



Hendry Creek and Imperial River BMAP Technical Meeting Summary September 22, 2009

MEETING SUMMARY

This is a summary of the first Basin Management Action Plan (BMAP) Technical Meeting for Hendry Creek and Imperial River. The meeting agenda and attendee list are attached. Provided below are significant discussions and comments of the meeting.

OPENING REMARKS

Steve Lienhart (URS) called the meeting to order at approximately 1:30 p.m. He introduced John Abendroth as the Florida Department of Environmental Protection (FDEP) Watershed Planning and Coordination Administrator and Beth Alvi as the FDEP Basin Coordinator. The participants introduced themselves and the entity they represent.

Basin Group Formation

Materials: PowerPoint Presentation, Nomination Form

Steve Lienhart explained that each entity that has an allocation will have a seat on the Basin Working Group (BWG) and discussed the key responsibilities of the BWG which include:

- Providing recommendations to the FDEP;
- Voting on the allocation approach, required nutrient load reductions;
- Approving the drafted BMAP documents; and
- Addressing any other issues as needed.

He also discussed the role of the BWG representative (decision making) versus the Technical Working participant (fact finding) and illustrated the characteristics of the ideal representative which include:

- Understanding the objectives and big picture of the TMDL/BMAP program;
- Holding a senior/management role in their organization;
- Ability to make key decisions for their organization; and
- Having adequate time to serve on the BWG.



Steve then distributed the nomination form to each stakeholder and requested that the pertinent information be provided to FDEP regarding contact information for their BWG representative.

Approaching Allocations

Materials: PowerPoint Presentation

Process Flowchart and BMAP Milestones

BMAP development and Implementation is a complicated multi-step process.

Primary steps include: calculation of loads by entity, establishing required reductions, making project commitments and calculating credits to meet required reductions.

Identify knowns and unknowns upfront in the process and determine what is absolutely necessary to move forward.

Boundaries

Currently we have two slightly inconsistent watershed boundaries.

Hendry Creek and Imperial River Maps with:

- Lee County Boundary
- South Florida Water Management District (SFWMD) Boundary

Need to identify correct boundaries, special districts, their viability, their responsibility, their boundaries, MS4 boundaries.

Allocation Calculations

Allocation: Relative proportion of load i.e. your annual load relative to the total load.

Required Reduction: Your Implementation Obligation. May not be the same as your assigned allocation.

Sufficiency of Effort: If there is insufficient scientific basis to make detailed allocation calculations, we define implementation obligations for the entities and then determine if this is sufficient to meet TMDL goals.

Modeling

No modeling conducted in the TMDL.

WMM model output will be on annual and seasonal basis.



HSPF modeling (Need flow data) will augment/validate WMM results.

Projects

Project information to be provided to FDEP in specified format by stakeholders.

Project cut-off date is July 2007.

Project credit will be for pounds reduced above permit requirements.

Maintenance records for older ongoing as well as new projects must be maintained.

Discussion

After the discussion of the key issues and concerns, the following key points were raised by stakeholder meeting participant questions and comments which were subsequently addressed by FDEP Staff:

Would projects done in the anticipation of TMDLs be given credit? Beth Alvi explained that the project cut-off date was July 2007 which is after the period of record for data used in the TMDLs. Steve Lienhart added the FDEP has the discretion to consider earlier projects on a case-by-case basis based on consideration of their merits, history and funding participation characteristics.

If a BMP was implemented as permit requirement will it count as BMAP credit? Beth Alvi responded that only if you demonstrate that you achieved additional reductions will it count as BMAP credit. The additional portion will count as BMAP credit.

Will biomass removal receive a BMAP credit? John Abendroth responded that FDEP would need to review the reduction data before offering an answer.

Will grant funding be available from FDEP or other agencies for projects that are required to achieve nutrient reductions and will have to be implemented as a part of the BMAP but are permit requirements? Beth Alvi explained that unfortunately those projects will not be eligible for 319 funding if they are a permit requirement but will be eligible for other types of grant funding. Steve Lienhart commented that future projects might receive an infusion of external funding from other agencies based on other regional water quality management and water supply initiatives.

Why is FDEP requesting information for land use, jurisdictional boundaries etc. as this information was sent to FDEP during TMDL development? Jennifer Thera (FDEP) replied that no modeling was done during TMDL development and the information being requested was not asked for before the BMAP. The TMDLs were based on the reference stream approach where the percent reduction is to achieve a TN concentration similar to a WBID that is not impaired and is considered "natural". Beth Alvi explained that the BMAP process focuses on the watershed boundaries of Hendry Creek and Imperial River which contribute to the water quality problems identified within the WBID boundaries by the TMDLs.



How were the percent reductions for the TMDLs developed? Beth Alvi explained that the TMDLs focused on the percent reduction in the ambient water quality concentrations that would be required to achieve State water quality standards. Steve Lienhart pointed out that the BMAP focuses on the pounds of annual nutrient load reductions that will have to be achieved by the stakeholders in their jurisdictional areas to achieve State water quality standards.

Will adding more WBIDs or creating a larger boundary affect the percent reduction in the TMDL? Beth Alvi replied that the BMAP includes the entire area that drains into the impaired waterbody and FDEP considers both the sources and the loadings into this waterbody. This approach will not affect the reductions that need to be made as stated in the TMDL. Mr. Lienhart commented that the problems in a specific downstream WBID is caused by excess nutrient discharges from the WBID in question as well as all of the upstream WBID discharges, and it is common watershed management practice to examine the reduction required of all sources—not just the sources in the impaired WBID.

How does FDEP apply the phased approach to implementing annual nutrient reductions in the BMAP? Beth Alvi responded that using a phased approach to achieve reductions allows for some flexibility, and allows FDEP to conduct additional monitoring to have better data. If reductions need to be changed in the future they can be done easily.

A stakeholder noted that it would be a lot harder to change to a higher reduction than to change to a lower reduction in the next TMDL cycle. This observation is accurate given the high cost of constructing and operating nutrient reduction facilities and the current financial situation under which stakeholders are operating. However, additional water quality and flow information combined with detailed modeling of ambient water quality in the watershed will reduce the uncertainty of the original TMDLs and may suggest higher actual annual loads exist and indicate that a larger nutrient load reduction is required to achieve ambient water quality goals.

Does USEPA find FDEP's phased approach of taking 15+ years for waters to meet standards acceptable? John Abendroth answered that there should not be a problem as long as FDEP can show that the stakeholders are showing reasonable progress towards meeting required reductions.

How will FDEP address the impacts of tidal flows and nutrients from Mullock Creek and the 10 Mile Canal on the Hendry Creek Marine WBID? FDEP replied that FDEP would need to examine the available data to determine if it indicates that Mullock Creek and 10 Mile Canal are actually a significant source of loading in the Hendry Creek Marine system. If Mullock Creek and 10 Mile Canal are found to be significant, they will need to be addressed.

Will FDEP be including 10 Mile Canal into the nutrient loading model to be developed for the Hendry Creek Marine WBID (recognizing that the WMM model will not do this and a more sophisticated model would be required)? Beth Alvi replied that FDEP is currently planning on using the WMM model to determine loadings from anthropogenic sources and, when adequate data exists on both flow and land-use, FDEP plans on using the HSPF model to validate our WMM results.



How will FDEP address the septic tank problem in the Hendry Creek WBID, and would it not be a more straight forward path of just addressing the septic systems instead of trying to do all this subjective modeling? John Abendroth stated that stakeholders can do any project they want to reduce loads/concentrations; however FDEP first needs to allocate a reduction for each stakeholder.

Given that a model is only as good as the data that goes into it, is FDEP going to conduct a review of available data see what's best and is FDEP considering getting more data? ? Steve Lienhart responded that for the purposes of the allocation we are going to start with a model based on loads and on land use per acre. Beth Alvi responded that we would be collecting additional data as warranted.

If FDEP only uses a land use model to estimate annual loads which is OK for a planning tool FDEP will miss other significant loads (i.e. groundwater) which is not good enough for assigning specific loadings for allocation purposes. Beth Alvi responded that FDEP needs to move forward with unknowns, however if we are able to gather that information in the future we can apply it next time around.

What is the time frame for “the next time around”? John Abendroth responded it would be based on the ongoing TMDL process cycle which would be around 5 years.

What data was needed for the development of an ambient water quality simulation model? Ms. Alvi replied that FDEP needs flow data to convert ambient concentration data into annual pollutant loading estimates. More information will be requested as needed.

Florida Gulf Coast University (FGCU) has collected water quality information in the impaired WBIDS, can provide their data, and may be able to help with future data collection initiatives if they knew our needs. Beth Alvi responded that FDEP would be glad to work with FGCU and will contact the FGCU representative in the near future.

When will WMM modeling be conducted and when will results be available for review? Steve Lienhart responded that FDEP should be able to provide a rough estimate of annual loading, based on existing data, in a few weeks.

HSPF is a watershed model that focuses on downstream freshwater flows — FDEP should also develop an appropriate tidal model to address the impact of the tidal prism flows. Steve Lienhart responded that FDEP is aware of the limitations of using just the HSPF model exclusively. Unfortunately, sufficient water quality and flow data do not exist at the present time to allow FDEP to develop a more sophisticated tidal model.

How is FDEP addressing the fecal coliform issue and sources in Hendry Creek? Beth Alvi responded that the TMDL enumerated septic, domesticated animals (dogs and cats) and wildlife as sources. Due to lack of adequate data, FDEP does not have any current plans for specifically addressing or modeling coliforms in Hendry Creek. However, many of the projects and ordinances that may be adopted as a result of this BMAP should help mitigate the fecal coliform issue.



Lee County mentioned their source tracking study and stated that preliminary data was available. FDEP will review and assess the potential of this information.

Will biomass removal count as credit? John Abendroth responded that we would need to review the reduction data before offering an answer.

Is FDEP trying to scare home owner associations (HOAs) into compliance with stormwater rules? Steve Lienhart responded that the discussion regarding possible stakeholder status and legal obligations of certain special purpose districts was intended as information only, and that it was not targeted at HOAs specifically. Generally, the properties in HOAs, exclusive of gated communities and preclude municipal access, fall under the regulatory purview of city and county MS4 Permits.

Action Items

Responsible Party	Action Item	Deadline
FDEP South District	Ground-truthing and mapping in Hendry Creek and Imperial River	ASAP
Beth Alvi	Post Presentation on FDEP's FTP site (ftp://ftp.dep.state.fl.us/pub/water/BMAP/EWC)	ASAP
All	Identify special districts, refine mapping of Imperial River and Hendry Creek watershed boundary	ASAP

Note: EWC materials can be at the following website:
<ftp://ftp.dep.state.fl.us/pub/water/BMAP/EWC/>