Recycled Water Update

WaterReuse – Los Angeles
August 8, 2017
City of Glendale & Water

- Incorporated 1906
- Third largest City in LA County
- Approx. 200,000 Residents
- Approx. 34,000 water services
- One of Founding MWD Member Agencies in 1928
- Pumper in San Fernando Basin and Verdugo Basin – 30% to 40% local supply
- Co-owner of LA – Glendale Water Reclamation Plant
- First recycled water use in 1978
- Currently over 7% of demand is local recycled water
Sources of Supply

- **MWD = 58 %**
- **San Fernando Basin = 29 %**
  - GNOU, GSOU, GCOU – Glendale Water Treatment Plant
  - VOC’s, Cr6
- **Verdugo Basin = 6 %**
  - Low groundwater levels
- **Recycled Water = 7 %**
  - San Fernando Basin return-flow-credit = recycled water is recycled more than once
GWP – Pioneer in Recycling

- 1976: City of Glendale is a co-owner of the new LA – Glendale Water Reclamation Plant
- 1978: First recycled water use was for cooling towers at GWP’s Grayson Power Plant
- 1992: The “Forest Lawn Project” was the first of several recycled system expansion projects
- 1992-2014: Glendale invested over $20.3 million in expansions
- 2016: Over 7% of Glendale’s water demand is supplied by local recycled water
• Cooperation between the Cities of Glendale and Los Angeles began in 1968 for regional reclamation facilities.

• Cooperation continued with completion of the Glendale-LADWP Bette Davis Project to extend Glendale’s recycled water system to serve portions of Griffith Park in 2015.

• Regional cooperation continues in 2017 on completion of the ULARA Salt and Nutrient Management Plan by all of the ULARA agencies.
Recycled System

- Approximately 21 miles of recycled water mains
- 6 RW pump stations
- 5 RW storage tanks
- 78 recycled water meters
- Uses include irrigation, cooling, dual-plumbing, dust control
Cross-Connection Program

- A major concern for when recycled water is used on sites served with potable water is cross connection.
- Users are required to submit application for RW use.
- Initial & routine site inspections are required to ensure no cross connections occur.
Current Projects

- Hoover, Keppel, Toll
  - $2.9 million project, with $1.6 million Prop. 84 grant
  - 5,890 lf of 8” pipe
  - Seven Service Connections for three Glendale Public Schools
  - Construction to be completed by October 2017
  - Close communication and coordination with school officials
  - 55 ACFT/year
<table>
<thead>
<tr>
<th>Activities</th>
<th>Schedule</th>
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<tr>
<td>DWR Release Draft Program Guidelines &amp; PSP.</td>
<td>Mid-March 2015</td>
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<td>IRWM 5 Steering Committees call for projects.</td>
<td>March 2015</td>
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<td>LA County FCD prepares and submits request to use as needed consultant to prepare application packet. FCD prepares Board Letter requesting approval to apply for grant funds.</td>
<td>March 2015</td>
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<td>IRWM 5 Steering Committees call for projects and Final list of Projects for Leadership Committee to consider for the Application.</td>
<td>April 2015</td>
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<td>DWR Public Meetings</td>
<td>Mid-April</td>
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<td>Projects Presentations to Leadership Committee for approval. Consultant begins preparing application with project proponents.</td>
<td>May 2015</td>
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<td>DWR Release Final Program Guidelines &amp; PSP.</td>
<td>Late-May 2015</td>
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<td>Consultant continues preparing application with project proponents.</td>
<td>June 2015</td>
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<td>DWR Applicant Workshops.</td>
<td>Early-July 2015</td>
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<td>FCD &amp; Grants staff reviews and approves application packet.</td>
<td>July 2015</td>
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<td>Application Due to DWR.</td>
<td>Early-August 2015</td>
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<td>DWR Announce Final Awards.</td>
<td>Mid-December 2015</td>
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• 1993 Agreement between Pasadena and Glendale for Recycled Water

• Glendale’s system built to accommodate Pasadena’s demands – including LADWP’s pumping facility at LAGWRP

• Glendale’s 50% share of LAGWRP tertiary treated water allocated for Glendale’s and Pasadena’s RW systems

• Regional benefit of reducing imported water from MWD
Lessons Learned

- Mandatory watering restrictions can inadvertently affect recycled use.
- The recycled system percent availability becomes more critical with dual-plumbed buildings vs. irrigation.
- Regional cooperation for interconnections help with reliability – Glendale – Burbank interconnection completed in 2016.
Conceptual Projects

• Distillation?
  – Potential for DPR using the power plants distillation facilities once DPR regulations are adopted?

• Verdugo Park WTP
  – Surface Water Augmentation for groundwater under the direct influence?
TO SUPPORT CONSERVATION
WE USE RECYCLED WATER FOR IRRIGATION

DO NOT DRINK