

Who is building this program?

- The City of Liberty Hill is moving forward with plans to develop and test advanced water purification to augment our current water supply. We are calling this program Pure Water LHTX.

Why does Liberty Hill need to recycle water?

- Liberty Hill is experiencing rapid population, business and economic growth, and it is expected to continue. Currently, our water comes from two different sources, surface water from Lake Travis and groundwater wells that pull water from the Trinity Aquifer. Advanced purified water will create an independently controlled, reliable and sustainable water source to augment our existing supplies. Through advanced water purification, the City is working to ensure safe, reliable and adequate water supply for today and the future to support economic vitality and quality of life.

What is Advanced Water Purification?

- Advanced Water Purification describes the high tech, state-of-the-art purification process that reclaimed water will undergo to create a new, safe, reliable water supply. This new supply will provide high-quality water for all water customers. Liberty Hill will pilot test two treatment process alternatives to determine the best way to safely and efficiently purify recycled water into drinking water.

What is Direct Potable reuse?

- Potable reuse is a process that involves cleaning recycled water to a high standard of purity so that it can be safely used for drinking. This type of recycled water is often referred to as advanced purified water. Direct Potable Reuse (DPR) refers to when advanced purified water, which meets or exceeds state and federal drinking water standards, is introduced directly into the drinking water distribution system.

How will the purified water be tested for safety?

- All purified water produced through the City's advanced water treatment plant will be thoroughly and routinely tested using the latest monitoring technology and will be overseen by highly trained and qualified operators. The City is committed to producing the highest quality drinking water for our customers. The pilot facility that is currently being designed will be built to test all treatment steps prior to full-scale implementation.

What is the program timeline?

- Liberty Hill has been developing our plan for Advanced Water Purification since 2024. We are currently in the process of designing the pilot facility. The next steps will be building and operating the pilot facility, completing extensive testing of the purified water product, and then designing and building the full-scale facility. At the program's completion, Liberty Hill could produce up to 5.0 million gallons of purified water per day, which is more than enough to meet our projected water usage demands for years to come. The City anticipates beginning the production of water for city residents by the end of 2030.

Where will the pilot facility be located?

- The pilot facility will be constructed at the existing site of the South Fork Wastewater Treatment Plant. Public tours of the wastewater treatment plant and the demonstration facility will be offered after the demonstration facility begins operations.

Where will the Advanced Water Purification Facility (AWPF) be located?

- The AWPF will be located on a currently vacant, 70-acre parcel bordered by Seward Junction Lp and County Road 266.

How will the AWPF be situated within the property?

- Design work on the facility has not yet commenced and is expected to be completed in late 2027. The exact location of the facility has not been determined. However, the Project team is committed to providing an environmental buffer-consisting of berms, trees and other vegetation- to reduce any visual impacts that the facility may have on neighboring residents.

Will the AWPF use raw wastewater to produce drinking water?

- No. Introducing raw wastewater into a water purification facility is against state and federal law. The AWPF will use reclaimed water – which has been cleaned at the existing South Fork Wastewater Treatment Plant – as its source water for producing advanced purified water. This reclaimed water has already been cleaned to standards that permit it to be used for residential irrigation and environmental releases.

How is this project being funded?

- Pure Water LHTX will be funded through a combination of city funds, state and federal grants, and state and federal loans. This project is an investment in our water future. Water availability is becoming scarcer over time, which will continue to drive up the cost of purchased water. Creating this new water source will help offset the need for purchasing additional imported water.

What other places have implemented water purification projects?

- There are several similar projects in the United States, both in operation and in progress.
 - The City of Big Spring, Texas has an AWPF in operation, producing 1 million gallons of purified water per day.
 - The City of El Paso, Texas broke ground on a direct to distribution advanced water purification facility in the spring of 2025.
 - The Groundwater Replenishment System in Orange County, California, has been in operation since January 2008. It currently produces 130 million gallons of purified water per day.
 - Several other projects are in progress in Arizona, Colorado and California.
 - To learn about more communities planning or operating similar projects, visit the Global Reuse Map at www.water360.com.au/map