

**Lakes Harney and Monroe and Middle St. Johns River
Basin Management Action Plan (BMAP) Annual Meeting Summary**

Thursday, January 30, 2020

1:30 PM

Seminole County Extension Auditorium

250 West County Home Road

Sanford, FL 32773

Meeting Attendees

Joyce Bittle, Department of Health Seminole County

Shannon Blankinship, St Johns Riverkeeper

Tiffany Busby, Wildwood Consulting

Derek Busby, SJRWMD

Chris Caschera, Wildwood Consulting

Susan Davis, SJRWMD

Lauren Dorval, FDACS

Leicester Dudley, City of Orange City

Marie Duffy, City of Sanford

Bill Eggers, Aqua Fiber

Rolland Fulton, SJRWMD

Phyllis Hall, Seminole Audubon

Hugh Harling, ECFRPC

John Hendrickson, SJRWMD

Cori Hermle, FDACS

Moira Homan, DEP

Sean Maroney, Volusia County

Danielle Marshall, City of Altamonte Springs

Gabrielle Mild, St Johns Riverkeeper

Edward Northey, FDOT

Dan O'Hanlon, City of Deltona

Tiery Osias, FDOH Seminole

Nico Pisarello, ATM

Robert Potts, E Sciences

Ben Ralys, DEP

Leylah Saavedra, Pegasus Engineering

Andrea Samson, Sludge Report

Pam Sanders, Geneva Wild

Charles Shinn, Florida Farm Bureau Federation

Stacy Simmons, FDACS

Ashley Swift, CPH

Donna Walsh, DOH Seminole

Pam Way, SJRWMD

Shannon Wetzels, Seminole County

Kelly Young, Volusia County

Opening Remarks

Tiffany Busby welcomed everyone to the Lakes Harney Monroe and Middle St. Johns River BMAP annual meeting. Tiffany stated that there were over 30 BMAPs currently in the state and congratulated the local stakeholders on their continued support in sending their project updates to the Florida Department of Environmental Protection (DEP) annually. The agenda was explained and Tiffany thanked the Seminole County Institute of Food and Agricultural Sciences (IFAS) Office for the meeting room. Tiffany noted that Moira Homann, basin coordinator, is the main contact for any questions related to the Middle St. Johns River and related BMAPs. Tiffany mentioned that any stakeholder at the meeting who did not receive the meeting notices can sign up online and manage their DEP subscriptions. Moira offered to send out the link to the subscription site in follow up to the meeting.

BMAP Annual Progress Report

Moira outlined the agenda for the day, starting with a summary of projects completed in 2019. Moira explained that each year DEP must provide project updates for all BMAPs by July 1. Today, she also said there will be updates from local stakeholders and the St. Johns River Water Management District (SJRWMD). The last items on the agenda are about alternative restoration information and addressing nutrient-loading issues upstream in the Upper St. Johns River with support from Ben Ralys.

For the project update, Moira explained that for the reporting period of the 2019 calendar year, there were 2 completed projects during 2019, 10 projects added, and 26 ongoing projects. Moira thanked everyone for their project updates for the STAR 2019; project updates were due on January 15th, 2020. These updates will be compiled statewide and will be presented to the Governor and Florida Legislature

by July 1st, 2020. Moira mentioned that January 31st, 2020 is the last day to provide supplemental information.

Moira showed the different project types in a table with the number of projects of each type. Most of the projects are related to stormwater treatment and a few projects related to wastewater treatment. A summary of load reductions achieved was given by Moira. An important thing to note is that the progress reports have moved away from showing bar graphs to now looking at timelines where the year of total maximum daily loads (TMDLs) are represented. By 2032, the total required reductions to meet the TMDL target loads are 87,657 pounds per year (lbs/yr) of total nitrogen (TN) and 17,710 lbs/yr of total phosphorus (TP). In 2017, there are reduction milestones of 43,828 lbs/yr of TN and 8,582 lbs/yr of TP. As of the end of 2019, approximately 103,000 lbs/yr of TN and approximately 28,000 lbs/yr of TP have been reduced. Both sets of reductions show that the 2017 and the 2032 milestones, respectively, have been met.

Monitoring Activities

Moira introduced the updates on Watershed Information Network (WIN) database uploads. An email should have been received by the stakeholders who have monitoring stations within the BMAP. She explained that feedback and updates on WIN are always appreciated. She explained that the WIN database is being used to implement DEP, U.S. Environmental Protection Agency (EPA), and Florida statutory requirements for water quality assessment as well as for assessing BMAP progress. Currently, 85 organizations are providing information into the WIN database. Moira stressed that local entities are required by rule and statute to cooperate with the DEP and to upload their water quality information into WIN. Moira also noted that support is available from herself and the WIN staff if anyone needs instruction on how to upload to the WIN database. Please reach out to Moira if WIN assistance is needed.

In terms of station frequency and monitoring, Shannon Wetzel brought attention to the fact that Seminole County and SJRWMD are doing biology and vegetation monitoring for their own stations around the lakes, monthly.

Local Government Updates

Seminole County

Shannon gave her entity's updates for this meeting. Currently, they are working with their engineering group on a drainage study.

Volusia County

Kelly Young offered that Volusia County is sampling their monitoring stations on a monthly basis and sharing their data with the water management district on Lake Monroe.

Danielle Marshall asked about the storage of their data in WIN and if the sampling they are doing is meeting BMAP requirements. Ben Ralys's response was that information and strategic monitoring planning is done alongside the BMAP progress assessments to ensure that all their data are being used and uploaded in WIN. Tiffany also replied that if an area lacks any monitoring data, the district or DEP will collect some water quality data, which is one reason they want to know what data have already been collected. If there are already local data, they don't have to fill in gaps with strategic monitoring. Local data; however, need to be in WIN so they can use them for assessment purposes.

Dan O'Hanlon said that some of his sample sites have fluctuating flows and they cannot always collect samples during dry conditions. He asked if there is a way to explain why samples are not collected because of low flow or dry conditions. Moira replied to his question that they can document these issues as they arise and that dry conditions could be flagged in the WIN database.

SJRWMD Updates

The SJRWMD gave updates on their water quality assessments for both lakes. Rolland Fulton (Rolly) showed a map of the entire BMAP and station locations for the years of 2015 through 2019. Most sample locations are sampled monthly. For measured TP concentrations, these have been noticeably higher than their TMDL target in both lakes Harney and Monroe. Average concentrations have been approximately 0.08 to 0.10 milligrams per liter (mg/L) in both lakes. In Lake Harney, there were higher TP concentrations when water levels were higher. For TN concentrations there were no significant trends, but averages were still greater than the target. Both lakes have TMDL targets of TN at approximately 1.2 to 1.4 mg/L, but concentrations have been about 1.3 mg/L (highest at Harney's inflow and at Monroe's center locations).

The chlorophyll-*a* concentrations in Lake Harney were described as staying below the TMDL target of approximately five to 10 micrograms per liter (µg/L) for many years now. The current concentrations for Lake Harney range from approximately 3 to 9 µg/L, while Lake Monroe was higher at approximately 15 to 25 µg/L. For Secchi transparency, there are no TMDL targets but a 0.8-meter (m) depth at Harney's outfall and 0.7 m at Monroe's outfall were reported as having the highest mean. No significant trends were reported.

A slide was shown on phytoplankton biovolume concentrations in the lakes from 2014 to 2017. Measuring phytoplankton biovolumes of cubic millimeters per liter (mm³/L) were discontinued in 2017. Rolly noted that cyanobacteria made up the largest biovolume of both lakes. Lakes Harney and Monroe had higher amounts in their centers than their inflow stations. Rolly finished his presentation with a slide on percent biovolume composition. Cyanobacteria made up a noticeably large percentage in both lakes. Rolly added that there is less cyanobacteria in Lake Harney and less coming into Harney from upstream than Monroe. However, no toxic species were found in Lake Monroe. These assessments were posted on the district's website for stakeholder reference.

Sean Maroney asked if pollution had a direct correlation with lower water levels. Rolly said inorganic phosphorus was in direct correlation with higher water levels in Lake Monroe. Lake Harney does not because of a lower water level where organic materials on the bottom of the lake may contribute nutrients when they are stirred at lower water levels.

John Henderson provided an update on the district's Upper St. Johns projects. He mentioned the Upper St. Johns River had issues with nutrient loading and introduced the district's project objectives. Project areas lie in the western half of the Upper St. Johns up through Brevard County and include water management (historically agricultural areas), marsh conservation (invasive species issues), and retention/detention (water storage issues). Oxidation and water level fluctuation have also affected the Upper St. Johns. Objectives were being met for load reductions, but things changed with the district's 2019 assessment of nitrogen and phosphorus. John summarized that TN is trending down and TP is trending up in areas south of Lake Harney. The opposite effects are observed near Lake Monroe with stable conditions of nutrients near the lake. John mentioned that biosolids from South Florida are thought to be part of the reason for this trend. The district is working with DEP and other consulting agencies to address this issue.

Next Steps/Future Plans

Maira introduced options for alternative restoration plans for water quality restorations. The two types of plans are Reasonable Assurance Category 4b plans (RAPs) and Pollutant Reduction Plans (4e). Impaired waters in 4b plans are excluded from the 303(d) list but waters included in 4e plans are still included on the 303(d) list. Maira introduced a slide on the benefits of alternative restoration plans. These plans and their implementation are faster paths to restoration. These plans give stakeholders

more control of their own restoration plans for their impaired waterbodies, and avoid/delay possible incoming TMDL requirements, as well as provide a good time for targets to be developed/benefit impaired waters downstream. Moira mentioned the DEP website has examples of both types of plans.

For a 4b plan's submittal, the basic requirements were introduced as being a description of the impaired water body; ecological goals; targets set up for water quality targets; proposed descriptions of management actions; a schedule of restoration projects; description of monitoring plans; reporting results; and a commitment for corrective actions. Moira stressed that this type of plan enables stakeholders to have their own timeline of meeting restoration goals. The final steps of a 4b plan after it is submitted to the DEP is for it to be adopted and signed by secretarial order. Updates and revisions can be made by stakeholders who submit their own timelines.

The main components of the 4b plan's submittal are a restoration target; a list of projects; an implementation schedule (can span multiple years); funding commitments; and EPA approval after facilitation is done between the entity and DEP. Moira added another benefit to these plans is the fact that stakeholders can save time in the watershed restoration process by using alternative plans. Moira and Tiffany offered advice to the stakeholders if they were to take this route.

Moira said an email will be sent out to share the Group 2-Cycle 4 of the impaired waterbody list. The stakeholders were encouraged to use this list to see if they have any waterbodies in their jurisdiction that are potentially impaired. Moira added that stakeholders should reach out to her or Ben Ralys if they have restoration activities in any of those waterbodies to discuss alternative restoration options.

Moira then showed a slide on Surface Water Grants (SWAG) considerations with \$8 to \$9 million (updated from \$5 million) from the state legislature to the DEP for shovel-ready capital improvement projects. Project selection for these funds occurs twice a year in March to April and October to November. Moira mentioned that proposals can be accepted year-round.

Derek Busby added that SJRWMD cost-share funding requests are given extra points if they are in a BMAP or 4b Plan area.

Moira mentioned to the stakeholders of the ongoing issues laid outside the Lakes Harney-Monroe boundary. She mentioned that some waterbody identification (WBIDs) areas south of this basin have water quality issues. She suggested that a new or expanded BMAP boundary could be considered. Moira showed a slide of WBIDs that have impairments and WBIDs without enough data to determine their impairment status.

Moira has performed some rough estimates of TP and TN loading from these areas. Additional follow up is needed with stakeholders in that south area, like Orange and Brevard counties, about restoration options to address those loads. Moira stated that the WBIDs with urban or agriculturally dominated land uses are the areas of focus. Moira noted that several of the WBIDs were described as having dissolved oxygen issues, but some require more monitoring information to confirm an impairment.

Robert Potts asked Moira if she can make these shapefiles available to see the areas being analyzed. Moira responded that she could share the shapefiles.

Before continuing, Moira stressed that they would not change the existing boundary of the BMAP, but rather incorporate the area south of the BMAP boundary using the Lake Harney and Lake Monroe TMDL as the target. Tiffany agreed upstream reductions may be needed in this area.

Shannon Blankinship said she liked the idea of an Upper Basin BMAP because of the phosphorus concentration coming from the south into the lower basins. She mentioned that St. Johns Riverkeeper would like to be involved in that process.

Tiffany and Moira supported that stakeholder coordination will be necessary every step of the way, but no outreach to landowners or entities has been done on this issue southward yet. This is the first external discussion of what type of planning approach could be appropriate for this area. Tiffany asked if anyone had any strong feelings about which type of plan was more appropriate or concerns about having a new BMAP or alternative restoration plan developed in the Upper Basin.

Hugh Harling stated that he was concerned about the pollutants/damage a hurricane caused on the east side of Lake George for navigation issues. He said sediments that moved across the lake bottom was causing issues. Tiffany and Moira noted this issue and took note of his concern.

Public Comments

There were no other comments.

Adjourn

The meeting adjourned at 3:01 PM.

Action Items

1. Moira Homann will post the PowerPoints for this meeting.
2. Moira Homann will provide the WIN link to the stakeholders and provide support as needed.
3. The deadline for stakeholders to update any new monitoring stations to Moira Homann is February 7, 2020.
4. Moira Homann will make Group 2-Cycle 4 assessments of the most recent impaired waterbodies list available to the stakeholders.
5. Moira Homann Tiffany Busby and continue to keep track of stakeholder projects, funding, and cost of projects being received from updated STAR 2019 information.
6. Moira Homann will post a reminder leading to March/April deadline for SWAG considerations.
7. Moira Homann will provide to the group the shapefiles for the nutrient loading map by land use for the area in the Upper Basin.