

What is the Eastern Pasco Wellfield project?

Tampa Bay Water is investigating several new water supply options to meet the region's growing demands in the 2033 timeframe. A new Eastern Pasco Wellfield is one of three potential project options being considered as part of the Feasibility Study for New Groundwater Sources. This proposed project would withdraw brackish and/or fresh groundwater and treat it at a new water treatment plant in Pasco County. Brackish wells would withdraw water from the Lower Floridan Aquifer, at least 1,500 feet below the surface, and fresh groundwater wells would withdraw water from the Upper Floridan Aquifer, approximately 500 feet or more below the surface. The treated water would be blended and stored before being pumped for distribution to Tampa Bay Water's members. If necessary, concentrate from the brackish groundwater treatment process would be injected into a deep well approximately 4,000 feet below the surface, well below the potential sources for drinking water.

What is Brackish Water?

Brackish water is water that is more salty than freshwater but less salty than seawater.

Why is the Eastern Pasco Wellfield project needed?

The Tampa Bay region will need an additional 25 million gallons per day of drinking water by 2043, with 10-20 million gallons of water per day needed as early as 2033. Pasco County's current water demand from Tampa Bay Water is approximately 38 million gallons per day and it is projected to increase by 5.6 million gallons per day, or nearly 14%, by 2033 and 11 million gallons per day, or 29%, by 2043. As one of the projects being studied, the Eastern Pasco Wellfield could provide additional supply to Pasco County.

How much additional water supply will this proposed project yield for Pasco County customers?

The proposed project's estimated annual yield is 9 million gallons per day from a brackish water supply, fresh groundwater supply, or a blend of both. The estimated yield will be refined once the aquifer performance tests and modeling are complete.

What does the feasibility study for the Eastern Pasco Wellfield project include?

The feasibility study will explore a potential new wellfield in Pasco County that could use brackish groundwater, fresh groundwater, or a blend of both. The first step is to acquire property, install test wells and monitor wells, and then conduct aquifer performance tests. These tests will provide important data on water quality, water quantity and data needed to model aquifer responses to pumping. This information is key to understanding if this project in Pasco County is technically feasible and environmentally sound.

What is an aquifer performance test?

An aquifer performance test is done to evaluate the changes in aquifer water levels and water quality from pumping a well. The well is pumped at a constant rate for a short period of time (for example, 7-14 days). During the test, hydrologic data is collected to observe the aquifer's response. The data is input into a groundwater model which provides information on the potential yield and changes in water levels (drawdown) in the aquifer and at environmental features such as wetlands and lakes. The water pumped during the test is typically discharged into a receiving water body or stormwater system.

What new infrastructure would be needed for the proposed Eastern Pasco Wellfield?

If feasible and selected for development, the proposed Eastern Pasco Wellfield could include a fresh groundwater wellfield, a brackish groundwater wellfield, treatment plant and pipelines, a finished water storage tank and a finished water pump station and pipeline to the distribution system.

What are the project's benefits?

The Eastern Pasco Wellfield could provide a reliable source of water supply in Pasco County, where regional demands are growing. If feasible, combining fresh groundwater with brackish groundwater ensures environmental stewardship by balancing withdrawals between the upper and lower portions of the aquifer. Groundwater is also the most efficient source to clean because the aquifer performs most of the filtration; combining fresh groundwater with brackish groundwater is less expensive than a brackish-only supply.

How will the project impact the environment?

The purpose of the feasibility study is to identify potential project impacts, including environmental impacts. For more than 25 years, Tampa Bay Water has invested in a diversified water supply network that balances the needs of the environment with the needs of the community. Our diversified network of alternative water supplies, including desalinated seawater and river water, has enabled Tampa Bay Water to reduce its reliance on groundwater, which has resulted in rejuvenated environmental health of lakes, wetlands and other surface water bodies across northern Tampa Bay. As we evaluate the Eastern Pasco Wellfield and other new water supply sources to meet future needs, we are committed to maintaining the environmental recovery achieved over the past 25 years.

How will this proposed project impact the Hillsborough River Groundwater Basin?

The project is being proposed in an area of eastern Pasco County that is outside the Hillsborough River Groundwater Basin. Aquifer performance tests will be conducted to determine if the Hillsborough River Basin would be affected by the proposed project.

Will Tampa Bay Water need to acquire property in Pasco County for this project?

Yes, Tampa Bay Water will need to acquire property for test and monitor wells in Eastern Pasco County.

What criteria will you use to evaluate sites for the test wells/wellfield?

Tampa Bay Water is looking for sites that protect the environment, protect public drinking water quality, support constructability in an affordable manner, and protect natural and cultural resources. The project team has numerous sub-criteria under each of these major criteria categories and potential sites will be evaluated numerically. Resident input into the evaluation criteria will play a role in the evaluation process.

Will this project affect the health of Pasco County's lakes and wetlands?

Potential effects to the Upper and Lower Floridan aquifers will be known after the aquifer performance tests. These tests provide data on drawdown and the aquifers' responses to pumping and will be used to model larger withdrawal quantities. The Lower Floridan Aquifer is approximately 1,200-2,300 feet deep, so brackish groundwater withdrawals do not affect surface features like lakes and wetlands. However, due to the depth of the withdrawals and the treatment of brackish groundwater, this is more costly in terms of drilling, treatment and pumping.

Why is Tampa Bay Water considering new supply from groundwater sources?

Tampa Bay Water has a 25-year track record of responsible groundwater management and supply. The regional utility has invested more than \$2 billion in diverse new water supply sources to create a balanced water supply network in which groundwater plays an important role. Groundwater, if withdrawn in a responsible manner, is an affordable drinking water supply. Tampa Bay Water's board of directors approved the agency's 2023 Long-term Master Water Plan in November 2003. Of the seven projects that were chosen for further study, three are part of the Feasibility Study for New Groundwater Sources, including the Eastern Pasco Wellfield. During the feasibility studies, Tampa Bay Water will refine potential yields, costs, permitability, treatment requirements and engage the community. Those projects that are economically feasible, environmentally sustainable and reliable will be considered individually or as configurations of projects in the water supply selection process.

Is the project enabling growth?

Tampa Bay Water has no authority to control growth. We have an unequivocal obligation to meet the water demands of our customers, including Pasco County. As the region's water needs grow, we respond by either adding new supplies, expanding our delivery network, or both. Growth is controlled by local cities and counties.

What is the cost of the Eastern Pasco Wellfield project? How is it being funded?

The Feasibility Study is estimated to cost \$7.3 million, being paid through Tampa Bay Water's municipal bonds. The project may be eligible for co-funding from the Southwest Florida Water Management District (SWFWMD).

What is the project schedule? When will you start construction on the test well?

Below is the projected timeline for the Eastern Pasco Wellfield project:

- **Property Selection** – Third quarter of 2024
- **Coring** – First quarter of 2025
- **Test Well Construction** – First quarter of 2025
- **Modeling** – First quarter of 2026
- **Feasibility Study Results** – Fourth quarter of 2026
- **Water Supply Configuration Recommendations to the Tampa Bay Water board of directors** – Fourth quarter of 2027

Will the public have input on this project?

In late July/early August 2024, Tampa Bay Water is reaching out to property owners within the project parameters to inform them on the project, directing them to an online survey to provide input on site selection criteria. Throughout the feasibility study, the project team will share information and solicit input on key components of the project. As with all projects, Tampa Bay Water is committed to open, transparent communication with residents.

Will you hold public meetings in the future?

Yes, the project team will hold public meetings to provide an update on the Feasibility Study results during the last quarter of 2026. Residents will be invited to future meetings via direct mail postcard and information will be posted on the project website and on Tampa Bay Water's social media channels.

How can I get more information on this project?

Information on the Eastern Pasco Wellfield project is available on Tampa Bay Water's website at **TampaBay.Water.org/EPW**. If you would like to opt in to receiving notices regarding this project, please email GroundwaterProjectInfo@gmail.com or call (813) 550-8326.