Hyperion Reuse and Water Resilience Program

L.A. Chamber of Commerce
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Water Resources Division – LADWP
Hyperion Reuse and Water Resilience Program
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LADWP Today

- Service area - 472 mi$^2$
- Provide Water and Power to over 4 million people every day
- Over 467 million gallons of water delivered per day - 523,100 acre-feet per year
Los Angeles’ Water Supplies

- LA Aqueducts
- Colorado River Aqueduct
- Conservation & Recycling
- Delta
- State Water Project
- Local Groundwater & Stormwater
- Sierra Mountains
Water Supply Reliability

Fiscal Year End 2014 - 18 Average Hydrology
Total Supply: 523,100 AFY

- MWD: 59%
- Los Angeles Aqueduct: 27%
- Groundwater: 12%
- Recycled Water: 2%
- 14% Local

Fiscal Year 2034 - 35 Average Hydrology
Total Supply: 661,800 AFY

- MWD: 59%
- Los Angeles Aqueduct: 27%
- Recycled Water: 4%
- RW NPR: 4%
- RW GWR: 32%
- Groundwater: 17%
- Stormwater: 2%
- New Conservation: 17%
- 72% Local

L.A.’s Green New Deal
Urban Water Management Plan

Urban Water Management Plan

- Groundwater Replenishment Master Planning Report
- Water Conservation Potential Study
- Action Plan
- Groundwater System Improvement Study
- Stormwater Capture Master Plan (2015)
- L.A.'s GREEN NEW DEAL
L.A.'s "GREEN NEW DEAL"

- Source 70% water locally
- Recycle 100% wastewater
- Capture 150,000 AFY Stormwater
- Reduce 25% water use

By 2035
New Recycled Water Initiative at Hyperion

**Program Objective:**
Recycle 100% of available treated wastewater for beneficial reuse from the Hyperion Water Reclamation Plant by 2035.
Operation NEXT Program Map

Water Treatment Facilities
- Los Angeles Aqueduct Filtration Plant
- MWD Treatment Plants

Water Reclamation Facilities
- City of LA
- Other

Distribution Facilities
- Proposed Potable Water
- Proposed Recycled Water
- Existing Recycled Water
- MWD
- Potential Injection/Extraction Well Location
- Long Beach Injection Wells
- Spreading Grounds
- Pump Station
- Distribution System

Groundwater Forebays
- Los Angeles
- Montebello
- Whittier Area

Groundwater Basins
- Eagle Rock
- Hollywood
- San Fernando
- Santa Monica
- Sylmar
- Verdugo
- West Coast
- Adjudicated Central
- Unadjudicated Central

Other
- Los Angeles City Limits
- Saline Plumes
- Sea Water Barriers
Technology Challenges

• Tunneling
• Groundwater Storage
• Advanced Treatment at Hyperion (MBR, log removal, regulatory approval)
• Brine Management
• Diurnal Management/Storage
Preliminary Program Schedule

HTP to Central Basin 11/29/18 - 11/24/35

Desalter to Harbor 11/29/18 - 11/26/27

2035
Collaborative Framework

• LASAN Collaboration for Hyperion
• Regional Partnerships
  – Water Replenishment District of Southern California (WRD)
  – MWD of Southern California / LA County Sanitation Districts
  – West Basin MWD
• Other Agency Partnerships / Contract Cities
• Potential Future Joint Powers Authority
Ongoing Efforts / Next Steps

• Groundwater Development and Augmentation Plan (GDAP)
• Joint Master Plan with WRD
• MOU between LADWP & LASAN
• Hyperion AWPF Demonstration Project
• Hyperion NdN MBR Pilot Facility
• Pilot Injection Wells
• Letter of Intent (LOI) with MWD – Program Integration
• Feasibility Studies
• Agency Outreach & Coordination
• Community Engagement
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