

Recycled Water for Los Angeles Non-Potable Reuse (Purple Pipe)

LOCAL SAFE RELIABLE





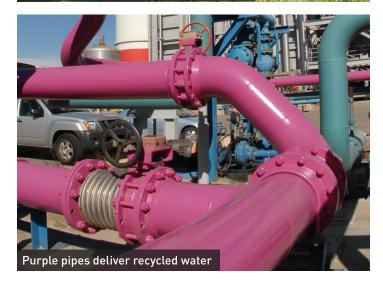
At the Los Angeles Department of Water and Power (LADWP), the mission of our Water System is to provide our customers with safe, reliable, high guality and competitively priced water services in a publicly and environmentally responsible manner.

L.A.'s Non-Potable Reuse (NPR) Program

Recycled water is wastewater that has been highly treated and is approved for irrigation of golf courses, cemeteries, freeway medians, and other large landscapes. It is also approved for other uses such as industrial cooling, street sweeping, dust control, and environmental benefits.







The California Department of Public Health requires that recycled water be delivered in pipelines separate from drinking water. These pipelines must be purple in color. LADWP's existing distribution system has 45 miles of purple pipelines and supporting infrastructure to deliver approximately 8,000 acre-feet per year (AFY) of recycled water. LADWP has an additional 11,350 AFY of NPR projects in various stages of planning, design or construction.

Together, existing and planned NPR projects will deliver 19,350 AFY of recycled water for irrigation, industrial process water, cooling water, dust control, and other beneficial uses.

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.

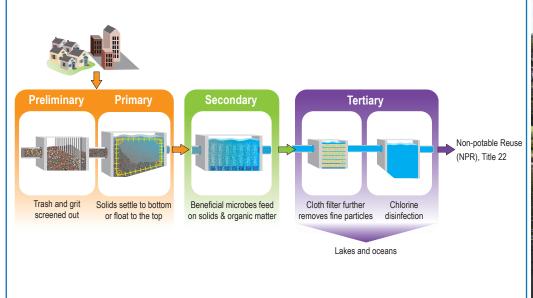
The City's water supply comes from:

- Imported water from Owens Valley and Mono Lake Basin, via the Los Angeles Aqueduct.
- Purchased water from the Metropolitan Water District of Southern California (MWD), which is imported from the Sacramento-San Joaquin Bay Delta via California Aqueduct and the Colorado River via the 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 expanding the purple pipe system, 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.

Recycled Water for Los Angeles Non-Potable Reuse (Purple Pipe) (continued)





The Japanese Gardens at the Donald C. Tillman Water Reclamation Plant use recycled water for irrigation and lakes.

Treatment Processes that Produce L.A.'s Recycled Water

In Los Angeles, recycled water – treated to the tertiary level – is currently produced at three of the four water reclamation facilities owned and operated by the Bureau of Sanitation. Secondary treated water is produced at the fourth wastewater treatment plant and delivered to another agency for tertiary treatment. The recycled water that LADWP supplies to its NPR customers meets all health and safety standards, including Title 22 of the California Code of Regulations. Recycled water used for NPR purposes is commonly called "Title 22" water and is not approved for drinking.

Potential NPR Projects

The City's NPR Master Planning Report recommends a suite of 38 potential projects in four service areas to increase non-drinking recycled water use in Los Angeles by 9,650 AFY. The blue portions referenced by the report (see chart at right) show the increase in recycled water use that the new NPR projects could produce.

Probable Costs of NPR

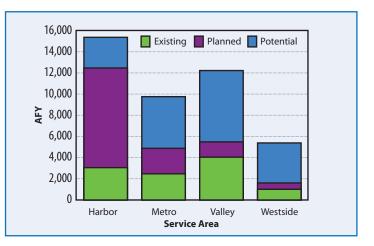
Capital (9,650 AFY)	\$195.3 M
Annual Operations and Maintenance (9,650 AFY)	\$4.5 M

The cost of Metropolitan Water District of Southern California purchased water is anticipated to be greater than LADWP's NPR program costs. Discussions on how to fund capital expenditures ("Pay as you go" or long-term financing with borrowed money] are ongoing.

Market Assessments

The City conducted a thorough assessment of potential customers for recycled water. The market assessment identified over 4,400 potential NPR customers.

Approximately 110 potential customers located throughout the City have non-drinking demands for irrigation and other mixed uses greater than 50 AFY. These customers comprise just 3% of LADWP's total recycled water customer accounts but represent 36% of the total demand for recycled water.



Recycled Water Use by Service Area

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