



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.



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RECYCLE RECHARGE REPLENISH



CLEARWATER'S Groundwater Replenishment PROJECT



Southwest Florida
Water Management District



Clearwater utility professionals treat and deliver an average of 11.5 million gallons of drinking water and nearly 7 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.

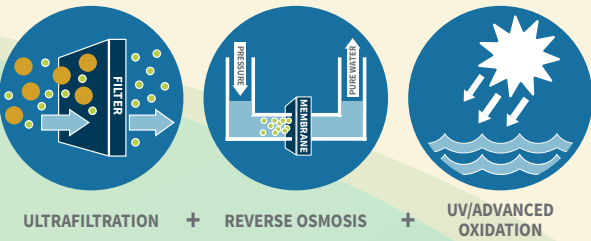


WHAT IS THE GROUNDWATER REPLENISHMENT PROJECT?

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

HOW PURE IS THE WATER AND HOW IS IT MADE?

The water produced from this process is near distilled quality. Advanced technologies make it possible to purify reclaimed water and safely replenish the aquifer by passing it through a combination of treatment processes. This multiple barrier treatment approach removes impurities and kills germs and viruses.

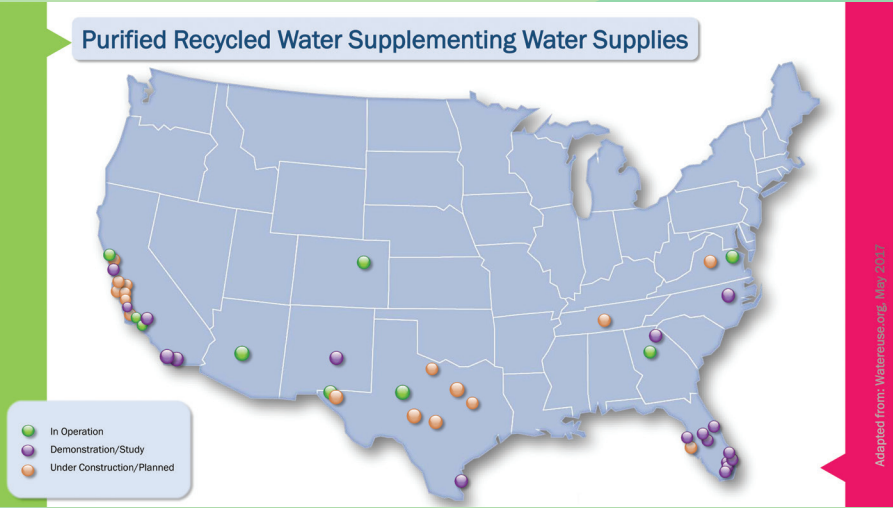


WILL THIS WATER BE SAFE TO DRINK?

Yes. After a multitude of rigorous third-party testing on an hourly, daily, weekly and monthly basis, the one-year operation of the pilot purification plant proved that the process works. Test results showed that the process successfully and consistently purified reclaimed water to a quality that is better than bottled water. Purified recycled water is safe for our residents and the environment.

WHAT IS GROUNDWATER REPLENISHMENT?

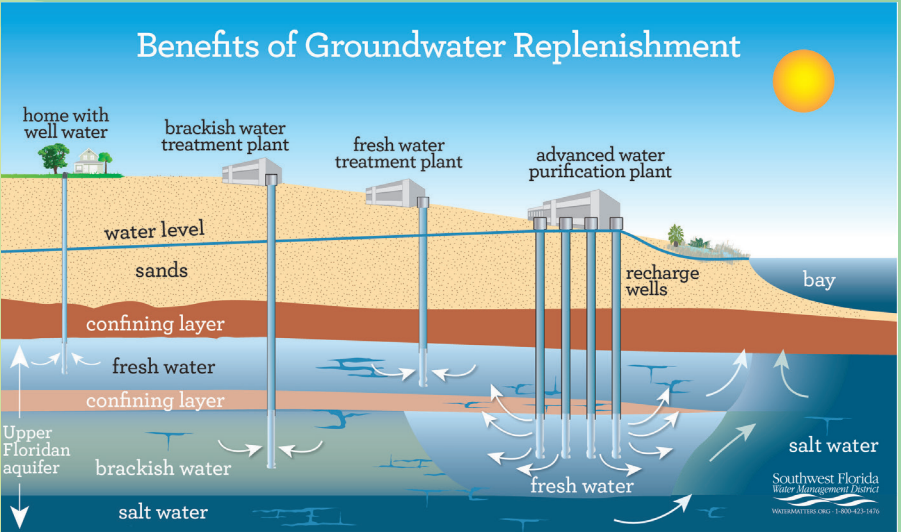
Groundwater replenishment, also known as aquifer recharge, is used to improve water levels within the aquifer and provide additional drinking water supplies. Systems that use purified recycled water to improve the sustainability of drinking water supplies are safely used throughout the country and the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



Purified Water Supplementing Water Supplies (As of April 2018)

PROJECT BENEFITS

- Reduce the discharge of reclaimed water to surface waters to improve the environment
- More fully use reclaimed water
- Provide up to three million gallons per day of purified recycled water to recharge the Upper Floridan aquifer beneath the city
- Produce high-quality water that is better than bottled water. It is safe and surpasses drinking water standards (Chapter 62-550 Florida Administrative Code) 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 and Recharge Wells
2018	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 co-funded by the city of Clearwater and Southwest Florida Water Management District.