

**Northern Tampa Bay Phase II Local Technical Peer Review Group (LTPRG)
Brooker Creek Education Center, 3940 Keystone Road, Tarpon Springs**

**Meeting 24
August 4, 2004 - 9:30AM**

Summary

The following were in attendance: **R. Warren Hogg**, Tampa Bay Water; Doug Keesecker, Tampa Bay Water; Bob McConnell, Tampa Bay Water; **Richard Voakes**, City of St. Petersburg; **Andy Smith**, Hillsborough County; Laura Morris, Quest Ecology for WRWSA; **Dave Slonena**, Pinellas County; **Gordon Leslie, Jr.**, Hillsborough County EPC; **Michael Hancock**, SWFWMD; Jill Hood, SWFWMD; John Emery, SWFWMD; **Ted Rochow**, SWFWMD; David Carr, SWFWMD; Sid Flannery, SWFWMD; Ken Weber, SWFWMD, and **Doug Leeper**, SWFWMD. Names in bold are designated representatives for the LTPRG.

Doug Leeper noted that District staff plan to present proposed levels for 14 northern Tampa Bay area lakes to the Governing Board in August for approval to initiate the incorporation of the levels into District rules. The lakes include Bell, Bird, Green, Moon, Padgett, Parker (Ann) in Pasco County, and Charles, Dan, Garden, Jackson, Mound, Platt, Reinheimer and Strawberry in Hillsborough County. He also noted that staff expected to present proposed minimum levels for several other area lakes (Hunters, Lindsey, Mountain, Neff, Spring, and Weekiwachee Prairie (Theresa) in Hernando County; Crescent, Horse, Pretty, Taylor and Wimauma in Hillsborough County; Clear, Hancock, Middle, and Pasadena/Buddy in Pasco County) to the Governing Board before the end of the year.

Sid Flannery gave a presentation summarizing progress on the establishment of minimum flows for Sulphur Springs. The minimum flow report will be presented to the Governing Board at its September meeting. Mr. Flannery's presentation included photographs of the spring and a description of the water control structures and modifications to the spring pool and run. A history of water use by the City of Tampa from the spring was discussed, including pumping the spring at a rate of 20 MGD during droughts. The recent modifications to the pumping system at the spring were described, including construction of the flume below the Hillsborough River Dam and the return pipe at the spring pool so that variable amounts of water can now be diverted from the spring pool.

The ecological criteria that were used to establish the minimum flows were presented, which are; (1) maintain low salinity habitats in the spring run, (2) provide inflow to the Lower Hillsborough River to maintain to reduce salinity there; and (3) provide a thermal refuge for manatees in the lower river during cold winter months. Results from the flow diversion experiments conducted during 2001 and 2002 were

presented, along with data from continuous recorders in the spring and run that are operated by the USGS. The thermal model developed by Janicki Environmental, Inc. was described and the results of various thermal modeling scenarios were presented.

The combined results indicate that a minimum flow of 18 cfs will largely prohibit the incursion of river water into the spring run and satisfy meet criterion 1. This minimum flow, however, can be reduced to lower values under two sets of conditions. The minimum flow may be reduced from 18 to 10 cfs at low tide stages to allow additional water use while still preventing salinity incursions into the spring run. The minimum may also be reduced to 13 cfs when water levels in the Hillsborough River Reservoir fall below 19 feet NGVD. This will also allow additional water use during times of water shortage, and cause only temporary incursions of river water from which the biology of the spring should recover. Modeling results indicate that minimum flows that meet criterion 1 also meet criteria 2 and 3, when used in conjunction with a diversion of 10 cfs of spring water to the base of the dam to meet the adopted minimum flow there.

Questions about the presentation concerned the effect of the spring discharge on density gradients in the lower river, use of the spring by manatees, the frequency of the 19 foot criterion, and salinity thresholds in the spring run to signal the incidence of river incursions.

Michael Hancock gave the group a presentation on the final results of the revised Wetland Assessment Procedure (WAP) field test results. The presentation and draft WAP procedure can be found on the NTB II website. Mr. Hancock explained that the results of the test showed that there was still too much variability in the results of the revised WAP, and that further assessment and testing were needed before the revision can be considered final and brought to Tampa Bay Water's Board for approval. The wetlands subcommittee has met twice (July 1 and July 29) to begin discussion the results and formulating remedies for the problems identified as part of the test. The next meeting is scheduled for August 20. Further revisions are expected to be devised within the next two months, and another test is planned for the September/October time frame.

The next regular LTPRG meeting is scheduled for 9:30 AM on October 6, 2004 at the Keystone Civic Center in Odessa.

AGENDA

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1. June meeting follow-up
2. Miscellaneous updates
 - Lake MFL Update
 - Future presentation/field trips
3. Proposed Minimum Flows at Sulphur Springs (S. Flannery)
4. Full WAP test results and other work (M. Hancock, J. Hood, T. Rochow)
5. Issues for Next Meeting – October 6, 2004 (at Keystone Civic Center)