

Upper Wakulla River and Wakulla Springs Basin Management Action Plan Proposed Boundary March 28, 2013

The Florida Department of Environmental Protection (FDEP) evaluated several options to create the proposed boundary for the Upper Wakulla River and Wakulla Springs Basin Management Action Plan (BMAP). This boundary will be used to identify the geographical area that will be covered by the actions in the first iteration of the BMAP, which is the five-year period starting at BMAP adoption. The BMAP basin may be modified in the next five-year BMAP iteration based on new evidence. It should be noted that no delineation of the springshed will be completely accurate as the groundwater system is dynamic.

The following boundaries, which are shown on the attached map, were evaluated by FDEP:

- Upper Wakulla River WBID 1006 TMDL Surface Watershed – This is the boundary for waterbody identification (WBID) number 1006, which is the Upper Wakulla River. The WBID represents the surface watershed that drains to the Upper Wakulla River, which was used in the total maximum daily load (TMDL) development.
- NWFWMD Wakulla Springshed 2008/TMDL Springshed – This boundary was developed by the Northwest Florida Water Management District (NWFWMD) using information from the following: 1) The Floridan Aquifer potentiometric surface in the U.S. Geological Survey (USGS) model simulation in Water Resource Investigation Report 95-4296; 2) The Chelette and Pratt report; and 3) The dye trace study conducted by the Florida Geological Survey. This is the springshed boundary used in the TMDL.
- Florida Geological Survey (FGS)/FDEP 2007 – This boundary was developed by the FGS, based on the USGS Floridan Aquifer potentiometric surface map. The FGS team that developed the boundary included Tom Scott, Rick Copeland, Harley Means, and Tom Greenhalgh.
- USGS Report 2007-5070 Davis Recharge Zone – This boundary represents the Wakulla Springs and Spring Creek Springs recharge area, and was created following the potentiometric map contours for these springs.

The proposed BMAP boundary was developed by merging the “FGS/FDEP 2007” boundary in the north and the “USGS Report 2007-5070 Davis Recharge Zone” in the south. Modifications to these two merged boundaries follow the features listed below:

- State line as the northern boundary;
- “Upper Wakulla River WBID 1006 TMDL Surface Watershed” boundary;
- Most seaward spring, instead of going out into the Gulf;
- “NWFWMD Wakulla Springshed 2008/TMDL Springshed” boundary in the northwestern portion of the basin; and
- Gadsden County-Liberty County line in the northwestern part of the basin.

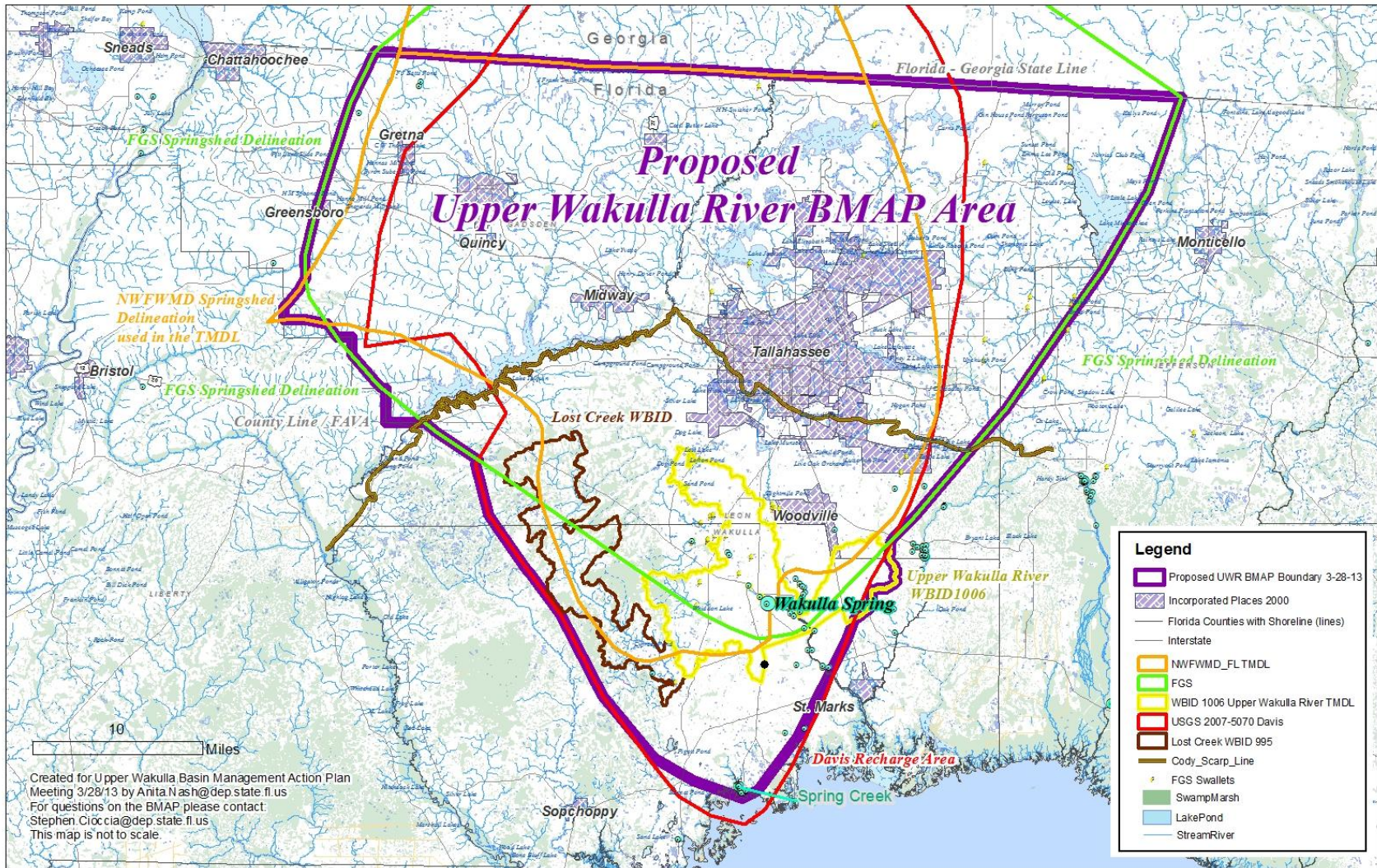


Figure 1: Map of the Boundaries Evaluated to Create the Proposed BMAP Boundary