



City of Los Angeles Hyperion Water Reclamation Plant 100% Water Recycling Program







OUR COMMITMENT

- Mayor Eric Garcetti's Plan for 100% Water Recycling at Hyperion
- Mayor Eric Garcetti's Executive Directive No.5 (Emergency Drought Response)
- Mayor Eric Garcetti's Executive Directive No.7 (Sustainable City Plan)
- One Water LA 2040 Plan
- Los Angeles Green New Deal





OUR COMMITMENT

- **❖** Reduce Purchased Imported Water by 50% by 2024
- Source 70% of City's Water Supply Locally by 2035
- ❖ 100% Full Advanced Treatment (FAT) Water Recycling at HWRP by 2035





LASAN WASTEWATER SYSTEM OVERVIEW

Hyperion Service Area Information

• Population served : 4,000,000

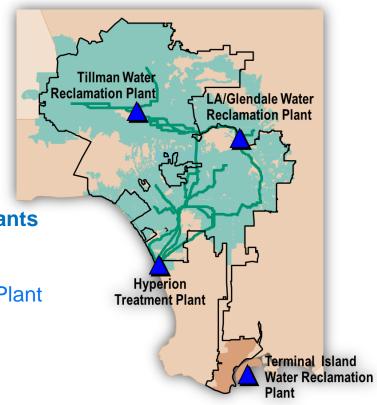
Area served : 600 Square Miles

Sewer System Length: 6,700 Miles

Average System Flow: 306 MGD

Hyperion Service Area: 3 Interconnected Plants

- Tillman Water Reclamation Plant
- Los Angeles Glendale Water Reclamation Plant
- Hyperion Water Reclamation Plant
- Terminal Island Service Area
 - 100% of Flow is Recycled
 - Average System Flow: 12 MGD





LASAN WASTEWATER SYSTEM OVERVIEW

Plant	Treated Wastewater (MGD)	Recycled Water (MGD)	RECYCLED WATER AND BENEFICIAL USES %
HWRP	260	71	27% Recycled and Beneficially Used
DCTWRP	32	32	100% Recycled and Beneficially Used
LAGWRP	14	14	100% Recycled and Beneficially Used
TIWRP	12	12	100% Recycled with AWPF
TOTAL	318	129	

Beneficial Reuse:

HWRP: In-Plant Water

DCTWRP: In-Plant Water, Japanese Garden, Balboa & Wildlife Lakes, LA River

LAGWRP: In-Plant Water and LA River

TIWRP: In-Plant Water

AWPF: Advanced Water Purification Facility



- HWRP Internal Use 36 MGD of Filtered Secondary Effluent
- West Basin Municipal Water District 35 MGD of Secondary Effluent
- Total Recycled Water 71 MGD







Two major initiatives to meet Mayor Garcetti's Goals:

- Hyperion Advanced Water Purification Facility
- Hyperion Membrane Bioreactor Pilot Facility

Data obtained will be utilized for the transformation of Hyperion aligned with Mayor's vision of creating a sustainable and resilient water supply to reality.





Hyperion Advanced Water Purification Facility (AWPF) Project

- Proof of Concept Project for 100% Water Recycling at HWRP
- LASAN in Partnership with LADWP and LAWA to produce 1.5 MGD for Plant Use, LAX, and Adjacent Customers (Target Date: Dec 2021)
- Three-Party MOA was signed in June 2018
- Contract was awarded on April 22, 2019



Acronyms:

MBR: Membrane Bioreactors

RO: Reverse Osmosis

UV-AOP: Ultraviolet – Advanced Oxidation Processes

AWPF: Advanced Water Purification Facility





Hyperion MBR Pilot Facility Project

- An important step towards the city's goal of sourcing its water from local supplies that are sustainable and resilient.
- A joint effort between the LASAN, LADWP, and WBMWD.
- Three Party MOA signed in January 2018





- Construct Hyperion MBR Pilot Facility by April 2021
- Construct Hyperion AWPF by December 2021
- Reroute up to 25 MGD of Hyperion tributary flows to DCTWRP to increase recycled water production at DCTWRP by 2025
- Complete Construction of Advanced Water Purification Facility for 100% Water Recycling by 2034 (Preliminary Estimate)
- Produce up to 174 MGD of advanced-treated recycled water by 2035





QUESTION/COMMENTS

