

Lake Okeechobee Basin Management Action Plan

Technical Meeting Summary

Tuesday, November 18, 2014

10:00 AM – 12:00 PM

Williamson Conference and Education Center
2229 NW 9th Avenue, Okeechobee, Florida

Attendees

Beth Alvi, FDEP	Kim Love, Citizen
Brent Bachelder, FWC	Susan Martin, SFWMD
Rick Baird, Osceola County	Erin McCarta, Tetra Tech
Missie Barletto, Aim Engineering and Surveying	Linda McCarthy, Lykes Brothers Inc.
Lesley Bertolotti, SFWMD	Alicia McDougal, Kissimmee
Tiffany Busby, Wildwood Consulting	Barbara Miedema, Sugar Cane Growers Coop
Marisa Carrozzo, Conservancy of Southwest Florida (<i>phone</i>)	Diana Morales, FIU (<i>phone</i>)
Scot Carpenter, McKim & Creed	Christopher Morris, Deserel Cattle & Citrus
Kevin Carter, SFWMD	Victor Muratt, UMUSA
Dennis Corrick, Dean Mead (<i>phone</i>)	Melodie Naja, Everglades Foundation (<i>phone</i>)
Audra Corson, OSWCD	Julie Neurohr, FDEP
Kevin Coyne, FDEP (<i>phone</i>)	Steffany Olson, SFWMD
Sara Davis, FDEP	Kelly O’Nan, Hendry County
Rebecca Elliott, FDACS	Al Perry, Clewiston
Yesenia Escribano, FDEP	Michelle Piccolo, FDEP
Tony Federico, Macvicar, Federico & Lamb	Fernando Pleitez, E Sciences
Clell Ford, Highlands County	Marcy Policastro, Wildwood Consulting
Stan Ganthier, FDEP	Robert Potts, E Sciences
Jane Graham, Audubon Society	Terry Pride, FDACS
Paul Gray, Audubon Society	Irene Quincey, Pavese Law Firm
R.L. Groover, FOWA	Monica Reimer, Earthjustice (<i>phone</i>)
Katie Hallas, FDACS	H.M. Ridgely, Evans Properties
Mary Hartney, FFAA (<i>phone</i>)	Bryan Roy, Royal Consulting
John Hayford, Okeechobee Utility Authority	Ray Scott, FDACS
Janet Hearn, ATM	Jeff Sumner, SFWMD
Tom Hill, Farm Bureau	Naomi Tillett, Envisors (<i>phone</i>)
Clegg Hooks, FDACS	Susanna Toledo, FWC
Kerry Kates, Fruit and Vegetable Association	Trina Vielhauer, FDEP
Greg Kennedy, FDEP	Pam Wade, SFWMD
Audrey Kuipers, OSWCD	Garrett Wallace, Alico
Kimberly Lawrence, Osceola County	Paul Whalen, TAC Environmental
Beth Lewis, SFWMD	Bonnie Wolff Pelaez, FDACS

Welcome and Opening Remarks

Tiffany Busby welcomed everyone to the Lake Okeechobee Basin Management Action Plan (BMAP) meeting. The participants introduced themselves and the entity they represent. Tiffany noted that the previous Florida Department of Environmental Protection Basin Coordinator, Katie Hallas, is now with the Florida Department of Agriculture and Consumer Services (FDACS). The new Department Basin Coordinator is Sara Davis, and her contact information is included at the bottom of the agenda.

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Overview of Draft Lake Okeechobee BMAP

Beth Alvi stated that the presentation will focus on the information in the draft final BMAP, which Sara sent to the distribution list about a week and a half ago. Beth noted that although the first phase of BMAP development is coming to a close, the implementation of projects in the watershed is just beginning, and the Department and stakeholders will continue to plan for the next BMAP phase.

Beth stated that the goals of the total maximum daily load (TMDL) and BMAP programs are to develop scientifically-based quantitative goals for restoration, and then develop a plan for restoration. The BMAP components are outlined in Section 403.067, Florida Statutes. These components include defining the basin boundary, identifying loads, projects and activities to achieve reductions, timelines for implementation, and methods to assess progress towards the TMDL goal. The BMAP will be adopted by Department Secretarial Order. Annual updates on the BMAP will be provided to assess the progress being made and to ensure projects are meeting timelines. Annual updates provide an opportunity to update the project list as stakeholders plan new projects. BMAPs are adaptively managed so the plan is assessed to determine what should be included in the next phase.

The Department began stakeholder/technical meetings in February 2013, and an additional eight meetings were held. The draft BMAP was sent to the stakeholders in September 2014. The Department received a lot of comments, which were incorporated into the updated draft BMAP that was sent to the stakeholders on November 7th. Beth thanked the stakeholders for their time, projects, and input to make the BMAP a better plan.

The BMAP is a large document; however, there are several key components: area under consideration for restoration, assumptions made in the BMAP to help put the BMAP information into perspective, a list of considerations that stakeholders and the Department agreed needed to be worked on during BMAP implementation, projects that will be implemented to achieve reductions, and the monitoring plan to assess progress. The Lake Okeechobee Watershed (LOW) is about 3.4 million acres, and is divided into nine sub-watersheds. There are six sub-watersheds north of the lake and three south of the lake. The six sub-watersheds north of the lake are the focus of this first BMAP iteration; however, all nine sub-watersheds are included in the BMAP. As more information is obtained about the sub-watersheds south of the lake, the BMAP will be updated. The 105 metric tons per year (MT/yr) of total phosphorus (TP) allowable load from the Lake Okeechobee TMDL includes all nine sub-watersheds.

The Executive Summary provides a quick overview of the information in the BMAP, and it is a good briefing document. Tables ES-1 through ES-6 list the projects that will be implemented in the short-term. Table ES-7 lists the projects that are under development by the Coordinating Agencies. The Department added language to Table ES-8 to clarify the summary loading information. The existing TP load is from the six northern sub-watersheds; however, this load will be updated once the model is updated to include the southern sub-watersheds. The allowable load of 105 MT/yr is for the entire LOW. The total project reduction for planned projects is 103.46 MT/yr of TP, and the estimated TP reductions from projects under development are 45.81-48.13 MT/yr. The total reduction for projects in the BMAP is about 149 MT/yr or 43.5% of the required reductions. Appendix A includes the detailed project tables. This information is organized by sub-watershed to give a picture of what will occur in each sub-watershed. To assess the progress made through BMAP implementation, the project tables will be updated to reflect the latest statuses. The BMAP includes an extensive monitoring network,

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which has some local government monitoring stations, but is mostly stations from the South Florida Water Management District (SFWMD) source control program. Annual updates will occur on the BMAP, and interim meetings will be held, as needed, to provide updates and obtain information from the stakeholders.

Beth stated that the Department received more than 800 comments from about 22 stakeholder groups on the first draft BMAP. The Department had a large team working to address the comments. The major categories of comments received included the BMAP boundary (northern and southern sub-watersheds), project tables and reduction calculations, Watershed Assessment Model (WAM), legacy phosphorus, total nitrogen (TN), and BMAP costs.

The BMAP applies to the entire LOW but the projects are focused on the six northern sub-watersheds for this first iteration. Table E-8 was updated to help clarify what is being considered. The project tables were updated to reflect the current statuses, cost information, and load reduction calculations. The WAM output was used to develop a Geographic Information Systems (GIS) tool to calculate loading and estimate the project reductions. Additional information was added to the BMAP to clarify how the WAM output was used in the BMAP.

A lot of work has been done to determine the legacy phosphorus loading in the watershed, and the comments received noted that this information should be considered when planning how to move forward with the BMAP. Legacy phosphorus and attenuation are important for the reduction calculations, and the Department will continue to address this in the BMAP process.

Beth stated that the Caloosahatchee Estuary has a TN TMDL and the St. Lucie Estuary has TP and TN TMDLs. Therefore, it is important to keep track of the TN benefits from the projects implemented through the Lake Okeechobee BMAP. The Department will continue to add information on the TN reductions as information is available.

In terms of the BMAP costs, restoration is expensive so it is important for stakeholders and the state to accurately represent the project costs. The cost information received from the stakeholders is included in the BMAP, and the costs will be updated as additional information is provided. The Department received comments on the Kissimmee River Restoration project because this project is for ecological restoration, in addition to water quality improvement. The costs for this project were separated out in the BMAP costs discussion. Table ES-10 was added to the BMAP to help clarify the project costs.

Beth stated that the Department would like to hear from the stakeholders if there are additional comments on the BMAP. The Department held numerous discussions with the stakeholders on their comments, and the vast majority of the comments received were addressed in this BMAP version. Stakeholders should contact the Department soon with any additional comments. The goal is to brief the Department Secretary in early December so that the BMAP can be adopted by the end of the year. Project development will continue after BMAP adoption. Beth thanked the Cooperating Agencies (FDACS and SFWMD) for all their help in developing the BMAP.

Questions, Comments, and Discussion

Paul Gray stated that the current WAM includes TP data collected in 2004/2005. He asked if the WAM update will include an update to the most recent TP data. Beth responded that she was unsure of the

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exact details of the model update but the goal is to update as much of the information as possible to reflect the current conditions. Additional details about the model update can be shared as information is developed.

Jane Graham asked how the SFWMD source control monitoring data will be assessed, and how BMAP progress will be assessed. Beth responded that the details of how to analyze the monitoring data have not been decided. The Department will work with SFWMD to determine how the data should be evaluated to assess progress. The source control stations were selected for the BMAP monitoring plan because these stations were in the best locations to determine loading at the sub-watershed level.

Marisa Carrozzo stated that the Conservancy of Southwest Florida would like to recognize the work that was put into coordination and development of the draft BMAP. This is a critical restoration plan and the Conservancy appreciates the work that went into making it a collaborative and iterative process. The Conservancy would like to encourage additional source control projects to help prevent adding to the existing legacy phosphorus load. A reference to back-pumping should be added in the BMAP discussion of the southern sub-watersheds, even if back-pumping is currently not occurring. Back-pumping could be used as a water supply source in the future, and there needs to be a water quality component to treat the water, so that back-pumping does not contribute to the TP loading. The Conservancy submitted written comments about the importance of TN for the Caloosahatchee, and they appreciate that these comments were included in the BMAP. Despite preliminary assessments that show Lake Okeechobee is not impaired for TN, about 60% of the TN loading to the Caloosahatchee is from Lake Okeechobee, so these reductions are needed to meet the Caloosahatchee TMDL. Beth thanked the Conservancy for their input and collaboration on the BMAP.

Melodie Naja asked if Beth could provide more information on the phased BMAP implementation process. Beth responded that the first phase of the BMAP addresses a portion of the reductions necessary to meet the TMDL because it is difficult for both state agencies and local government to plan for the entire reduction. The Department tried to determine what could be done in the first phase, and this BMAP outlines the projects and activities that will be undertaken. The BMAP also includes a monitoring plan to determine progress. It takes time for the effects of projects to be seen in the monitoring data. However, there is an extensive monitoring network in the watershed, so the benefits may be seen faster than in other areas. This BMAP includes a plan for the next five years, and also project planning out to ten years because it takes a while to plan, fund, and construct the larger projects. Each year the project tables will be updated with new projects and better estimates of loading, which will help to determine what is needed for the next BMAP phase. Melodie asked if the reductions are not on track, will the BMAP be reassessed. Beth responded that if there are not improving trends in the water quality data, projects will be identified to focus on areas with higher TP loading. Trina Vielhauer added that the Department can update the BMAP when they and the stakeholders feel it is necessary. The BMAP will have annual updates, and the BMAP includes a backstop update tied to the WAM updates. As the monitoring data are assessed and new projects are identified, the Department will include this information to keep the BMAP current. It is a continual process to provide updates.

Kim Love asked if the Department is expecting that the TP loads will increase over the next five years. Beth responded that the Department is not expecting TP loads to increase. The water quality data will show what is occurring, and the Department will use that information to determine where additional reductions are needed to make improvements in water quality. Kim stated that the TMDL has been in

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place for a long time, and the current loading is about 4.5 times the allowable load. It does not seem as if there is any ramification for not meeting TMDL, and there does not seem to be a sense of urgency to meet the TMDL. There have been plans for this watershed for at least the last 20 years, and the hotspots have been identified. Beth responded that the Lake Okeechobee Protection Plan (LOPP) includes a variety of components, not just water quality. The BMAP focuses on water quality and builds on existing efforts. The projects identified in the BMAP focus on reducing TP loads to the lake. With this greater focus on water quality, the BMAP should help to make faster strides towards the TMDL. Kim stated that FDACS Commissioner Putnam has put money in the budget for additional agricultural cost-share, and ranchers are petitioning for water storage in the upper part of the watershed. There are a lot of good pieces that could come together with the BMAP process to create larger projects. Kim encouraged the agencies to look at the larger picture because this is as important as looking at individual projects. Beth responded that SFWMD is planning to assess water storage needs north of the lake to prevent harmful discharges to the estuaries. This storage is important because the northern watershed is a flashy system. The Department will be working with SFWMD on this effort. FDACS is talking about adding more cost-share funding in this area. These efforts are being built upon in the BMAP.

Melodie asked once more is known about the hotspot areas, what the plan is to address these areas through the BMAP. Beth responded that there is a timeline in the BMAP for WAM refinement, and these results will be used to plan projects to address areas with high loads. Melodie asked if the BMAP will be updated in two years after the model is updated. Beth responded that she is not sure whether the hotspot analysis can be completed in two years. Once the WAM update is completed, an analysis of what types of projects are needed and where will be done within three years.

Jane stated that Audubon appreciates all the time that the Department has taken on this initiative, and they are hopeful that steps will be taken to benefit Lake Okeechobee long-term. The draft BMAP mentions the best management practice (BMP) verification process, and Audubon is supportive of this process. Audubon suggests that as the Department moves forward with this verification that they look at the current BMPs and notices of intent (NOIs) and compare these to what has actually been implemented. FDACS has a report from 2013-2014 with helpful information about BMP implementation, which should be included in the BMAP. Jane noted that she will provide suggestions to the Department on what information from this report could be included in the BMAP. Jane stated that she is happy that FDACS is committing \$70 million for cost-share BMPs over the next 10 years. However, Audubon hopes that this funding can be greatly increased. Jane noted that a few years ago there was an initiative for a statewide stormwater rule, and this rule is not currently moving ahead for political reasons. Audubon will try to help move this rule along but, in the meantime, the Department should talk with local governments to determine how they could reduce stormwater through ordinances and other activities. Beth thanked Audubon for working with the Department and providing input on the BMAP. The Department is gathering data through research projects to fill in data gaps that were identified during the initial development of the statewide stormwater rule. Beth noted that the local governments are implementing ordinances to reduce nonpoint source runoff, and these ordinances are included in the BMAP.

Rick Baird asked if the passage of Amendment 1 will lead to additional funding for programs like the TMDL grants, because implementing the BMAP will require a lot of money. Beth responded that this new program is still in the early stages so the Department is not sure how much money will be allocated and for what programs.

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Kim encouraged the Department to not wait two more years to do something about the hotspots because the necessary data are already available. Beth responded that some information is available but the current resources have already been allocated. The model update will provide better information to assess where additional reductions are needed.

Adjourn

The meeting was adjourned at 11:06 AM.

Action Items

- Stakeholders should provide additional comments on the BMAP to the Department as soon as possible so that the Secretary can be briefed on the BMAP in early December.
- The Department will continue to work with the stakeholders on project development after the BMAP is adopted.
- The Department will provide details about the WAM update as information becomes available.
- Jane Graham will provide feedback to the Department on what information from the FDACS BMP implementation report could be added to the BMAP.