Consolidated Water Use Permit

Groundwater continues to be a vital part of the Tampa Bay region’s water supply, with more than 50 percent of the regional supply coming from wellfields. Some of the wellfields in Tampa Bay Water’s system have been pumping groundwater for over 50 years. Though groundwater pumping has been drastically cut back, in the past very high rates of pumping from these wellfields contributed to lower water levels in some of the region’s lakes and wetlands.

In 1998, Tampa Bay Water gained ownership and control of all of the regional wellfields in the Tampa Bay area. The Southwest Florida Water Management District issued a new permit to Tampa Bay Water that consolidated the permits for 11 of these wellfields located in Pasco, northern Hillsborough, and northeast Pinellas counties. This new permit, known as the “Consolidated Permit,” lowered the annual average pumping limit for these 11 wellfields from 192 million gallons per day (mgd) to 90 mgd. Tampa Bay Water operates these wellfields as an interconnected system at this lower pumping limit to promote environmental recovery near the wellfields.

Reduced pumping from these 11 wellfields has resulted in higher groundwater levels and environmental recovery in some lakes and wetlands. The Consolidated Permit allows 90-mgd annual average pumping through 2021, but requires Tampa Bay Water to prepare a Permit Recovery Assessment Plan prior to renewal of the permit.

Permit Recovery Assessment Plan

The Permit Recovery Assessment Plan (Recovery Assessment), requires Tampa Bay Water to:

- Provide a final assessment of environmental recovery due to our pumping cutbacks to 90 mgd;
- Identify any remaining adverse impacts caused by pumping at an average of 90 mgd;
- Identify and evaluate potential options to address the remaining impacts; and
- Begin addressing on-going damage now rather than waiting for the permit renewal.

This Recovery Assessment is the first of its kind to be performed in the Southwest Florida Water Management District (District) region and throughout the state of Florida. The Recovery Assessment is required to be completed by the Consolidated Permit renewal in 2021; a draft report of preliminary results is due to the District by December 2018.
Recovery Assessment Efforts
As the first assessment of its kind, the specific methods, means and measurements to determine environmental recovery were not defined as part of the permit. Tampa Bay Water has been working with the District for many years, specifically since the permit renewal in 2011, to determine the best means and methods to perform the assessment. Each step requires a team of staff and consultants working together to determine both the measurements and the boundaries that will be used to study each of the components of the environment for recovery. In order to be successful, we are working to obtain buy-in from the District staff for each analysis, as they will be reviewing and approving the final assessment report.

Assessment Schedule
Tampa Bay Water has been working on completing the Recovery Assessment. Major areas of work that are being completed include:

- Establishing the approach, framework and coordination schedule with the District
- Developing the Area of Investigation, including environmental features that require assessment
- Reviewing and ensuring quality control of water level data
- Developing protocols and methods of assessing recovery
- Assessing site-specific drainage and land-use changes on wetlands
- Documenting all findings and preparing a final report

The Recovery Assessment report of preliminary results is due to the Southwest Florida Water Management District in December 2018 in anticipation of the Consolidated Permit renewal.

Why Is This Important?
The Tampa Bay region has spent more than $1 billion to build an interconnected, flexible and reliable drinking water supply system. Though alternative water supplies now make up a large part of the regional water sources, the use of groundwater is still vital to maintaining a balance of reliability, sustainability and affordability. To renew the Consolidated Permit in 2020, the Recovery Assessment must be completed. Any continued damage from pumping at an average of 90 mgd will need to be mitigated. This can happen through either a further reduction in groundwater pumping or through mitigation of specific sites.

Simply put, the regional water supply system cannot operate without the Consolidated Permit wellfields and cannot provide drinking water to the more than 2.4 million people in the region without the use of some groundwater. We will continue to monitor the environment around our wellfields and complete the Recovery Assessment in time for the next Consolidated Permit renewal.