

## **Wekiva BMAP Implementation Approach**

*Prepared for March 18, 2010, Wekiva Basin Working Group Meeting*

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One objective of the BMAP process is to identify load reduction responsibilities by stakeholder, source type, or groups of stakeholders. In several other BMAPs (Lower St. Johns Mainstem, Lake Jesup) this has taken the form of quantitative detailed allocations by entity (e.g. City X must reduce their load by 500 pounds of nitrogen in the next 15 years).

This type of quantitative detailed allocation is not appropriate in the Wekiva BMAP due to three primary factors: 1) with impaired springs, consideration of activities in the springshed is necessary; and 2) quantification of denitrification in soil and groundwater is not possible at the scale necessary for entity-specific allocations; and 3) a portion of the Wekiwa/Rock springshed extends beneath surface watersheds that drain to other basins. The challenge is to develop an implementation approach that provides certainty for stakeholders and the health of the springs while accounting for scientific unknowns and the reality that our typical best management practices that rely on infiltration may actually increase loads to the springs via groundwater. The following text and tables describe the Wekiva BMAP Implementation Approach.

### ***Description***

The BMAP planning area for the Wekiva includes a surface watershed and springshed. One complexity in the Wekiva Basin is that some entities are in the Wekiva surface watershed *and* springshed while others are in the Wekiva springshed but in the watershed of another basin.

The proposed approach is phased with two levels of implementation included in each phase. ***The phasing addresses changes in implementation over time, while the level of implementation differentiates effort among stakeholders.***

Phase 1 is intended to implement logical BMPs in order to see results in a short timeframe. Phase 1 contains two levels of BMP implementation. Level 1 BMPs are focused on pollution prevention (e.g. decreasing nutrient inputs). All BMAP stakeholders must implement Level 1 BMPs applicable to their jurisdiction and within their authority. These BMPs, to be identified by the Department and Basin Working Group, shall:

1. Focus on pollution prevention;
2. Address all identified sources;
3. Be cost effective;
4. Be implemented in a relatively short timeframe; and
5. Achieve reductions or provide information for desirable future activities on a relatively short timeframe.

Level 2 BMPs are more stringent requirements including treatment of nutrient loads. Level 2 BMPs achieve greater nutrient reductions, but require more extensive resources and/or funding. Those entities that are within both the springshed and watershed will be required to implement both Level 1 and Level 2 BMPs.

Phase 2 will mirror the same Level 1/Level 2 structure. Initiation of Phase 2 is contingent on resolution of key scientific unknowns and evidence that management actions undertaken in Phase 1 are inadequate to meet the nutrient targets specified in the TMDL.

### ***Sufficiency of Effort***

Sufficiency of effort would be determined on a BMP implementation basis. If a stakeholder implements all applicable BMPs, then they have met their BMAP obligation. The Department is under the obligation to determine to what extent a BMP needs to be implemented to qualify for implementation credit.

### ***Quantification of Nutrient Reductions***

Even with a BMP-based implementation approach, quantification of nutrient reductions is necessary to communicate the extent to which nutrient inputs are being reduced. Nitrate load reductions achieved by BMAP projects will be estimated to the greatest extent possible.

## Wekiva BMAP Implementation Approach

*All BMPs are to be implemented within five years of BMAP adoption*

|                | Required BMPs for Level 1 Entities<br>(springshed only)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Required BMPs for Level 2 Entities<br>(watershed)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Permitted Wastewater<br>Facilities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| <b>PHASE 1</b> | <ol style="list-style-type: none"> <li>1. Adopt and implement the Florida Friendly Landscaping Program.</li> <li>2. Enroll 100% of agricultural producers in the agricultural BMP program and implement nutrient management BMPs</li> <li>3. Enhance public education efforts to include: nutrient-management related public service announcements, pamphlets/ presentations, website, and implementation of an illicit discharge program)</li> <li>4. Adopt local development regulations or ordinances that decrease the application of nutrients on the ground and/or decrease the transport of nutrients to groundwater.</li> <li>5. Optimize frequency of stormwater pond maintenance (i.e. clean-out) to ensure that filtration capacity is maintained.</li> </ol> <p>&lt;OTHER STORMWATER AND ONSITE WASTEWATER BMPs WILL BE INCORPORATED; FINAL LIST TO BE DETERMINED BY BASIN WORKING GROUP&gt;</p> | <ol style="list-style-type: none"> <li>1. Implement Level 1 BMPs</li> <li>2. Implement specified projects to eliminate untreated/ insufficiently treated stormwater discharges through retrofits. &lt;INSERT RESULT OF PROJECT COLLECTION re: SPECIFIC STORMWATER BMPs BY ENTITY&gt;</li> <li>3. Adopt local development regulations or ordinances that encourage or mandate setbacks from waterbodies, treatment of runoff from new/existing development, promote low impact design, promote the maintenance of natural areas, encourage riparian buffers, and otherwise improve runoff management.</li> </ol> <p>&lt;OTHER STORMWATER AND ONSITE WASTEWATER BMPs WILL BE INCORPORATED; FINAL LIST TO BE DETERMINED BY BASIN WORKING GROUP&gt;</p> | <p>Achieve discharge limits established in TMDL:</p> <p>SCES/Yankee Lake WRF<br/>FL0042625: 572 lbs<br/>TN/month (18.8 lbs/day;<br/>facility currently meeting this target)</p> <p>Wekiva Hunt Club WWTF<br/>FL0036251: 2,805 lbs/mo<br/>nitrate (80.5 lbs/day)</p> <p>Altamonte Springs Regional<br/>Water Reclamation Facility<br/>FL0033251: 91 lbs/mo<br/>nitrate (2.9 lbs/day)</p> <p><i>Note: The TMDL also contains total phosphorus allocations for these facilities. TP allocations will be incorporated into facility permits along with the TN reductions noted above.</i></p> |

## Trigger for Entering Phase 2

Depends on results of studies, regulation, legislation, & new technology that become available (e.g. passive septic tank enhancement options approved for use). Details will be developed by the Wekiva BMAP Working Group.

### PHASE 2

BMPs to be determined, depending on outcome of studies that will provide guidance regarding where additional effort is needed (spatially and by source type). Phase 2 requirements will be developed in future BMAP updates.