

Lake Jesup Interagency Restoration Strategy Bi-Annual Update

February 10, 2009

This is the second in a continuing series of Lake Jesup Interagency Restoration Strategy (LJIRS) Bi-Annual Updates. Updates are scheduled for distribution twice each year. The Updates provide potential changes occurring as we implement the strategy, along with the status of projects. Inputs to the Updates are reviewed by each of the three state agencies as well as any basin stakeholder contributing to implementation of the strategy.

Project Updates

Phase 1, Step 1, Finalize Basin Management Action Plan BMAP (FDEP): *The Lake Jesup BMAP Working Group Key activities since the last update include the Allocation framework. The BMAP allocation strategy is designed such that the total reduction required is achieved within 15 years. Each allocation entity is responsible for meeting 1/3 of their required reduction by the end of each five-year period. This phased approach allows time for project funding, design, and construction, leaves flexibility for project implementation to be adjusted as new scientific information becomes available, and provides a framework within which the LJIRS projects can be integrated to assist with meeting the necessary reductions. Calculation of allocations and required reductions for all entities is complete. Total phosphorus reduction values have been established for common structural best management practices and nonstructural best management practices. Key stakeholders have developed a draft monitoring strategy, including compilation of current monitoring efforts, among a number of entities. The combined monitoring efforts of local governments, SJRWMD, FWC, and Lakewatch cover a significant portion of the watershed. The items above will be considered by the Basin Working Group at their next meeting, March 19, 2009.*

Phase 1, Step 2, Reduce external loading

Outreach: *Seminole County Soil and Water Conservation District is seeking grant and other funding sources to develop the fertilizer-reuse outreach campaign, per Step 2 of the Strategy and plan to contact the FDEP Director of Storm water, and submit a grant proposal for a public education effort.*

Seminole County has contracted WESH 2 to air 370, 30-second time slots during various hours of the day from January- September. With the sponsorship help of the Altamonte Springs, Casselberry, Longwood, Lake Mary, Oviedo, Sanford, Winter Springs and Orlando, 4 different 30 second videos, will run on WESH, and Seminole County Government TV. Series 1 is "Stormwater Runoff," focusing on protecting our lakes & rivers from harmful chemicals. The 2nd PSA will focus on Right Plant, Right Place, Fertilizing & controlling yard pests. The 3rd focuses on Water Efficiently, fertilizing, and recycling. The 4th will be about protecting the waterfront. Series 1, "Stormwater Runoff", has reached over 1,220,000 adults.

Floating Wetlands (SJRWMD): *\$150,000 was budgeted in tributary treatment, moving this technology into Step 2 reduction of external loading. The Request for Proposals (RFP) resulted in the contract being awarded to the University of Florida. The use of physical adsorption combined with harvested plant uptake for TP reduction using a low energy, floating structure is in progress at the H.T. Odum Center for Wetlands. These technologies have shown promise in treatment of high TP concentration wastewater, but tests with lower concentration waters is limited. Initial testing of individual components at different loading rates to optimize the final treatment system is under way. When these bench scale and*

mesocosm evaluations are complete, the floating prototype will be built and tested at the mouth of a tributary with a relatively high TP load.

Nitrogen Fixation (SJRWMD) : *The N-fixation study completed by FIU in Lakes Jesup and Monroe found that between 71 and 263 MT TN/yr is input from N-fixation to Lake Jesup, with an overall average of 140 MT TN/yr. This load is synonymous with the conjectured load in the TMDL report.*

Phase 1, Step 3, Reduce in-lake nutrients

Pilot Pay For Performance (SJRWMD): *FDEP approved AquaFiber (AF) Technology Corporation's permit for the Lake Jesup Phosphorus Removal project, January 2009. The permit allows AF to proceed with the upland portion of development, but precludes construction into the wetlands and lake area until the Bureau of Public Lands Administration authorizes the Sovereign Submerged Lands lease. Erosion control, earthwork, and underground stormwater piping installation in the upland areas, are proceeding. AquaFiber expects to complete infrastructure construction by March 2009. The Commencement date is April 18, 2009.*

Phase 2, Step 4, Improve water clarity

Sediment Study (SJRWMD): *The sediment nutrient cycling study awarded to FIU with \$195,000 budgeted is off to a good start. They found more sand volume than anticipated, and found a deposit of blue clay. Some initial net deposition rates and other key sediment-water interface data should be available by September 2009.*

Phase 2, Step 5-6, Improve habitat and wildlife populations FWWCC Fish and

Wildlife Habitat: *No new information is available on the status of this project.*

Phase 2, Step 7, Monitor

Water Quality: Table 1. Water quality stations in the Lake Jesup basin

Agency	Ambient	Storm Event
SJRWMD	Jesup 3 open water, 4 tributary outlets	0
Seminole County	Howell Creek and tributaries - 11 sites	Jesup tributaries - 5 sites, Howell Creek – 3
Other agencies in the basin also conduct water quality monitoring, and their stations will be listed in the next LJIRS update.		

Vegetation (Seminole County, FWCC, and SJRWMD): *A joint project to determine baseline submerged aquatic vegetation (SAV) in Jesup was conducted July 2007. Current plan calls for revisit every 3 years unless in-lake activities or natural disturbances are deemed justifiable to increase interval. Seminole County monitors the vegetation quality providing written observations of survey to the above agencies on a quarterly basis.*

Fish (FWCC): *No new information is available on the status of this project.*

Next Milestone: *The next milestone is anticipated adoption of the TMDL BMAP allocations. Please send information for next update to Regina Morse by June 21, 2009.*