Frequently Asked Questions

Revised May 5, 2025

About Pure Water Los Angeles

Q: What is Pure Water Los Angeles?

R: Pure Water Los Angeles is the City of Los Angeles' new, local drinking water supply and resiliency initiative. It is an initiative collaboratively developed by the Los Angeles Department of Water and Power (LADWP) and Los Angeles Sanitation and Environment (LASAN) to design, build, and operate an exceptionally advanced water purification system.

Through the program, treated water from LASAN's Hyperion Water Reclamation Plant will undergo advanced purification, allowing the water to be safely reintroduced into L.A.'s drinking water supply.

As part of the program, LASAN will retrofit and modernize the Hyperion Water Reclamation Plant to support the advanced water purification process, while LADWP will construct the infrastructure required to transport this advanced treated water and enable it to be reintroduced into our local water supply.

Q: Why does the City of Los Angeles need the Pure Water Los Angeles Program?

R: The City of Los Angeles has imported water for decades from the Bay Delta and the Colorado River Aqueduct. Water also has been transported from the Eastern Sierra through the Los Angeles Aqueduct for more than 100 years. However, in some years, climate change presents greater uncertainty with water deliveries from these sources. Pure Water Los Angeles will provide a new, sustainable, reliable, and safe local drinking water source for the City and further diversify the City's water supply portfolio.

Q: What is the current treatment process at Hyperion Water Reclamation Plant?

R: On average 260 million gallons of wastewater enter the Hyperion Water Reclamation Plant on a dry weather day. Wastewater is processed and treated using multiple stages: pretreatment, primary treatment, and secondary treatment. Throughout the treatment process, wastewater is monitored to ensure proper removal metrics are met.

Hyperion's pretreatment begins by removing large solid materials—such as branches, plastics, and rags—using bar screens. After this first screening, smaller solid materials like sand and other gritty solids are removed in the grit basins. Next, fine solids and organic material are removed from the wastewater during primary treatment, when wastewater is held in underground tanks to allow heavy solids to settle to the bottom and oil and grease to float to the top.

Secondary treatment is a two-stage process that begins in covered, oxygen-rich reactor tanks. There, bacteria living in the wastewater consume most of the remaining organic materials. The

water then goes to clarifiers, where bacteria and organic materials settle to the bottom of the clarifiers for final removal. The clear water that results is called secondary effluent and is sent to Santa Monica Bay.

The solids and bacteria removed during primary and secondary treatment are pumped into huge, completely enclosed, egg-shaped tanks called digesters. There, the solids are digested under thermophilic (high temperature) anaerobic (without oxygen) conditions. The high temperature kills all pathogens in the solids, allowing the remaining solids to be safely used as a soil supplement in land farming operations. The digestion process also produces natural methane gas, which is converted to electricity in the Hyperion Bioenergy Facility and provides almost all of Hyperion's power demand.

Q: What is advanced treatment?

R: Advanced treatment in water recycling refers to processes applied after conventional primary and secondary treatment to further treat the water. The advanced treatment is composed of a series of additional filtration and disinfection steps, which produces water of the highest quality. These processes can include ozone/biological advanced carbon, reverse osmosis, and ultraviolet advanced oxidation processes. The combination of filtration and disinfection technologies are essential for when a higher quality water is needed, such as for drinking water or industrial processes. They provide a robust and redundant level of treatment that is rigorously tested and monitored daily to assure that all water quality and public health standards are being met.

The water produced through this kind of processing is called advanced treatment recycled water, or purified recycled water.

Q: What type of infrastructure is needed for Pure Water Los Angeles?

R: The Pure Water Los Angeles Program requires infrastructure that includes facilities for advanced treatment of water as well as a system to transport water, pump stations, storage tanks, well fields, direct potable reuse treatment, groundwater treatment, and other possible needs. All infrastructure within the program will be operated and maintained by City of Los Angeles staff, creating additional career opportunities.

Q: How much will it cost to build the infrastructure?

R: Based on initial estimates, the non-escalated cost is currently between $21 billion and $25.4 billion. The City is seeking grants and partnership opportunities to reduce impact to future rates.

Q: Why is Pure Water Los Angeles pursuing recycled water instead of desalination?

R: Seawater desalination, the process of removing salts and other impurities from seawater, is an established water supply technology across the world. The City of Los Angeles' current water resource strategy does not include seawater desalination as a water supply due to its high cost and

challenging environmental impacts. Seawater desalination may be further explored in the future as technologies evolve.

Q: Where can I find additional information on the Pure Water Los Angeles Program?

R: Information on the Pure Water Los Angeles Program can be found at www.PureWaterLosAngeles.com.

About Pure Water Los Angeles Planning

Q: What steps have been completed as part of the Pure Water Los Angeles planning process?

R: In early 2025, LASAN completed the Hyperion Program Implementation Plan and LADWP completed its Master Plan for Pure Water Los Angeles. Together, these two documents establish the initial planning framework for Pure Water Los Angeles as described below, including phasing and timing.

Q: What is the Pure Water Los Angeles Master Plan?

R: The Master Plan for Pure Water Los Angeles lays the foundational groundwork for one of the city's most important future water programs. It brings together key elements—like where the water comes from, how it will be purified at a new advanced treatment facility, how it will be delivered, stored, and eventually used. This plan serves as a starting point to guide the next steps in making the program a reality. Through this effort, LADWP explored different options for how the program could take shape, estimated costs, looked at possible funding sources and partnerships, and identified important goals along the way. Based on this work, the earliest that purified recycled water could be available is 2040, with an initial goal of producing 50 million gallons a day.

Q: What is the Hyperion Program Implementation Plan?

R: The Hyperion Program Implementation Plan is the technical blueprint for converting the Hyperion Water Reclamation Plant from a conventional wastewater treatment plant to an advanced treatment facility for producing purified recycled water. It identifies the upgrades of existing infrastructure and the new infrastructure for advanced treatment that will be needed, and it lays down the various design and construction steps for actual implementation. The document provides a path to maximize the production of recycled water from Hyperion.

Q: What are the next steps in the Pure Water Los Angeles planning process?

R: The next steps in the planning process include preparing a Programmatic Environmental Impact Report (PEIR) to evaluate the potential environmental effects of the proposed program. In parallel, technical engineering analyses and studies will be conducted to further refine and optimize the program's design, implementation strategies, and program components. We will also continue to

conduct further outreach and stakeholder engagement, with community meetings, stakeholder meetings, and other outreach events planned for this year.

Q: How can customers and the public provide feedback on the program?

R: The Pure Water Los Angeles team is planning to hold community meetings and stakeholder engagement group meetings, and to conduct other community outreach to allow customers and the public to provide feedback on the program. More information about planned outreach is available at www.PureWaterLosAngeles.com. Customers and the public can also request information about planned outreach or submit program feedback at PureWaterLosAngeles@ladwp.com.

About Recycled Water

Q: What is "potable reuse"? What's the difference between indirect potable reuse and direct potable reuse?

R: "Potable reuse" describes recycled or reclaimed water that has undergone advanced treatment processes, making it safe for people to drink.

There are two potable reuse strategies: indirect potable reuse (IPR) and direct potable reuse (DPR). With IPR, advanced treated recycled water is used to replenish drinking water supplies by first subjecting it to an environmental buffer, such as incorporating it into the local groundwater or mixing it with surface water, before treating it further at a drinking water treatment plant. DPR is the process where advanced treated recycled water is connected directly to the drinking water treatment plant or distribution system, without first subjecting it to an environmental buffer.

Q: Does the State of California or Federal Government allow for advanced treated recycled water to be used for drinking water?

R: Yes, both the State of California and Federal government have established regulations for potable reuse, or advanced treated recycled water. IPR Regulations were established in October 2018. DPR Regulations were established in December 2023. The water from the Pure Water Los Angeles Program will meet or exceed both federal and state drinking water standards and is safe to reuse for drinking. See the State Water Resource Control Board's website links below for more information.

- **IPR Regulations:** https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/lawbook/rwregulations.pdf
- **DPR Regulations:** https://www.waterboards.ca.gov/board_info/agendas/2023/dec/121923_3_drftreso.pdf

Q: How can residents be assured this advanced treated recycled water is safe to drink?

R: Potable reuse regulations in California are very strict to protect public health. Furthermore, LADWP has a robust water quality monitoring procedure structure with dedicated in-house staff to collect and analyze samples, to ensure that the water meets all state and federal standards.

Redundancy is critical in all drinking water treatment, and potable reuse also is designed with multiple barriers of treatment. These barriers use highly advanced treatment processes, which may provide additional protection against future contaminants. For DPR, the required treatment train will consist of at minimum 4 treatment processes, including ozone/biological activated carbon (BAC), reverse osmosis (RO), and Ultraviolet advanced oxidation process (UV/AOP).

Although the treatment processes may be similar for IPR, the required treatment train may not include AOP, given that a major part of the treatment is accounted for through an environmental buffer (groundwater aquifer).

Q: Is advanced treated recycled water something new?

R: No, advanced treated recycled water is not new. IPR has been used in California since 1962, and globally, 40 cities have adopted advanced treated recycled water as part of their drinking water supply. Here in Los Angeles, the L.A. Groundwater Replenishment project, also a partnership between LADWP and LASAN, is under construction and, once complete, will provide 20 million gallons of purified recycled water daily for Los Angeles. The following map shows locations in the United States and worldwide that have utilized advanced treated recycled water.

Globally, over 35 cities have adopted PRW as part of drinking water supply

More than that number again are exploring it

As climate change continues, more places will need to reuse the water they have