Recycled Water for Los Angeles

Future Concepts for Recycled Water

LOCAL | SAFE | RELIABLE

At the Los Angeles Department of Water and Power (LADWP), the mission of our Water System is to provide our customers with safe, reliable, high quality and competitively priced water services in a publicly and environmentally responsible manner.


Hyperion Treatment Plant


Donald C. Tillman Water Reclamation Plant


Los Angeles Glendale Water Reclamation Plant


Terminal Island Water Reclamation Plant

Near-Term Recycled Water Strategies (Proposed for Implementation by 2035)

As of 2012, over 8,000 AFY of recycled water is being delivered to LADWP customers. Additional projects currently in design or construction will bring that total to 19,350 AFY. The City's Recycled Water Master Planning documents recommend the implementation of a program to replenish groundwater in the San Fernando Basin with up to 30,000 acre-feet per year (AFY) of purified recycled water. Also recommended is the expansion of the City's non-potable reuse (purple pipe) systems to provide 29,000 AFY of recycled water to targeted LADWP customers for irrigation, industrial cooling, and other non-drinking uses. Together, these would increase the amount of recycled water use to 59,000 AFY by 2035.

Even more water recycling can be accomplished in the future.

Reducing Our Reliance on Imported Water

Los Angeles has long relied on water imported from hundreds of miles away to support its water demands. However, environmental, legal, and regulatory restrictions have threatened the reliability of these imported supplies.

The City's water supply comes from:

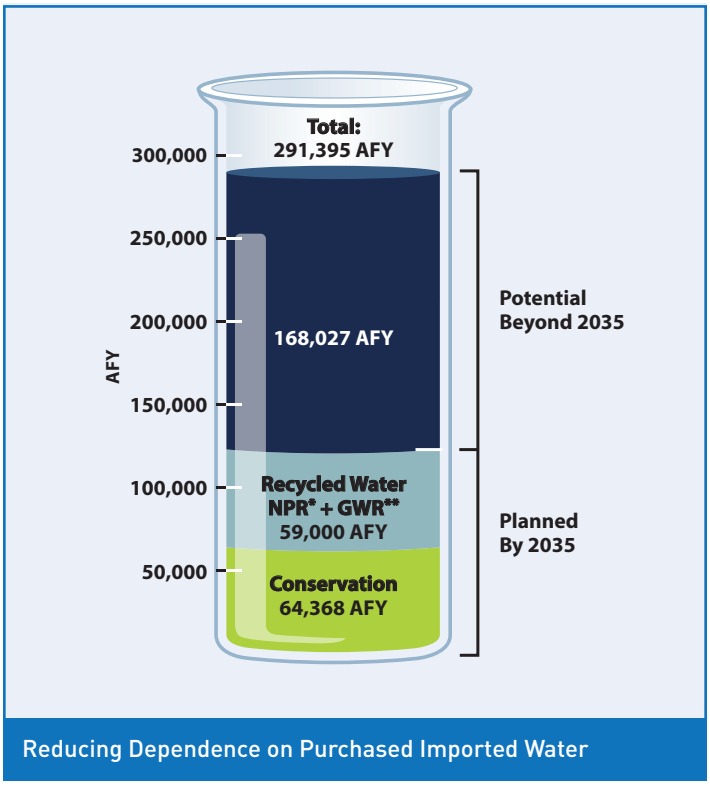
- Imported water from Owens Valley and Mono Lake Basin (Los Angeles Aqueduct).
- Purchased water from the Metropolitan Water District of Southern California (MWD), which is imported from the Sacramento-San Joaquin Bay Delta (California Aqueduct) and the Colorado River (Colorado River Aqueduct).
- Several local water sources including groundwater, captured stormwater, and recycled water. These are safe, more reliable, and more drought tolerant than imported water supplies.

The City is planning Los Angeles' water future in order to increase reliability. By increasing our local water supplies, in part through replenishing groundwater supplies, we can reduce our dependence on imported water. The City obtained input from stakeholders during this planning and will continue to seek input as projects are implemented.

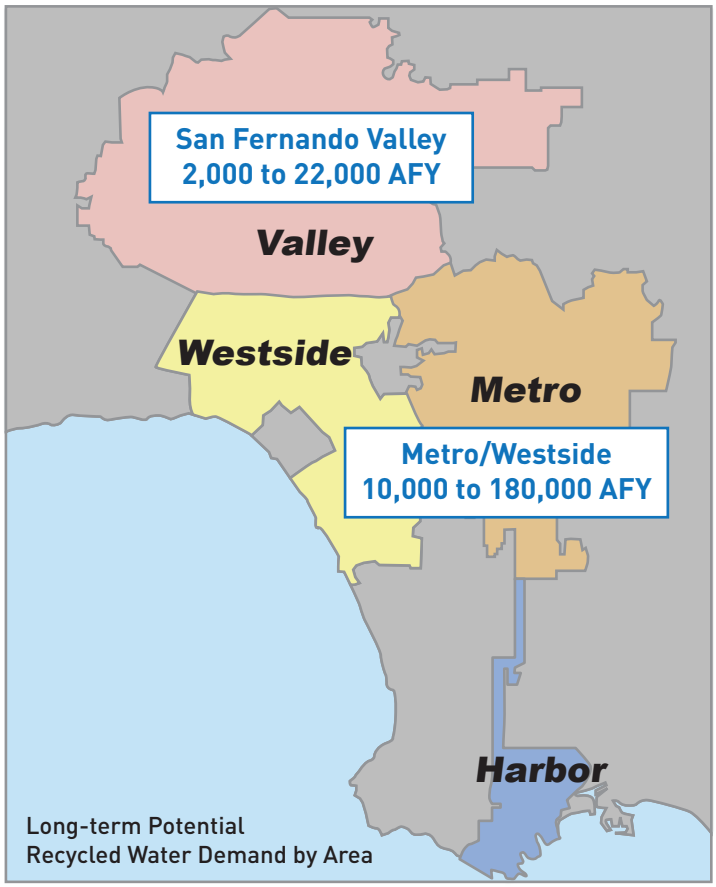
One acre-foot of water is about 326,000 gallons and it is enough to serve two average families for one year.

Potable Water is Drinking Water

Future Concepts for Recycled Water (continued)



Reducing Dependence on Purchased Imported Water



Long-term Potential
Recycled Water Demand by Area

Long-Term Recycled Water Concepts

The City projects that in 2035, even after implementing near-term recycled water strategies, there will still be a demand for more than 168,000 AFY of imported water that would have to come from MWD. The City has identified substantially more recycling potential which could meet a significant portion of that long-term demand.

Long-term recycled water concepts include:

- Maximizing the use of recycled water produced at City facilities.
- Building a new satellite treatment plant near Downtown Los Angeles.
- Using recycled water produced by outside agencies.
- Potable reuse alternatives.

Potable reuse alternatives will be at the core of L.A.'s long-term recycled water program since most non-drinking reuse projects will have been implemented by 2035.

Concepts were developed for the Valley, Westside, and Metropolitan/Downtown Los Angeles areas. Project concepts consist of treated recycled water supplies, conveyance, groundwater replenishment facilities (injection wells or spreading basins), and production wells for recovery.

Probable Costs for Future Concepts

Capital	**$63 M – $3,463 M**
Annual Operations & Maintenance	**$1.5 M – $121.2 M**

Implementation is dependent upon funding availability.

Regulatory Setting

Long-term concepts reflect the pathways available to the City given the current regulatory setting, but changes in the regulations are imminent. Senate Bill 918 passed in June 2010 requires the California Department of Public Health to adopt groundwater replenishment regulations by December 31, 2013 and surface water augmentation regulations by 2016. The Department of Public Health is also required to publish a study on the feasibility of direct potable reuse in California by 2016. With these regulatory changes, it is envisioned that new opportunities will be available to the City to maximize recycled water use.

*Non-Potable Reuse
**Groundwater Replenishment

For more information: www.ladwp.com/RW
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Based on October 2012 Recycled Water Master Planning Documents