## Northern Tampa Bay Phase II Local Technical Peer Review Group (LTPRG) SWFWMD Tampa Service Office, Hwy 301N, Tampa

#### **Meeting 40**

December 12, 2007 - 9:30AM

### Summary

The following were in attendance: Patty Fesmire, Tampa Bay Water; Doug Keesecker, Tampa Bay Water; R. Warren Hogg, Tampa Bay Water; Kim Haag, USGS; Terrie Lee, USGS; Patty Metz, USGS; Dan Schmutz, GPI Southeast, Inc.; Deborah Daigle, HDR Engineering, Inc; Scott Emery, EHI/Hillsborough County; Jim Mykytka, Reynolds, Smith & Hills; Cynthia Wheeler, Reynolds, Smith & Hills; Dave Slonena, Pinellas County Utilities; Laura Morris, Quest; Michael Hancock, SWFWMD; Maya Burke, SWFWMD; John Emery, SWFWMD; Adam Munson, SWFWMD; SWFWMD; Don Ellison, SWFWMD; and Doug Leeper, SWFWMD. Names in bold are designated representatives for the LTPRG.

Doug Leeper provided an update on the status of minimum flows and levels development for currently identified priority water bodies in the northern Tampa Bay area. He noted that following Governing Board approval of the proposed 2008 Minimum Flows and Levels Priority List and Schedule in October 2007, the list and schedule was submitted to the Florida Department of Environmental Protection.

With regard to minimum flows for river/spring systems in the Tampa Bay area, Mr. Leeper noted that at the December 18, 2007 Governing Board meeting, staff plans to recommend that the Board approve Initiation of rulemaking to amend Rule 40D-8.041, Florida Administrative Code., to establish minimum flows for the Braden River, the upper Hillsborough River, and Crystal Springs. Mr. Leeper also noted that peer-review findings for the proposed minimum flows for the Alafia River estuary and lower Peace River should be available in early 2008.

With regard to the development of minimum and guidance levels for lakes in the northern Tampa Bay area, Mr. Leeper noted staff plans to recommend that the Board approve initiation of rulemaking to amend Rule 40D-8.624, Florida Administrative Code, to delete previously adopted guidance level and add new guidance and minimum levels for several priority lakes, including King Lake, King Lake (East) and Lake Linda in Pasco County. He also noted that staff plans to recommend continuation of a public hearing on proposed rule amendments concerning minimum and guidance levels for Crews Lake and other priority Pasco County lakes until the January 2008 Board meeting.

Jim Mykytka gave a presentation on the Cypress Creek Wellfield Surface Water Management Project. The project team was managed by Reynolds, Smith, and Hills, and was cooperatively funded by the SWFWMD and Tampa Bay Water. The project is part of the Phase 1 Mitigation Plan effort. The objective of the project was to modify existing drainage patterns within the Cypress Creek wellfield property to improve the

wetland hydrology at targeted wetland restoration sites, and to reduce flooding conditions in Saddlewood Estates and Quail Hollow, without causing any adverse ecological or hydrological impacts. Detailed evaluations of surface water alternatives to were proposed, which would increase water flow through Dye's Crossing, utilize existing storage south of Dye's Crossing, control surface water flows leaving the wellfield, and divert high flows to the west towards target wetlands. Construction of the project was completed in August 2007.

Mr. Mykytka discussed the details of the constructed project, which included enhanced structures at Dye's Crossing, a 7,500 foot long berm with a 274 foot concrete weir, and a series of shallow swales designed to direct flows toward dehydrated wetlands during high flow events. One of the main features of the project is the restoration of the floodplain south of Dye's crossing, which has experienced low water level conditions due in part by the historic restriction of the Dye's Crossing culverts. The project is designed to move more water toward this section of the floodplain, which will take advantage of the floodplain's storage capabilities, and provide ecologic benefits. Challenges of the project included a design that minimized any effects to the preserve (while meeting the objectives of the project), avoiding gopher tortoises and their habitat, and maintaining downstream conditions in the flow system. A PDF file of Mr. Mykytka's presentation is posted on the NTB II website.

Don Ellison gave a presentation on the assessment of long-term lake fluctuations for the minimum levels analysis. Mr. Ellison discussed the definitions of several of the terms used in the District's minimum flows and levels rules (40D-8), as well as the importance of the use of long-term lake percentiles when developing minimum levels. The understanding of long-term water levels at individual lakes enables the District to account for natural rainfall variability when comparing shorter-term data to minimum levels. Because most lakes don't have long-term periods of water level data collection (defined as 60 years or more of record), it is often necessary to use models to produce simulated water levels, based on best available information. Mr. Ellison explained that future presentations will include information on the modeling techniques that the District has been pursuing. A PDF file of Mr. Ellison's presentation is posted on the NTB II website.

The next regular LTPRG meeting is scheduled for 9:30 AM on February 13, 2008 at SWFWMD's Tampa Service Office.

#### **AGENDA**

#### Northern Tampa Bay Phase II Local Technical Peer Review Group

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#### December 12, 2007 - 9:30AM

- 1. October meeting follow-up
- 2. Miscellaneous updates
  - Lake MFL Update
- 3. Cypress Creek Surface Water Management Project (Jim Mykytka, RS&H)
- 4. Analysis of Long-term lake fluctuations for MFL assessments (Don Ellison, SWFWMD)
- 5. Issues for next Meeting February 2008