

Florida Department of Environmental Protection



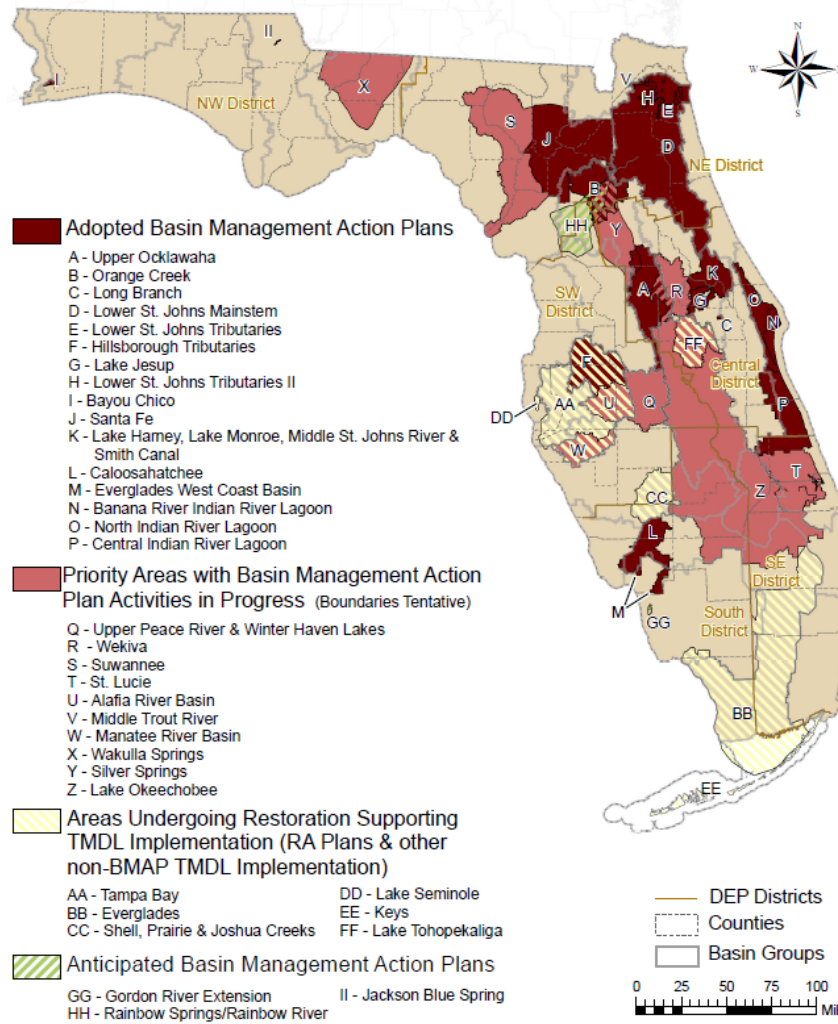
**Lower St. Johns River TAC Meeting
December 11, 2013**

Upstream St. Johns River Nutrient Reduction Plans

Charles Gauthier, FAICP



Basin Management Action Plans



Source: Florida Department of Environmental Protection
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<http://www.dep.state.fl.us/water/watersheds/bmap.htm>

**TMDL Implementation:
Basin Management Action Plans
and other Water Quality
Restoration Activities**



March 2013



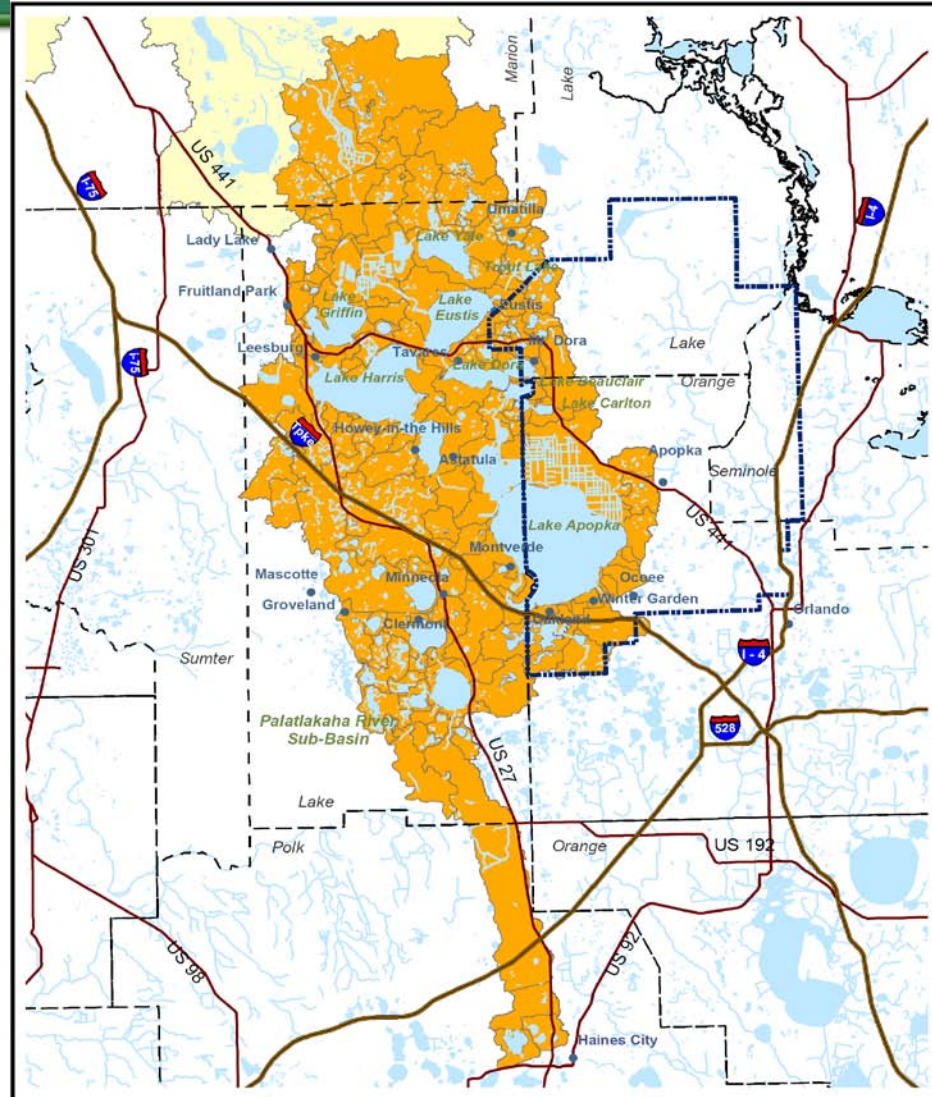
Upstream Reductions for the LSJR Main Stem TMDL

- To achieve the TMDL for the Lower St. Johns River Main Stem freshwater section, reductions from upstream are required:
 - 31.6% reduction in total nitrogen (TN).
 - 35.98% reduction in total phosphorus (TP).
- The Department has adopted several BMAPs upstream and is working on other BMAPs, which will help meet the LSJR Main Stem reductions.



Upper Ocklawaha

- The basin is mostly in Lake County, the northwest portion of Orange County, southern Marion County, and the northern part of Polk County.



Map prepared June 7, 2006 by the Bureau of Watershed Management, Division of Water Resource Management. Map is intended for display purposes only.

Upper Ocklawaha Basin



Legend	
	Florida County Boundaries
	Ocklawaha Basin
	Upper Ocklawaha Basin Area
	Wekiva Study Area

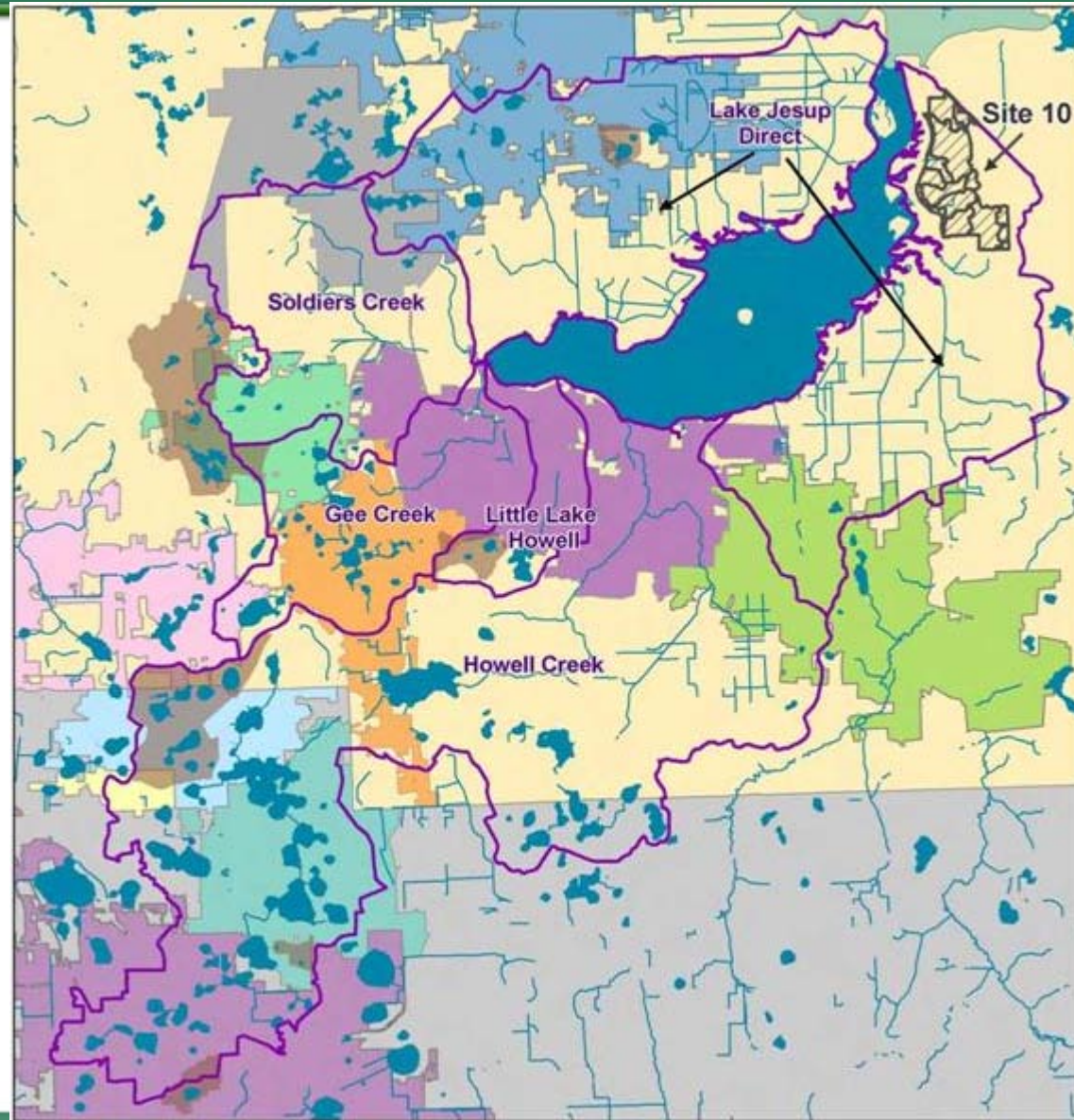


Upper Ocklawaha

- The Upper Ocklawaha BMAP was adopted in August 2007 for the following 10 waterbodies:
 - Lake Apopka, Lake Beauclair, Lake Carlton, Lake Dora, Lake Eustis, Trout Lake, Lake Harris, Palatlahaha River, Lake Griffin, and Lake Yale.
- The BMAP is currently being updated to reflect new projects, load reductions, and monitoring.
 - Anticipated adoption in late January/early February.
- The projects in the original BMAP achieve an estimated reduction of 256,835 lbs/yr of TP.
 - Meets the required reductions for 4 of the waterbodies.

Lake Jesup

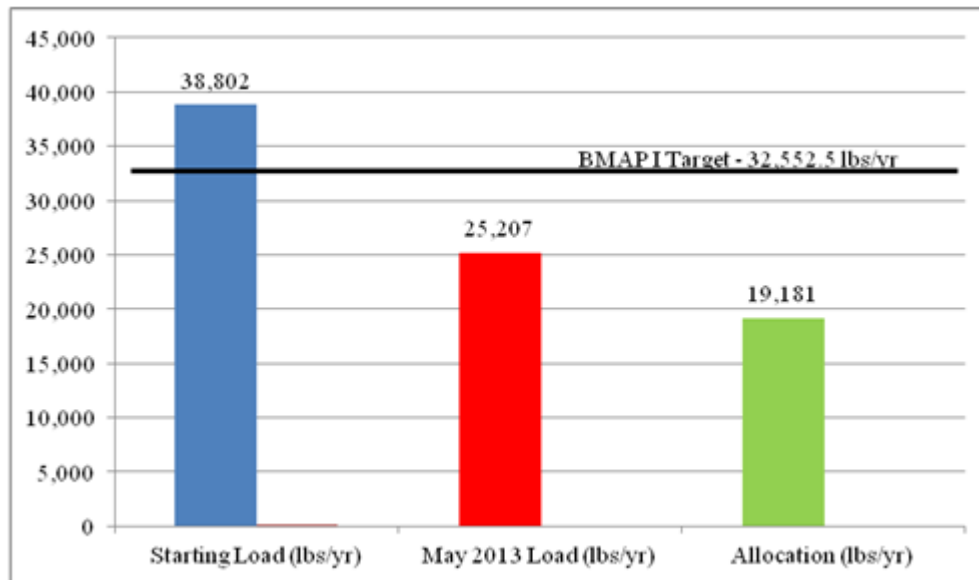
- Located in a large portion of Seminole County, a small portion of Orange County, the entire City of Winter Springs, and portions of the following municipalities: Altamonte Springs, Casselberry, Eatonville, Lake Mary, Longwood, Maitland, Orlando, Oviedo, Sanford, and Winter Park.





Lake Jesup

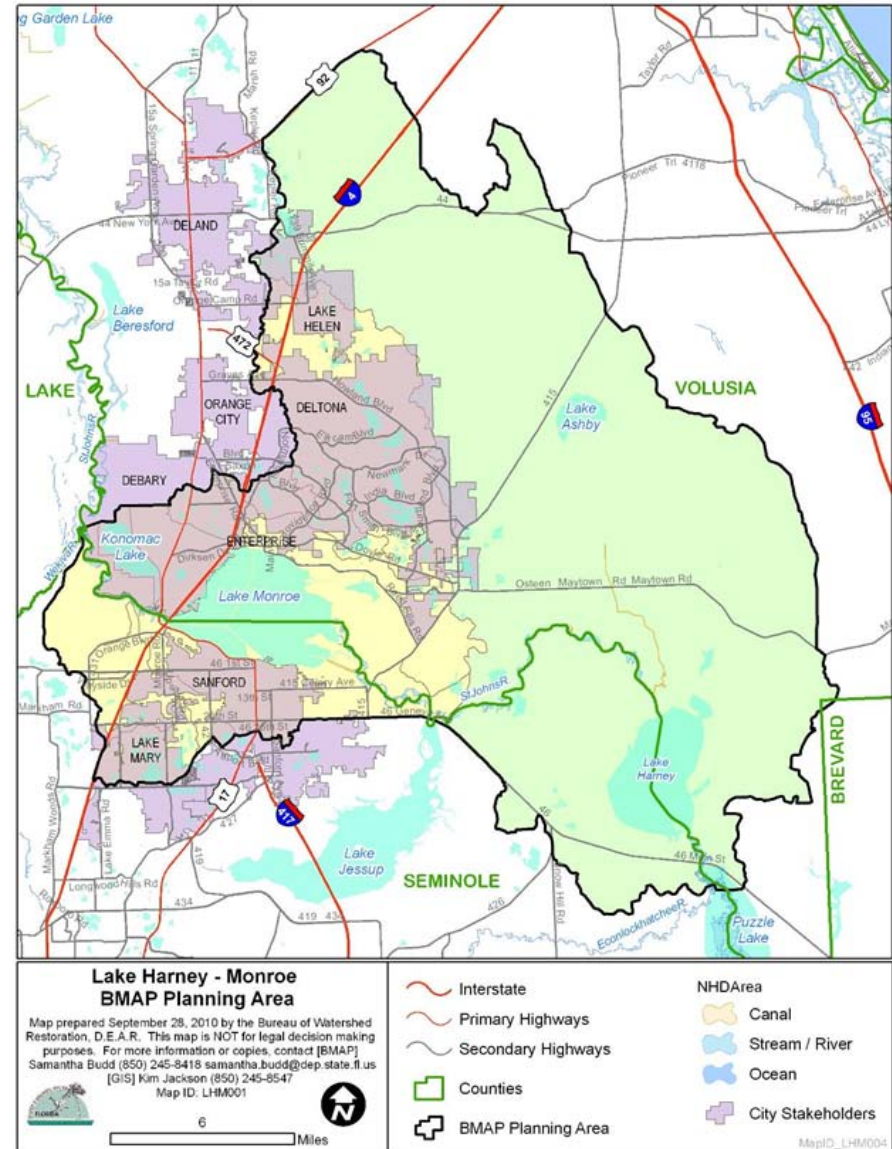
- The BMAP was adopted in May 2010 to address TP loading to Lake Jesup.
- The total project reductions to date have achieved 12,649.9 lbs/yr of TP.
- The Department and SJRWMD are developing a new model for the second iteration of the BMAP.





Lakes Harney and Monroe and Middle St. Johns River

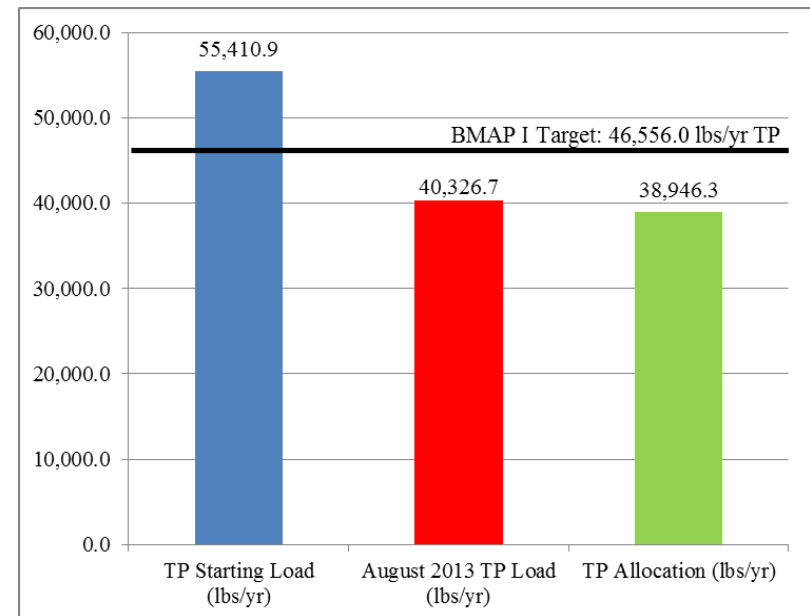
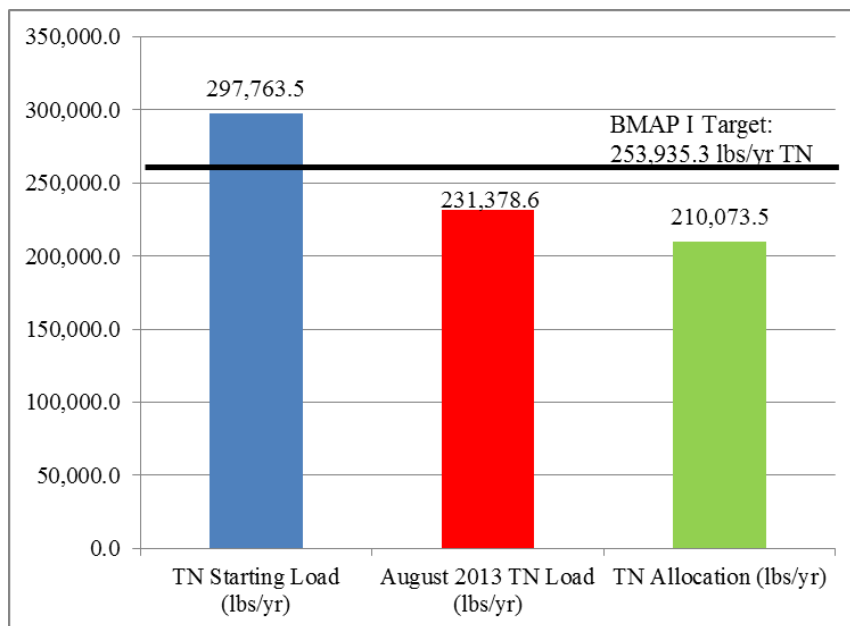
- Includes the two lakes and the impaired main stem segments of the MSJR located between the lakes. The basin encompasses portions of Seminole County and Volusia County and areas within the cities of DeBary, DeLand, Deltona, Lake Helen, Lake Mary, Orange City, and Sanford.





Lakes Harney and Monroe and Middle St. Johns River

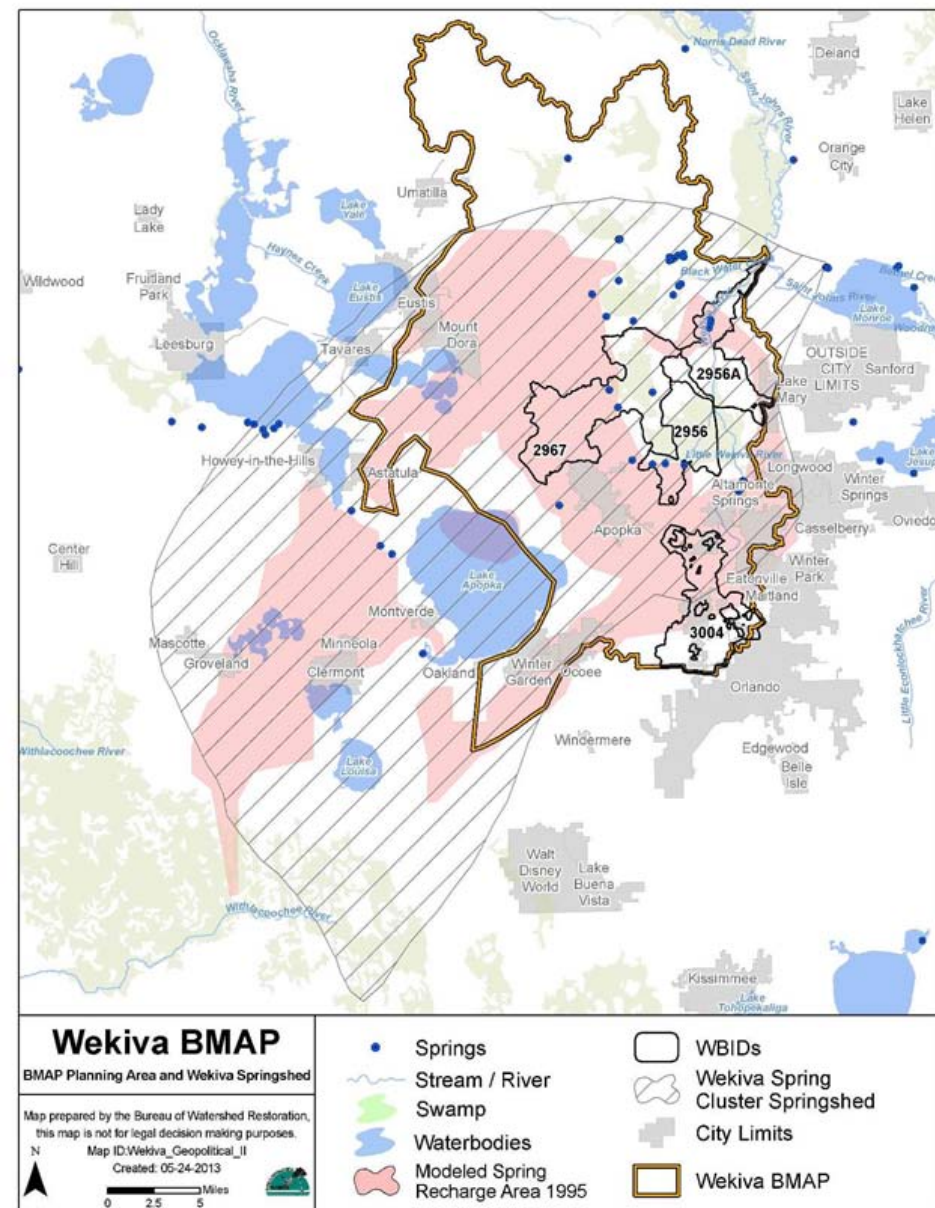
- The BMAP was adopted in August 2012 to address TN and TP loading.
- The total project reductions to date are 66,384.9 lbs/yr of TN and 15,084.2 lbs/yr of TP





Wekiva River and Springs

- The Wekiva River originates in Wekiwa Springs State Park (Orange County) at the confluence of Wekiva Springs Run and Rock Springs Run. The river meanders for about 14 miles through Lake, Seminole, and Orange Counties before entering the St. Johns River just downstream of Lake Monroe.





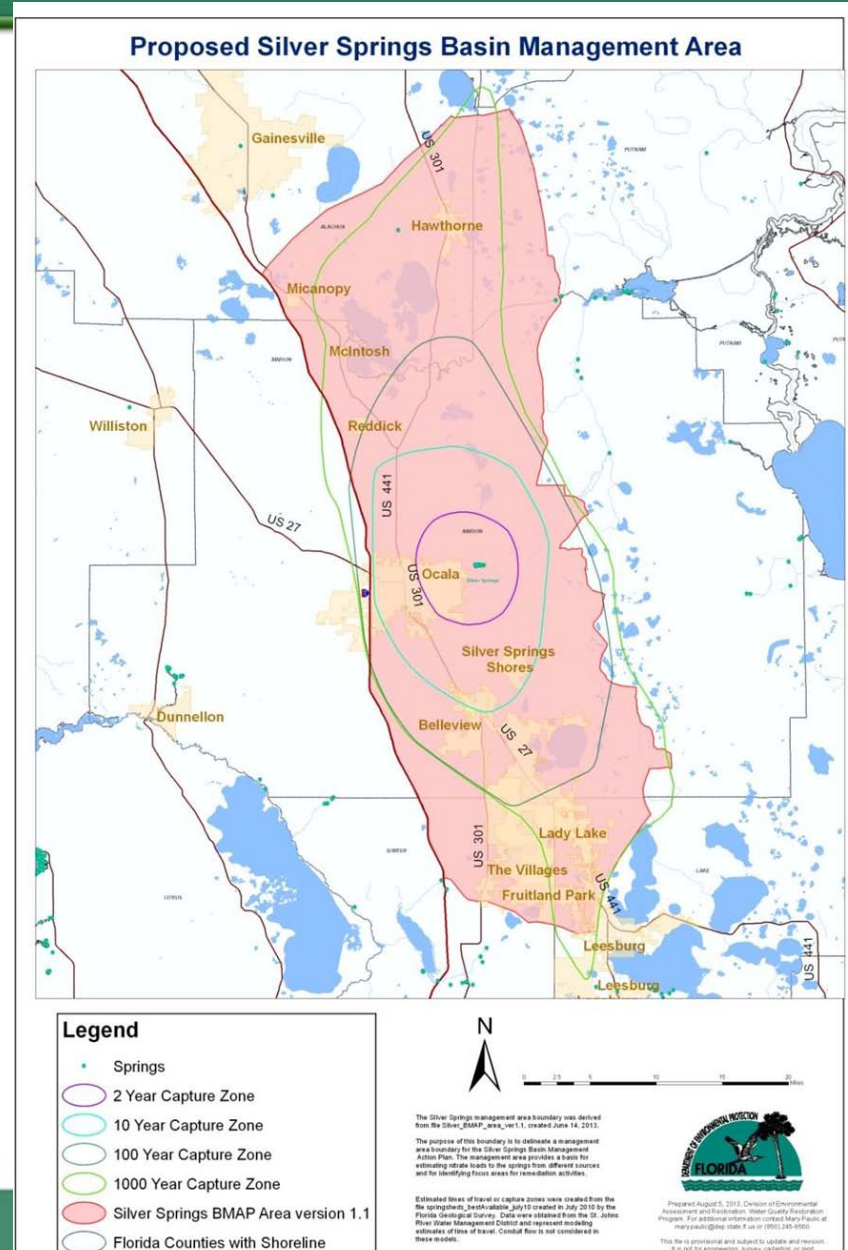
Wekiva River and Springs

- The BMAP was developed to address nitrate and TP loading to the surface and ground waters in the basin.
- The BMAP should be adopted in December/January.
- For the BMAP projects that could be quantified, the expected load reductions are 423,484 lbs/yr of TN and 90,456 lbs/yr of TP.



Silver River and Springs

- The springshed boundary is still in development. Working to delineate separate areas for this springshed and the Rainbow Springs springshed.





Silver River and Springs

- The BMAP process has been underway for about one year, and it will be about another year before the BMAP is adopted.
- The focus of the BMAP will be to achieve the nitrate reductions for the river and springs.



Thank You!

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