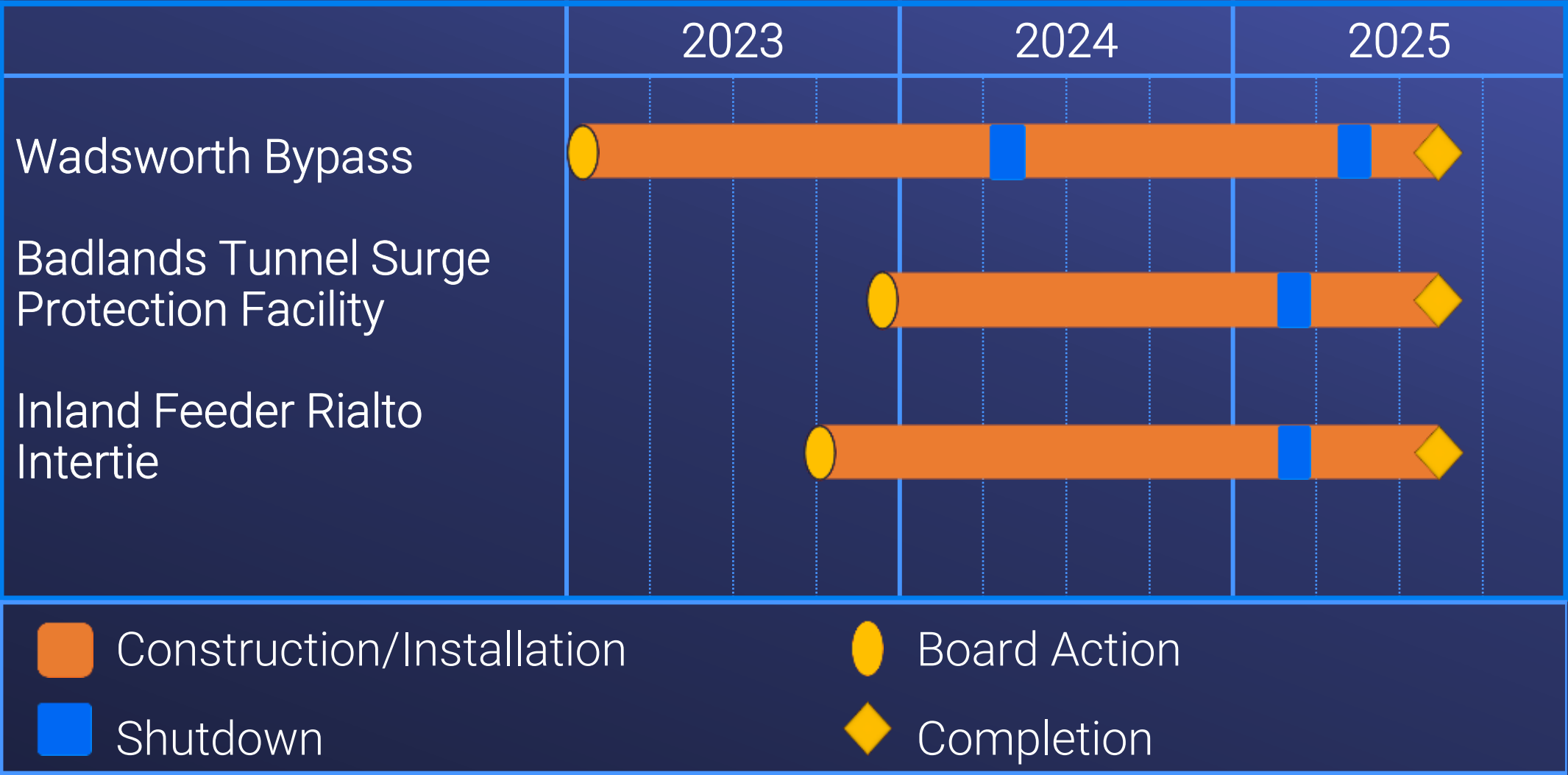


Pipe Reducer Installation



84-Inch Diameter Valve Fit Up

# Construction Schedule





# Inland Feeder-Foothill Pump Station Intertie

- **Summary of Project Scope**

- Collaborative effort with San Bernardino Valley MWD (SBVMWD)
- Connect Inland Feeder with SBVMWD's Foothill Pump Station
- Construct supply & discharge pipelines, isolation valves & surge tanks

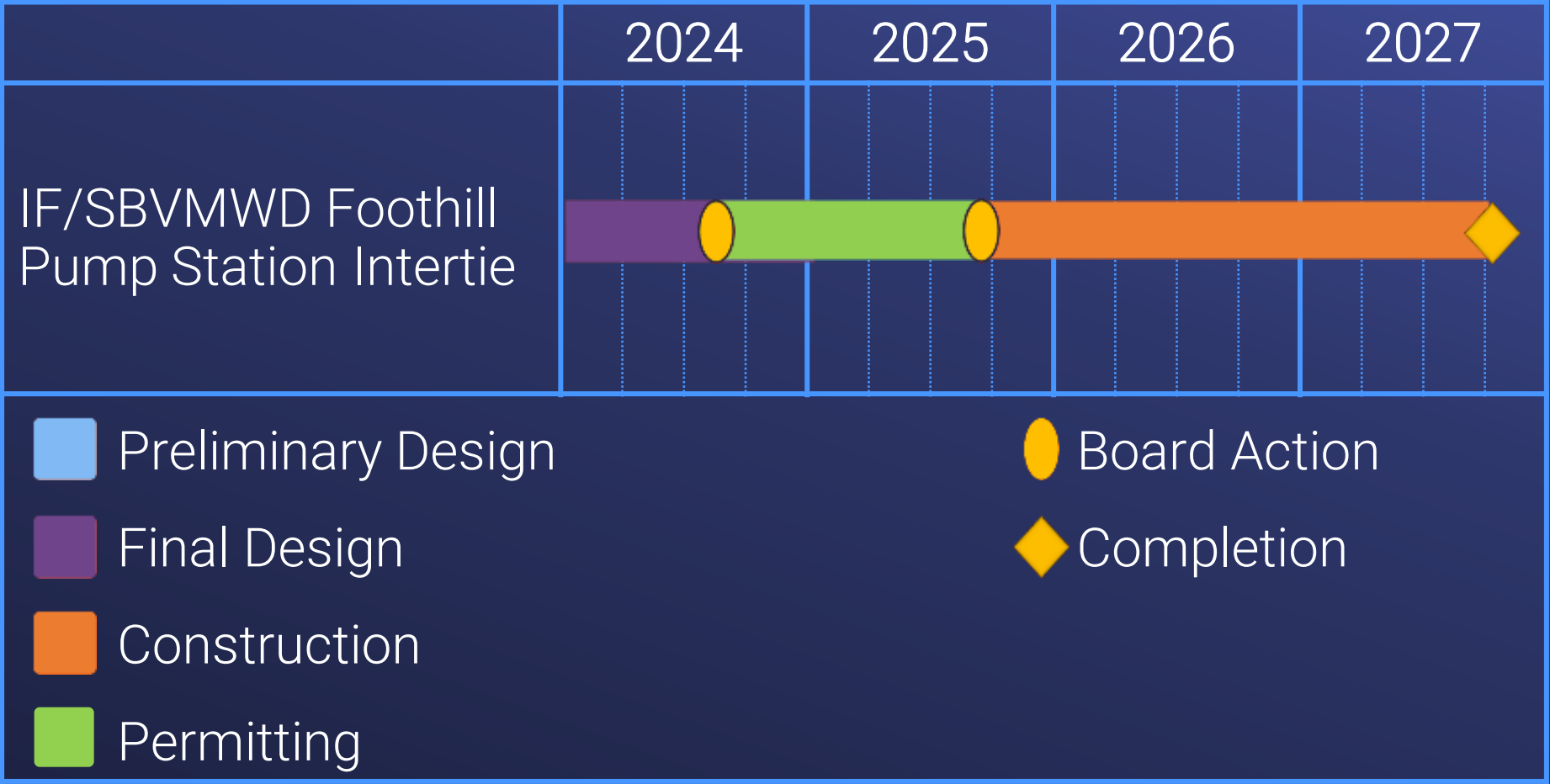
- **Project Status**

- Pending Fish & Wildlife permit & BLM right-of-way acquisition
- Awarded \$5M USBR WaterSMART grant
- Section 7 consultation with USF&WS underway



Existing Foothill Pump Station

# Inland Feeder-Foothill Pump Station Intertie

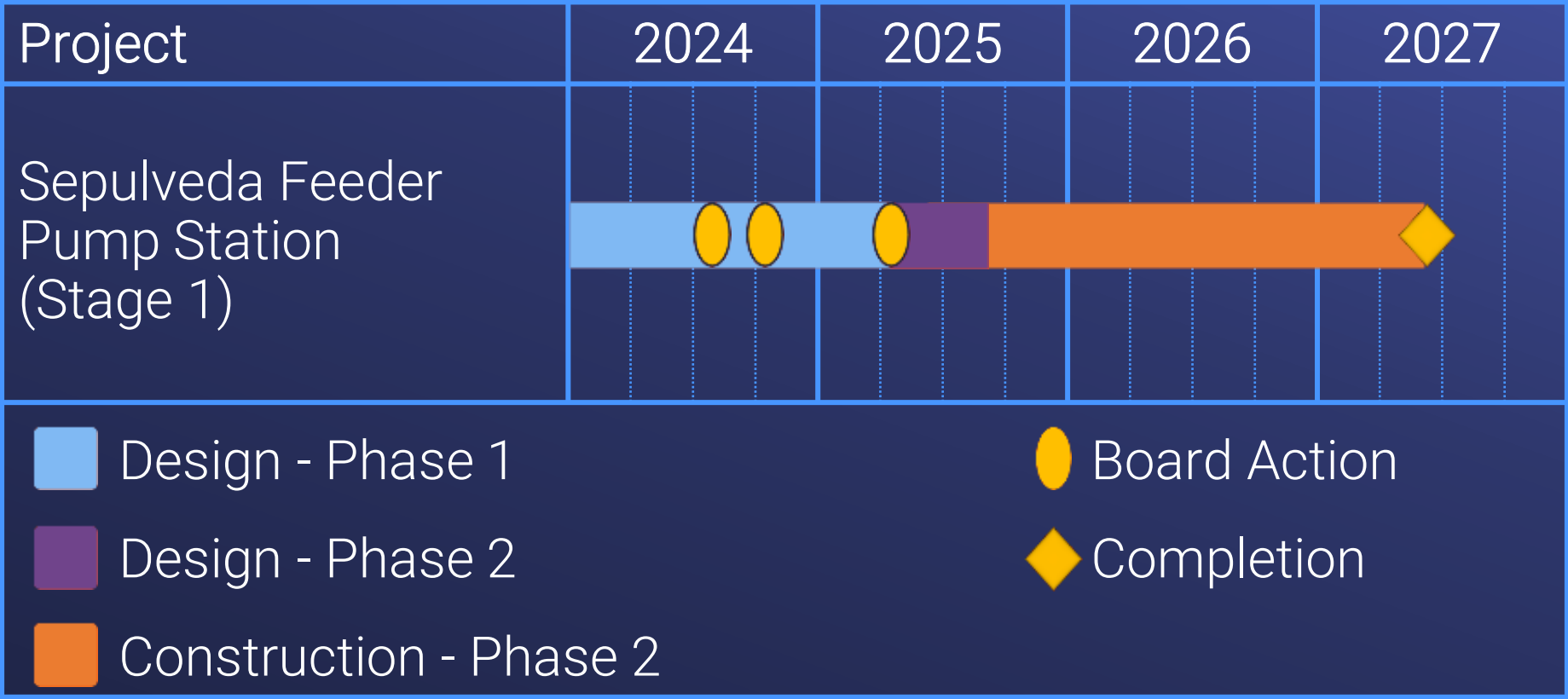


# Sepulveda Feeder Pumping – Stage 1

- **Purpose**
  - Augments existing Greg Ave Pump Station to provide 30 CFS to Jensen exclusive area on west side
- **Project**
  - Reverse flow in the Sepulveda Feeder
  - Install pumping stations at two existing pressure control structures
  - Utilize Progressive Design-Build delivery
- **Status**
  - Design approx. 70% complete
  - Major equipment procured
  - Negotiating GMP for Spring 2025 action



# Sepulveda Feeder Pumping – Stage 1



# Next Steps

- Continue implementation of projects
  - Award Phase 2 PDB contract including construction of Sepulveda Feeder Pump Stations
  - Award construction contract for SBVMWD Foothill Pump Station intertie
  - Quarterly reporting to the subcommittee
- Inform the CAMP4W process
  - Continue work on precursors for Sepulveda Feeder Pumping Stage 2
    - Improved electrical service for Venice & Sepulveda Cyn. sites
    - Sepulveda Feeder PCCP rehabilitation
    - Detailed surge analysis
    - Inglewood Lateral



