

**Northern Tampa Bay Phase II Local Technical Peer Review Group
Northwest Hillsborough County Sites**

**Field Trip
January 17, 2002 – 9:00 AM**

Summary

The following were in attendance: **Dave Slonena**, Pinellas County; **R. Warren Hogg**, Tampa Bay Water; Doug Keesecker, Tampa Bay Water; **Ralph Craig**, City of St. Petersburg; **Richard Voakes**, City of St. Petersburg; **Andy Smith**, Hillsborough County; Dave Carr, SWFWMD; Adam Munson, SWFWMD; **Doug Leeper**, SWFWMD. Names in bold are designated representatives for the Local Technical Peer Review Group.

Site visits to several northern Tampa Bay area lakes were conducted, as agreed upon at the January 11th, 2002 meeting of the Local Technical Peer Review Group (LTPRG). At each site, relevant information was reviewed, potential data needs were identified, and other relevant issues were discussed.

At Starvation Lake, Mr. Leeper displayed a 1989 aerial photograph map of the Lake Park area and a map depicting the location of contour lines approximating provisional minimum levels and other selected elevations in the Lake Starvation basin. Available spot elevation information for the basin was reviewed and discussed in relation to existing roads, the concrete boat ramp at Starvation Lake, and the parking lot located near the boat ramp.

Determination of the control point elevation for Lake Starvation was discussed. Mr. Slonena and Mr. Voakes suggested that the control point elevation for the Starvation Lake should be established at an elevation (~49.57 ft, NGVD) associated with the ditch between Lake Starvation and Lake Crum. Mr. Leeper indicated that District staff has reviewed site information and determined that the currently proposed control point elevation (52.72 ft, NDVD), at a spot in the outlet conveyance system south of Lake Simms is the appropriate control point for Starvation Lake.

Effects of urban development on the water budget of Starvation Lake were discussed. Mr. Voakes produced several documents describing changes in surface water drainage which occurred in the area in the late 1980s. Mr. Slonena and Mr. Voakes suggested that a review of potential changes in surface water drainage to the Lake Park area should be conducted for evaluation of potential impacts on Starvation Lake water levels. Mr. Leeper indicated that he would discuss this issue with appropriate District staff.

The period of record used for development of "Current" hydrologic statistics (percent exceedance statistics) was discussed. Mr. Leeper indicated that data from January 1974 through December 2000 was used for development of the Current P10, P50 and P90 statistics for Starvation Lake. Mr. Slonena suggested that calculation of hydrologic statistics based on a period of record from 1989 to the present would be useful for evaluating potential effects of urban development on the hydrologic regime of Starvation Lake. Mr. Hogg suggested that it would be useful to evaluate provisional minimum levels based on these post-1989 hydrologic statistics and the control point elevation advocated by Mr. Slonena and Mr. Voakes. Mr. Leeper agreed to conduct these analyses and provide results to the LTPRG.

At Lake Rogers, Mr. Leeper displayed a 1989 aerial photograph map of the area and a map depicting the location of contour lines approximating provisional minimum levels and other selected elevations in the Lake Rogers and Lake Raleigh basins. Mr. Hogg displayed an architectural drawing depicting the elevations the ground surface and a water main located in the vicinity of Lake Rogers and Lake Raleigh. Available spot elevation information for the basin was reviewed and discussed.

Approaches for development of minimum levels for Lake Rogers was discussed. All agreed that the provisional minimum levels for Lake Rogers, developed using the Districts' proposed multiple-parameter approach, may not be appropriate due to changes in land-use and vegetative assemblages that have occurred within the basin in recent decades. Following the recommendation put forth by Mr. Leeper at the January 11th LTPRG meeting, the group discussed basin features (e.g., roads, water mains, walking trail) that could be considered for development of minimum levels based upon minimizing flooding potential. Mr. Hogg indicated that he would consult with appropriate Tampa Bay Water staff to determine whether the water main located in the vicinity of Lakes Rogers and Raleigh would be adversely impacted by specific lake water levels or water table elevations. Mr. Leeper indicated that he would obtain additional spot elevation data for sites on the walking trail and dirt roads located in the lake basin. Based on a suggestion by Mr. Hogg, Mr. Leeper also indicated that he would develop maps depicting elevation contour lines associated with the various features and factors discussed during the site visit. Plans for a future site visit involving review of the maps and other materials and development of a brief report on potential changes in vegetation associated with development and implementation of minimum levels associated with the various features and factors were also discussed.

Determination of a control point elevation for Lake Rogers was discussed. Mr. Voakes identified a culvert under Race Track Road through which water could potentially flow into or out of the Lake Rogers basin. Mr. Leeper indicated that he would inform appropriate District staff of the location of the culvert and ask for their evaluation of the site as a potential control point for Lake Rogers.

Before leaving the Lake Rogers basin, information on Lakes Church and Echo was discussed. Mr. Leeper displayed a map depicting the location of contour lines approximating provisional minimum levels and other selected elevations in the Lake

Church and Lake Echo basins. In response to an issue raised by Mr. Voakes at the January 11, 2002 meeting of the LTPRG, Mr. Leeper led a discussion on the development of the High Guidance Level for the Lake Church/Echo system. He indicated that the High Guidance Level was established at the Current P10 elevation, which was developed using lake stage data from January 1964 through December 2000. Mr. Slonena suggested that it would be appropriate to develop "Current" hydrologic statistics for the lake system using a period of record beginning in 1985, based on the installation, in the mid-1980s, of a culvert connecting Lake Church to Lake Williams. Mr. Voakes noted that it would be useful to determine elevations associated with the culvert. Mr. Leeper agreed to calculate hydrologic statistics for the lake system based on the period of record from 1985 to the present, and noted that he would discuss the culvert location, elevation and potential affect on Lake Church water levels with appropriate District staff.

At Calm Lake, Mr. Leeper displayed a 1989 aerial photograph map of the area and a map depicting the location of contour lines approximating provisional minimum levels and other selected elevations in the Lake Calm basin. Spot locations associated with the provisional minimum levels and the Basin Connectivity Standard were identified and discussed.