

Florida Department of Environmental Protection



Lake Jesup BMAP 2013 Progress Report

Basin Working Group Meeting
August 8, 2013





Annual Report Overview

- This is the third annual progress report on the basin management action plan (BMAP) activities.
- Information was provided by the stakeholders on activities from June 1, 2012 through May 31, 2013.
- The report includes:
 - Accomplishments.
 - Issues.
 - Upcoming year activities.



Background on the BMAP

- The total maximum daily loads (TMDLs) for Lake Jesup were adopted in April 2006 for total phosphorus (TP) and total nitrogen (TN).
- The BMAP focused on achieving the TP reductions over a 15-year period.
- Detailed allocations were made to the responsible stakeholders to achieve the first one-third of the reductions over a 5-year period.
- The BMAP was adopted by the Florida Department of Environmental Protection Secretary in May 2010.



Accomplishments

- City of Casselberry completed six whole lake alum treatments in Middle, North, and South Lake Triplet, and Queen's Mirror.
- City of Longwood completed the Fairly Lake outfall project, with a reduction of 0.7 lbs/yr TP



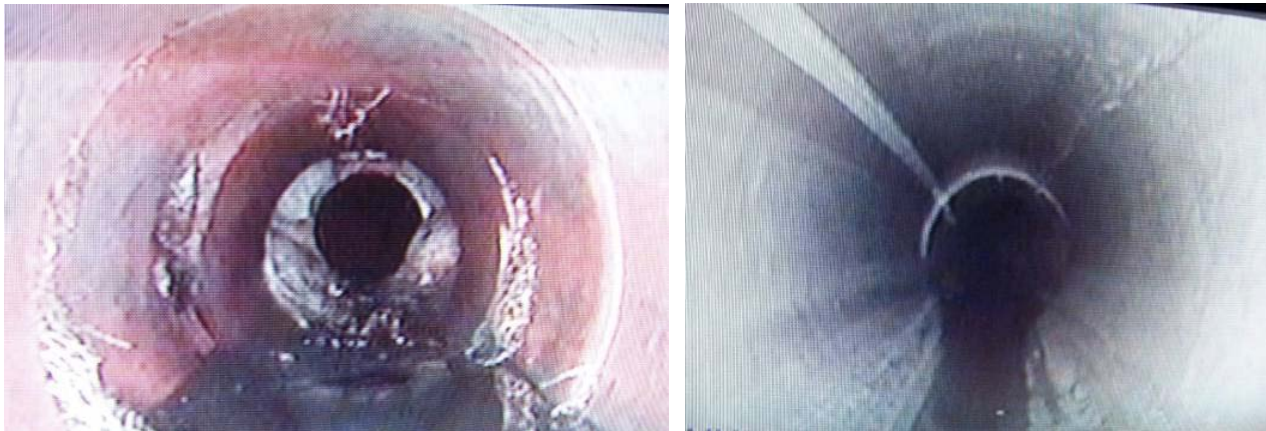
Casselberry Queen's Mirror Lake Alum Treatment



Longwood Fairy Lake Outfall

Accomplishments, continued

- City of Orlando completed the Ivanhoe Plaza Park exfiltration project for a reduction of 1.3 lbs/yr TP.
- The City of Oviedo completed the Aulin regional stormwater treatment pond for a reduction of 13.5 lbs/yr TP.
- The City of Sanford conducted an evaluation of sewer system stormwater inflow and infiltration (I/I). Improvements to the sewer system reduced I/I by 64%



Sanford I/I Projects Before (left) and After (right) Repairs



Accomplishments, continued

- Seminole County had success with the submerged aquatic vegetation plantings of Suwannee narrow leaf eelgrass in two, one-acre plots in the lake.
 - Survival rate of 80%.
- Town of Eatonville has implemented public education and outreach efforts for a 1.9 lbs/yr of TP reduction.
- Florida Department of Agriculture and Consumer Services continued to sign up producers for best management practices.
 - Additional 35.4 lbs/yr of TP reductions during the reporting year.



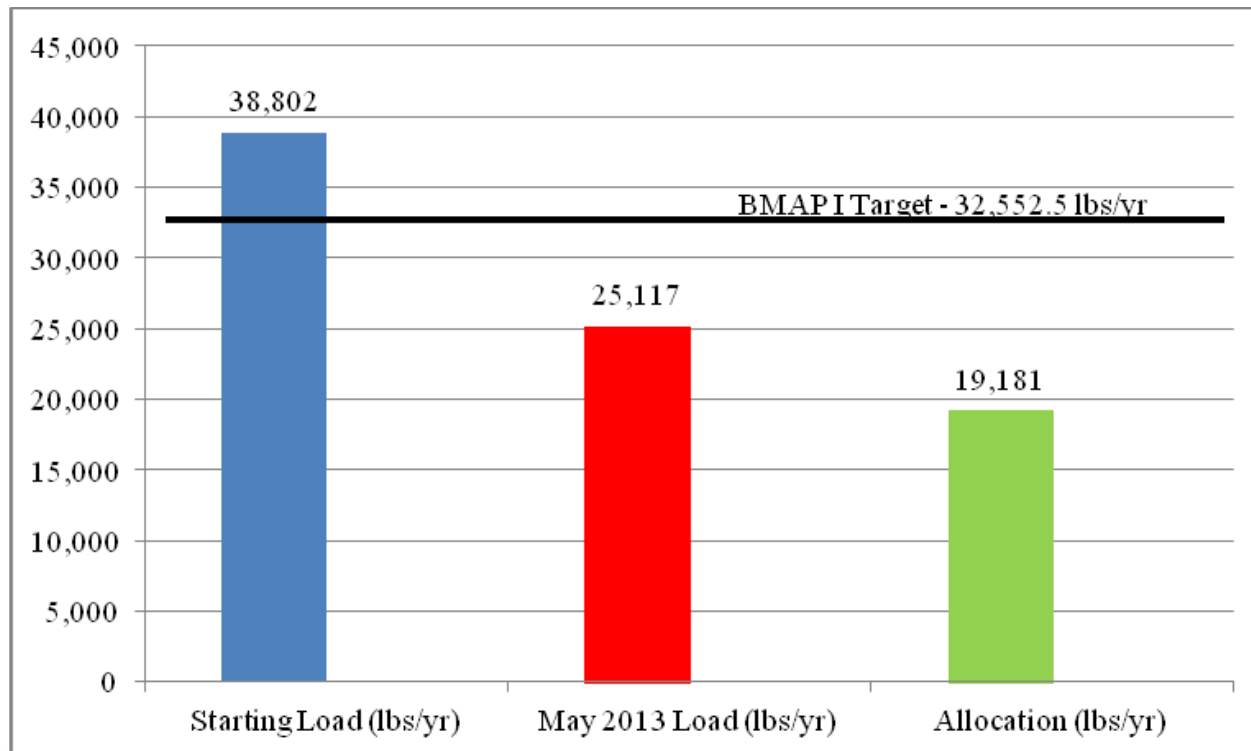
Accomplishments, continued

- As discussed during the 2012 annual meeting, the Department worked with the Florida Stormwater Association to develop a tool to quantify credits for MS4 maintenance activities:
 - Street sweeping.
 - Catch basin clean out.
 - Other BMPs clean out.
- Several of the stakeholders updated their BMAP street sweeping and BMP clean out credits using the new tool:
 - Resulted in an additional total reduction of 3,598.4 lbs/yr of TP.



Progress to the TMDL

- The total project reductions, including those shown as completed in the BMAP, are 12,649.9 lbs/yr TP.
 - This is greater than the required reduction for the first BMAP iteration of 6,249.5 lbs/yr TP.





Monitoring Accomplishments

- The BMAP monitoring plan was designed to enhance the understanding of basin loads, track project implementation, and identify long-term water quality trends.
- All responsible stakeholders participated in the monitoring plan in the third year of BMAP implementation.
- Orange County installed a new pressure transducer at Lake Burkett that is transmitting data real time to the water atlas.
- Seminole County completed the storm event monitoring in the basin and are preparing a report with the data analysis.



Research Accomplishments

- Orange County completed a study of Lake Killarney with Winter Park, which found that the lake rarely discharges.
- Orange County also completed a study of Lake Georgia, which found that the lake discharges to the Econlockhatchee River Basin, not the Lake Jesup Basin.
- Seminole County completed Phase II of the seepage study in Lake Jesup, which found that about 20,000 lbs/yr of TP is from the ground water.
- SJRWMD has started work on the Lake Jesup Pollutant Load Reduction Goal to provide support for the Lake Jesup TMDL update.



Issues

- Several entities have encountered delays with their project implementation.
- These delays are not causing an issue with BMAP compliance:
 - Stakeholders have either already achieved their BMAP required reductions for this iteration; or
 - The projects are still planned during the first BMAP iteration.
- The stakeholders also noted that obtaining funding for the projects has been an issue.



Questions and Discussion on the 2013 Progress Report