



## **AGENDA**

**JOINT WORKSHOP  
OF  
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT  
GOVERNING BOARD  
AND  
TAMPA BAY WATER  
BOARD OF DIRECTORS**

**JANUARY 26, 2009**

**BROOKER CREEK PRESERVE  
ENVIRONMENTAL EDUCATION CENTER**

3940 KEYSTONE ROAD  
TARPON SPRINGS, FLORIDA 34688  
727-453-6959

*☞ All meetings are open to the public. ☜*

8:30 a.m. **Refreshments**

9:00 a.m. **Workshop**

1. Welcome and Introductions
2. Status of the Partnership Plan Implementation
3. Status of the Northern Tampa Bay Recovery Plan
4. Tampa Bay Water Master Water Supply Plan
5. Regional Reclaimed Water Project – Recharge Component
6. Open Discussion

11:45 a.m. **Adjournment and Lunch**

If you have any questions concerning this meeting,  
please call 352-796-7211 or 1-800-423-1476, ext. 4610.



## Joint Board Meeting Presentation Information

At the Joint Board Meeting between the Tampa Bay Water Board of Directors and the Southwest Florida Water Management District Governing Board scheduled for Monday, January 26, Tampa Bay Water staff will be providing two presentations: an overview and status update on the success of the Partnership Agreement and an update on future water supply projects for the Tampa Bay region.

### Partnership Agreement Update

A decade ago, Tampa Bay Water and the Southwest Florida Water Management District entered into a Partnership Agreement to bring alternative water supplies to the Tampa Bay region and relieve long-used groundwater wellfields. The District committed \$183 million to offset the capital costs of these alternative supplies. Today, the regional drinking water system is a balanced combination of surface water from area rivers, desalinated seawater and groundwater. Groundwater permitted pumping has been reduced nearly 100 million gallons per day from 192 mgd to 158 mgd to 90 mgd and conditions around the region's wellfields have improved. The introduction of the alternative supplies, as well as increased piping connections, has created a unique and flexible drinking water system for the region.

Even with the new infrastructure and supplies in place, the regional water supply system will still face permit compliance challenges in the coming months. Despite the flexibility and drought-resistance of the water supply system, Mother Nature still plays an important part in the surface water availability and groundwater reduction at our wellfields. Continued dry weather, low water levels in the reservoir and lack of available surface water will present challenges throughout the winter and spring dry season. Staff will provide the latest information on groundwater permit compliance and updated information on the alternative water supply system.

### Future Water Supplies

Tampa Bay Water has started construction on a second configuration of projects to meet the drinking water needs of the region through 2019. An expansion of the alternative water supplies delivered through the successful enhanced surface water system will add more flexibility to the system. This configuration of projects includes an expansion of the Regional Surface Water Treatment Plant, along with additional hydraulic capacity and piping, to treat and produce 99 million gallons per day of drinking water when surface water is available. Staff will provide an update on the construction of the second configuration of projects.

The agency is also working on a plan to meet regional drinking water needs in the 2017-2019 timeframe. In December 2008, the Tampa Bay Water Board of Directors approved the update to their Master Water Plan. Seven projects will undergo additional planning studies over the next three years. The Board also approved initiatives to continue demand management and source water protection efforts, and to assist conversation among the member governments on reclaimed water planning. The seven project ideas in the Master Water Plan represent a mix of ideas that include surface water, desalinated seawater and brackish water, and limited groundwater. Staff will provide an overview of the projects in the Master Water Plan and the three policy initiatives approved by the Board.

## **SWFWMD Governing Board and Tampa Bay Water Board of Directors**

**Joint Workshop -- January 26, 2009**

### **Status of the Northern Tampa Bay Recovery Plan**

#### *Purpose*

The purpose of this presentation is to provide the Boards with an update and status of the District's efforts to monitor water level recovery in the Northern Tampa Bay (NTB) area. This item is for information only, and no action is required.

#### *Background/History*

In 1998, the Governing Board approved a recovery strategy for the NTB area, including the Partnership Agreement, issuance of TBW's water use permit for its 11 regional wellfields (the Consolidated Permit), adoption of minimum flows and levels (MFLs), and changes to its water use and environmental resource permitting rules. Implementation of the Partnership Plan and issuance of the Consolidated Permit have brought alternative sources on-line and enabled TBW to reduce and better optimize withdrawals from the wellfields to minimize impacts. Minimum levels for 41 cypress wetlands, 15 lakes, and seven Floridan aquifer wells were adopted in 1998 and minimum levels for an additional 54 lakes in the NTB area have been adopted to date. In addition, data relating to the health of approximately 500 wetlands and water levels in over 1,000 wells in the NTB area are routinely collected by both the District and TBW.

Since the inception of the NTB Recovery Strategy, the staffs of the District and TBW have been monitoring the water levels, flows, and biologic data in the area's water resources to assess changes in conditions as groundwater withdrawals in the area are reduced. While implementation of the Recovery Strategy is not yet complete and assessment is still ongoing, there are clear indications that progress toward recovery in the area has occurred. In 2010, the District's Governing Board will have several critical decisions to make regarding water level recovery in the NTB area. These include the reevaluation of current MFLs and possible adoption of new MFLs, determining the need for a second phase of recovery, and the evaluation of TBW's Consolidated Permit. Over the past several years, District and TBW staffs have been working to ensure the necessary data and technical analysis will be available by 2010 to support the Board's decision-making process.

Staff will present an overview of the District's NTB Recovery Plan, water level responses in the NTB area that have been observed to date (including the status of MFLs in the area), and the activities involved in preparation for the evaluation of recovery in 2010.

#### **Staff Recommendation:**

This item is presented for information only, and no action is required.

**Presenter:** Michael C. Hancock, Senior Professional Engineer, Resource Projects Department

## **SWFWMD Governing Board and Tampa Bay Water Board of Directors**

**Joint Workshop -- January 26, 2009**

### **Regional Reclaimed Water Project – Recharge Component**

#### *Purpose*

The purpose of this presentation is to provide an overview and status of the Reclaimed Water Aquifer Recharge Feasibility Study that is being conducted as part of the District's Regional Reclaimed Water Partnership Initiative Project (RRWPIP). This item is presented for information only, and no action is required.

#### *Background/History*

In 2008, the District initiated the RRWPIP to work with utilities in the Tampa Bay Area to identify options for maximizing the beneficial use of reclaimed water flows. One of the options that has been identified proposes to use reclaimed water (treated to meet all applicable regulatory standards) to recharge the Upper Floridan aquifer (UFA) to benefit water resources in the area and provide opportunity for additional groundwater withdrawals. Aquifer recharge using reclaimed water has been successfully implemented in other areas of the country. For example, the Groundwater Replenishment System in Orange County California currently provides up to 70 mgd of highly treated waste water for use in recharging the aquifer to augment drinking water supplies.

As part of the RRWPIP, a Recharge Steering Committee comprised of District staff and representatives of local governments and utilities in the area was formed in the Spring of 2008 to further explore the concept of reclaimed water aquifer recharge in the area. It was agreed in meetings with the Steering Committee that a feasibility study was needed to assess the practicability of implementing this option in the area of southern Hillsborough and Polk Counties. Working with the committee, District staff prepared a scope of work and contracted with the consulting firm Montgomery Watson Harza (MWH) to conduct the study. The scope of work for the study involves three main tasks: (1) assessing permitting and treatment requirements; (2) quantifying water level improvements resulting from aquifer recharge and the subsequent amounts of groundwater withdrawals that may potentially be available; and (3) performing cost analyses of selected options. The study was initiated on October 1, 2008 and will be completed by March 31, 2009. MWH has completed the first two tasks and has begun work on the third task.

#### Staff Recommendation:

This item is presented for information only, and no action is required.

Presenter: Mark D. Barcelo, Hydrologic Evaluation Program Director,  
Resource Projects Department