

Florida Department of Environmental Protection



Lakes Harney and Monroe and Middle St. Johns River BMAP 2013 Progress Report

Annual Meeting
October 10, 2013





Annual Report Overview

- This is the first annual progress report on the basin management action plan (BMAP) activities.
- Information was provided by the stakeholders on activities from September 1, 2012 through August 31, 2013.
- The report includes updates on project implementation and water quality and biological monitoring.



Background on the BMAP

- The total maximum daily loads (TMDLs) for the Lakes Harney and Monroe and the Middle St. Johns River (MSJR) Basin were adopted in December 2009 for total nitrogen (TN) and total phosphorus (TP). The TMDL for Smith Canal was adopted in September 2009 for TP.
- The BMAP focused on achieving the TN and TP reductions over a 15-year period.
- Detailed allocations were made to the responsible stakeholders to achieve 50% of the reductions over a 5-year period.
- The BMAP was adopted by the Florida Department of Environmental Protection Secretary in August 2012.



Activities During the Reporting Period

- The City of Deltona completed the Lake Gleason control structure project.
 - Estimated reductions of 670.0 lbs/yr of TN and 188.4 lbs/yr of TP.
- The City of Lake Helen completed the surveying and conceptual design for a new stormwater project on the north shore of Lake Helen.
- The Florida Department of Transportation (FDOT) District 5 began construction efforts along State Road 415, which will add stormwater treatment for areas that were previously untreated.



Activities, continued

- The Florida Department of Agriculture and Consumer Services (FDACS) has enrolled a total of 3,760.6 acres of agriculture in best management practices (BMPs) in the basin.
 - The enrollment acreage is being evaluated by FDACS and may be adjusted in future reports.
 - Estimated reductions of 4,046.8 lbs/yr of TN and 800.2 lbs/yr of TP.
- The St. Johns River Water Management District (SJRWMD) has been assessing project options in the Deep Creek basin. They have also explored options for projects in the areas surrounding the Lakes Harney and Monroe and MSJR Basin.



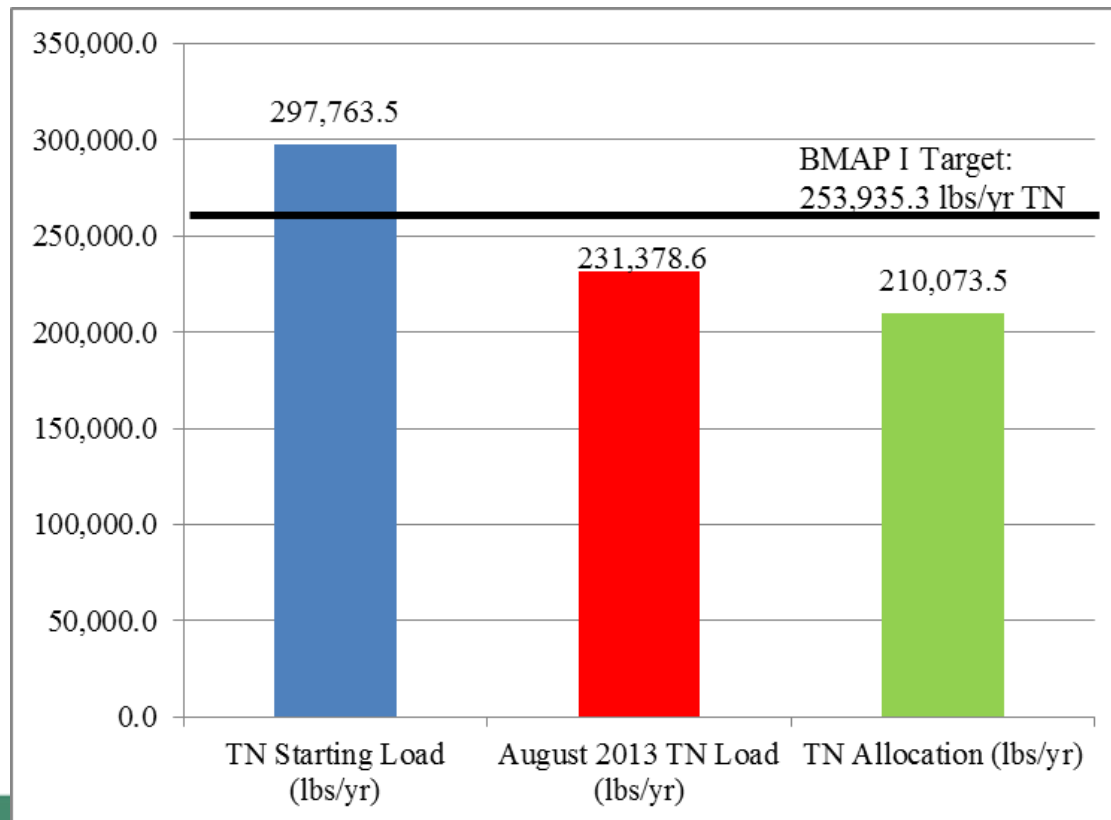
Ongoing Activities

- Education and outreach:
 - City of DeLand.
 - City of Deltona.
 - City of Lake Helen.
 - City of Lake Mary.
 - City of Orange City.
 - City of Sanford.
 - Seminole County.
 - Volusia County.
- Street sweeping:
 - City of Lake Mary.
 - City of Sanford.
 - FDOT.
 - Seminole County.
 - Turnpike Authority.
 - Volusia County.



Progress to the TN TMDL

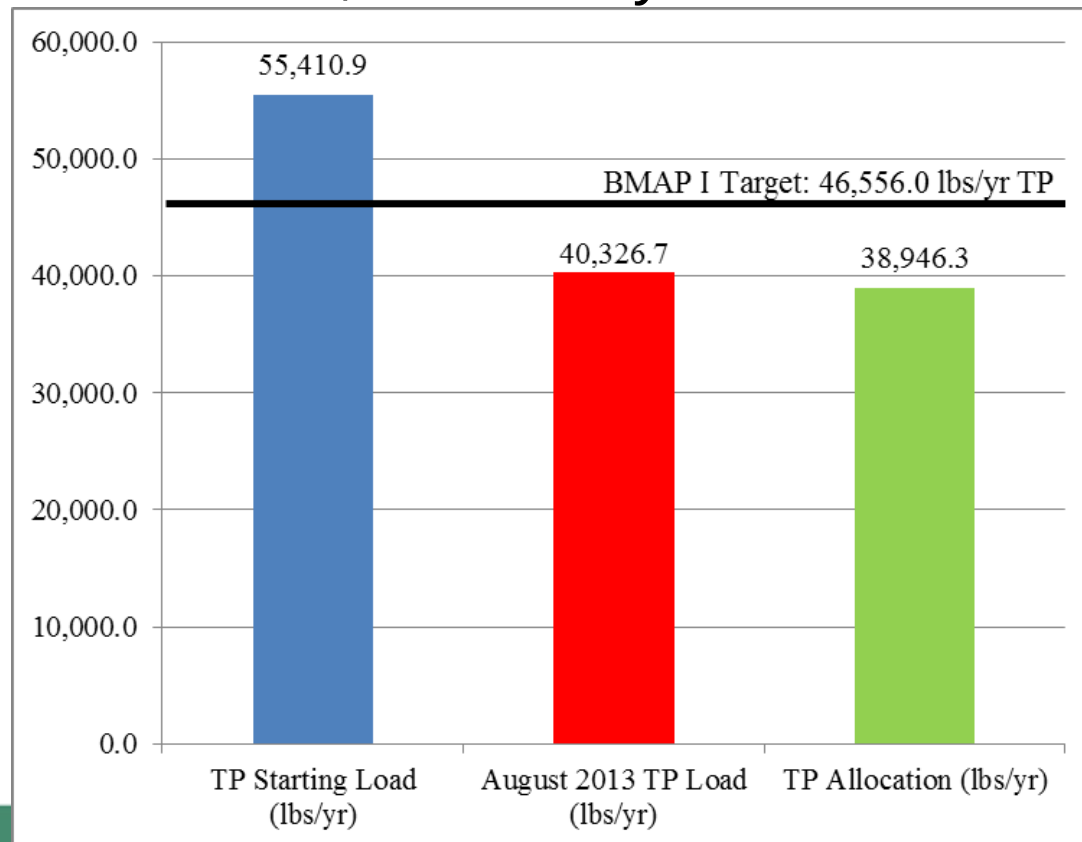
- The total project reductions, including those shown as completed in the BMAP, are 66,384.9 lbs/yr of TN.
 - This is greater than the required reduction for the first BMAP iteration of 43,828.2 lbs/yr TN.





Progress to the TP TMDL

- The total project reductions, including those shown as completed in the BMAP, are 15,084.2 lbs/yr of TP.
 - This is greater than the required reduction for the first BMAP iteration of 8,854.9 lbs/yr TP.





Water Quality Monitoring

- The BMAP monitoring plan was designed to enhance the understanding of basin loads, identify areas with high nutrient concentrations, and track water quality trends.
- The City of Deltona continued its monthly monitoring at three stations in the basin.
- Seminole County continued its water quality sampling at the two BMAP stations in the basin.
 - No samples were pulled for the first four months of 2013 at MILL1 (Mill Creek at the outflow to Lake Monroe) due to low water levels and no visible flow conditions.
 - This station may need to be removed from the BMAP monitoring plan if these conditions continue.



Water Quality Monitoring, continued

- Volusia County continued monthly sampling at six of the nine stations included in the BMAP.
 - The county no longer samples station VC-DC04 (Deep Creek) but station VC-DC05 is sufficient to represent water quality in this part of the basin.
 - The county also stopped sampling station VC-083 (Gemini Springs outfall) but station VC-082 is still sampled and is adjacent to station VC-083.
 - The county had problems sampling station VC-COW (Cow Creek) due to no measurable flow for most of the year. This may not be a suitable location for monitoring.
- SJRWMD continued to sample its ten BMAP water quality stations.



Biological Monitoring

- Seminole County was unable to collect biological data in 2013 due to unfavorable conditions that were not “representative” of the system.
- SJRWMD continued its phytoplankton sampling at three stations in the basin. The highest total phytoplankton biovolume values were at station SJR-415, which is located downstream of Lake Jesup and upstream of Lake Monroe.



Questions and Discussion on the 2013 Progress Report