PLANNING FOR THE FUTURE

FAST FACTS:

Need: 10 million gallons per day by 2028

Source: Conservation and existing facilities

Project yield: 5-21 million gallons per day

Key points: reducing demand and optimizing existing facilities can delay new water supply development; leveraging existing assets can be more economical than developing new supplies

Optimization & Demand Management

Saving Water and Improving Efficiency

Current supply and demand projections show Tampa Bay Water's member governments will need approximately 10 million gallons per day of new supply in the 2028 timeframe and an additional 10 million gallons per day in the 2035 timeframe. One way to defer the need for new supply is to make the most of Tampa Bay Water's existing supplies through conservation and facility improvements. These two initiatives could delay the need for new water supplies beyond 2030.

Saving Water, Saving Money

Conserving water before tapping new sources saves money, saves energy and protects our environment. While the Tampa Bay region has successfully conserved water over the past 20 years, there are still opportunities for improvement.

REGIONAL CONSERVATION PROGRAMS CAN SAVE UP TO 11 MILLION GALLONS PER DAY, DELAYING THE NEED TO BUILD NEW WATER SUPPLIES

Tampa Bay Water's regional demand management program, Tampa Bay Water Wise, includes several elements that can save an estimated **6 million gallons per day by 2025 and up to 11 million gallons per day by 2030 at less than a quarter of the cost of the least expensive new water supply alternative.** The savings can be achieved if all member governments participate in the program, which includes a mix of rebates and incentives for single-family homes, multi-family homes, new housing developments and commercial and industrial properties.

Tampa Bay Water Wise was developed collaboratively with Tampa Bay Water's member governments. To make the program even more cost-effective, the program is co-funded by the Southwest Florida Water Management District.

Upgrading Facilities to Improve Yields

Tampa Bay Water can also maximize existing supplies by upgrading two existing facilities: the Tampa Bay Regional Surface Water Treatment Plant and Tampa Bay Seawater Desalination Plant. Preliminary engineering analyses show that the Regional Surface Water Treatment Plant could possibly produce another 5 million gallons of per day by modifying the facility's filtration system operations.

Likewise, the Seawater Desalination Plant could be upgraded to improve performance and reliability to possibly produce additional water. A key upgrade for the Seawater Desalination Plant is the eventual replacement of the pretreatment system with a more reliable and high-performing technology. By reducing downtime for maintenance and improving operations, the facility's annual production could be increased.operations, the facility's annual production could be increased.

Next Steps

In 2019, Tampa Bay Water hired consulting engineers to conduct more thorough preliminary design and analyses for the optimization projects, including:

- Conducting demonstration studies to confirm that operational changes at the Regional Surface Water Treatment Plant will increase sustainable yield.
- Pilot-scale testing of alternative pretreatment systems and membranes at the Seawater Desalination Plant to improve reliability and sustainable yield.
- Evaluating potential improvements at the Seawater Desalination Plant to address future TECO operational changes.

The Regional Demand Management Program was launched in early 2020. Residential and commercial property owners can check their eligibility at TampaBayWaterWise.org.

Public Outreach

Tampa Bay Water conducted focus groups, public opinion surveys, telephone town halls and speaker's 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

Regional demand management and facility optimization were identified in Tampa Bay Water's 2018 Long-term Master Water Plan as two cost-effective ways to defer the need for new supply development. 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.