

MEETING SUMMARY
Lake Jesup, Crane Strand, and Long Branch BMAP
Technical Working Group
July 24, 2008
1:00 PM – 4:00 PM
Sylvan Lake Park
Sanford, Florida

Meeting Attendees

John Abendroth, FDEP Libertad Acosta-Anderson, CH2MHill Julie Bortles, Orange County Sherry Brandt-Williams, SJRWMD Kelly Brock, City of Casselberry Tiffany Busby, Wildwood Consulting Fred Calder, FDEP Lisa Curtin, City of Orlando Tim Egan, City of Winter Park Chris Ferraro, FDEP Brian Fields, City of Winter Springs Mark Flomerfelt, Seminole County Vivian Garfein, FDEP Jennifer Gihring, FDEP Ed Hayes, FWC Cecilia Height, Sierra Club Migdalia Hernandez, Sanford Danielle Honour, CDM	Bilal Iftikhar, Sanford Carol Johnson, FDACS Joel Jordan, RCS Bob Kelly, SAIC Robert King, Friends of Lake Jesup Chris Kintner, Longwood Steve Lienhart, URS Regina Lovings-Morse, SJRWMD Durga Nagda, City of Lake Mary Kim Ornberg, Seminole County Mary Paulic, FDEP Zynka Perez, City of Winter Springs Marcy Policastro, Wildwood Consulting Robert Potts, E-Sciences Marissa Rodriquez, City of Maitland Joe Walter, PBSJ Shannon Wetzel, Seminole County
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Opening Remarks

Welcome and Introductions

Tiffany Busby welcomed everyone and participants introduced themselves and the entity they represent. There were no comments on the May meeting summary and no questions on the Total Maximum Daily Loads (TMDLs).

Basin Working Group Meeting Report

Jennifer Gihring stated that there was a good turnout for the Basin Working Group (BWG) meeting. She thanked everyone for prepping their BWG members for the meeting. The BWG did not have many questions but it seemed like they were all engaged and ready to make progress on the Basin Management Action Plan (BMAP). The next meeting will be held in November or December. The allocation table and project lists need to be complete before the next BWG meeting.

BMAP Monitoring Plan Update

Tiffany noted that monitoring plan is an important component of the BMAP to determine water quality trends and progress made in project implementation. This will be a separate effort for the BMAP and a conference call was held on July 17th with a few key agencies to begin discussing

existing monitoring. Jennifer added that the Florida Department of Environmental Protection (FDEP), St. Johns River Water Management District (SJRWMD), Seminole County, and Orange County participated in the call. They discussed the components of a monitoring plan and the objectives they want to achieve with the plan. FDEP Geographic Information System (GIS) and Monitoring Program staff in Tallahassee will be involved with this process and will be contacting the entities to obtain monitoring information. The draft monitoring plan will be brought to the group for discussion and revision. Tiffany added that a research plan will be included in the monitoring plan. Sherry Brandt-Williams is currently compiling SJRWMD studies and will then send this information to the other entities to add their research projects.

Request for Proposals (RFP) Update

Sherry Brandt-Williams stated that SJRWMD will be releasing an RFP for non-land related treatment projects, such as floating islands. This RFP has not been posted yet but will be soon. If anyone is interested in receiving notice of this RFP, they should let Sherry know.

Sherry also provided an update on the sediment study. This study was advertised but no one responded so it was opened to the universities and awarded to Florida International University (FIU). The study will go to the SJRWMD Governing Board in August and after that FIU will be able to begin testing the sediment to come up with a work plan in September or October.

The preliminary results of the nitrogen-fixation study have come in. The SJRWMD will review this information and the study can be sent out in September. Sherry noted that the results of the study were mixed.

Other Updates

Robert King stated that he has had several people ask him about the pay-for-performance project and he wondered what the status of the project was. Regina Lovings-Morse responded that there is no definite timeframe right now. Aquafiber has applied for all the necessary permits and about 75 percent of the site has been cleared. The rest of the project cannot begin until the permitting process is complete. More information should be available by the end of September. Kim Ornberg noted that Aquafiber should have the necessary permit from Seminole County because they met with them about 7-8 months ago to discuss what needed to be done to apply for the permits. The remaining permits needed are from FDEP.

Allocations

Site 10 Allocation – Revised Description

Tiffany stated that the handout from the last meeting on how to allocate the Site 10 loads has been updated to address comments made by the group. Jennifer added that after the last meeting, FDEP had a call with the City of Sanford to discuss options for integrating the monitoring efforts and projects that the city has proposed. They also discussed which activities should be listed in the BMAP versus the city's wastewater facility permit. Since the facility permit is up for renewal, the projects and monitoring requirements will be added to the permit and discussed in the BMAP. Sanford has put together a preliminary monitoring plan that was sent to FDEP for review. The handout has been updated to clarify that one of the purposes of the monitoring is to better estimate loads from site to the lake and to clarify that the monitoring and project requirements will be included in the permit.

Migdalia Hernandez asked if the approach would include the wastewater and residuals load in the BMAP allocations. Jennifer responded that those loads would not be included in the allocation table; however, there is an additional stormwater load from the site, which will be included in the allocation table. Kim asked if the Site 10 wastewater and residual loads would be included in the next iteration of the TMDL. Jennifer responded that these loads would be included in the TMDL calculations but it cannot be determined now if those loads would be given a specific load reduction in the next cycle. Robert King asked what land classification was used for Site 10. Jennifer responded that they used managed pasture but with a specific event mean concentration (EMC) for the site.

Sherry asked if FDEP would send the Site 10 monitoring plan to the group. Chris Ferraro responded that the draft permit includes the entire Sanford wastewater facility, of which Site 10 is a small portion. Chris will notify Jennifer and Tiffany when the notice of draft permit is available so that they can inform the group.

The Technical Working Group provided consensus on the approach for including Site 10 loading into the BMAP allocations with one member supporting it, three that agreed to it, ten that accepted it, and no one that could not accept the approach.

Septic Tank Allocations

Tiffany noted that the TMDL included loading from functioning septic tanks that are in close proximity to surface waters. These are not failing tanks but functioning tanks that can impact the lake. The group has been discussing how best to include these loads in the allocation table.

Jennifer stated that there are multiple ways that septic tank loads can be estimated in TMDLs and that the effect of septic tanks on a waterbody varies by the type of impairment. The septic tank loads in the Lake Jesup TMDL are from properly functioning tanks, which can contribute nutrients. Only tanks within 200 meters of surface water were considered in the TMDL and then a soil attenuation factor was applied. The relative loading from septic tanks was determined based on population density. Spatial information about areas served by septic tanks provided by local governments was used in the TMDL. This load reduction in the TMDL is 1.5 metric tons (MT) (versus 7.4 MT for stormwater loads). There are two issues related to septic tanks that need to be resolved: 1) how to include these loads in allocation table, and 2) who should these loads be allocated to. The TMDL did not include septic tanks for all jurisdictions (five entities were missing) so these loads could not be allocated on a load weighted basis, which is how the surface runoff loads were allocated. The proposal in the handout is to allocate the 1.5 MT septic tank load reduction on a surface loading basis to the applicable entities. This is the recommendation because FDEP went through the process of trying to estimate the septic tank loads from the missing entities but several did not have the information needed, which would introduce additional inconsistencies.

Mark Flomerfelt noted that if an entity has 30 percent of the surface load then they would receive a septic tank load of 30 percent, regardless of the percentage of septic tanks, which does not make sense. Vivian replied that she wished the septic tanks had not been listed separately in the TMDL. Since they were, the best approach is to use the surface load percentages to create one

allocation and each jurisdiction can then determine the best way to achieve those reductions. Some entities may find it is better not to address septic tanks to meet their allocation in this BMAP and to instead wait until the next iteration when more information is available.

Robert Potts asked if septic tank loads were allocated to the Florida Department of Transportation (FDOT). Jennifer responded that FDOT, agriculture, and the Turnpike Authority were not given any septic tank load reductions because they do have jurisdiction over septic tank management. Under the proposal, each of the local governments is treated equally, whether or not they provided septic tank information for the TMDL. This information will be gathered for the next iteration of the TMDL.

Kim noted that each entity could look at their wastewater service areas to determine areas where there is no wastewater infrastructure and assume those areas area septic tanks. Lisa Curtin stated that Orlando worked with the Orange County Health Department to try and obtain septic tank information for the TMDL. However, the Health Department only has information on septic tanks that fail, which is not a good representation of the number of septic tanks. Jennifer noted that she found the same problem when trying to obtain information for the missing entities because the health departments only have information on failing tanks where the owner applied for a repair permit.

Tiffany asked if the group would feel more comfortable if the 1.5 MT reduction was allocated to only those entities included in the TMDL septic tank information, which excludes five jurisdictions. FDEP did not recommend this method because they did not think it was fair. The group agreed that this was not a fair approach. Jennifer stated that adding the septic tank load from the missing jurisdictions almost doubled the estimated septic tank load from the TMDL. This is similar to the Site 10 issue where there is a load that was not considered in the TMDL and the group needs to determine how best to allocate this reduction.

Danielle Honour noted that Jennifer had stated that the number of septic tanks in the TMDL was based on population estimates. Danielle asked if these numbers were updated to reflect the information provided by the local governments. Jennifer responded that the local governments provided information on areas served by septic versus sewer but this information was not submitted by all entities. The TMDL included population density zones and FDEP took those areas that were residential or commercial and applied the population estimates. Then, the septic tanks areas within 200 meters of the lake were multiplied by the average concentration per person for a septic tank. These loads were then attenuated.

Kim asked that since there are a lot of holes in the information, if the septic tank loads could be set aside until the next iteration. This would be better than lumping these loads with the stormwater loads since they are a separate issue. The group can work on obtaining more accurate information on septic tanks and these updated loads can be analyzed with the Site 10 loads in the next TMDL. Fred Calder noted that he would like to see the group make decisions to move the BMAP process forward. This issue should be documented in the BMAP and a project can be included to address the information deficiency. This project would commit all jurisdictions with septic tanks to obtaining more information for the next TMDL.

Jennifer noted that gathering additional information is the second part of the recommendation. The first part is to allocate the load from the TMDL in this BMAP and then use the additional information in the next BMAP. Fred stated that it would be possible to exclude the septic tank loads in this allocation and that a BMAP project could be added to determine a better estimate of the number of septic tanks. Kim noted that making a requirement in the BMAP that the wastewater service areas for each jurisdiction are clearly defined is the best way to involve the utilities. Jennifer stated that this is why the BWG was formed because they need people at a higher level at each entity involved so they can assign responsibilities. Tim Egan noted that Winter Park is a smaller entity that has its own wastewater system so it will be relatively easy to determine where septic tanks are located. This will be a more difficult task for the counties, which have to obtain wastewater information from multiple utilities.

Bob Kelly noted that there are three options for moving forward: 1) using the proposal in the handout, 2) setting aside this load and collecting more information for the next cycle, or 3) collecting more information now for use in this allocation. Steve Lienhart stated that any projects to address septic tank loads would require knowing where the tanks are. This should be a research priority for the next TMDL. Robert stated that including a project to determine the number of tanks would be a good approach because they need to understand the loading from this source. If the group does not know where the tanks are and how many there are then they cannot address the issue. Vivian stated that she does not have a problem addressing these loads in the next cycle and gathering more data now. This is a fair and logical approach since there are entities with missing information. This will require involving all public and private wastewater utilities to map their service areas.

Kelly asked how pushing off the septic tank loads to the next iteration would affect an entity that wants to remove septic tanks to address their allocation. Jennifer responded that FDEP would have to discuss if an entity can receive credit for removing a load that is not part of the allocation.

The Technical Working Group reached consensus on the approach to investigate but not allocate the septic tank loads in this iteration of the BMAP. A project with a set timeline will be included in the BMAP. All members were able to support, agree, or accept this approach.

Tiffany stated that FDEP will provide an updated handout with the consensus decision. FDEP will also provide information on if credit can be given in this BMAP for septic tank removal.

Revised Allocation Numbers

Jennifer noted that the allocation table provided includes the septic tank load so she will revise the table and provide the updated version at the next meeting.

Kelly Brock noted that approximately 60 percent of Casselberry flows into the Lake Jesup basin because there is a weir that holds back a portion of the stormwater. Kelly noted that this structure was not factored into the TMDL. Sherry stated that the SJRWMD also ran the HSPF model for this basin, which includes weirs on lakes as long as they are documented structures. The HSPF water budget matches all known gauge data within 10 percent. There were very few differences between this model and the model used for the TMDL and Sherry was not sure if the

Casselberry weir was one of those differences. Kelly asked if Casselberry conducts monitoring and modeling to show how their system works, if this information can be included in the TMDL. Jennifer noted that this information could be considered in the next TMDL (as long the proper data collection standards are followed) and the study can be listed in this BMAP.

BMAP Project Discussion

Consumptive Use and In-Lake Projects

Jennifer stated that this handout was updated to address issues brought up during the last meeting. A new bullet was added under Question #1 (consumptive use projects) to clarify that this policy only affects consumptive use of lake water and not stormwater reuse. A new bullet was also added under Question #2 (in-lake restoration) to give credit to a project that draws water from the lake and returns treated water to the lake because this is similar to treating tributary inputs. Any projects that have multiple purposes (treat and return water and treat internal loads) would be considered on a case-by-case basis.

Robert King noted that the entity will have to make a good case that they are treating tributary water to obtain credit. Jennifer stated that these projects would be reviewed by Eric Livingston (FDEP) and the Technical Working Group. Regina asked if this new language would affect the Aquafiber project. Jennifer stated that the Aquafiber project could be given credit once it is confirmed that there is a nutrient benefit and the technology is made public. Sherry noted that the SJRWMD contract with Aquafiber allows the SJRWMD to buy the first 1.5 MT of nutrients removed and they will set those credits aside. Any reductions above and beyond that amount could be sold to entities that need project reductions. Sherry asked if the SJRWMD monitoring data for the project will be sufficient to show that the project is achieving nutrient reductions. Jennifer responded that they will also need to know how the technology works because this is still unknown (Aquafiber is going through the patent process for this technology).

The Technical Working Group reached consensus on the approach for consumptive use and in-lake restoration projects that would receive credit in this BMAP. All members were able to support, agree, or accept these approaches.

Sherry and Robert King noted that some of the language used in the handout may be too general and they will provide recommended corrections to Jennifer.

Status of Project Collection Sheet and Missing Submittals

Tiffany noted that the project collection process requires a lot of effort by the entities but this information helps FDEP understand what has been done in the basin and what is achievable in this iteration of the BMAP. Tiffany thanked those entities that have already submitted their project lists. Jennifer requested that the entities review the project summary handouts to ensure that what they submitted matches what is included in the tables.

Tiffany stated that FDOT, Eatonville, Oviedo, Maitland, Turnpike Enterprise, and Winter Springs have not submitted project lists. Maitland has hired a contractor and their project list should be submitted by the end of July. Brian Fields stated that Winter Springs has hired a contractor to create a list of projects that would be part of a TMDL Master Plan. The city would

then decide to implement these projects and/or participate in the regional projects. The draft project list should be complete in the next month or two.

Bilal Iftikhar noted that some of the projects appear to have been built to meet permit requirements and are not over and above the requirements. Kim added that several projects are older than the period requested. Jennifer stated that this project list includes all projects received. The projects will be looked at in further detail to determine which qualify for credit in the BMAP. Tiffany noted that Eric Livingston (FDEP) has completed the stormwater project review in the Lower St. Johns River Basin and he reviewed all the permits to ensure credit was only given for reductions above what was required. Bilal noted that Sanford has hired a contractor to determine regional projects that could be implemented with Seminole County. It will be easier for most jurisdictions to participate in regional projects due to budget cuts.

Jennifer stated that the entities do not have to include any municipal separate storm sewer system (MS4) activities because these will be pulled from the annual report. Jennifer suggested that they submit any structural projects that are included in the annual report to ensure that all the information necessary for the BMAP is provided.

Robert Potts stated that FDOT has list of projects for 2008-2013 that will be released in the next month. This information will be provided when available. Tiffany stated that the other entities that have not submitted projects and did not attend the meeting will be contacted to determine their project collection status.

BMP Effectiveness

Tiffany stated that Eric Livingston determined and agreed to the BMP efficiency values included in the handout. These numbers will be used to make load reductions estimates consistent for all entities. Tiffany thanked Bob Kelly for providing information and analyses to Eric.

Jennifer noted that in order to estimate the loads going into a project, Joe Walter (PBS&J) and his staff will be contacting each entity to obtain project information. This information will be mapped in GIS and the layer will be used in the pollutant loading model to estimate the loads from each project. The BMP reduction numbers will be applied to these calculated loads. If an entity has monitoring data for a project, this data will likely be used instead of the calculated values. The BMP efficiency values are based on Harvey Harper's 2007 report, Harvey Harper's 1999 report, Eric's best professional judgment, and data that has been collected. There is a list of provisional BMPs included in the table, which will be given credit in the BMAP but these numbers will be refined once more data is collected. The street sweeping values are based on a 2001 FDOT study in Tampa and the education values are from the Environmental Protection Agency's Center for Watershed Protection Watershed Treatment Model. Jennifer requested that the group let her know if they have any questions on the numbers provided.

Robert Potts asked how the street sweeping load reductions will be evaluated because the level of activity varies from year to year. Bob responded that the load reductions are based on the loading from the catchment area for the streets that are swept. The method to calculate this area for street sweeping will need to be further refined and more information will be brought to the group in a future meeting. Kim noted that the loads in the TMDL model are aqueous and the

reductions are based on sediments. Bob responded that the street sweeping numbers from the report are for entrained loads. Mark requested that the FDOT report be posted on the FTP site.

Kelly asked if the education reduction would apply to the entire load. Tiffany responded that Eric has said that credit can be provided for up to five percent of the load but the entities will have to provide a description of their nutrient-specific education program. Jennifer added that Eric has also stated that the education efforts must be over and above what is required by the MS4 permit. Mary Paulic asked how the five percent reduction was determined because a targeted education effort could yield higher reductions. Marcy Policastro responded that this value is from the EPA Watershed Treatment Model and she will send information about this model to Mary. Tiffany noted the education reductions are currently provisional and they will be adjusted once more information is available from the Florida Stormwater Association (FSA) study.

Danielle asked if these BMP values apply to agricultural projects. Jennifer responded that she will revise the handout to make it clear these values do not apply to agriculture. The list of BMPs now includes phosphorus credit for continuous deflective separator (CDS) units and also Stormceptors, which will be revised shortly once data from the Sanford study is available.

Next Steps

Next Meeting Agenda Topics

The next meeting will include an updated version of the septic tank handout, an updated allocation table, and additional information about the BMPs. Sherry will provide a presentation on the nitrogen-fixation study at the September meeting.

Next Meeting Date

The next meeting will be held on August 21st at 1:00 PM at Sylvan Lake Park.

Announcements

Tiffany requested that the group copy her on emails to Jennifer since Jennifer will be going on maternity leave soon.

Carol Johnson asked if agriculture can buy into the interagency projects because they may want to participate later. Jennifer stated that they could participate in the regional projects. Regina noted that she will be sending an update on the status of the Interagency Plan to the group. If there are any questions about the interagency projects, people can contact Regina and Sherry. Steve asked if the projects are scalable in case only partial funding is received. Sherry responded that some projects are more scalable than others and it would be up to the entities funding the project to determine if it should be constructed. Feasibility studies are being conducted now to determine if the projects recommended in the plan will work. Regina requested that if entities are interested in participating in the interagency projects that they let her know as soon as possible to help with planning.

Adjournment

The meeting was adjourned at 4:00 PM.

Action Items

1. The TWG should let Sherry Brandt-Williams know if they want to be on the RFP list.
2. Chris Ferraro will let Jennifer Gihring and Tiffany Busby know when the notice of draft permit for the City of Sanford wastewater facility (including Site 10) is available.
3. FDEP needs to discuss the implications of providing credit for septic tank removal if septic tank loads are not included in this BMAP allocation.
4. Jennifer Gihring will update the septic tank handout with the consensus information.
5. Jennifer Gihring will update the allocation table to only include surface loads.
6. Sherry Brandt-Williams and Robert King will provide language to clarify the consumptive use paper.
7. Tiffany Busby and Marcy Policastro will follow up with the entities who did not submit projects to determine their project collection status.
8. The TWG should review the BMP information and let Jennifer Gihring and Tiffany Busby know if there are any questions.
9. Further information will be provided by FDEP on how to apply the street sweeping reductions.
10. Bob Kelly will provide the FDOT study on street sweeping for posting on the FTP site.
11. Marcy Policastro will send Mary Paulic information on the Center for Watershed Protection's model.
12. Jennifer Gihring will update the BMP handout to specify that these numbers do not apply to agriculture.