Recycled Water in Burbank

Produced at the Burbank Water Reclamation Plant (BWRP)

- In use since 1967
- Currently treats up to ~5-7 MGD of sewage
- Produces Tertiary Treated Wastewater
Types of Recycled Water Uses

- Currently used for:
  - Surface Irrigation
  - Cooling Tower Makeup
  - Industrial Processes
  - Structural/Wildfire Fire Fighting
  - Decorative Fountains
  - Dust Control
  - Sewer Flushing
  - Cleaning roads, sidewalks, and outdoor areas
Type of Use Breakdown

- Power Generation: 36%
- Irrigation: 45%
- HVAC Cooling: 9%
- External Agencies (Proposed): 9%
- Miscellaneous: 1%
- Recycled Water Use: 4%
How much has changed since 2007?
Power Generation

- **Magnolia Power Project**
  - 310 MW natural gas-fired combined cycle generating plant
  - Uses our recycled water for:
    - Cooling Towers
    - Heat Recovery Steam Generator (demineralized)

- **Lake One Power Plant**
  - 45 MW natural gas-fired "peaker" plant
  - Uses our recycled water for:
    - Cooling Towers
Major Partners

- Burbank Town Center
- Burbank Unified School District
- Caltrans SR-134 and I-5
- City of Burbank Parks and Recreation
- Costco Wholesale
- Debell Golf Course
- Empire Center
- Fry’s Electronics
- Hollywood Burbank Airport
- Ikea
- Los Angeles Department of Water and Power
- Providence Saint Joseph Medical Center
- Valhalla Cemetery
- Walt Disney Studios and ABC 7
- Warner Brothers
- Worthe Real Estate Group
Future Partners

- Nickelodeon Animation
- Whole Foods Market
- Burbank Community Chevrolet
- Hollywood Burbank Airport Replacement Terminal
- Caltrans I-5 Realignment
- Burbank Channel Bikeway
What’s next for Burbank?

- Olive Main Extension
  - Fully permitted. Construction to begin late June.
- Winona/Hollywood Way Main Extension
  - To be planned and designed by yours truly.
- Indirect/Direct Potable Reuse?
  - Feasibility Study Underway
- Optimize Operations
  - Continuously evaluate diurnal supply/demands to maximize system reliability and minimize expensive potable makeup
Wastewater Change Petition
Changes in RW use since 1991 WDR/WRR adoption
- HVAC Cooling Towers, car washing, street cleaning, etc
- Expanded volume of recycled water used.

2016 WDR/WRR adoption required the City to file a change petition with the Water Rights Division

Water Code §1211
(a) Prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater, the owner of any wastewater treatment plant shall obtain approval of the board for that change.
(b) Subdivision (a) does not apply to changes in the discharge or use of treated wastewater that do not result in decreasing the flow in any portion of a watercourse.
Change Petition Timeline

- 2015 – Engineering Report Submitted to DDW identifying new RW usage
- April 2016 – New WDR/WRR’s require Change Petition
- May 2016 – Filed Change Petition and Environmental Information
- Discussions with Board Staff
- February 2017 – AB 52 Letters mailed out to affected tribal groups
- March 2017 – Revised Change Petition Filed
- April 2017 – CEQA IS/ND circulated for 30 day public comment period
- Received 1 Comment Letter
- August 2017 – Responded to Comment Letter
- Patiently Waiting
- April 20, 2018 – WW0091 and WW0019 Approved
Increased Water Recycling and the LA River

What are the potential impacts?
Figure 1. Study area. Study area is between the model start and model end points.
Increased use of Recycled Water and the LA River

- Project effects most noticeable in August (2005-2015)
- Winter/Spring Flows are 100 to 1,000 CFS
- Average August flows for LA River
  - 58.2 CFS at Tujunga Avenue
  - 92.9 CFS above confluence with Arroyo Seco
- Activities that have potential to impact LA River Flow
  - Flows from BWRP in August will be reduced from 6.9 to 2.8 CFS
  - LA-G WRP’s petition proposes 12.5 to 4.4 CFS reduction in August
  - Comment letter listed several other activities
    - Not enough information to allow meaningful analysis for flow reduction
### Potential Physical Impacts (August 2008 Conditions)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>BWRP Only</th>
<th>BWRP+LA-GWRP</th>
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</thead>
<tbody>
<tr>
<td><strong>Average Velocity</strong></td>
<td>1.45 ft/s</td>
<td>1.42 ft/s (-2%)</td>
<td>1.37 ft/s (-5.6%)</td>
</tr>
<tr>
<td><strong>Average Depth</strong></td>
<td>9”</td>
<td>8.88” (-2.2%)</td>
<td>8.52” (-5.3%)</td>
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<tr>
<td><strong>Wetted Area</strong></td>
<td>136.96 acres</td>
<td>135.82 (-0.83%)</td>
<td>134.19 (-2.02%)</td>
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</tbody>
</table>

“The modeled Project effects and cumulative project effects are very minor, and fall well within the range of data collection and hydraulic model uncertainty and error. The Project hydrologic effects would likely be almost undetectable in the field and the cumulative effects barely detectable.”
Potential Biological Impacts

- Less than significant impacts to biological resources
  - 0.48” change in average flow depth not expected to drop water levels below aquatic plant root zones
  - Less than ½” reduction in water level will not impact fish migration or movement of native aquatic species
  - No measurable impacts in all other hydraulic conditions

Photo 1: Depicts the outflow from the Burbank Western Channel into the Los Angeles River at the north western edge of the Study Area. Photo was taken from the bike path at the western end of Segment 1 facing northwest.
Burbank does not have naturally occurring rights to groundwater. All water in the City is imported. And we intend to use all of it.