PURPOSE

Clearwater is working to ensure the future of our water and is moving forward with the design and permitting phase of the Groundwater Replenishment Project. This innovative project will replenish the aquifer and provide a new local water supply that protects the environment and ensures the sustainability of high-quality drinking water to meet the current and future needs of the community.

CLEARWATER
BRIGHT AND BEAUTIFUL · BAY TO BEACH

Southwest Florida
Water Management District

LBG

TETRA TECH

Learn more about the Groundwater Replenishment Pilot Project success and watch the informational videos at

MyClearwater.com/groundwater

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Perfectly **Pure**

Safe Drinking Water for Years to Come

C L E A R W A T E R ' S

Groundwater Replenishment

P R O J E C T

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OVERVIEW

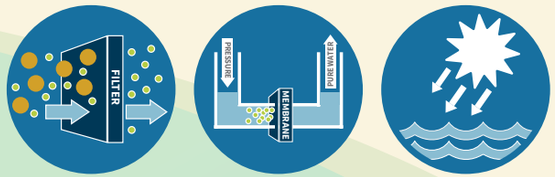
Clearwater utility professionals treat and deliver an average of 11.5 million gallons of drinking water and nearly seven million gallons of reclaimed water to customers each day. The source of drinking water comes from the upper zone of the Floridan aquifer system, which has a limited local recharge capacity and relies on summer rains to replenish groundwater levels. If the area experiences a drought, water shortages can occur. The Clearwater Groundwater Replenishment Project is just one of several initiatives in the city's Integrated Water Management Strategy Program that is designed to manage the rising cost of water, conserve our valuable water supplies, protect the coastal environment, and produce more water locally.

WHAT IS THE GROUNDWATER REPLENISHMENT PROJECT?

The city's Groundwater Replenishment Project is a two-step program that includes purifying reclaimed water to better-than-drinking-water standards and recharging the aquifer using the purified water. An Advanced Water Purification Plant (AWPP) will be constructed at the city's existing Northeast Water Reclamation Facility (NEWRF). The plant will have the capacity to produce up to 3 million gallons of purified water every day.

HOW PURE IS THE WATER AND HOW IS IT MADE?

The water is purer than any source of untreated water we have. Today's advanced technologies have the capability to purify reclaimed water to safely replenish the aquifer by passing it through a combination of treatment processes. These combined processes purify the water through a multiple barrier treatment approach to remove impurities and kill germs and viruses.



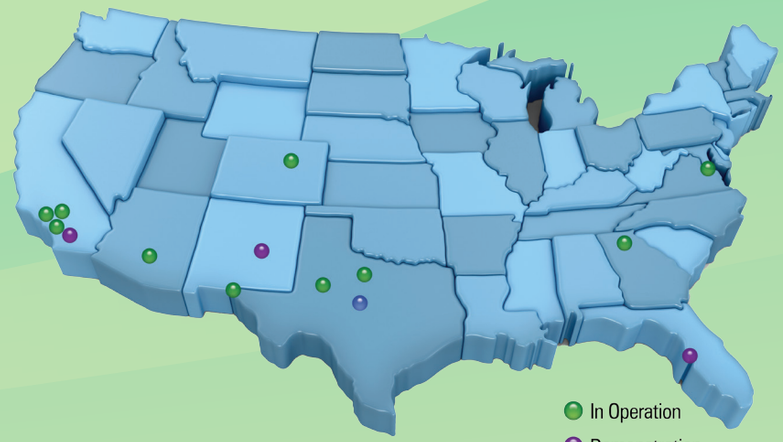
ULTRAFILTRATION + REVERSE OSMOSIS + UV/ADVANCED OXIDATION

WILL THIS WATER BE SAFE TO DRINK?

Yes. The test results from the one-year operation of the pilot purification plant proved that the process worked. The results showed that the pilot plant successfully and consistently purified reclaimed water. The city of Clearwater and the Southwest Florida Water Management District have both recommended implementation of this project after verifying that it was safe for our residents and the environment.

WHAT IS GROUNDWATER REPLENISHMENT?

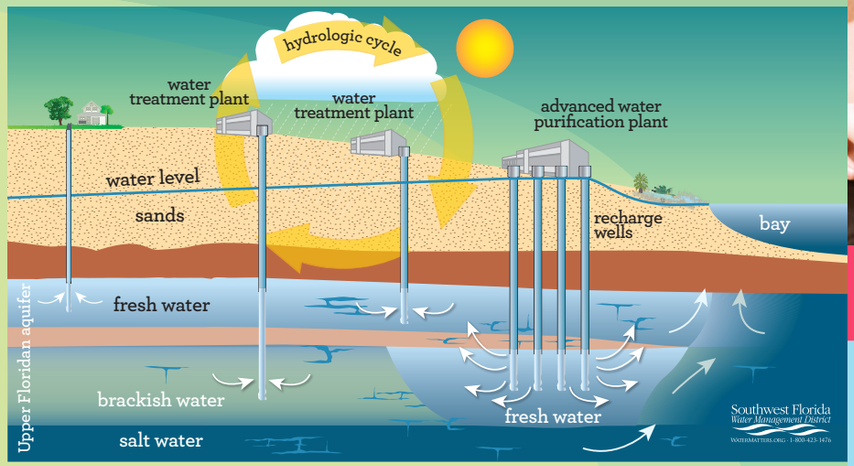
Groundwater replenishment, also known as aquifer recharge, is used to improve water levels within the aquifer and provide additional drinking water supplies. Systems that utilize purified reclaimed water to improve the sustainability of drinking water supplies are safely used throughout the country and the world. At least four recharge wells will be used to introduce the purified reclaimed water into the aquifer. A pipeline from the water purification plant will deliver the purified reclaimed water to these wells.



Purified Water Supplementing Water Supplies (partial list)

PROJECT BENEFITS

- Reduce the discharge of reclaimed water to surface waters
- More fully use reclaimed water
- Provide recharge of the city's aquifer with purified reclaimed water
- Supply up to three million gallons per day of purified reclaimed water to recharge lower Zone A of the Floridan aquifer beneath the city
- Produce high-quality water that is safe and exceeds drinking water standards to help meet Clearwater's current and future water needs.



PROJECT TIMELINE

2009	Preliminary Feasibility Evaluation
2011	Feasibility Study
2014	12-Month Advanced Water Purification Treatment Pilot Operation
2016	Design of Advanced Water Purification Plant (AWPP) and Recharge Wells
2017	Advanced Water Purification Plant and Recharge Well Construction

WHAT ARE THE COSTS, AND WHO IS FUNDING THE PROJECT?

Current preliminary project capital costs are about $33 million for the water purification plant and the groundwater recharge well system. The project costs will be paid by the city of Clearwater. This project is being co-funded by the Southwest Florida Management District.