

**Northern Tampa Bay Phase II Local Technical Peer Review Group  
SWFWMD Tampa Service Office, Hwy 301N, Tampa**

**Meeting 8  
August 1, 2001 - 9:30AM**

## **Minutes**

The following were in attendance: Zhongyan Lin, Hillsborough County EPC; **Gordon Leslie, Jr.**, Hillsborough County EPC; **Dave Slonena**, Pinellas County; Doug Keesecker, Tampa Bay Water; Chris Shea, Tampa Bay Water; **R. Warren Hogg**, Tampa Bay Water; **Richard Voakes**, City of St. Petersburg; **Ralph Craig**, City of St. Petersburg; **Andy Smith**, Hillsborough County; **Cliff Harrison**, Schreuder, Inc. for WRWSA; Nina Raymond, Quest Ecology, Inc. for WRWSA; **Jeff Vilagos**, City of Tampa; John Trommer, United States Geological Survey; John Emery, SWFWMD; **Michael Hancock**, SWFWMD; Adam Munson, SWFWMD; **Ted Rochow**, SWFWMD; Ken Weber, SWFWMD; Robert Peterson, SWFWMD; **Doug Leeper**, SWFWMD; Bob Perry, SWFWMD, David Carr, SWFWMD; Mikel Renner, SWFWMD, Marty Kelly, SWFWMD, Gregg Jones, SWFWMD; Mark Barcelo, SWFWMD, Karen Lloyd, SWFWMD, and Ralph Kerr, SWFWMD. Names in bold are designated representatives for the LTPRG.

Doug Leeper gave an update on the Category 3 Lake Minimum Level process. Mr. Leeper said that a message board has been established for the two peer review panelists to use for discussions. The message board is available to the public for following the discussions. Also, the peer review panelists will be meeting in the Tampa Service Office on August 6<sup>th</sup> and 7<sup>th</sup>, beginning at 9:00 AM each day. The panelists will take public comment on August 6<sup>th</sup>, and may also take a field trip. The meeting on August 7<sup>th</sup> will be very brief. Mr. Leeper asked that if any LTPRG representatives would like to forward pertinent material to the panelists for review, please forward the material to him.

Michael Hancock gave a brief update on the Peer Review Program process. The SWFWMD has received nearly 500 resume from the SFWMD for review and possible inclusion in the program. District staff is currently reviewing the information, but it is a very slow process. Updates will continue to be presented to the LTPRG.

Mr. Hancock said that the District and Tampa Water staff and consultants that are most knowledgeable about the hundreds of wetlands monitored by Tampa Bay Water held a series of meetings during the first two weeks of July. The purpose of the meetings was to review each of the wetlands and gather information about each to make decisions on the future monitoring of each site. The meetings were very productive, and the District

will now be reviewing the information gathered on the sites, and finalizing the MFL and Recovery data networks over the next two months. Other meetings on other types of data are scheduled.

John Trommer gave the group a presentation on one of his current projects, entitled *Assessment of the Hydrology, Water Quality, and the Hydraulic Connection between Ground Water and Surface Water in the Upper Hillsborough River Watershed*. The presentation began with an explanation of the purpose and scope of the study. Mr. Trommer then talked about data collection sites. Two overhead slides were shown; the first was a map of the Upper Hillsborough watershed delineating the study area, and the second was a map showing the data collection sites. Current and future data collection activities and the length of time for data collection activities was discussed. A third slide showing the results of the low-base flow seepage run, conducted in May of this year, was presented. The map showed the gaining and losing stretches of the river, Blackwater Creek, Itchepackesassa Creek, and East Canal. Water-quality sampling was discussed, and a Piper diagram of the sampling results to date was presented. The Piper diagram showed three distinct groupings or water types. The fifth and last slide presented showed water levels in the wells and the stream at the Blackwater Creek transect. Mr. Trommer discussed the absence of a surficial aquifer system in the area and the potential for ground-water and surface-water interaction between the Upper Floridan aquifer and the stream. Mr. Trommer also discussed the plans to map the potentiometric surface of the Upper Floridan aquifer using measurements made at over 60 wells in the study area.

Dr. Zhongyan Lin and Mr. Gordon Leslie of the EPC/Hillsborough County presented data from Hillsborough County's recent study of the comparison between soil-based normal pool elevations, and normal pool elevations measured from cypress buttress indicators. The purpose of study was to determine if there is a correlation between these two types of normal pool elevation indicators. The study area consisted of twelve lakes in Northwest Hillsborough County, and the study period was from the winter of 2000 through the spring of 2001. The procedure was to visit each of the twelve lakes, and measure the normal pool elevation using available cypress buttress indicators, while also measuring the normal pool elevation based on indicators in soils near the lake. The Hillsborough County study group was made up of Dr. Scott Emery, Mr. Andy Smith, P.G., and Mr. Andre Lewis, along with the two presenters.

Dr. Zhongyan Lin began the presentation by describing the soil-based normal pool methodology that he employs. He also explained the characteristics that he looks for in soils, and how these are used to set the normal pool. Mr. Gordon Leslie continued the presentation by showing the group the data that had been collected, which included data from this study and also data from normal pool evaluations done at Cone Ranch in March 1999. All the data were made available to the group via handouts.

Based on the data for Cone Ranch, it was shown that the average difference between soils-based normal pool indicators and cypress buttress-based normal pool indicators was about 0.2 feet. This was considered good agreement, and provided the impetus

for the study on the twelve lakes. Data collected from the lake study indicated that on average, the soils-based normal pool was about 0.9 feet higher than the cypress buttress-based normal pool. The preliminary conclusion was that although more study is needed, soils appear to have value as a hydrologic indicator of a normal pool elevation. It was further concluded that soil-based normal pool indicators could be particularly useful in cases where other types of normal pool indicators are lacking.

There were a few general questions on Dr. Lin's methodology, which he answered. Dr. Marty Kelly then had a question about whether water level control structures could be a factor on lakes where there were cypress buttress normal pool indicators at different elevations. The answer was yes.

Although all twelve lakes used in the study had cypress trees around them, it was observed that two of the twelve lakes had larger, "old growth" cypress trees at higher elevations than the smaller, "new growth" cypress trees. For these two lakes, it was possible to measure two different normal pool elevations, one higher than the other. As stated above, the soils-based normal pool was about 0.9 feet higher than the normal pool based cypress trees. It should be noted that this average difference is based on the smaller, "new growth" cypress trees. Mr. Chris Shea questioned whether ground water seeping into lakes with steep slopes could have an effect on Dr. Lin's soil-based normal pool methodology. Dr. Lin said that he had already considered this factor when he made the field determination.

Mr. Hancock noted that it has been over one year since the LTPRG began meeting. He asked each of the representatives how they thought the process was going, whether they felt it was proceeding in accordance with Chapter 40D-8, and whether any of them had suggestions for improvement. Each of the members present thought that the meetings were very useful, and felt that they were accomplishing what was expected. Several offered suggestions for future discussions. Richard Voakes and Ralph Craig said that they would like to see an update on the watershed assessment work being performed by Hillsborough County, as well as the U.S. Corps of Engineers studies in the Hillsborough and Withlacoochee River watersheds. Andy Smith suggested that we continue looking for ways to include the LTPRG in the peer review process, including assisting with drafting the charge to the panelists. Dave Slonena suggested that the District present a summary of the various research projects that are currently ongoing or proposed for the Northern Tampa Bay area. He also said that he would like to see a discussion on the recent assessment performed on the Hillsborough River watershed by District staff. Mr. Hancock said that he would plan on including each of the suggested subjects in the agenda of future meetings.

The next regular LTPRG meeting will be held at 9:30 AM on October 3, 2001. The meeting will take place at the SWFWMD's Tampa Service Office.

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1. June Meeting Follow-up
2. Miscellaneous Updates
  1. Category 3 Lakes MFLs (Doug Leeper)
  2. Chapter 373 Peer Review (Michael Hancock)
  3. Data network inventory (Michael Hancock)
3. Assessment of the Hydrology, Water Quality, and the Hydraulic Connection between Ground Water and Surface Water in the Upper Hillsborough River Watershed (John Trommer, Tampa office, USGS)
4. Overview of recent EPC soils studies (Gordon Leslie, Hillsborough EPC)
5. Other issues
6. Issues for the Next Meeting - October 3, 2001 (at the Tampa Service Office)