



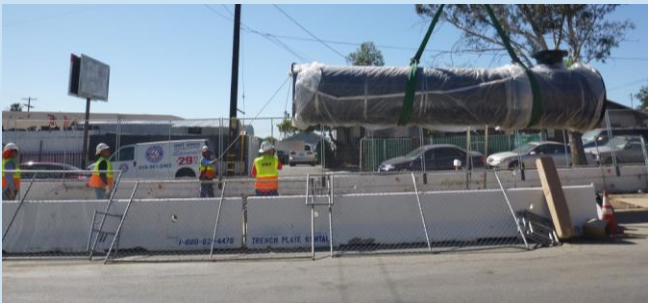
Report for
Council File No. 23-0309
August 11, 2023
Energy & Environment Committee

LADWP Water Supply and Infrastructure Programs

Infrastructure Investments



Los Angeles Aqueduct Repairs



Foothill Trunkline ERDIP



Operation NEXT - Hyperion

San Fernando Basin Groundwater Remediation and Replenishment



Tujunga Centralized Treatment



North Hollywood West Wellhead Treatment



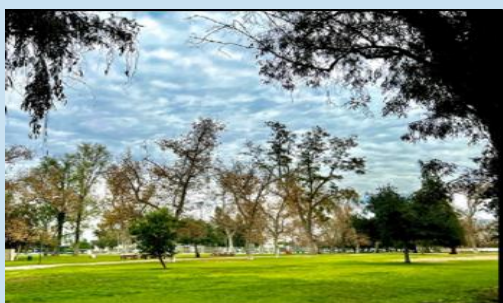
Tujunga Spreading Grounds Enhancement



North Hollywood Centralized Treatment



Los Angeles Groundwater Replenishment



Stormwater Capture Parks Program

Water Use Efficiency and Conservation



Increased incentives help customers reduce water use



LADWP Water Conservation Response Unit enforce and educate

Emergency Water Supply Allocation Imposed on LA

CAL MATTERS

6 million Southern Californians face unprecedented order to conserve water

Los Angeles Times

Unprecedented water restrictions ordered as MWD declares water shortage emergency

Los Angeles Times

DWP customers in L.A. face two-day-a-week water restrictions, with eight-minute limit

DAILY BULLETIN

Drought prompts outdoor watering limits, possible fines for 6 million in Southern California

Six agencies within the Metropolitan Water District must reduce usage by 35%



Source: AOL



Source: Daily Bulletin



Source: LA Times

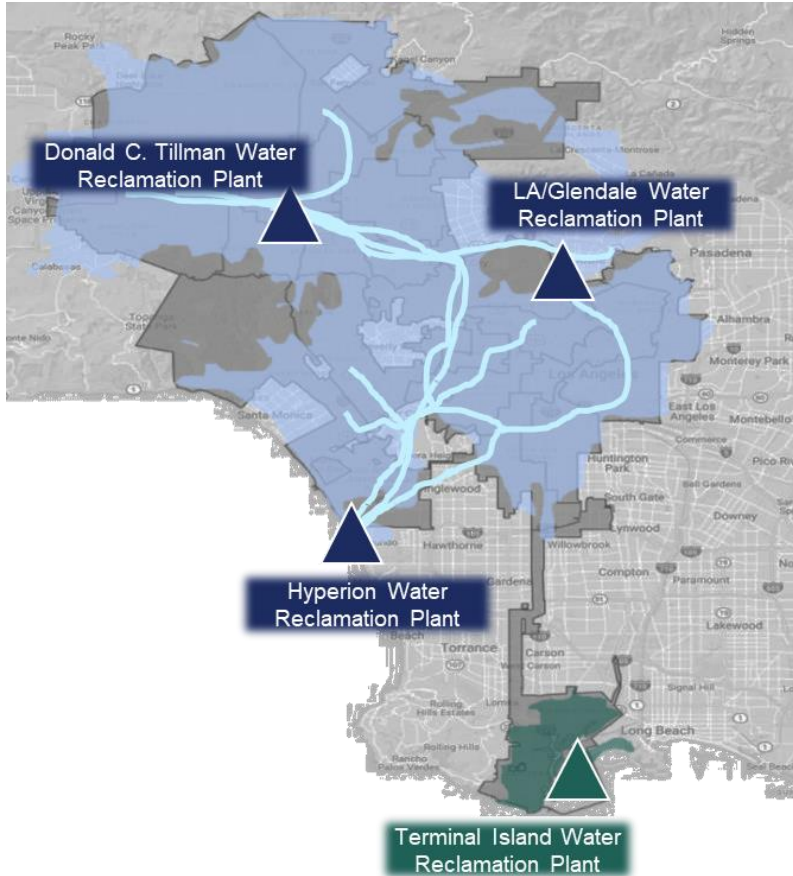
Opportunities to Improve Local and Regional Supply Reliability and Resiliency

- Interconnected Regional Conveyance to eliminate isolated shortages and reliability disparity
- LADWP Operation NEXT integration with Metropolitan for regional distribution of local supply, and operational flexibility and system resiliency



Potential Future Integration of Reuse Programs
Operation NEXT Master Plan in Progress

LASAN is contributing to local water supplies



Four Water Reclamation Plants with a combined flow of 302 MGD

- Recycled water 47 MGD or 53,000 AFY
- In-plant use (potable water off-set) 40 MGD or 45,000 AFY
- Support beneficial uses of LA River 31 MGD or 35,000 AFY

1 million gallon per day (MGD) = 1,120 acre feet per year (AFY)

The opportunity exists at Hyperion to make an enormous contribution to local water supplies

- Current discharge to Santa Monica Bay: 230 MGD or 257,000 AFY
- Hyperion can provide up to 50% as a local source

LASAN recycled water in progress

Overall goal: Maximize the production of recycled water at the four water reclamation plants for potable reuse

Terminal Island WRP



100% recycled water since 2017

Capacity 12 MGD / 13,400 AFY

Donald C. Tillman WRP



DCT Advanced Water Purification Facility

Capacity 20 MGD / 22,400 AFY

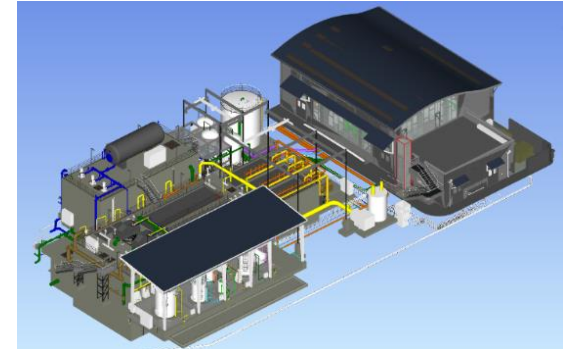
LA-Glendale WRP



Urban Waterway and Water Technology Center

Demonstration facility

Hyperion WRP



Hyperion Advanced Water Purification Facility

Capacity 1.5 MGD / 1,700 AFY

Hyperion Membrane Bioreactor Pilot Facility

LASAN planning for Hyperion 2035

Program goals

- Maximize recycled water from Hyperion: up to 230 mgd or 257,000 AFY
- Maximize process efficiency of the facility
- Reduce future effluent discharges into Santa Monica Bay

Hyperion 2035 and LASAN – LADWP coordination

- Pilot and demonstration projects: Hyperion AWWP and Membrane Bioreactor Pilot Project
- Plan development: Hyperion 2035 Program Implementation Plan informs LADWP's Master Plan
- Program management: define roles and responsibilities for the two departments, identify funding
- CEQA: joint programmatic EIR
- Outreach: Hyperion 2035 Technical and Community Advisory Groups

Construction schedule Hyperion 2035

- Phase 1: 50 MGD / 56,000 AFY, by 2033
- Phase 2: 90 MGD / 100,800 AFY, by 2038
- Phase 3: 230 MGD / 258,000 AFY, by 2046

Metropolitan supports local resources across the region

Local Resources Program

- 12 active projects in Los Angeles
- Invested \$724 M (for 4.2 million AF)

Conservation

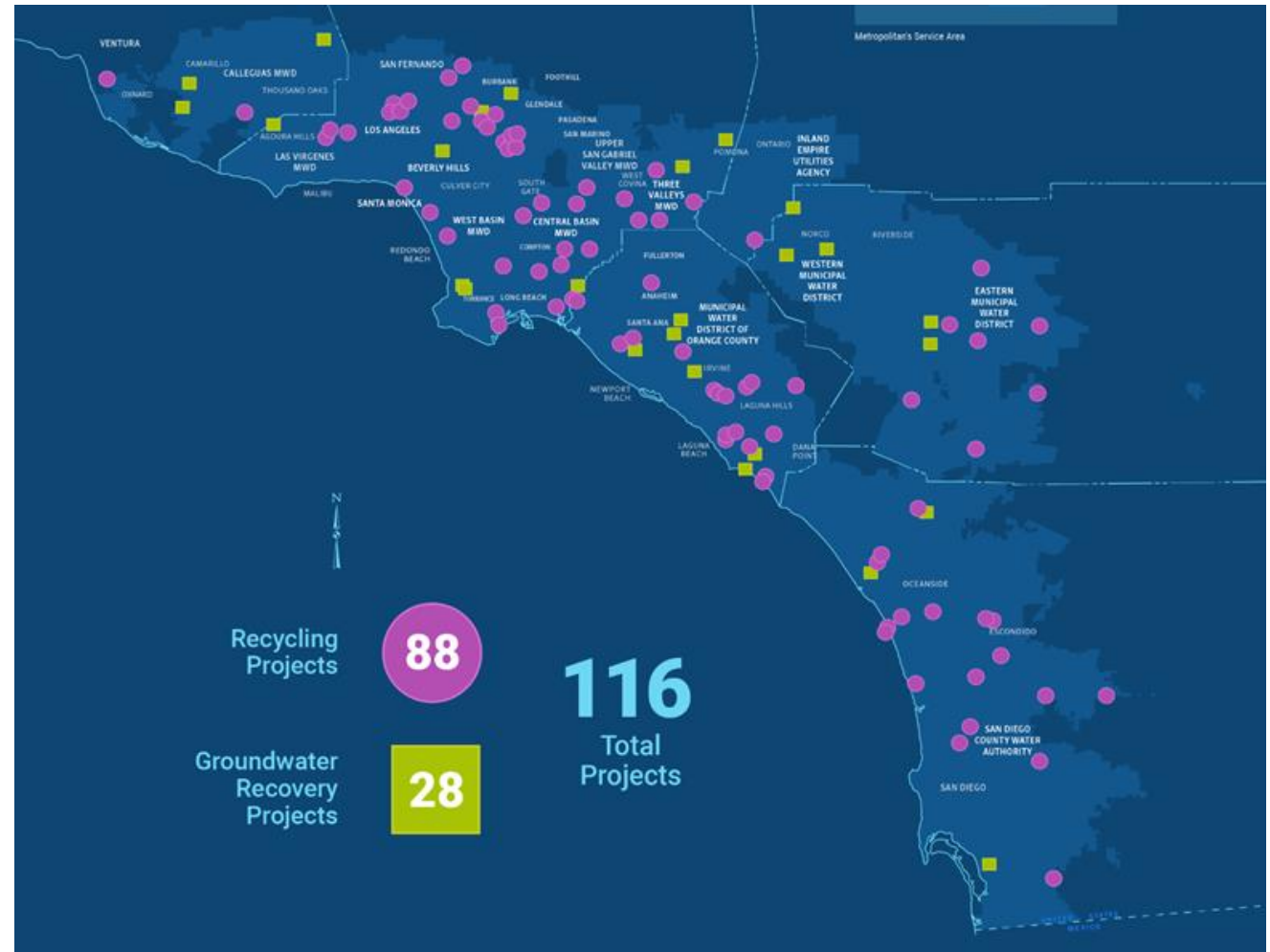
- Per-capita water use dropped by nearly 40 percent since 1990
- Invested \$864 M (for 3.7 million AF)

Cultivating new resources

- Stormwater pilot programs
- Future supply actions

Climate Adaptation Master Plan

- Decision-making framework for water resource, financial, & climate adaptation planning



Opportunities to Integrate with Pure Water Southern California

Our top priority

- Provide equivalent water supply reliability through an interconnected and robust system of supplies, storage, and programs

Regional partnerships for recycled water

- Pure Water SoCal conveyance could form part of the “backbone” to regionally distribute recycled water
- Coordinating with LADWP to potentially connect to Operation Next

Pure Water schedule

- Phase 1: 2032 (115 mgd)
- Phase 2: TBD (scale to 150 mgd)



Potential Future Integration of Reuse Programs
with Drought Mitigation Projects



Metropolitan's Multifaceted Seismic Resilience Strategies

Strategies

- Planning
 - System flexibility & redundancy
 - Emergency storage
- Risk assessment & mitigation
- Emergency response
- Regional preparedness and response partnerships

Key Accomplishments

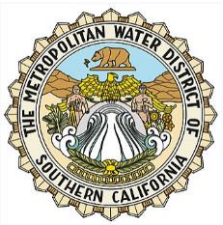
- \$250 M invested over 20 years
- More than 75 structures upgraded
- Increased emergency storage by 20% in 2019



Installing earthquake-resistant pipes



Testing large-diameter earthquake-resistant pipes





Thank You