



Master Plan and Program Implementation Plan Update

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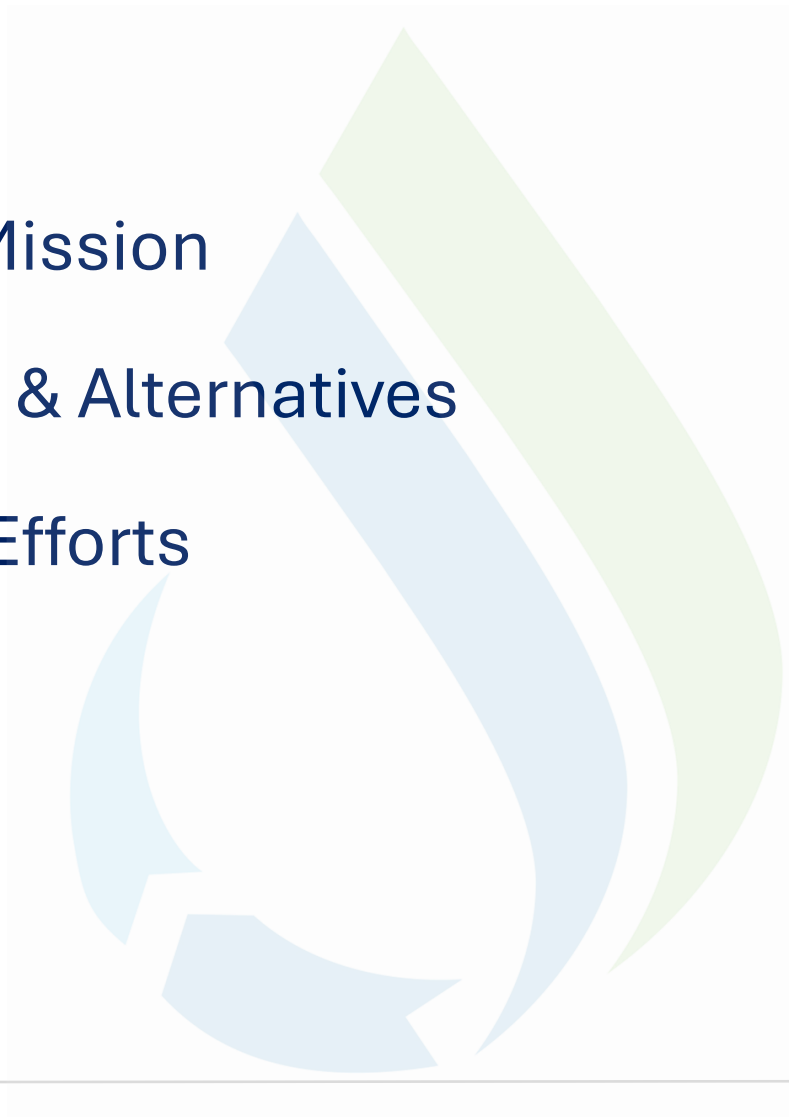
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March 25, 2025



Agenda

- ☐ Background
- ☐ Program Vision & Mission
- ☐ Program Approach & Alternatives
- ☐ Program Planning Efforts
- ☐ Next Steps



Water Supply Sources

Historical Imports

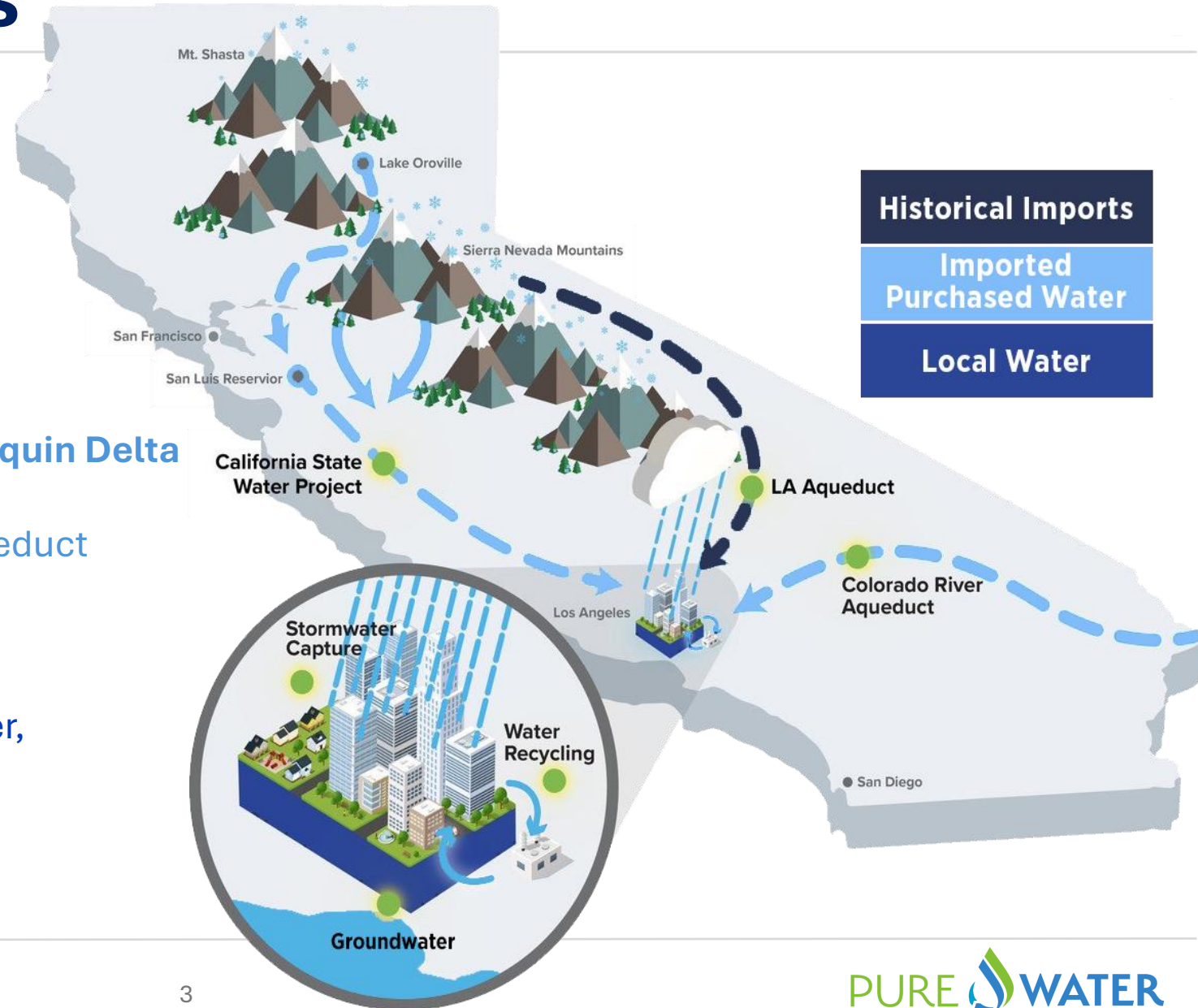
- **Eastern Sierras** via the Los Angeles Aqueduct

Imported Purchased Water

- **Northern Sierra and Sacramento-San Joaquin Delta** via the California State Water Project
- **Colorado River** via the Colorado River Aqueduct

Local Water

- Local Water Supplies including groundwater, recycled water, and conservation



Program 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.

Program Goals



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



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



Increase the
**Resiliency,
Reliability, and
Sustainability** of
the City's
Wastewater and
Water Supply
System

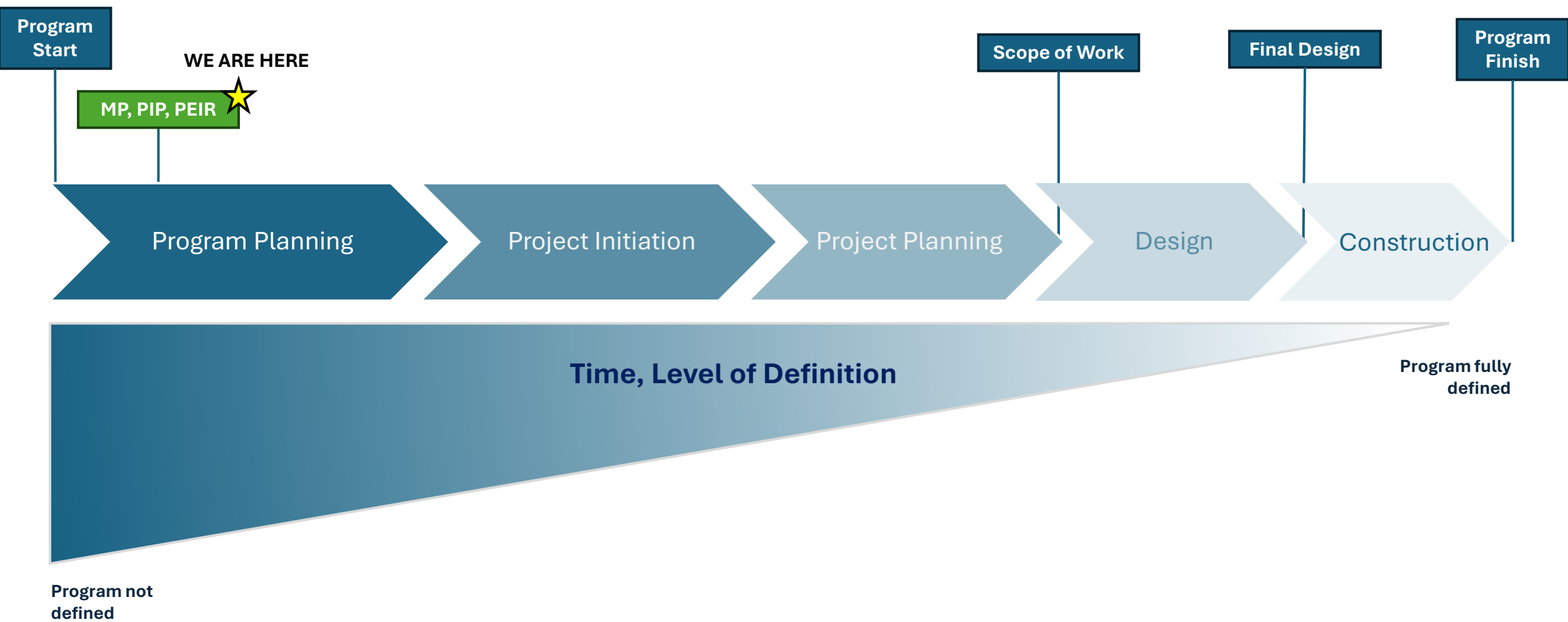


Protect Santa
Monica Bay and
**Enhance
Ecosystem
Health** across
the LA Basin



Provide
**Community &
Equity Benefits**

Program Evolution



Program Planning

What are the Master Plan (MP) and Program Implementation Plan for Hyperion (PIP), and how do they Work Together?

- Complementary plans that evaluate the **maximum potential** for Hyperion reuse
 - The MP evaluates demands, end-uses, seasonal variations, regional variability, conveyance, and locations for advanced water purification
 - The PIP evaluates the feasibility of Hyperion Water Reclamation Plant to maximize reuse
- The MP and PIP provide important analyses of benefits (water supply, resilience, ecosystem, job creation) and quantifies the overall scope (infrastructure, cost, schedule, strategy).

Water reuse from Hyperion up to 230 million gallons per day, within the stated time horizon, is aggressive due to cost and demand limitations. Final sizing requires additional planning and refinement.

Planning Documents Strategy

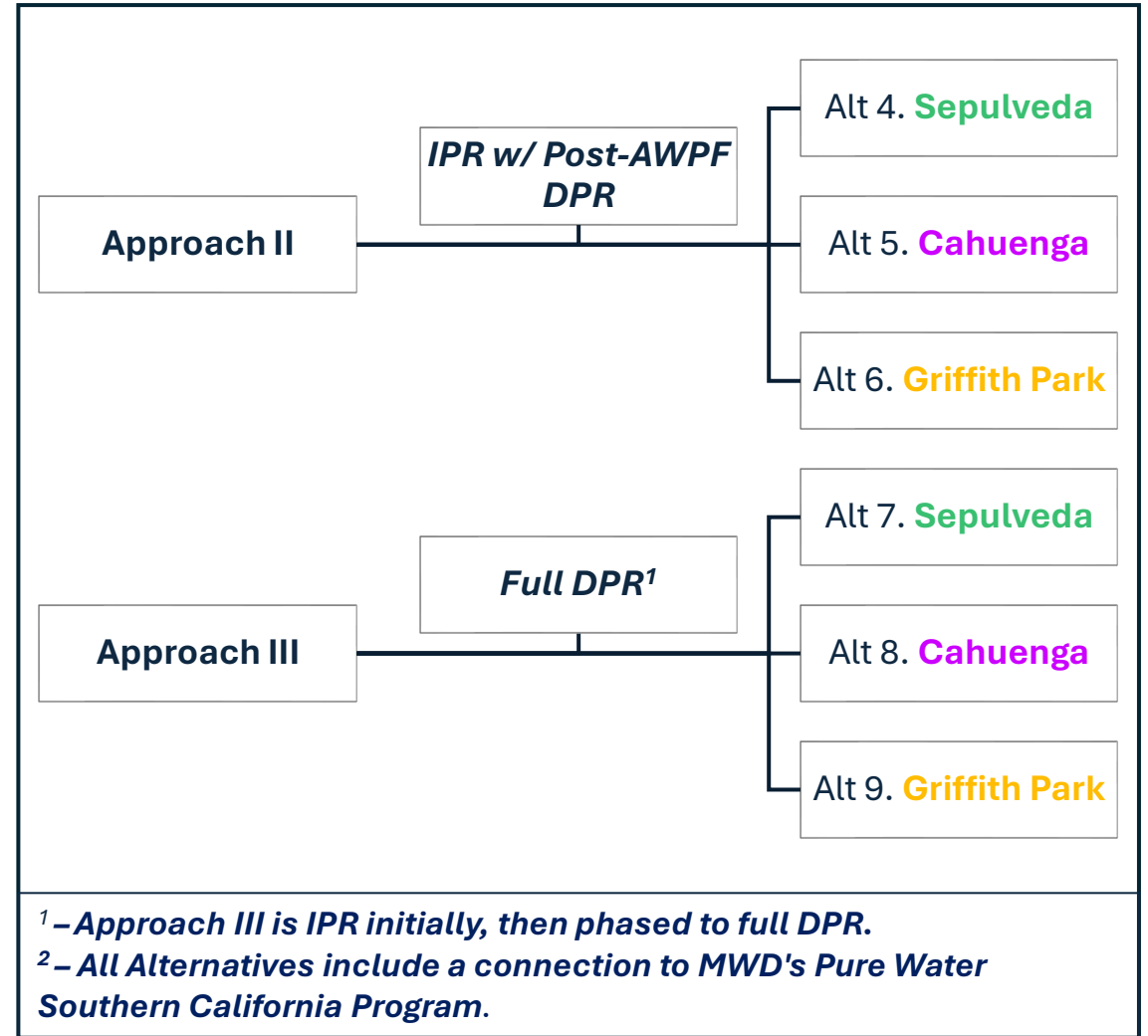
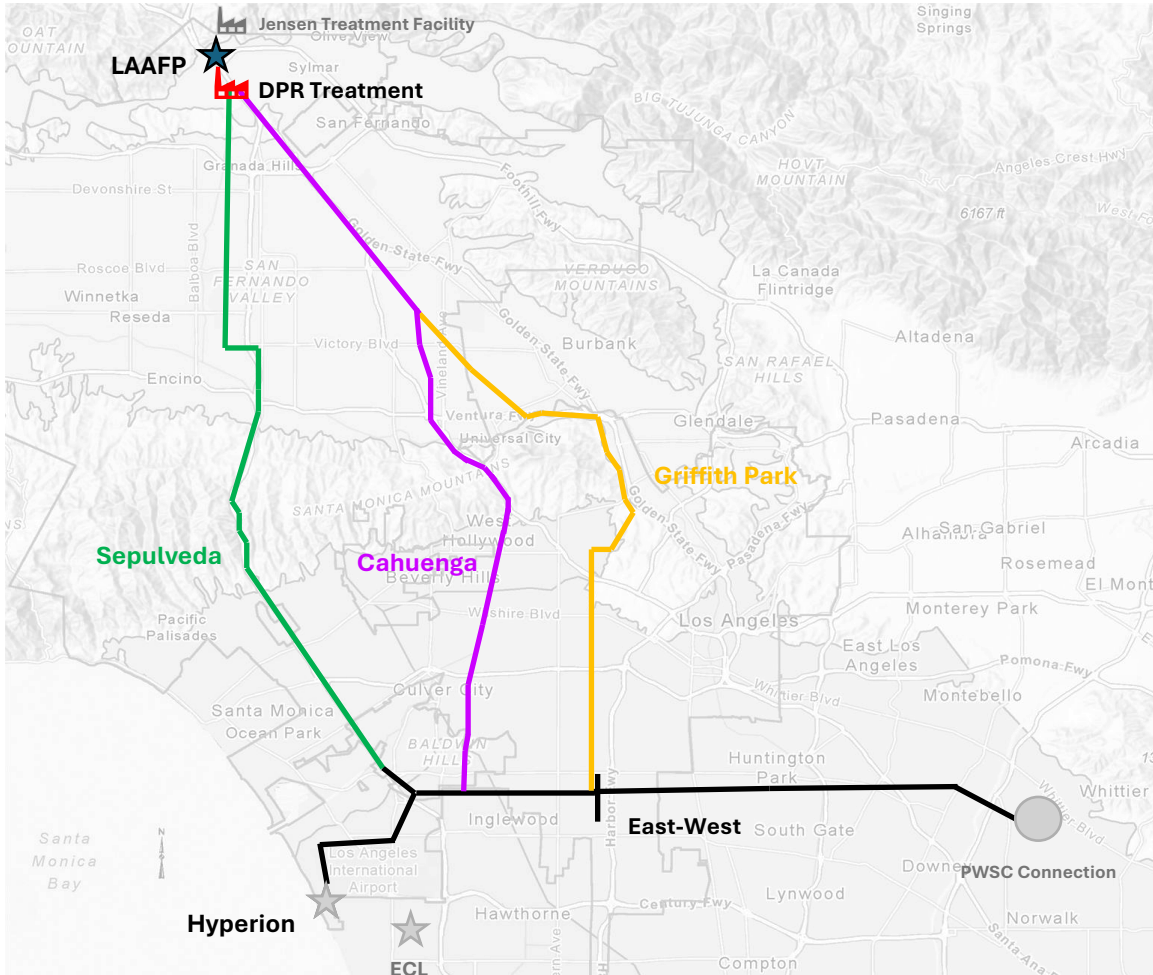
The Master Plan and Program Implementation Plan for Hyperion:

- Foundational building blocks for Pure Water Los Angeles.
- Conceptual study that includes options in every alternative to partner with regional agencies such as MWD, West Basin, WRD, and others.
- Starting point for discussions with communities about what the City's water reuse program might look like, with space to accommodate their input.
- Develops multiple alternatives to address feasibility concerns while still maintaining ambitious implementation timelines to address risks, cost, scale and complexity.

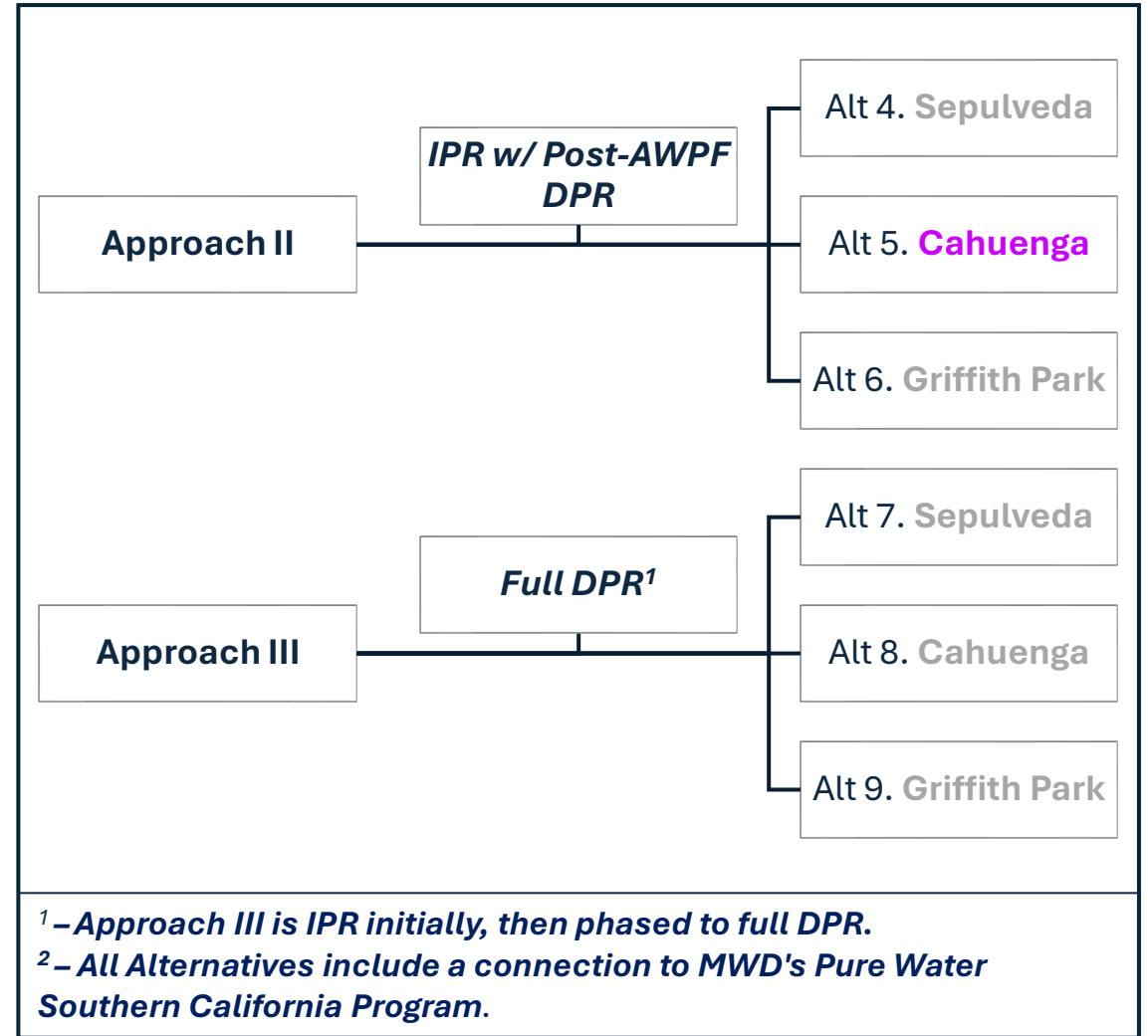
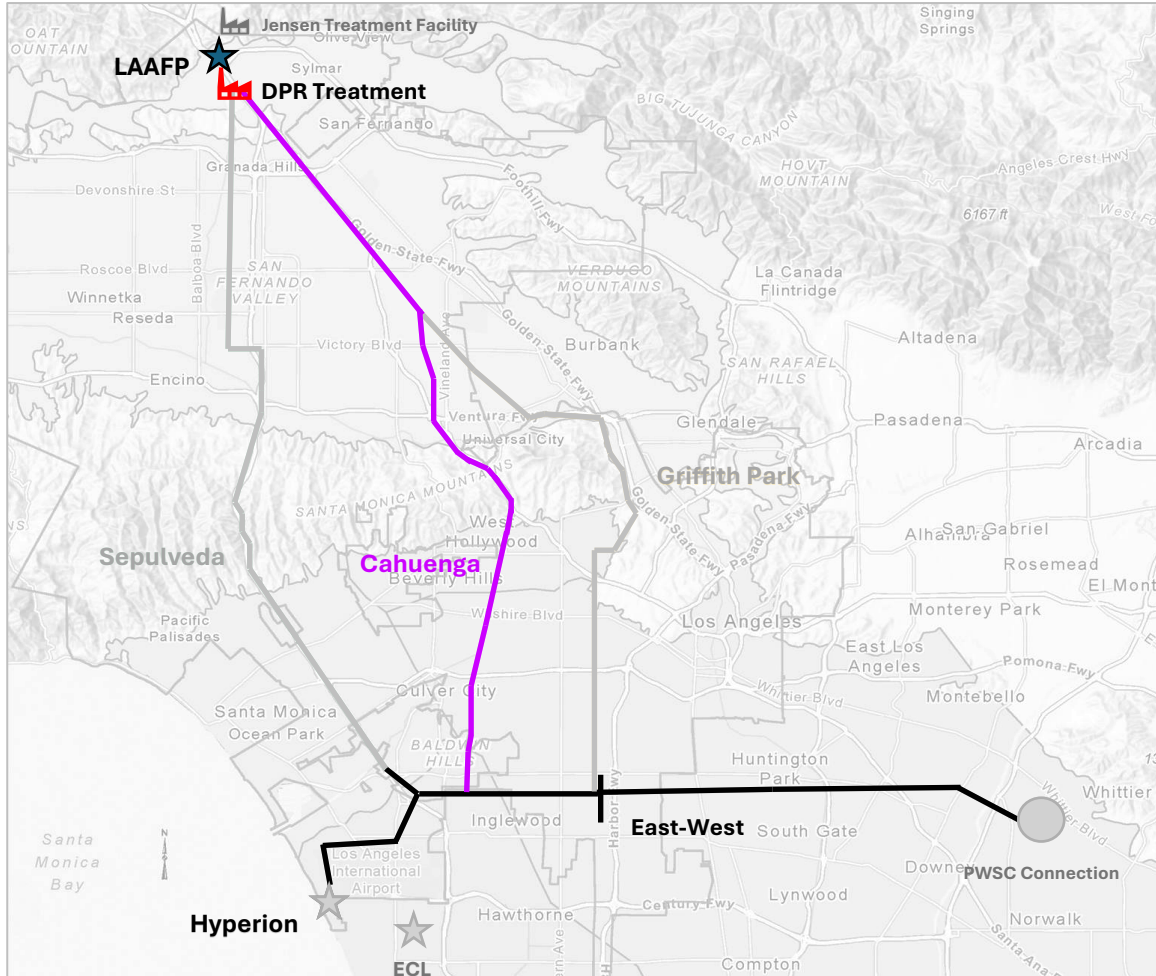
Future planning documents will address:

- Path for what, where, when and how big Program will be.
- Identifies partnerships.
- Path for remaining steps of the Program's Planning Phase.

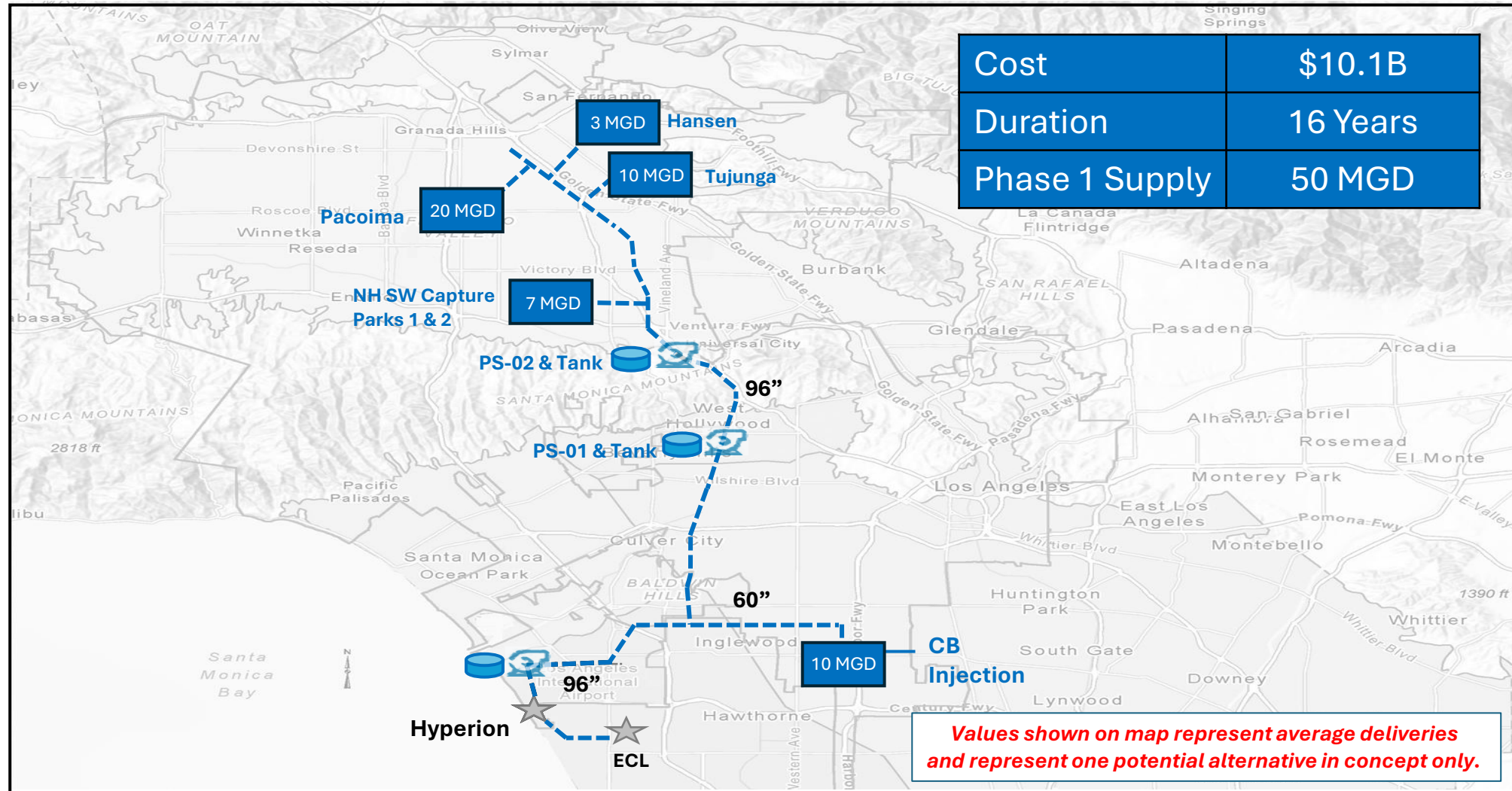
Master Plan Approaches & Alternatives



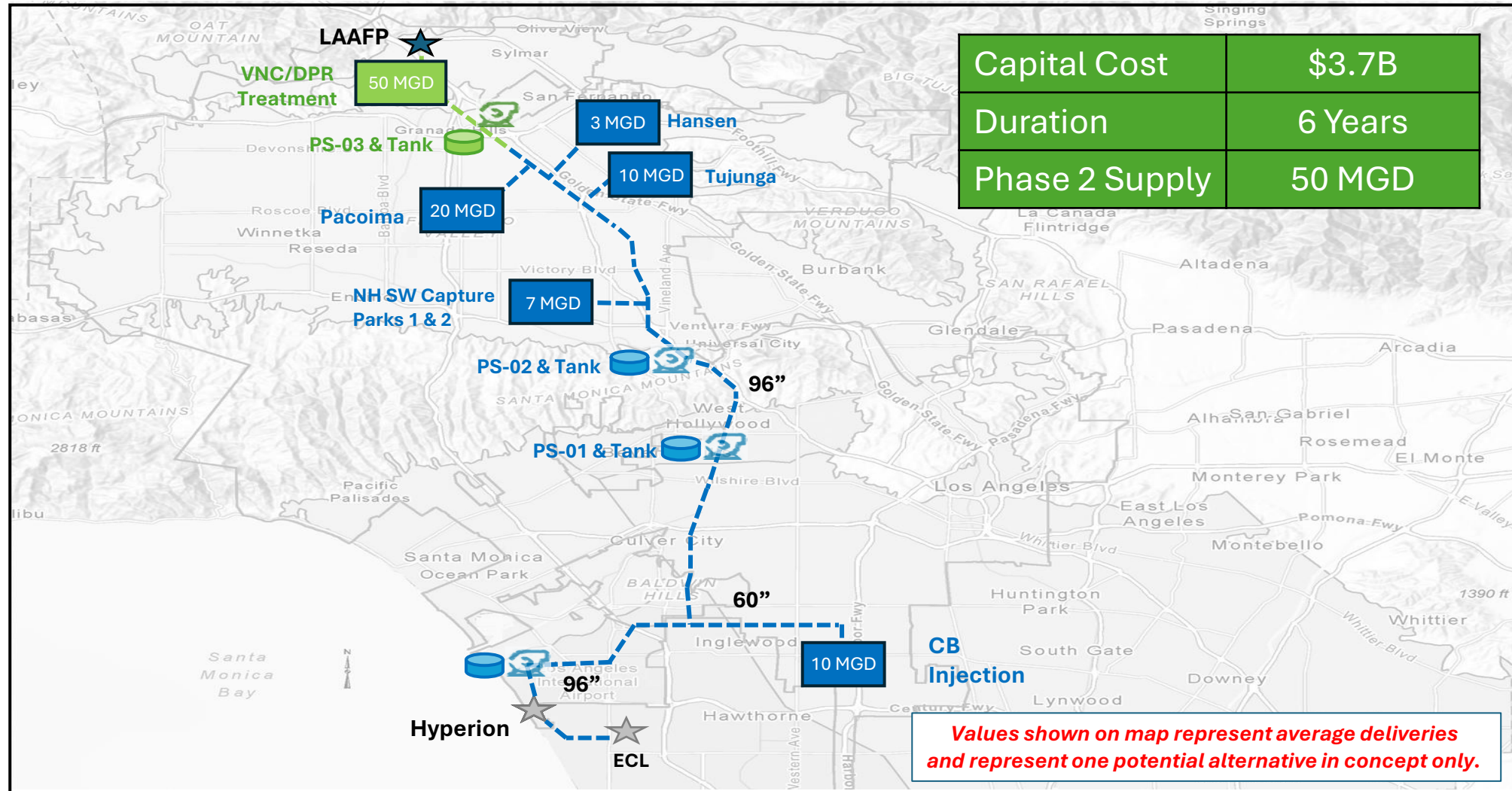
Master Plan Approaches & Alternatives



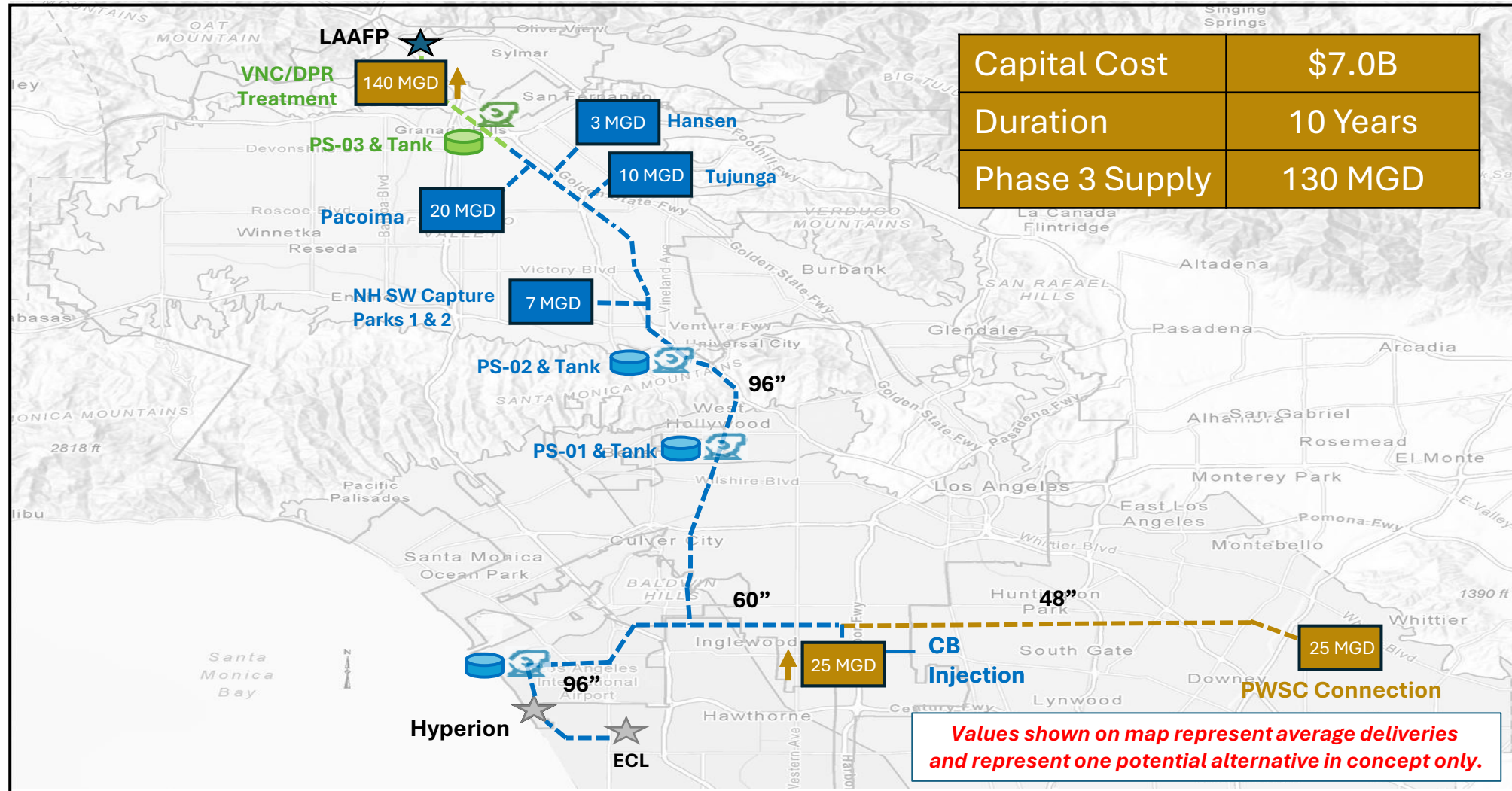
Conceptual Alternative 5 – Phase 1



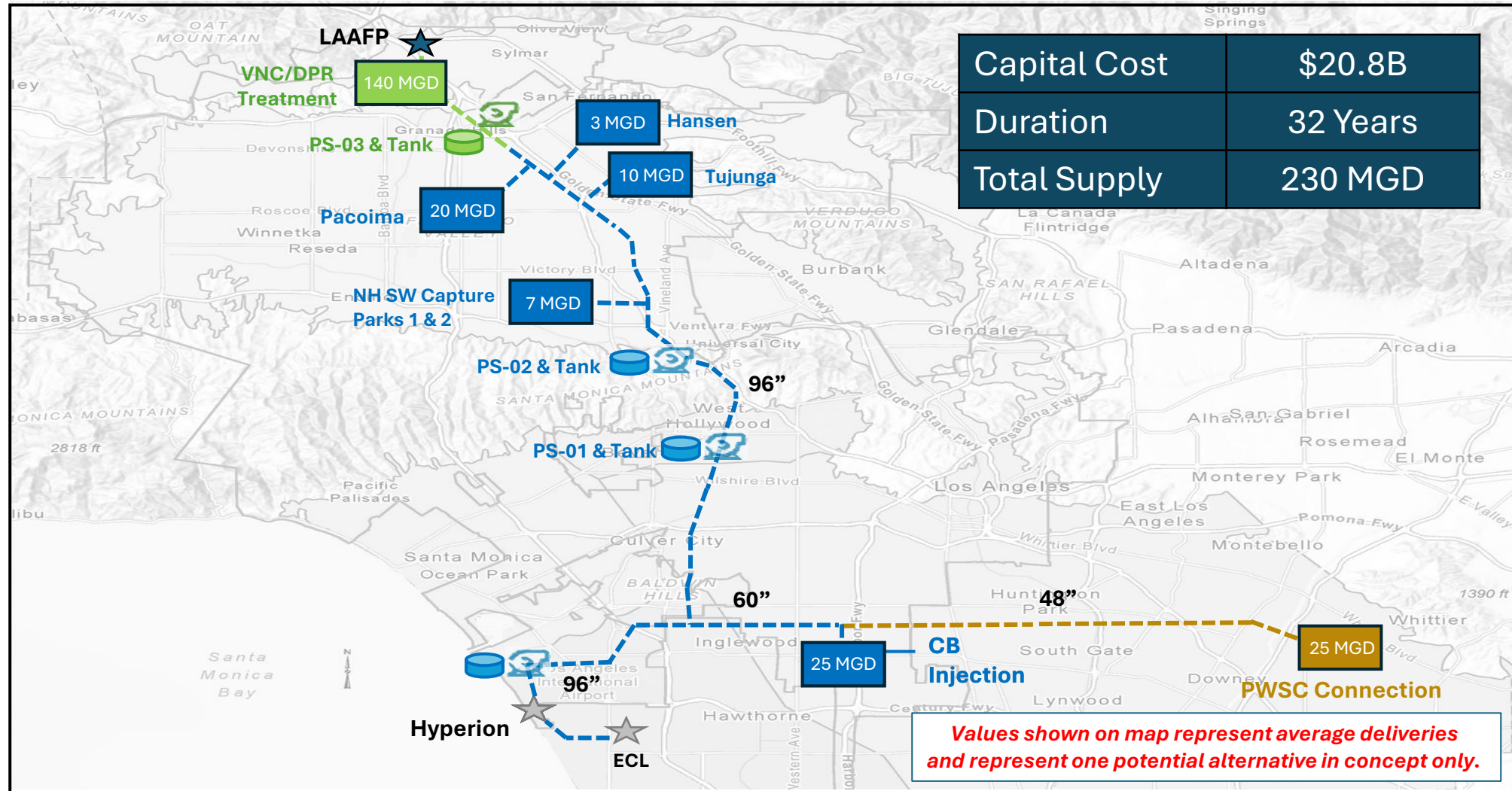
Conceptual Alternative 5 – Phase 2



Conceptual Alternative 5 – Phase 3



Conceptual Alternative 5 – Full Buildout



Hyperion Planning Efforts

Hyperion Implementation: Three Phases

Phase 1 (50 MGD):

Foundational infrastructure and initial water production

Phase 2 (50 MGD):

Expansion of treatment, increased water production

Phase 3 (up to 130 MGD): Complete build out, maximization of water production

Final configuration and capacity of advanced treatment depends on CEQA, regional partnerships and LADWP's Master Plan



Current Projects at Hyperion Play Critical Role



Hyperion Advanced Water Purification Facility

- Proof of Concept
- Construction completed
- Water production anticipated early 2025



Membrane Bioreactor Pilot Facility

- Regulatory acceptance and research
- Construction completed
- Testing to begin Spring 2025

Environmental Benefit for Santa Monica Bay

Santa Monica Bay

Use of Membrane Bioreactor (MBR) instead of existing secondary treatment process at Hyperion, provides two major benefits:

- **Cleaner water for subsequent purification**
- **Maximum reduction of pollutants discharged:**
 - Nitrogen up to 86%
 - Solids up to 79%
 - Biochemical Oxygen Demand up to 96%



Next Steps

Additional work to determine final configuration of Program:

1. Conduct further stakeholder coordination and public outreach
2. Conduct hydraulic and component demand analyses
3. Determine the location for advanced water treatment
4. Develop partnership agreements
5. Develop programmatic environmental impacts (CEQA)
6. Examine pipeline routing
7. Further develop real estate, funding, rate impacts, permitting, and technical research opportunities



THANK YOU!