



## PLANNING FOR THE FUTURE

### FAST FACTS:

**Need:** 10-20 million gallons per day

**Source:** Alafia River, Hillsborough River, Tampa Bypass Canal

**Project yield:** 10-20 million gallons per day

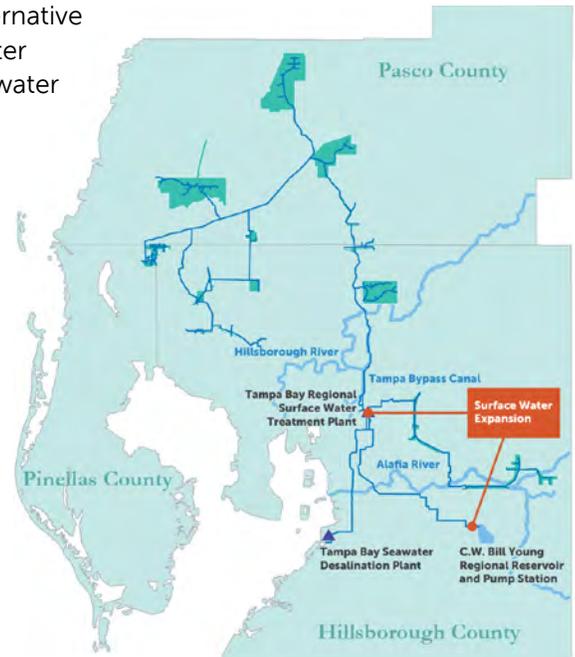
**Key points:** proven technology; permittable; 19-year history of high-quality drinking water

# Surface Water Expansion Project

Surface water, or river water, was the first alternative to groundwater to be added as a drinking water source to the Tampa Bay region's wholesale water supply. Tampa Bay Water's Enhanced Surface Water System takes advantage of the 47-50 inches of rain that typically falls annually in our region by skimming water from the Alafia River, Hillsborough River and Tampa Bypass Canal and cleaning it to drinking water standards at a state-of-the-art regional facility.

The Surface Water Expansion Project involves investigating the feasibility of expanding surface water treatment capacity to provide an additional 10-20 million gallons per day (mgd) of high-quality drinking water. This could be achieved by:

- Expanding the existing Tampa Bay Regional Surface Water Treatment Plant or
- Building a second surface water treatment plant on the C.W. Bill Young Regional Reservoir property.



Tampa Bay Water is currently conducting feasibility studies to help determine whether the proposed options are technically feasible, environmentally sound, and economical.

## Expanding the Existing Facility

Tampa Bay Water's Regional Surface Water Treatment Plant, located in Tampa, has operated successfully since 2002. It is designed to provide an average of up to 90 million gallons per day of high-quality drinking water to the region and a maximum of 120 million gallons per day. It could be expanded and optimized to leverage our existing surface water sources without increasing permitted withdrawals from the rivers and canal. An additional 10-15 million gallons per day of drinking water could be gained by:

- 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 raw water,
- Adding another ozone contactor (ozone is the primary disinfectant at the plant and is one of the most powerful disinfectants in water treatment today),
- Adding more biologically active filters to remove remaining organic molecules, and
- Expanding secondary disinfection chemical systems
- Expanding residuals processing.

Some of the surface water treatment plant's components, including the finished water storage, pumping and pipeline, will not need to be expanded.



### **Building a New South Regional Water Treatment Plant**

Another option under consideration is building a new surface water treatment plant, located on the C.W. Bill Young Regional Reservoir property. This 20-30-million-gallon facility would use the same proven technology as the existing surface water treatment plant. It would be in the northwest corner of the regional reservoir property, near the facility's current repump station and administrative building. Water would be supplied to the new facility from the existing reservoir pipelines.

### **Next Steps**

Tampa Bay Water began feasibility studies and analysis for this project in 2019. Work is ongoing and next steps include:

- Continuing conceptual site layouts for each alternative.
- Modeling system-wide reliability for both options and documenting the results.
- Preparing and submitting the feasibility report.

### **Public Outreach**

Tampa Bay Water conducted focus groups, public opinion surveys, telephone town halls and speakers' bureau presentations to obtain input for its Long-term Master Water Plan update. Public outreach continues for the projects selected for feasibility 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.