





Operation NEXT Water Supply Program & Hyperion 2035

Update for Board of Water & Power Commissioners

Anselmo Collins, PE, MBA & Rafael Villegas, PE, MSCE

Traci Minamide, PE, BCEE & Hubertus Cox, PhD, PE

July 9, 2024

Agenda

- 1. Joint Program Update
- 2. Program Planning Status
- 3. Program Approaches & Alternatives
- 4. Treatment Location
- 5. Cost Considerations
- 6. Community Engagement
- 7. Partnerships

Joint Program Planning



ASAN

- 2019 City Directive for Recycled Water
- Planning Focus: Treatment at Hyperion



ADWP

- 2019 City Directive for Recycled Water
- 2021Master Plan BoardDirective
- Planning Focus:
 Demands,
 Conveyance, Final
 Treatment and End
 Uses





Joint City Program – Rebranding in Progress







Unified Vision & Mission

Vision

Increase and optimize the City's **local supplies** and support the transition to seventy percent local water by **maximizing the production of purified recycled water** as part of a **diversified water portfolio** in an affordable manner to **mitigate risks** from climate change and ensure an **equitable and resilient future** for the region.

Mission

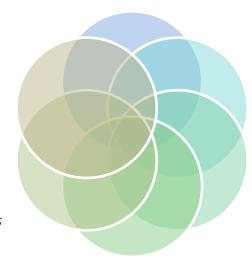
Partner across the region to build and operate a world-class advanced recycled water system, to replenish local groundwater basins and support future direct potable reuse applications.

Unified Goals

Maximize Reuse of Wastewater Effluent from Hyperion Water Reclamation Plant to Create a New and Sustainable Local Water Supply

Provide Community & Equity Benefits

Protect Santa Monica Bay and Enhance Ecosystem Health across the LA Basin



Increase the Resiliency, Reliability, and Sustainability of the City's Wastewater and Water Supply Systems Construct New and Upgrade Existing City's Infrastructure in a Cost-Effective and Responsible Manner

Urgently Implement Water Strategies to Diversify Los Angeles' Water Supply Portfolio

Master Plan Background

Direction from LADWP Board of Commissioners – Nov. 2021

 Develop a Master Plan for validation of Program strategy and long-term plan

Objective

 Develop viable roadmap for successful implementation of Program infrastructure

Master Plan Elements

- ✓ Program Alternatives
- ✓ Rate-Based Revenue Requirements & Impacts
- ✓ Identify Program Milestones
- ✓ Off-ramp/Trigger Opportunities
- Regulations and Mandates
- ✓ Emerging Technologies
- ✓ City and Regional Agency Coordination and Agreements
- ✓ Cost Sharing and Grant Opportunities
- ✓ Resource Constraints
- ✓ Outreach
- ✓ Environmental Justice & Equity

Program Planning for Hyperion

Technical Memoranda

- Completed Spring 2023
- Foundational information regarding feasibility for Hyperion

Program Implementation Plan

- Hyperion's facility plan with capital improvement projects, cost estimates, construction schedule, and phasing
- July 2024

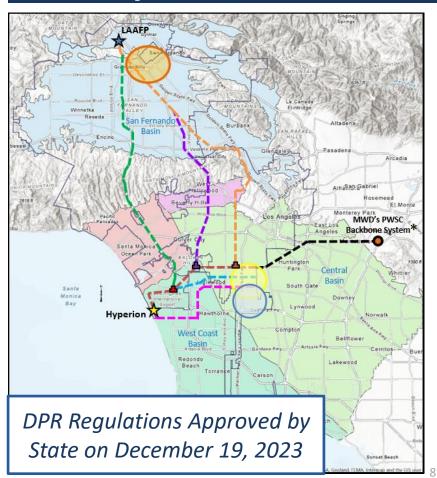
Program Management Plan

- Outline of management structure, procedures, and protocols for efficient program implementation, as well as tracking and control systems for transparency and accountability.
- July 2024

Conceptual Design Report for Phase 1A

- Design of foundational infrastructure improvements at Hyperion
- New activity funded by Bureau of Reclamation

Operation NEXT Program Approaches



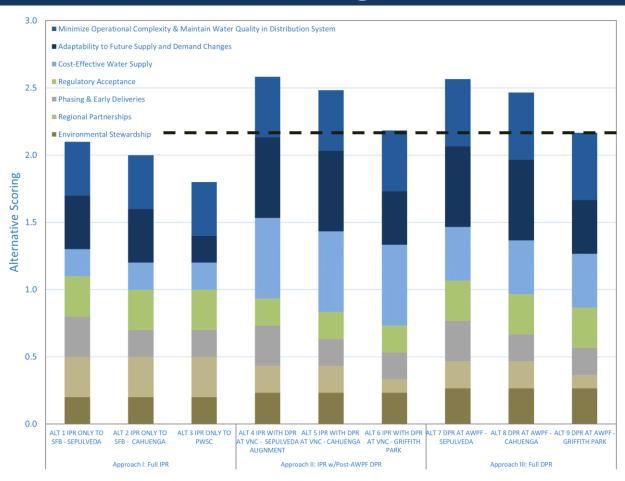
Master Plan 3 Approaches & 9 Alternatives				
Approach I Full IPR	Approach II IPR w/Post- AWPF DPR	Approach III Full DPR ¹		
Alternative 1	Alternative 4	Alternative 7		
Sepulveda	Sepulveda	Sepulveda		
Alternative 2	Alternative 5	Alternative 8		
Cahuenga	Cahuenga	Cahuenga		
Alternative 3	Alternative 6	Alternative 9		
MWD-Centric	Griffith Park	Griffith Park		

¹ – Approach III is IPR initially, then phased to full DPR.

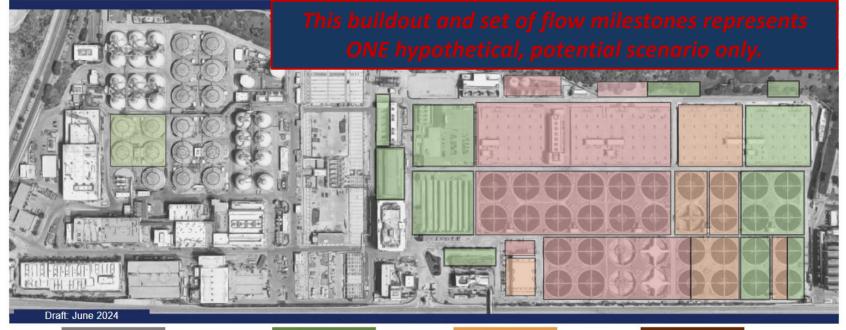
² – All Alternatives include a connection to MWD's Pure Water Southern California Program.

Alternatives Scoring

Staff
Recommendation
Alternatives List:
Approaches II & III
(All Alignments)



Technical Studies Establish Feasibility and Potential Construction Phasing



Hyperion Today

Nine secondary treatment modules with bioreactors and 4 clarifiers Phase 1

Produce 50 mgd IPR Phase 2

Produce additional 40 mgd IPR for a new total of 90 mgd Phase 3

Produce additional 120 mgd DPR for a new total of 210 mgd

Grants: \$5 million from Bureau of Reclamation and \$3.4 million from US EPA

Potential Treatment Locations



Preliminary Cost Considerations

Approach #	Alternative #	Total Capital Cost (Unescalated)	O&M Cost/Year (Unescalated)
Approach II: Indirect Potable Reuse (IPR) w/Post-AWPF Direct Potable Reuse (DPR)	4	\$21.0B	\$393M
	5	\$20.6B	\$388M
	6	\$21.2B	\$398M
Approach III: Full Direct Potable Reuse (DPR)	7	\$25.0B	\$440M
	8	\$24.8B	\$438M
	9	\$25.4B	\$449M

^{*—} AACE Class V Cost Estimate for all Alternatives, includes AWPF costs in each Alternative. Monte Carlo simulations will be performed to verify that cost estimates/ranges are robust and sufficiently conservative given the current level of definition for the Program.

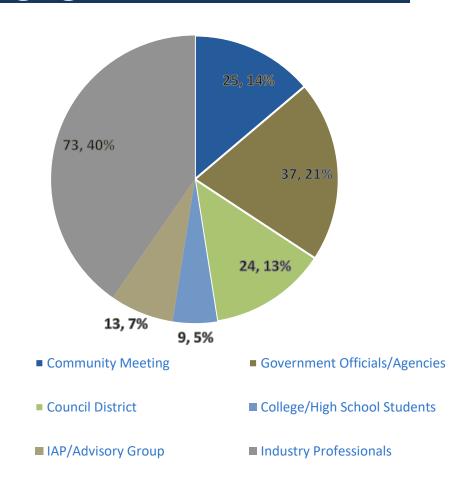
Community Engagement

Potential Priority Areas:



Community Engagement

- Program Outreach to Date: 181 presentations given to date.
- Audiences: Community Members, Elected Officials, Government Agencies, Industry Professionals, etc.
- LASAN/LADWP Joint Outreach Plan:
 In Development
- Continue Outreach During Programmatic EIR



Partnership & Regional Collaboration

Key Partner



Groundwater Basin Managers





- Continuous Collaboration with Key Partner, LASAN
- 10 Meetings with other potential partners on Operation NEXT
 - MWD Regional Water Reuse Collaborative: Workshops on 4/17, 4/19
 - Next Workshop: 7/17

Potential Agency Partners















Regional Water Reuse
 Collaborative: Statement of Intent signed August 2023

Joint Program Next Steps











Thank You

www.ladwp.com/OperationNEXT