

# Florida Department of Environmental Protection



## Upper Wakulla River and Wakulla Springs BMAP

# Draft Research Items for the BMAP

**June 25, 2013**  
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# Overview

- From discussions during past meetings, the following draft list of research items of interest to the stakeholders has been compiled.
- The items are presented in the chronological order as voiced at the stakeholder meetings.
- Proposed research items or recommendations/revisions of draft items from stakeholders need to be submitted by July 2<sup>nd</sup>.
- Once finalized with input from the stakeholders, the research items will be included in the BMAP as actions that could be pursued to improve understanding of the basin, if funding becomes available.



# Draft Research Items

- Determine the nitrate contributions to Wakulla Springs during the reverse flow scenario.
- Identify potential sources of loading entering the basin from Georgia, determine if any are significant enough to be addressed to help meet the nitrate target.
- Evaluate drinking water well data to identify areas with high nitrate concentrations, conduct further research to determine source(s).
- Expand the Department's Wakulla Springs Basin Nitrogen Sourcing Inventory to include the entire BMAP basin.
- Update the potentiometric surface data for the basin to better define the boundary.



# Draft Research Items (cont.)

- Run the Aquifer Vulnerability Assessment (AVA) model for the entire BMAP basin.
- Collect Light Detecting and Ranging (LIDAR) data in Wakulla County to better identify karst features to improve the AVA model update.
- Verify the effectiveness of agricultural BMPs in the Wakulla BMAP.
- Monitor before and after project implementation to determine the nitrate reduction benefits of the projects.



# Draft Research Items (cont.)

- Add nitrate data loggers to the river water quality sampling locations (upper bridge and recreation area boat dock) to obtain better information about how nitrate concentrations change in the river.
- Determine the effects of ground water withdrawals on the nitrate concentrations in the Upper Wakulla River and Wakulla Springs.
- Determine the effects of saltwater intrusion on the biological community in the Upper Wakulla River and Wakulla Springs.



# Draft Research Items (cont.)

## REMINDER

- Proposed research items or recommendations/revisions of draft items from stakeholders need to be submitted to Anita Nash by July 2<sup>nd</sup>.



# Questions on the Draft Research Items

