

NORTHERN TAMPA BAY WATER USE CAUTION AREA REVIEW

PROGRAM COMPONENTS	PROGRAM COMPONENT SUMMARY	CITATIONS
<p style="text-align: center;"><u>Water Supply Mission Components</u></p>	<p>Initially established in 1989 and expanded in 2007 to address adverse impacts to water resources from groundwater withdrawals associated with rapid growth and development pressures in the region. The majority of groundwater use in the Northern Tampa Bay (NTB) Water Use Caution Area (WUCA) is for public supply. As a result, most of the water resource impacts are located in areas surrounding the major public supply wellfields.</p> <p>Tampa Bay Water (TBW) and its member governments¹ entered into an agreement with SWFWMD in 1998 (referred to as the Partnership Agreement) to significantly reduce groundwater withdrawals from its regional wellfields and work toward recovery in areas where water resources had been impacted. As part of the Partnership Agreement, SWFWMD combined all the permits for TBW's central system wellfields into one permit (Water Use Permit No. 20011771), known as the "consolidated permit."</p>	
<p style="text-align: center;">Goals</p> <ul style="list-style-type: none"> • Resource (e.g. salt intrusion, potentiometric surface, MFLs, Domestic wells, Freeze protection use and resource impacts, MALs, etc.) • Existing legal user protection • Future water resource development project water availability 	<p>The original consolidated permit was issued for 158 million gallons per day (mgd) with planned reductions of 121 mgd by 2003 and 90 mgd by 2008. Reductions were achieved through the development of the alternative water supplies.</p> <p>In 2010, SWFWMD's Governing Board adopted the second phase of the recovery strategy. SWFWMD's goal is to continue evaluating the amount of environmental recovery that can be achieved over the next 10 years while withdrawals remain at 90 mgd.</p> <p>SWFWMD established MFLs for the lower Hillsborough River in 2007 along with a recovery strategy for bringing flows up to the minimums within a decade. SWFWMD entered into a joint funding agreement with the City of Tampa to implement a number of projects to divert water from various sources to meet the minimum flows.</p> <p>Models have generally confirmed the localized nature of saltwater intrusion in the NTB area.</p>	<p>2010 Regional Water Supply Plan, Tampa Bay Region</p> <p>Water Use Permit No. 20011771.001 (Available at page 116 of SWFWMD Governing Board Notebook dated 01-25-11) Special Condition No. 2 (Withdrawal Limitations) and No. 9 (Phase 1 Mitigation Plan)</p>

¹ TBW is a regional wholesale water supplier that provides water to Hillsborough, Pasco and Pinellas counties, as well as the cities of New Port Richey, St. Petersburg and Tampa. Other cities in the three-county area receive at least some of their water from these six public supply systems.

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	<p><u>Specific Objectives:</u></p> <ul style="list-style-type: none"> • Recover minimum flows for 2 segments of the Hillsborough River, and minimum levels at 33 lakes and 27 wetlands; • By 2018, complete an assessment to determine whether TBW’s reduction to 90 mgd of groundwater withdrawal from the Central Wellfield System provides necessary recovery for impacted rivers, lakes and wetlands; • Complete permitting, final design and construction of Blue Sink and Morris Bridge Sink projects for the Lower Hillsborough River recovery; • Conduct a 5-year assessment of adopted MFL for the Lower Hillsborough River. 	
<p>Linkage to regional water supply plan</p> <ul style="list-style-type: none"> • Limited water availability demonstrated • Causal relationships documented • Analysis of alternatives and comparative performance of options • Strategy (long-term) developed considering scientific and socio-economic issues • Water supply development and water resource development projects linkage • Funding • Others 	<p>A 1998 water supply assessment quantified water supply needs through the year 2020 and identified areas where future demand could not be met with traditional groundwater sources. In 2001, SWFMWD published its first Regional Water Supply Plan (RWSP), which quantified water supply demands through the year 2020 and identified water supply options for developing alternative sources (sources other than fresh groundwater). The RWSP was updated in 2006 and the planning period extended to 2025. It also concluded that a regional approach to meeting future water demands was required because some areas have limited access to alternative water supplies.</p> <p>The recovery strategy for lakes and wetlands in the NTB WUCA is primarily to reduce withdrawals from TBW’s central system wellfields to 90 mgd on a 12-month running average basis as required in the water use permit.</p> <p>The consolidated permit requires an extensive water resource monitoring network around the individual wellfields, along with many other data reporting and planning requirements. It is anticipated that TBW’s monitoring network will address most of the data collection needs in and around major withdrawal centers, while the District’s efforts will focus on the areas between and beyond TBW’s withdrawal centers.</p> <p>In the late 80s, SWFMWD initiated detailed water resource assessment projects (WRAPs) of the Eastern Tampa Bay (ETB) and NTB areas to determine causes of water level declines and to address water supply availability. Resource concerns in these</p>	<p>2010 Regional Water Supply Plan, Tampa Bay Region</p> <p>Section 373.0363, F.S. Subsection (4)(b)</p> <p>Applicants Handbook Part B Section 3.9.4.3.3</p>

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	<p>areas included lowered lake and wetland levels in the NTB area and saltwater intrusion in the Upper Floridan aquifer in the ETB area.</p> <p>As part of the Partnership Agreement, SWFWMD provided partial funding for the development of alternative water supplies to offset the reduction in groundwater withdrawals and to meet growing demands, including a seawater desalination facility in Hillsborough County on Tampa Bay. In 2008, the desalinization facility produced an average of 20 mgd for the regional system. In 2009, TBW began to operate the facility at its full capacity of 25 mgd as part of a four-month performance test to qualify for final payment of SWFWMD funds.</p> <p>SWFWMD provided funding assistance for a major interconnect between the regional system and the Starkey wellfield, which serves areas of western Pasco County and the City of New Port Richey, which provides additional operational flexibility for TBW that will help reduce the environmental impacts of groundwater withdrawals in the Starkey wellfield.</p> <p>SWFWMD provided funding assistance for TBW's System Configuration II project that is expected to increase TBW's enhanced surface water system by 25 mgd.</p> <p>SWFWMD provided funding for the cities of Tarpon Springs, Oldsmar and Clearwater to augment water supplies by developing brackish groundwater wellfields and reverse osmosis membrane treatment facilities.</p>	
<p>Related to minimum flow / level recovery strategy</p>	<p>Established MFLs in the NTB area for cypress wetlands, lakes, rivers, springs and the Upper Floridan aquifer</p> <p>Phase One (approved in 1999) required that new withdrawals not violate established MFLs, unless the withdrawal was part of the NTB WUCA Recovery Strategy.</p> <p>Phase Two was approved in 2009 for implementation through 2020. Major components of the rule include: (1) TBW's consolidated permit is to be renewed for 90 mgd for 10 years; (2) TBW will continue to conduct withdrawals pursuant to the Operations Plan; (3) TBW will continue expansive environmental data collection and analysis; (4) TBW will continue to evaluate and implement environmental mitigation; (5) TBW's member governments will continue</p>	<p>Section 373.042, F.S.</p> <p>Rule 40D-8.041, F.A.C. (Minimum Flows)</p> <p>Rule 40D-8.626, F.A.C. (Minimum Aquifer Level)</p> <p>Comprehensive Environmental Resources Recovery Plan for the Northern Tampa Bay Water Use Caution Area, and the Hillsborough River Strategy</p> <p>Rule 40D-80.073, F.A.C.</p> <p>Water Use Permit No. 20011771.001 (Available at page 116 of SWFWMD Governing Board Notebook dated 01-25-11)</p>

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	<p>water conservation activities; (6) further impacts caused by other water use permittees will continue to be limited; and (7) the creation of a “reservoir renovation exception period” that would allow a temporary exceedance of the 90 mgd permit limit during the period when the C.W. Bill Young Regional Reservoir will be repaired, if there is a significant drought and other sources are unable to replace the temporarily lost reservoir storage.</p> <p>SWFWMD has committed to collect additional data to support the refinement and improvement of its MFLs’ methodologies and to study the benefits of using other management methods, such as augmentation, to achieve adopted MFLs. To facilitate this data collection, the District established the Northern Tampa Bay Phase II Local Technical Peer Review Group (LTPRG) to coordinate with local governments, agencies and other stakeholders to review hydrologic, biologic and geologic studies being performed in the NTB WUCA.</p>	
Geographic area	All of Pinellas and Pasco Counties, and the majority of Hillsborough County (north of Highway 60).	Rule 40D-2.801, F.A.C. Subsection (3)(a)
Monitoring Program <ul style="list-style-type: none"> • Hydrologic • Biologic • Linkage to recovery strategy • Linkage to water shortage trigger • Compliance with goal • Methodology 	<p>TBW is required to monitor and assess environmental systems based on the Environmental Management Plan for the TBW Central System Wellfields.</p> <p>TBW is required to prepare a Permit Recovery Assessment Plan.</p> <p>TBW is required to adhere to standards for the consistent and accurate collection of field data linked to the recovery strategy. Specifies:</p> <ul style="list-style-type: none"> • Hydrologic data collection procedures • Water quality data collection procedures • Wetland assessment data collection procedures • Production flow metering • Surveying standards • Data storage and reporting • Data correction procedures • Data submittal 	<p>Water Use Permit No. 20011771.001 (Available at page 116 of SWFWMD Governing Board Notebook dated 01-25-11) Special Condition No. 8 and Exhibit C</p> <p>Special Condition No. 11 and Exhibit E</p> <p>Special Condition No. 14 and Exhibit F</p>
<u>Regulatory Program Components</u>	The consolidated water use permit (WUP No. 20022771) incorporates requirements contained in the Recovery Strategy for the	

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	NTB WUCA	
Source restricted (“capped”) <ul style="list-style-type: none"> • Surface water • Ground water • Method to cap defined 	<p>Central Wellfield System shall not exceed 90 mgd on annual average, with some limited exceptions contained in the permit while the C.W. Bill Young Regional Reservoir is renovated. Permit details requirements TBW must comply with in order to exceed the 90 mgd.</p>	<p>Water Use Permit No. 20011771.001 (Available at page 116 of SWFWMD Governing Board Notebook dated 01-25-11) Special Condition No. 2.</p>
Existing legal user (ELU) rights <ul style="list-style-type: none"> • Renewal and modification programs • New program(s) and ELU • Offset projects for ELU 	<p>Existing uses that affect water bodies for which MFLs have been adopted where the actual flow is at or above the MFL (including TBW Central System Facilities) are evaluated pursuant to Section 3.9.3.1.1A (same criteria used for new quantities).</p> <p>If permitted quantity would cause actual flow or level to fall below the Baseline Quantity, new quantity may be permitted if applicant:</p> <ul style="list-style-type: none"> - demonstrates no reasonable means to modify the proposed withdrawal to meet this condition (including the use of alternative supplies to reduce or replace the amount of requested quantity that exceeds the Baseline Quantity); - provides reasonable assurance that significant harm will be prevented to wetlands and water bodies that could be affected by proposed withdrawals (this requires submitting an Environmental Management Plan); - demonstrates that any measures used to provide the reasonable assurances above will not cause a violation of any criteria listed in Rules 40D-2.301, 40D-3.01 or 40D-3.02, F.A.C. <p>For water bodies affected by an existing permitted withdrawal, where actual flow or level is below its MFL:</p> <p>A. TBW Central System Facilities – compliance with established MFLs for water bodies adversely impacted by TBW Central System Facilities shall be addressed.</p> <p>B. Other existing permittees - compliance with established MFLs will be addressed as specified in Rule 40D-80.073.</p> <p>Existing permitted surface water withdrawals from stressed lakes shall be abandoned or replaced with an alternate source within 3 years of the stressed lake designation.</p> <p>TBW is required to investigate water withdrawal complaints within a “Well Complaint Mitigation Area” to determine if TBW’s withdrawals are causing a problem to</p>	<p>Applicants Handbook Part B Section 3.9.3.1.2.1</p> <p>Applicants Handbook Part B Section 3.9.3.1.1.1</p> <p>Applicants Handbook Part B Section 3.9.3.1.2.2</p> <p>Applicants Handbook Part B Section 3.9.3.1.2.2A Rule 40D-80.073, F.A.C.</p> <p>Applicants Handbook Part B Section 3.9.3.1.2.2B Rule 40D-80.073, F.A.C.</p> <p>Applicants Handbook Part B Section 3.9.3.4.1.2</p> <p>Water Use Permit No. 20011771.001 (Available at page 116 of SWFWMD Governing Board</p>

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	<p>reporting conditions.</p> <p>Standard water conservation plan or a goal-based water conservation plan.</p> <p>Until Wholesale Water Use Permits are obtained by the Member Governments of permittees of 90 mgd facilities, as required by Chapter 40D-2, F.A.C., each permittee of 90 mgd facilities, including TBW, shall report on the permittees', as applicable, and the Member Governments' per capita rates, water losses, reclaimed water use, residential water use and the following measures to reduce water demand (including an evaluation of the below-listed measures, the findings and conclusions and the schedule for implementing selected measures)</p> <ol style="list-style-type: none"> 1. Toilet rebate/replacement; 2. Fixture retrofit; 3. Clothes washer rebate/replacement; 4. Dishwasher rebate/replacement; 5. Irrigation and landscape evaluation; 6. Irrigation/landscape rebate; 7. Cisterns/rain water harvesting rebate; 8. Industrial/commercial/institutional audits and repair; 9. Florida-Friendly landscape principles; 10. Water Conservation Education; 11. Water-conserving rate structures and drought rates; 12. Multi-family residential metering. <p>Because the wholesale permits have been issued, TBW is no longer be required to submit the data on behalf of the Member Government.</p>	<p>Applicants Handbook Part B Section 2.4.8.6</p> <p>Rule 40D-80.073, F.A.C. Subsection (2)(i)</p> <p>Water Use Permit No. 20011771.001 (Available at page 116 of SWFWMD Governing Board Notebook dated 01-25-11) Special Condition No. 13</p>
<p style="text-align: center;">Supplemental irrigation allocation</p> <ul style="list-style-type: none"> • Allocation and actual usage • Metering • Crop reporting • Frost / freeze and market conditions 	<p>SWFMWD uses Management Periods to evaluate future efficiency standards and goals as part of the recovery strategy for the NTB WUCA.</p> <p>Crop reports are required.</p> <p>Metering is required for individual WUPs of 100,000 gpd or greater annual average with one or more facilities in the NTB WUCA</p>	<p>Applicants Handbook Part B Section 3.9.3.2</p> <p>Applicants Handbook Part B Section 3.9.3.2.2</p> <p>Applicants Handbook Part B Section 4.1.1</p>
<p style="text-align: center;">Competition</p>		
<p style="text-align: center;">Redistribution of existing allocations</p>		

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Alternative water supply program	<p>Applicants for WUPs with 100,000 gpd or more are required to evaluate use of alternative water supply (AWS).</p> <p>Alternative supplies must be considered if a permittee attempts to demonstrate there is no reasonable means to modify the proposed withdrawal to avoid causing actual flow or level to fall below the Baseline Quantity.</p>	<p>Applicants Handbook Part B Section 2.1.1</p> <p>Applicants Handbook Part B Section 3.9.3.1.1.1</p>
Permit duration	<p>Generally 20 years, unless pre-existing adverse impacts are being addressed through a minimum flow and recovery strategy that must be eliminated by the 10th year.</p> <p>The current consolidated permit expires on January 25, 2021.</p>	<p>Rule 40D-2.321, F.A.C. Applicants Handbook Part B Section 1.5</p> <p>Water Use Permit No. 20011771.001 (Available at page 116 of SWFWMD Governing Board Notebook dated 01-25-11)</p>
Prohibited use class(es) identified <ul style="list-style-type: none"> • E.g. Aesthetic 	<p>Irrigation for unimproved pasture will not be approved.</p> <p>Augmentation for purely aesthetic purposes (e.g., creating and maintaining water levels in constructed ponds) shall not be permitted.</p> <p>New use from stressed lakes or new groundwater withdrawals that adversely impact stressed lakes shall not be permitted.</p>	<p>Applicants Handbook Part B Section 2.4.3.1.11</p> <p>Applicants Handbook Part B Section 3.9.3.3</p> <p>Applicants Handbook Part B Section 3.9.3.4.1.2 Section 3.9.3.4.1.3</p>
Program adopted as a “package” <ul style="list-style-type: none"> • “Self-destruct” clause 	<p>The rules for the NTB WUCA were adopted as part of the Recovery Strategy Comprehensive Plan and the Consolidated Permit.</p>	<p>Rule 40D-80.073, F.A.C.</p>