Florida Department of Environmental Protection

Water Quality Restoration Program

Upper Ocklawaha River Basin Management Action Plan January 2014

Mary Paulic
Mary.paulic@dep.state.fl.us





Today's Purpose

- Present final briefing summary
  - Final call for any requests for BMAP briefings by DEP

- Update of Activities Since December Basin Working Group meeting

Purpose

- Timelines and schedules for adoption
  - Comment period
  - Public meeting

Purpose

- Walk through revised draft of Upper Ocklawaha BMAP.
  - Overview of changes
  - Edits and additions
  - Document is available at http://publicfiles.dep.state.fl.us/DEAR/BMAP/Upper_Ocklawaha/

Schedule and Timelines

Date	Action
January 17, 2014	BWG discussion (via teleconference) on BMAP revisions since December
January 29, 2014	Public meeting on BMAP
February 14, 2014	Public comment period ends
End of February/ early March	Final version of BMAP available Adoption package to Department Secretary
End of March 2014	Challenge period ends (challenge period ends 21 days after BMAP adoption)

Time Lines

- Later 2014 /2015.
  - Periodic BWG meetings to work on projects for lakes.
  - Support new TMDL development.
  - Support other TMDLs as they arise.

Briefing Summary

Activity Update

- Technical Working Group held a teleconference on January 8
- DEP met with SJRWMD to discuss method for estimating loading reductions from agriculture BMPs on January 16

BMAP Review

- Major additions/deletions since December.
- Sections that still need additional text
- Important sections to pay close attention to the content

Consensus Changes

- Section 1.3 BMAP Process consensus language. Pages 10 and 11

The BWG, took a consensus-based, collaborative approach when making decisions on the content of the BMAP. It was necessary to define what constitutes a consensus agreement for the BWG, short of unanimous agreement. BWG members agreed on the following consensus statement: Consensus is unanimity minus one or two. Members that support or accept a recommendation are considered to be in consensus with the recommendation; members that oppose a recommendation are not in consensus with the recommendation.

Though the consensus statement was generally accepted, the BWG raised concerns that the resistance of one or two members could stop an agreement from being reached. The BWG members recognized, however, that certain members have a unique perspective on an issue, such as a larger geographic scope of agency responsibilities, or that the member may be the only representative of a particular interest (e.g., small business or environmental advocacy).

The BWG expressed a desire to attain full unanimity by exploring alternative proposals when there were dissenting viewpoints within the group. If a unanimous or consensus alternative cannot be identified, a non-consensus recommendation will include a description of the parties that objected and the nature of their objection(s). These objections will be included in presentations to the Department's decision-makers so that an informed decision can be made on whether and how to move forward with the BMAP process.

Allocation Additions

Section 1.4 Allocations page 12 first bullet.

There is only one permitted facility discharging to a surface water, as of the updating of the plan (2013-14). That facility has a wasteload allocation as part of the Lake Apopka TMDL. While calculating more detailed allocations among the various nonpoint sources in the basin would be of interest to some of the BWG members, the time and resources required to develop detailed allocations would delay updating the plan without potentially benefiting the outcome. During this BMAP iteration, the Department and BWG will evaluate whether detailed allocations are needed as a tool for reductions in certain parts of the basin.

Consideration Additions

Section 1.5 Considerations new bullet page 12

- Hydrologic Effects – Years of either heavy or limited rainfall influence the amount of loading entering the impaired waterbodies and the concentration of TP present in each waterbody. Dry years do not have as much stormwater generated as runoff that enters each waterbody; loadings will be lower for these years. Lower water levels, less total volume of water, in dry years has a concentrating effect on the level of TP present. Wet years can provide higher stormwater loading and the volume of water may also have a diluting effect on TP concentration. Over the past decade the basin has experienced long periods of drought resulting in low water levels. In the case of Lake Apopka, water has not been released from the Apopka-Beauclair Dam downstream to Lake Beauclair for the past two years. The influence of dry and wet years are not fully accounted for in evaluation of the status of water quality in each waterbody and are one of the challenges to be addressed in this second BMAP iteration.

Considerations

Section 1.5 Considerations new bullet page 13

- Minimum Flows and Levels (MFLs) – In 2013, the SJRWMD Governing Board approved the notice of development for MFLs for lakes Apopka, Beauclair, Dora, Eustis, Griffin, and Harris. These MFLs will be developed in 2014. Once implemented, the MFLs will set the minimum water flows and/or levels for these lakes to prevent significant harm to the water resources or ecology. Improvements in lake level could help to improve the water quality in these lakes.

Considerations

Section 1.5 Considerations new bullet page 13

- Future Growth – Estimates of future growth through 2010 were included in the first BMAP iteration. These estimates are included in this second iteration because growth did not occur as estimated during the first iteration due to the economic downturn. However, the future growth projections will be assessed to determine if they are valid for some portions of the basin, such as Lady Lake, where growth occurred during the first BMAP iteration.

- Is there agreement over the suggested pathway for addressing future growth?

Urban NPS

- Section 2.3 URBAN NONPOINT SOURCES pages 19-20

Reductions in loads carried by stormwater that are separate from discharges by a permitted MS4 were established in the "load allocation" component of the TMDL. Paragraph 403.067(7)(b)2.f, F.S., prescribes the pollutant reduction actions required for nonagricultural pollutant sources that are not subject to NPDES permitting. These "non-MS4" sources must also implement the pollutant reduction requirements detailed in a BMAP. The City of Mascotte, Lake County Water Authority, Town of Howey-in-the-Hills, and Town of Montverde are the entities that may be responsible for reducing nonpoint sources in the Upper Ocklawaha Basin.

Urban NPS

Failure by a nonpoint source to reduce loadings, as required in a BMAP, can result in enforcement action by the Department under Paragraph 403.067(7)(b)2(h), F.S. The Department can designate an entity as a regulated Phase II MS4 if its discharges are determined to be a significant contributor of pollutants to surface waters of the state in accordance with Section 62-624.800, F.A.C. The designation of an entity as a Phase II MS4 can occur when a TMDL has been adopted for a waterbody or segment into which the entity discharges the pollutant(s) of concern. If an entity is designated as a regulated Phase II MS4, it is subject to the conditions of the Phase II MS4 Generic Permit.

Lake Apopka Initiative

- 3.1 LAKE APOPKA INITIATIVE page 23

The Florida Legislature provided $4.8 million in 2012 to fund projects intended to improve habitat, water quality, and lake access for Lake Apopka. Several projects were approved, including access dredging at Winter Garden and Magnolia Park (SJRWMD and UF), evaluation of new and innovative phosphorus removal techniques (DEP), establishment of aquatic vegetation (FWC), and installation of fish attractors (FWC). After an engineering evaluation, it was determined that access dredging would not be cost effective at this time due to rapid re-sedimentation caused by current low water levels. FWC, SJRWMD and DEP are partnering together to issue Requests For Proposals (RFP) for innovative nutrient and sediment removal techniques in Lake Apopka. Effectiveness of the pilot project will be used to determine the feasibility of expanding the project or modifying for additional testing. The FWC has installed more than 300,000 giant bulrush (Scirpus californicus) and 40,000 spatterdock (Nuphar luteum) plants, mainly along the north shore, as well as placing 41 quarter-acre fish attractors around the lake.

Ag BMP Load Estimate Change

- 3.4.4.2 Agricultural BMP Load Reduction Estimates page 35

The estimates of TN and TP load reductions due to the implementation of BMPs are not currently documented for the basin. The task of estimating the reductions in TP loading expected from the implementation of BMPs is one of the tasks to be completed in the second iteration. The models used to estimate loading from agriculture did not include information about BMPs. Accomplishing this task will require reconciling discrepancies in landuse data as expressed by the landuse/landcover data that supports water quality modeling and DACS information about the location of acreage covered by NOIs. With a more accurate accounting of location of agriculture acreage commodity-specific methods developed for the Lake Okeechobee watershed can be applied to estimate TP loading reductions.

Florida Forest Service Addition

- 3.4.6 FLORIDA FOREST SERVICE ROLE IN BMP IMPLEMENTATION AND MONITORING page 35

FDACS' Florida Forest Service's silviculture BMP program is responsible for the development, implementation, and monitoring of silviculture BMPs across the state. Florida's first silviculture BMP manual was published in 1979. The current silviculture BMP manual (2008) contains 150 individual BMPs within 14 categories.

Implementation of silviculture BMPs in Florida is primarily done under an educational format, designed to transfer BMP technology to silviculture landowners and practitioners through public workshops and by providing professional technical guidance. In 2013, a total of 26 silviculture BMP workshops were presented to over 570 participants across the state. Implementation is also accomplished through a variety of outreach services including silviculture BMP courtesy checks for ongoing or recently completed operations, silviculture BMP site assessments for planned silviculture operations, and the silviculture BMP notice of intent program.

FFS Addition

The silviculture BMP notice of intent program began on February 11, 2004. Since then, over five million acres of forest lands have been signed up under the program. As of December 2013, there were 50,677 acres signed up under the silviculture BMP notice of intent within the Upper Ocklawaha Basin. This number is nearly double the acreage of silviculture identified within the basin using 2009 SJRWMD land use data for code 4400. This discrepancy is likely a result of the fact that land use code 4400 only includes upland forests that are made up of "tree plantations," and does not include natural upland forest lands or forested wetlands, both of which are often managed following silviculture BMPs and are therefore included in silviculture BMP notice of intent acreages.

Since 1981, the Florida Forest Service has monitored silviculture operations for compliance with BMPs by conducting biennial surveys. Surveys consist of on-the-ground evaluations of randomly selected sites where recent silviculture operations have taken place. From 1981-2013, seventeen survey reports have been conducted with a total of 4,174 silviculture operations being evaluated. The overall silviculture BMP compliance has ranged from a low of 84% in 1985 to a high of 99.1% in 2005, with a cumulative average of 94%. The most recent survey (2013) reported the overall average silviculture BMP compliance was 98.9%.

Addition

- 3.8.1 COST OF BMAP IMPLEMENTATION page 44

The estimated cost of the management strategies included in the Upper Ocklawaha BMAP totals more than $195 million This estimate does not include costs for the implementation of FDACS programs and the Florida Department of Transportation (FDOT) stormwater projects.

Funding sources range from local stormwater fees to regional and state cost-share grants. The Department supports restoration activities in the basin through Section 319 funding and TMDL Restoration Grants. The LCWA provides funding for municipal or community projects through the Stormwater Treatment Grant Program. These grants fund removal of pollutant discharges to wetlands and lakes. The SJRWMD through a Cooperative Funding Program makes funds available for projects that reduce nutrient load in springsheds and other waterbodies with nutrient TMDLs.

Project Data

- 3.8.2 SPECIFIC MANAGEMENT STRATEGIES INCLUDED IN THE BMAP
  - Project tables 8-16, pages 44-74
  - Please proof data in tables for your jurisdiction
  - Critical fields are description of project, status, start and completion dates
  - Need lat /long data for structural BMPs or GIS files if possible

Needs Review

- Section 3.8 NET ESTIMATED LOADINGS OF TOTAL PHOSPHORUS TO TMDL WATERS (UNDER REVIEW)
  - some text updates, but further review and editing will occur
  - 54 new projects with about 3300 lbs/year TP reduction
  - Table 7 loading table will be updated
  - Replace Figure 5

Focus Areas

- 3.10 IDENTIFICATION OF FOCUS AREAS page 76

One of the goals for the second BMAP iteration is the targeting of water quality improvement activities to specific watersheds or focus areas in the basin to insure that problem waterbodies are not inadvertently neglected by the BMAP process. This goal is not intended to undermine or lessen the efforts already planned or needed on other waterbodies. Large scale restoration projects are still an important component of the overall restoration plan for this basin and are identified in this BMAP as significant contributors to continued improved water quality. However, several waterbodies within the basin were predicted in the first BMAP iteration to not meet their TMDL targets (Figure 5) and that has largely been confirmed through an assessment of progress made in achieving TP loading and concentration targets.

Monitoring

- 4.1.3 MONITORING DESIGN AND EVALUATION page 94

– Monitoring agencies agree that each impaired waterbody has at least one monitoring station.

– The minimum sampling frequency is quarterly data collection, however, a higher frequency of sampling is recommended to strengthen trend detection. Quarterly data allows the calculation of seasonal averages required by the Department's Impaired Waters Rule and verified impaired listing process.

Monitoring

Refinements to the sampling network may periodically be necessary. The following provides guidance for those situations:

- The TWG will periodically review the list of monitoring stations to ensure that each impaired waterbody is being monitored. The goal is to have at least one agency sampling at least one location within each impaired waterbody.
- Feedback from longterm data or research monitoring efforts, can be used to identify the best locations for sampling and the frequency of sampling. There are statistical techniques that can be used to determine adequate sampling frequency.
- As issues arise or data analysis indicates the need for additional monitoring, the TWG will periodically review the monitoring list to identify opportunities to add sampling locations or increase frequency of monitoring.

Monitoring Tasks

- Add information about location of DEP lake vegetation index monitoring
  - 4 focus area lakes annually
- Do we need a list of monitoring stations?

Meeting TMDL Goals

- TWG recommends that loading and water quality targets be considered as long term averages. Suggested a rolling average as an metric by which to measure success.

Additional Revisions to Monitoring Text

- Minor text revisions to be completed for sections
- 4.1.4 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) MECHANISMS
- 4.1.5 DATA MANAGEMENT MECHANISM(S) FOR DATA STORAGE AND RETRIEVAL
- 4.1.6 DATA ANALYSIS/ASSESSMENT—METHODOLOGY FOR ASSESSING ATTAINMENT OF MONITORING OBJECTIVES
- 4.1.7 REPORTING—REGULAR REPORTING MECHANISM FOR WATER QUALITY MONITORING RESULTS
- Eliminated Section 4.1.8 and 4.1.9 – information will be incorporated into other sections

Changes to Appendix A

- Updated pie charts and text, but they are under review for accuracy
- Suggestion was made to add water quality information to each waterbody summary

Schedule

Date	Action
January 17, 2014	BWG discussion (via teleconference) on BMAP revisions since December
January 29, 2014	Public meeting on BMAP
February 14, 2014	Public comment period ends
End of February/ early March	Final version of BMAP available Adoption package to Department Secretary
End of March 2014	Challenge period ends (challenge period ends 21 days after BMAP adoption)

Public Meeting January 29, 5:30 p.m. Lake County Commission Chambers, 315 West Main Street, Tavares

NEXT STEPS

- Provide comments on document
- Revised document will be posted after the public meeting comment period ends
- Please forward the public meeting announcement to managers. Elected officials are welcome at the January 29 meeting.