

PLANNING FOR THE FUTURE

FAST FACTS:

Need: 10 million gallons per day by 2028

Source: Alafia River, Hillsborough River, Tampa Bypass Canal

Project yield: 10 million gallons per day

Key points: expands existing facility; proven technology; permittable; 15-year history of highquality water

Tampa Bay Surface Water Treatment Plant Expansion

Pasco County

Hillsborough County

Tampa Bay Water's Regional Surface Water Treatment Plant is located in Tampa. The facility has operated successfully since 2002, providing 50 million gallons per day (mgd) annual average of high-quality drinking water to the region. The facility is the hub of Tampa Bay Water's Enhanced Surface Water System. When available, water is skimmed from the Tampa Bypass Canal, Hillsborough and Alafia rivers. Some is treated for immediate use at the Tampa Bay Regional Surface Water Treatment Plant, and surplus water is stored in the C.W. Bill Young Regional Reservoir to supply the water treatment plant during dry times.

The surface water treatment plant can be expanded to treat 10 mgd additional water.

Expansion Details

The existing Regional Surface Water Treatment Plant is comprised of three main stages of

treatment, including ACTIFLO®, ozone disinfection and biofiltration. A 10 mgd increase in the surface water treatment plant's yield requires:

Pinellas County

- Adding piping and valves from the onsite storage tanks to the plant influent.
- Expanding the plant's patented ACTIFLO®, high-rate clarification process that removes color and particles from the raw water.
- Adding another ozone contactor (ozone is the primary disinfectant at the plant and is one of the most powerful disinfectant in water treatment today).
- Adding more biologically active filters to remove any remaining organic molecules.
- Expanding secondary disinfection chemical systems and residuals processing.

Some of the surface water treatment plant's components, including the finished water storage, pumping and pipeline, are sufficient for the expansion.





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Next Steps

IIn 2019, Tampa Bay Water began feasibility studies and analysis for the Tampa Bay Water Surface Water Treatment Plant, including:

- Discussions with Southwest Florida Water Management District regarding potential permit modifications.
- Updating environmental analyses associated with additional withdrawal.
- Conducting detailed capacity analysis of the existing facility and demonstration studies to confirm existing or re-rated capacities.
- As a potential alternate, studying whether a new 10-20 mgd surface water treatment plant located at the regional reservoir is feasible.

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 though 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.