

Addendum to PRF Application

Lake Thonotosassa muck removal feasibility assessment

July 7, 2006

Summary

At the time the application for PRF funding was submitted – on May 1, 2006 – it was not clear which set of pollutants (nutrients or lead) should be the primary focus of the assessment project. Based on additional information that has become available, it now appears that the proposed project should focus on lead as the primary pollutant of concern. The Southwest Florida Water Management District will be conducting a parallel project which will provide information on nutrient-related issues. If PRF funding is approved for the lead assessment project, the EPC and SWFWMD projects will be coordinated through a multi-agency technical working group to ensure minimum duplication of effort and maximum integration of monitoring data and other information between the two projects.

Background

Because of Lake Thonotosassa's hypereutrophic condition, and the role the nutrient-rich muck sediments may play in maintaining that condition, nutrient fluxes between the sediments and the water column are an obvious lake management issue that need to be assessed.

In December 2005, however, the U.S. EPA also issued a TMDL for lead in the Lake Thonotosassa water column. The TMDL document stated that:

“The potential sources of lead in the watershed are the stormwater runoff from MS4 areas, stormwater discharges from industrial sites documented in the SWIM Plan, and legacy pollutants from the use of leaded gasoline that may be present in the Lake sediments.

The implementation of this TMDL should focus on monitoring potential sources and sampling the lake sediment for lead and hardness. It is possible that the lead exceedances (i.e., the exceedances observed in the existing water column monitoring data) are principally due to re-suspension of contaminated lake sediments under severe weather conditions.”

In order to assist Hillsborough County in complying with this EPA recommendation, it now appears most reasonable to focus the PRF project on lead rather than nutrients. Neither EPC nor the County budgeted funds in fiscal years 2006 or 2007 to deal with this issue. As a result, if other funding sources (such as PRF) cannot be found, it appears that an assessment of lead levels in Lake Thonotosassa sediments will have to be deferred until the FY08-09 funding cycle. If approved for this purpose, however, the use of PRF funds would allow the work to begin during 2006.

Fortunately, as noted in the May 1 application, the Southwest Florida Water Management District (SWFWMD) is in the process of developing updated water and nutrient budgets

for Lake Thonotosassa, as part of its Surface Water Improvement and Management (SWIM) program. Although nutrient fluxes between the sediments and the water column will not be the primary focus of the SWIM project, data addressing that issue will be collected as part of the project. Analyses of the potential impacts of the sediments in maintaining the lake's poor (hypereutrophic) water quality conditions will also be addressed.

If PRF funding is approved for the EPC muck assessment project, EPC staff will form a multi-agency technical working group (which will include SWFWMD staff) to provide technical reviews of the project design, data, findings and recommendations. The working group will also help to coordinate the EPC and SWFWMD projects, to minimize duplication of effort and ensure that data from each project is available and applicable to the other. SWFWMD staff have indicated that they plan to establish a comparable working group, which will include EPC staff, to assist them in coordinating the nutrient budget update project.