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

May 22, 2019
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

<table>
<thead>
<tr>
<th>Plant</th>
<th>Treated Wastewater (MGD)</th>
<th>Recycled Water (MGD)</th>
<th>Recycled Water and Beneficial Uses %</th>
</tr>
</thead>
<tbody>
<tr>
<td>HWRP</td>
<td>260</td>
<td>71</td>
<td>27% Recycled and Beneficially Used</td>
</tr>
<tr>
<td>DCTWRP</td>
<td>32</td>
<td>32</td>
<td>100% Recycled and Beneficially Used</td>
</tr>
<tr>
<td>LAGWRP</td>
<td>14</td>
<td>14</td>
<td>100% Recycled and Beneficially Used</td>
</tr>
<tr>
<td>TIWRP</td>
<td>12</td>
<td>12</td>
<td>100% Recycled with AWPF</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>318</strong></td>
<td><strong>129</strong></td>
<td></td>
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</tbody>
</table>

**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 CURRENT WATER RECYCLING STATUS

- 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.
100% WATER RECYCLING PROGRAM

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
100% WATER RECYCLING PROGRAM

- 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