

Lake Jesup, Crane Strand & Long Branch BMAP
Working Group Meeting
Wednesday, August 8, 2007
1:00 PM – 4:00 PM
Sylvan Lake Park - 845 Lake Markham Rd., Sanford, Florida

Attendees

Julie Bortles, Orange County
Mary Brabham, SJRWMD
Sherry Brandt-Williams,
SJRWMD
Kelly Brock, Casselberry
Tiffany Busby, Wildwood
Consulting
Tim Egan, Winter Park
Chris Ferraro, FDEP
Brian Fields, City of Winter
Springs
Mark Flomerfelt, Seminole
County
Pat Fricano, FDEP
Jennifer Gihring, FDEP
Ed Hayes, FFWCC
Migdalia Hernandez, City of
Sanford
Dan Homblette, Orange
County EPD

Sarah Jozwiack, FDEP
Bob Kelly, SAIC
Steve Kelly, FDEP
Robert King, Friends of Lake Jesup
Chris Kinter, City of Longwood
Steve Lienhart, URS Corporation
Regina Lovings-Morse, SJRWMD
Kevin McCann, City of Orlando
Ian McDonald, City of Maitland
Kim Ornberg, Seminole County
Vincent Peluso, City of Oviedo
Zynka Perez, City of Winter Springs
Penny Post, Orange County
Robert Potts, E-Sciences
Gary Smith, Orange County Health Dept.
Mike Thomas, PBS&J
Ed Torres, Casselberry
Joe Walter, PBS&J
Bob Walter, Seminole County
Shannon Wetzels, Seminole County

The meeting began at 1:05 p.m.

Welcome and Introductions; Updates

Tiffany Busby thanked Seminole County for providing the facility. Introductions were made. Tiffany asked if there were any questions about TMDLs since last meeting. None were raised.

Jennifer Gihring gave an update on one-on-one meetings with municipalities in the basin. FDEP met with FDOT on August 8, 2007 regarding regional projects as part of the interagency plan; FDOT is open to cooperative funding and regional projects. Tiffany Busby asked if there were any questions about the one-on-one meetings. None were raised.

Sherry Brandt-Williams gave an update on the interagency report being assembled by FWC, FDEP and SJRWMD. This report will introduce the possibility of regional treatment for Lake Jesup. It is currently in the hands of the SJRWMD permitting group as well as in the hands of the BMAP Working Group for review. The document is available on the ftp site listed on the bottom of the agenda (<ftp://ftp.dep.state.fl.us/pub/water/BMAP/MiddleStJohns/Meetings/>). Comments should be sent to Sherry Brandt-Williams, preferably before August 15. In the draft, members should make sure how they want to be listed: reviewer, supporter, etc. It is important to note, however, that endorsement is not required to provide comment. If you meet all of your allocation, there will be no requirement to participate in the projects. Even those not planning to participate should be included; endorsement

only is ok. Vincent Peluso suggested that working group members talk to local governing councils to encourage their participation and endorsement. Tiffany Busby said BMAP staff members are available to make presentations or to give briefings should that be helpful. Jennifer Gihring added that this has been successfully done in other basins. Florida State Sen. Lee Constantine's office has put out a request to compile a list of projects so he can take it to the Legislature. It is hoped that this list can be completed in time to meet his request.

Shannon Wetzel gave an update on the Lake Jesup submerged aquatic vegetation (SAV) study. The field component of the study, which was to establish a baseline on in-lake vegetation, is complete. Transects were established around the lake looking for SAV and the plan is to re-visit each transect every two (2) years to measure changes. This is the first time a formal SAV survey has been done at Lake Jesup. Shannon Wetzel indicated that they are still processing all of the GIS data.

Sherry Brandt-Williams said that they sampled four sites in Bear Gully yesterday. This was a "snapshot" sampling effort.

Migdalia Hernandez asked about the status of groundwater monitoring at Site 10 (Sanford's wastewater facility). Jennifer Gihring said FDEP was waiting for rain, but are planning to sample Site 10 soon as there has been sufficient rainfall.

Migdalia Hernandez says they are changing the processing of sludge to create a better product with reduced nitrogen loading. She said the City of Sanford is trying reach an agreement with Volusia County and possibly Lake Mary to take up to two (2) mgd of reuse water.

Kevin McCann asked Sherry Brandt-Williams why the gizzard shad harvest was taken out of the plan. Sherry Brandt-Williams responded that data from FWC was not supportive of a gizzard shad harvest. Ed Hayes says there seems to be a good population of gizzard shad in the lake based on fish kills. Sherry Brandt-Williams will send population characteristics and calculations to Ed Hayes.

FDEP developed a matrix that pulls together all logistics throughout basins. Jennifer Gihring described the structure and composition of the table. She then asked the members to forward any questions or revisions to her by the end of August. Tiffany Busby stated that the level of MS4 activity will vary among basins; this table is to be a general baseline and will attempt to create a basic understanding of who is doing what. Dan Homblette asked if the table should reflect activity in the basin or in the municipality. Jennifer Gihring explained that it should be basin-specific and that it is important to indicate how much effort is being put into what is already in place.

MS4 permits and BMAP implementation Steve Kelly & Sarah Jozwiack, FDEP

The MS4 is a system of conveyances that is publicly owned and discharges to waters of the state. The MS4 group has only seen one draft BMAP since its inception six (6) years ago. There is a difference in MS4 enforcement and compliance. Compliance is typically in the form of education and outreach. Enforcement can be a progressive process of phone calls, meetings, letters, corrective action letters, and finally, fines and penalties. The group would rather work with entities to resolve enforcement issues. FDEP is going down the list of permits in order of permit expiration dates and they are working with individual permittees. Sarah Jozwiack read the draft language. Joe Walter asked what the reporting requirements are for projects that agencies are committing to do. Sarah Jozwiack said that FDEP will be reviewing the BMAPs and will coordinate between the MS4 group and the BMAP group. Tiffany Busby explained that the BMAP will contain language for the Working

Group to do a self-check on BMAP implementation and to hold an annual or bi-annual meeting. The hope is that there will be no duplicity of project requirements and reporting. Jennifer Gihring added that the BMAP report would reference other reports sent to FDEP.

Brian Fields asked how private developments would be handled. Sarah Jozwiack said they don't have the authority to issue permits for private stormwater systems; this is typically done in the ERP process. Jennifer Gihring said there are three options for dealing with water quality in private stormwater systems: 1) through the ERP process for new developments; 2) enhance stormwater requirements within an overall municipality; or 3) form a Community Development District (CDD). It is an act of special legislation to form a CDD and it must be for a specific purpose or purposes such as fire control, water control, mosquito control, etc. There are certain criteria about who can qualify for an MS4. For example, Heathrow is all privately owned; Seminole County has no authority to enforce their water quality despite its discharge into the Wekiva River. Tiffany Busby said that there is the option of including CDDs with allocations or specific responsibilities in the BMAP document. Ed Torres asked what legal authority there is to enforce the CDDs to comply. Jennifer Gihring stated that there are requirements and conditions under the ERP permit which was issued for the private entity's stormwater collection. If there is a violation of ambient water quality standards, however, FDEP can step in.

Jennifer Gihring suggested that as members are completing their projects list for the BMAP, they should start thinking about which projects they feel should be linked to MS4 permits and which should not. Steve Kelly stated that members should use caution linking projects that contain 319 Grant funding. Sarah Jozwiack noted that some projects listed in the BMAP are not appropriate to link to MS4; i.e., projects related to septic tanks. There is no change in the current MS4 reporting or permitting requirements. Steve Kelly and Sarah Jozwiack will remain for the duration of the break if there are any other questions.

Water Quality Credit Trading

Steve Lienhart, URS Corporation

Pollutant trading, 'water quality credit trading,' is based in the TMDL process. The process objective of a TMDL is to identify, quantify, and model non-point sources, and then apply the results. The best allocation process is to allocate reductions to all dischargers and treat all dischargers fairly.

Issues regarding water quality credit trading:

- point vs. non-point
- urban vs. agricultural
- reductions inside vs. outside a WBID
- overall cost of pollutant load reductions
- prior investments in facilities
- basis of BMPs
- fairness to all parties/stakeholders
- quantification

Credit trading allows market forces to find the most cost-efficient solutions, provides the economic benefit of lower cost, delivers environmental benefits such as greater and faster reductions in loading for the same fixed costs, allows additional money for addressing non-point sources --which are the main sources of impairment -- and offers a mechanism to offset loads from new growth. Basically, credit trading allows stakeholders the needed flexibility to achieve their required pollutant reduction.

It is estimated that stormwater treatment costs fall between \$8,000 and \$15,000 per acre and that the statewide TMDL cost is estimated at between \$1.5 and \$12.0 billion.

A credit can be generated by some of the following means:

- reduce off-site load discharge
- reuse previously discharge
- cease current business practices
- go out of business altogether
- control generation of discharges, on-site treatment
- off-site interception and removal

Principles of credit trading:

- must meet Clean Water Act requirements
- must occur within the watershed or segment
- must be able to quantify reduction for credit
- must be enforceable
- needs organizational structure; i.e., a process for tracking implementation and for monitoring reductions and net effectiveness
- finally, someone must want to buy the credit

Legislative direction on trading:

FDEP has been authorized to adopt rules for water quality credit trading. FDEP developed the PTPAC (Pollutant Trading Process Advisory Committee) to spearhead this effort. It is required that the rules be ratified by the legislature going into effect. FDEP will issue a "Notice of Rule Development" soon.

Tiffany Busby said that water quality credit trading focuses on the post-BMAP implementation phase.

Break from 3:05 to 3:15 p.m.

Tiffany Busby explained that water quality models for Lake Jesup are based on land use surrounding the lake, and currently neglect inclusion of ongoing water treatment regimes in the area. FDEP has taken a look at the upstream data. The combination of these has led to the study described in the following presentation.

Lake Jesup Stream Phosphorus Concentrations

Joe Walter, PBS&J; Bob Kelly, SAIC

The sampling effort compared Total Phosphorus (TP) concentrations in Lake Jesup to concentrations in tributaries that drain into the lake. The tributaries sampled were: Navy Canal, Six Mile Creek, Soldiers Creek, Gee Creek, Lake Fairy, Lake Triplet, Little Lake Howell Creek, Lake Tony, Solary Creek, Salt Creek, and Sweetwater creek.

Vincent Peluso asked if there was sediment flux in Soldiers Creek; Bob Kelly replied that there was for the lake, but not this specific creek.

The highest concentrations of TP were in streams on the southern side, and the highest concentrations in the lake also occurred nearby. Little Lake Howell Creek had the largest identified load of TP, but it appeared that Bear Gully contributed much of the load. In the northern areas of the

lake, flow was very low unless it was the wet season. Several members agreed that flow data were an important aspect on which to do further study. Joe Walter said the model may have underpredicted the flow. Groundwater contributions of TP were still under analysis

Kim Ornberg pointed out that since the middle section's land use was mostly agricultural, the soils were likely saturated with phosphorus. Therefore, improvement activities in this area would likely create the best benefit for the effort.

Next Steps:

- take a closer look at groundwater data
- develop Solary Canal and Chub Creek data and incorporate
- include Bear Gully in the analysis
- look at land use data more carefully in the area of streams with higher concentrations

Jennifer Gihring asked what they had in mind as far as land use data. Joe Walter replied that he wanted to take a closer look at why the model was so different than reality.

Tiffany Busby asked if any conclusions could be made based on the data from an allocation perspective. Joe Walter and Bob Kelly described how these data do not currently support any conclusions.

Kim Ornberg suggested that the group find out what the worst areas are basin-wide and all pitch in to get the greatest result for their effort. Tim Egan pointed out that it must be based on a fair sharing agreement. Kevin McCann suggested participation should be based on what loads each entity is contributing. Ed Torres stated that he would like to see most of their money stay within their area. Tiffany suggested that the group should all start thinking about what the data limitations are and think about what would be fair for the entities, basin-wide.

Jennifer Gihring stated that the next working group meeting will transition into the Sunshine Law phase and discussions about allocations can begin. She asked that the members review the last half of page 2 and the first half of page 3 of the Sunshine Law handout. Basically, the reorganization will add another layer of decision making. The planned arrangement will help the existing group and meeting keep its current structure.

The meeting adjourned at 4:15 p.m.

Action Items

Members should forward any questions or revisions to the MS4 matrix table to Jennifer Gihring by the end of August.

Members should send comments on the interagency report to Sherry Brandt-Williams, preferably before August 15.

Sherry Brandt-Williams will send gizzard shad population characteristics and calculations to Ed Hayes.

Keep Migdalia Hernandez updated on the status of FDEP's Site 10 groundwater monitoring and continue to look for the groundwater source identified in the CDM report.

Need information/future meeting topic on private stormwater systems and how they will be incorporated into the BMAP process and enforced.

There is a data need for Little Lake Howell and downstream water quality data (send to Joe Walter and Bob Kelly).

Additional analysis needs from Joe Walter and Bob Kelly: 1) Take a closer look at SJRWMD groundwater data and integrate with FDEP data; 2) Develop Solary Canal and Chub Creek data and incorporate; 3) Look at land use data more carefully in the areas of high concentrations of P coming into the lake and for Bear Gully.

Need a better handle on flows from groundwater and stormwater.

Evaluate whether the groundwater source is larger than was considered in the TMDL model.

Meeting summary prepared by Michael Thomas (PBS&J) and Tiffany Busby (Wildwood Consulting). Please send comments to tbusby@wildwoodconsulting.net.