



PLANNING FOR THE FUTURE

FAST FACTS:

Need: 10 million gallons per day by 2028

Source: Floridan Aquifer

Project yield: 7.5-20 million gallons per day

Key points: new groundwater via aquifer recharge credits; net benefit to aquifer; within high growth area

New Groundwater Treatment Plant via Aquifer Recharge Credits

South-Central Hillsborough County is one of the fastest growing areas in the Tampa Bay region. It is also designated a Water Use Caution Area by the Southwest Florida Water Management District (SWFWMD). To address growing water needs in this area and provide flexibility, the SWFWMD has adopted the "net benefit" concept where any proposed withdrawal from the aquifer must be offset by another source and result in an additional positive effect within the same aquifer.



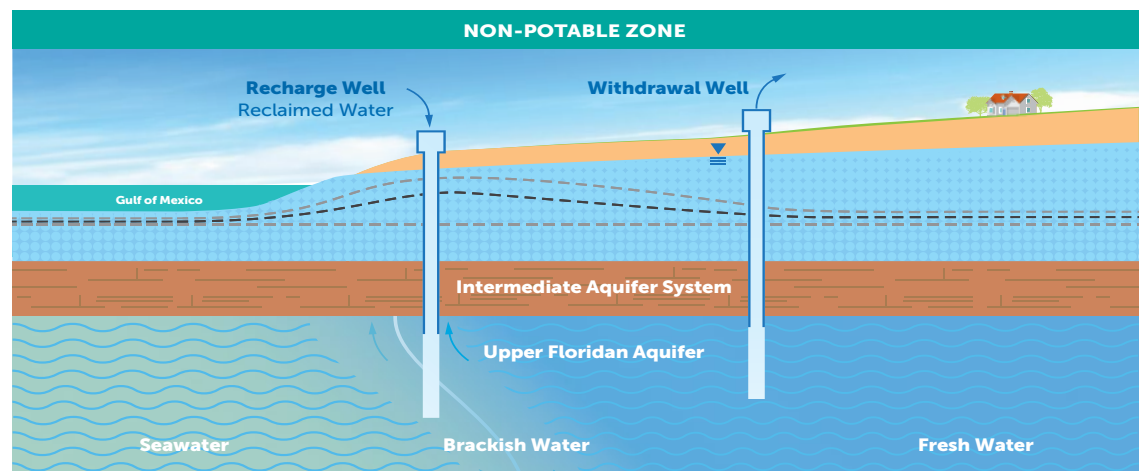
Using the net benefit approach, a new groundwater wellfield could be developed in southern Hillsborough County by purchasing aquifer recharge credits from Hillsborough County via its South Hillsborough Aquifer Recharge Project (SHARP). SHARP involves pumping reclaimed water into a salty, coastal zone of the aquifer. Pilot studies show that the recharge water creates a mound that prevents saltwater intrusion into fresh groundwater. It also increases aquifer levels several miles inland from the recharge well location. This increase in groundwater levels facilitates groundwater withdrawals further inland to meet water needs.

New Groundwater via Aquifer Recharge Credits Details

This project concept is based on obtaining groundwater withdrawal credits via aquifer recharge. A 7.5 million gallon per day (mgd) groundwater wellfield will require:

- Hillsborough County to continuously operate SHARP at 10 mgd to generate withdrawal credits of approximately 7.5 mgd that may be sold/transferred to Tampa Bay Water.
- A new 10-acre wellfield in south Hillsborough County with four, 2.5-mgd production wells and piping system.
- A new groundwater treatment plant with hydrogen sulfide removal, disinfection and water quality facilities, ground storage tank and high-service pumping.
- A new 11.5-mile, 36-inch finished water transmission main in south Hillsborough County.

If implemented, this project could potentially be expanded to 20 mgd to meet the region's drinking water needs in the 2040 timeframe.



Aquifer recharge can increase water levels so groundwater can be withdrawn and treated to high-quality drinking water standards in an environmentally sound manner.



PLANNING FOR THE FUTURE



Next Steps

In 2019, Tampa Bay Water will begin feasibility studies and analysis for the new groundwater treatment plant via Aquifer Recharge Project, including:

- Discussions with the SWFWMD regarding available credits and permitting.
- Discussions and agreements with Hillsborough County regarding groundwater credit costs.
- Updating groundwater modeling and associated yields based on Hillsborough County's finalized injection well sites.
- Installing a test well at a potential withdrawal site to confirm water quality, yield, and treatment requirements.
- Developing a conceptual design for new groundwater treatment plant.

Public Outreach

Tampa Bay Water conducted focus groups, public opinion surveys, telephone town halls and speakers bureau presentations to obtain input used in the Long-term Master Water Plan. Public outreach will continue for those projects selected for continued evaluation.

Long-term Master Water Plan

This project is one of three top-ranked projects under further evaluation to meet the region's drinking water needs in the 2028 timeframe. The potential projects are the culmination of five years of analysis through Tampa Bay Water's Long-term Master Water Plan. This 20-year framework for meeting the region's future drinking water needs includes analyses of future demand, conservation potential, supply reliability, water shortage mitigation planning and hydrologic uncertainty along with potential water supply projects to ensure adequate drinking water in the future. For more information, visit tampabaywater.org/future-drinking-water-sources.

