

**St. Lucie River and Estuary Basin Management Action Plan (BMAP)
5-Year Review Kick-off Meeting Summary**

*Friday, August 25, 2017 at 10:00 AM
Martin County Building Permits Office
Conference Rooms A and B
900 Southeast Ruhnke Street, Stuart, FL*

Attendees

Joe Adams, Pavese Law Firm
Ernie Barnett, Land and Water Advisors
Tom Behlmer, DEP
Jason Bessey, St. Lucie County
Vanessa Bessey, FDACS
George Caulkins, Caulkins Citrus Company
Teresa Coley, SFWMD
Audra Colgan, FDACS
Breanna Crowell, DEP
Sara Davis, DEP
Patrick Dayan, St. Lucie County
Deborah Drum, Martin County
Amy Eason, AECOM for SLRWCD
Rachel Espinosa, E Sciences
Cathy Foerster, Wildwood Consulting
Stanley Ganthier, DEP
Joe Gilio, Citizen
Alex Gillen, Bullsugar
Kathleen Greenwood, FDACS
Bill Griffin, City of Stuart
Janet Hearn, ATM

Patrick Helms, AECOM
Kevin Henderson, Evergreen Engineering
Dina Hermoso, City of Fort Pierce
Dianne Hughes, Martin County
Chad Kennedy, DEP
Tom Kenny, Caulkins Citrus Company
Lisa Krinsky, UF-IFAS
Milton Leggett, City of Stuart
Dale Majewski, City of Port St. Lucie
Ansley Marr, SFWMD
Angelica Mavina, CHCW
Jennifer McGee, SLCERD
Stacey Ollis, SFWMD
Mark Perry, Florida Oceanographic Society
Nyla Pipes, One Florida Foundation
Allie Preston, Bullsugar
Raulie Raulerson, FDACS
H.M. Ridgely, Evans Properties
Gary Ritter, Florida Farm Bureau Federation
Cassandra Thomas, SFWMD

Introduction

Sara Davis, Florida Department of Environmental Protection (DEP) Environmental Manager, opened the meeting at 10:02 AM by welcoming everyone. She introduced Breanna Crowell, DEP Basin Coordinator, and Cathy Foerster, consultant to DEP. She stated that this is the kick-off meeting for the 5-Year Review of the adopted St. Lucie River and Estuary Basin Management Action Plan (BMAP). She and Breanna will provide an overview of the adopted BMAP; discuss relevant legislation and requirements of the 5-Year Review; and discuss the timeline, action items, and next steps associated with the 5-Year Review. She requested that each person in the room introduce themselves.

Overview of the St. Lucie River and Estuary BMAP

The St. Lucie River and Estuary BMAP was adopted in June 2013 to implement total nitrogen (TN) and total phosphorus (TP) total maximum daily loads (TMDLs) that were adopted in 2009. The third annual progress report was finalized in January 2017 for the reporting period of July 1, 2015 through June 30, 2016. In lieu of a fourth annual progress report, Sara stated that information from July 1, 2016 to December 31, 2017, will be collected and included in the 5-Year Review.

Sara stated that as of June 30, 2016, the estimated TN reduction is 1,053,414 lbs-N/yr (51 % of the required reduction) and the estimated TP reduction is 404,166 lbs-P/yr (35 % of the required reduction) through projects completed by agricultural producers, City of Fort Pierce, City of Port St. Lucie, City of

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Stuart, Copper Creek Community Development District (CDD), Florida Department of Transportation (FDOT) District 4, Florida Turnpike, Hobe St. Lucie Conservancy District, Martin County, North St. Lucie Water Control District (WCD), Okeechobee County, Pal Mar WCD, St. Lucie County, Town of Seawall's Point, Tradition CDD, Troup-Indiantown WCD, and Verano CDD. These TN and TP reductions are based on modeled estimates of project benefits, and have already met the Phase I (5-year) BMAP milestone.

Pertinent Legislation

Sara stated that legislation went into effect in 2016 that requires 5-Year Reviews of the Caloosahatchee Estuary BMAP, St. Lucie River and Estuary BMAP, and Lake Okeechobee BMAP (Northern Everglades BMAPs). The 5-Year Review of the St. Lucie River and Estuary BMAP is to be finalized and submitted to the Governor, Senate President, and Speaker of the House in June 2018 (five years from date of adoption [June 2013] of the original BMAP). The review shall include 5-year milestones towards meeting the TMDLs within 20 years of adoption of the BMAP; assessment of progress towards meeting the milestones; determination of whether the TMDLs can be met within the 20 years, and if not, an explanation as to why; and recommended revisions to the BMAP, such as model revisions, monitoring network revisions, revised allocations, etc. Sara stated that the 5-Year Review is not a revised BMAP. Rather, the report will provide recommendations on how to revise the BMAP. The timeline for BMAP revisions is dependent on the recommendations.

Questions/Comments by Attendees

1. Dianne Hughes, Mark Perry, and Patrick Dayan each asked a question regarding the 15-year milestone established in the original BMAP. Will the new legislation extend the 15-year milestone out to 20 years, rather than require the milestone be met within 15 years? Sara responded that the 20-year timeframe came from the legislation that is applicable to all Northern Everglades BMAPs. It requires that milestones be set for 5, 10, 15, and 20 years after adoption, and that an assessment is included in the 5-Year Review of whether the necessary reductions can be met within 20 years. Part of the process of preparing the St. Lucie River and Estuary BMAP 5-Year Review will be determining the 5-, 10-, 15-, and 20-year milestones. However, the goal in the original BMAP of meeting all required reductions within 15 years does not have to change. Milestones can be set to mirror that goal.

Timeline

Sara explained the tentative timeline below associated with submittal of the 5-Year Review. She noted that the period of record (POR) for the 5-Year Review is actually 4.5 years, from the month following BMAP adoption (July 1, 2013) through December 31, 2017. The dates provided are estimated deadlines, so meetings and tasks will likely occur prior to the dates provided.

1. January 31, 2018 – Deadline for DEP to receive project updates (for the period of July 1, 2016 through December 31, 2017) and potential new projects (for the next 15 years) from stakeholders.
2. January 31, 2018 – Anticipated deadline for DEP to conduct a technical meeting to review preliminary model results presented by SFWMD.
3. February 28, 2018 – Anticipated deadline for DEP to conduct a public meeting to discuss draft revised allocations with stakeholders.
4. March 1, 2018 – Deadline for stakeholders to upload water quality monitoring data via the Watershed Information Network (WIN) for samples collected through December 31, 2017.

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5. April 30, 2018 – Anticipated deadline for DEP to conduct a public meeting to present the draft 5-Year Review and obtain comments on the draft. DEP will route the draft document for review prior to the meeting.
6. May 15, 2018 – Approximate deadline for DEP to receive comments on the draft document. The actual deadline will be set when the draft document is made publicly available, and will depend on the actual date of the public meeting held in April 2018.
7. June 30, 2018 – Deadline for DEP to submit the final 5-Year Review to the Governor and Florida Legislature.

Outline of the 5-Year Review Document

Breanna presented a series of slides regarding the proposed outline for the review document. The document will consist of three chapters that focus on the past (background information), present (assessing progress), and future (recommendations). The background information includes a summary of the St. Lucie River and Estuary TMDLs and BMAP regulatory components. To assess progress, DEP will identify projects completed or underway by stakeholders through December 31, 2017. DEP will also evaluate ambient water quality monitoring data and biological monitoring data in addition to completing a water quality analysis. DEP will provide recommendations for the five-year milestones; potential changes to allocations due to modeling revisions; changes to the water quality monitoring tier system (similar to what is proposed in the Caloosahatchee Estuary BMAP 5-Year Review), and any other recommendations that will assist in implementation of the BMAP. This process is an opportunity to address aspects of the BMAP that can be enhanced and find solutions to those issues. Breanna stressed that DEP very much wants stakeholder feedback on the recommendations.

Sara presented slides that provide more details on potential recommendations. For example, the South Florida Water Management District (SFWMD) is updating, enhancing, and recalibrating the St. Lucie Estuary Watershed (WaSh) model. The results may help guide BMAP implementation and potential revised allocations. The updates and enhancements include code enhancement; geographical user interface water quality upgrades; septic system loadings; and land use data for three separate PORs (1998 to 2006; 2007 to 2011; and 2012 to 2016). A baseline scenario and two alternative scenarios will be run as part of the current scope of work. The timeline associated with the WaSh model work is as follows:

1. August to September 2017 – Recalibration.
2. August to October 2017 – Run baseline scenario that will be delineated into three PORs based on three different land use data sets.
3. November 2017 to January 2018 – Run alternative scenario 1 that includes implementation of BMAP projects.
4. December 2017 to January 2018 – Meeting to discuss preliminary results. SFWMD staff will present technical details related to the baseline run and preliminary results. Sara requested that stakeholders have the appropriate technical persons attend this meeting.
5. January to February 2018 – Run alternative scenario 2 that includes the concept that loading from all septic systems will be eliminated.
6. March 2018 – Finalize model report.

Sara then displayed the current water quality station locations. She asked the stakeholders to contemplate prioritization of the stations. Perhaps there could be a tiered system that prioritizes monitoring stations for water quality analyses. This type of approach is currently being contemplated in the Caloosahatchee Estuary BMAP 5-Year Review.

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Questions/Comments by Attendees

1. Dianne Hughes: There appear to be differences in some of the details for this run of the model compared to how it was set up previously. Sara: Let's speak after the meeting regarding the modeling scenarios.
2. Dale Majewski: Can there be a TP credit for septic to sewer conversion? Sara: At this time, sufficient data has not been provided to DEP to indicate TP loading associated with septic systems. Data is needed to understand loading, assign allocations, and determine credits. Therefore, it is not possible at this time to include TP loading from septic systems in any allocations, nor provide TP credit for septic to sewer conversions. Sara also mentioned that anyone who knows of studies that could help determine whether these TP allocations and credits are appropriate should contact her with that information.

Monitoring Data

Sara presented a series of slides on the BMAP monitoring data requirements. WIN is now open for uploads and will replace the STORET database. She mentioned that the minimum data quality standards are different for WIN compared to STORET and the upload process is different, too. WIN is a web-based interface in which data is uploaded and verified by providers prior to being available in the database. She mentioned that SFWMD had already successfully uploaded some data to WIN and that it is a good idea to try uploading a small data set the first time to get familiar with the process and work through the kinks.

Sara stated that data collected prior to July 1, 2017 can continue to be uploaded to STORET through December 2017. This may include data that does not meet WIN minimum data quality standards or corrections for data already in STORET. Data collected on or after July 1, 2017 should only go to WIN, and after December 2017, data can no longer be uploaded to STORET. Sara provided contact information for the DEP STORET/WIN coordinators, so data providers with questions can contact the coordinators directly.

Next Steps

Sara provided an overview slide of the next steps: prepare draft report (DEP with stakeholder input); complete WaSh revisions (SFWMD); conduct a technical modeling meeting (DEP and SFWMD; December 2017 or January 2018); conduct a technical allocation meeting (DEP; February 2018); complete WIN database uploads (stakeholders/data providers; February 2018); conduct water quality evaluation (DEP and SFWMD); route draft report and conduct public meeting (DEP; April 2018); stakeholders submit comments on draft report (May 2018); and submit final report to the Florida Legislature (DEP; June 2018).

Sara provided her and Breanna's contact information. She stated that the final presentation and meeting summary will be posted to the DEP public access site within a week's time.

Questions/Comments by Attendees

1. H.M. Ridgely: When can we comment on the WaSh model? Sara: Comments will be taken at the technical meeting that will be scheduled for December 2017 or January 2018, or you may contact me in the interim with any concerns or comments.
2. Patrick Helms: Why does the legislation allow a 20-year period to meet the TMDL rather than 15 years? Has the overall goal changed for this basin? Sara: The 20-year timeframe came from the legislation that is applicable to all Northern Everglades BMAPs. It requires that an assessment is included in the 5-Year Review of whether the necessary reductions can be met within 20 years.

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Part of the process of putting together the St. Lucie River and Estuary BMAP 5-Year Review will be determining the 5-, 10-, 15-, and 20-year milestones. However, the goal in the original BMAP of meeting all required reductions within 15 years does not have to change. Milestones can be set to mirror that goal.

3. Dianne Hughes: Are you aware of a BMAP where allocations have changed when the model used was changed from spreadsheet format to spatial format? Sara: I am unaware of such an example, but will research and follow up with you.
4. Kevin Henderson: How will DEP respond to Dr. Goforth's very thorough water quality analysis that is in contrast to the BMAP? Sara: DEP will reach out to Dr. Goforth to collaboratively review water quality data.
5. Kevin Henderson: Will Dr. Goforth's model be available for public review? Sara: DEP does not typically post non-DEP reports. I am aware that Dr. Goforth has posted his report and it is accessible to the public.
6. Kevin Henderson: The C-44 is a declining basin which could be the result of sugar farming. DEP should issue a statement that the coastal communities are not the only entities to have the burden to reduce loading; agriculture and sugar farmers should share the burden. Sara: Under the current statutes, the BMAP requires that agricultural producers either enroll in the Florida Department of Agriculture and Consumer Services (FDACS) Best Management Practice (BMP) Program or conduct water quality monitoring to demonstrate compliance with the water quality criteria for the parameters addressed by the BMAP. Commodity specific BMP manuals are available through the BMP Program, and FDACS also explores alternative BMPs with producers. DEP meets regularly with FDACS to discuss these BMPs and alternatives.
7. Joe Gilio: The Lake Okeechobee discharge data used in the model is not real DHYBRO data. The agricultural discharges from canals are presumed to be met if BMPs are being implemented. There needs to be actual, measured data from the canals, not an assumption. Real data is needed for the model, not presumed data. Sara: Measured data, where available, is being used in the model recalibration, which will provide for sufficient model accuracy to determine relative loading and estimate project benefits.
8. Mark Perry: DEP needs to consider the extensive data already available (he handed Sara a copy of Dr. Goforth's report). The entire input from Lake Okeechobee needs to be considered. DEP needs to look at real data to determine upstream issues, particularly land use. We are not truly meeting the BMAP Phase I restoration goal. Sara: The adopted BMAP and annual progress reports identify estimated reductions associated with implementation of projects. Moving forward, DEP is shifting focus to include both estimated reductions and water quality analyses based on measured data. The 5-Year Review will reflect both the estimated reductions and results of analyses based on measured data.
9. Mark Perry: Per the 2016 annual progress report (third annual report) regarding Station SE-03, "While the yearly averages for both TN and TP display some reductions, it should be noted that DEP is not using these data for compliance assessment at this time. A compliance methodology will be agreed on before the fourth annual update, in accordance with the timeline established in the BMAP." Has DEP finalized a compliance methodology since there will now not be a fourth annual report? Sara: As the direction from the Florida Legislature changed, the reporting schedule has changed. DEP is building on the work done previously on the methodology, and will include it in the 5-Year Review.
10. Gary Ritter: I agree that real concentration data and loading data should be evaluated; however, there needs to be an apples to apples comparison. The SFWMD South Florida Environmental Report (SFER) contains data in pounds per acre per year that allows direct comparison, which

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yields different results than Dr. Goforth's report. Sara: The BMAP does need to be able to make appropriate comparisons across the basin. DEP is working with SFWMD on the methodology used in the 5-Year Review.

Adjournment

Sara requested that any further comments or questions are directed to her via telephone or email. The meeting adjourned at 10:50 AM.

Action Items

Below are action items from the meeting.

1. Sara: Post final presentation and meeting summary to the DEP BMAP public ftp site.
2. Sara: Research and follow-up with Dianne Hughes regarding other BMAPs, if any, in which the model used was changed from a spreadsheet-based model to spatial model.