

Florida Department of Environmental Protection



Water Quality Restoration Program

BMAP Status and Next Steps

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Status

- Since our last meeting in June:
 - DEP has met with DOT, Ocala, Marion County, Belleview, and The Villages;
 - Discussed wastewater and stormwater management programs;
 - Preparing summaries of programs; and
 - Next steps are completing project data inputs.
 - Are there other people or organizations that I should talk with?
 - Project collection has proven to be more challenging than anticipated.

Wastewater Project Data Collection Outline

Status of existing wastewater treatment facilities

- Permitted capacity versus operating capacity, level of treatment
- Handling of discharge
- Proposed upgrades
- Planned service area expansions
- New wastewater treatment plants
- Computerized management system (SCADA) in place
- Other future proposals or activities

Collection systems maintenance and operation schedules

- Pipe replacement or upgrade
- Slip lining
- Leak detection protocols and fixes
- Age of system
- Sanitary sewer overflows or spills – frequency, plans to address
- Lift station replacement or upgrade

How are septic systems being addressed?

- Are there programs or plans for replacing septic systems with sewer?
- Any ordinances or financial incentives that would make sewerage feasible?
- Are there programs or ordinances that address management of septic systems?
- What factors are considered when evaluating whether or not to convert an area from septic to sewer?
- Does property owner interest/opposition factor into the decision to convert an area to sewer?

Wish list of wastewater improvements or changes

- What else should be done/needs to be done to reduce nitrate concentrations in ground water?

Concerns and Issues

- Any issues or questions related to the Silver Springs BMAP?
- Expectations from BMAP
- Emerging wastewater management issues?
- Any issues with private collection and treatment systems?

Wastewater and Stormwater Questionnaires

- Intent is to gather data about the current operation of waste collection systems and storm-water collection systems and potential problems.

Stormwater Project Data Collection Outline

- Stormwater Management Status**

- Status of current activities (MS4 permitted municipalities have specific permit related requirements)
- Illicit discharge ordinance
- Fertilizer ordinance
- Education and outreach techniques or activities
- Cleaning, maintenance, and operation of stormwater collection system
- Sediment and erosion control

- Sinkholes/or other conduits to Floridan aquifer**

- Management of these features
- Reduction of pollutants entering

- Street sweeping**

- Frequency
- Area swept

- Stormwater Structural Best Management Practices**

- Types of BMPs used
- Retrofit of existing BMPs



BMAP Management Area

- Provisional management area defined for BMAP.
- Purpose of management area:
 - Help identify who are stakeholders – at a minimum for communication purposes.
 - Define area for nitrate inventory.
 - Define area for project data collection.

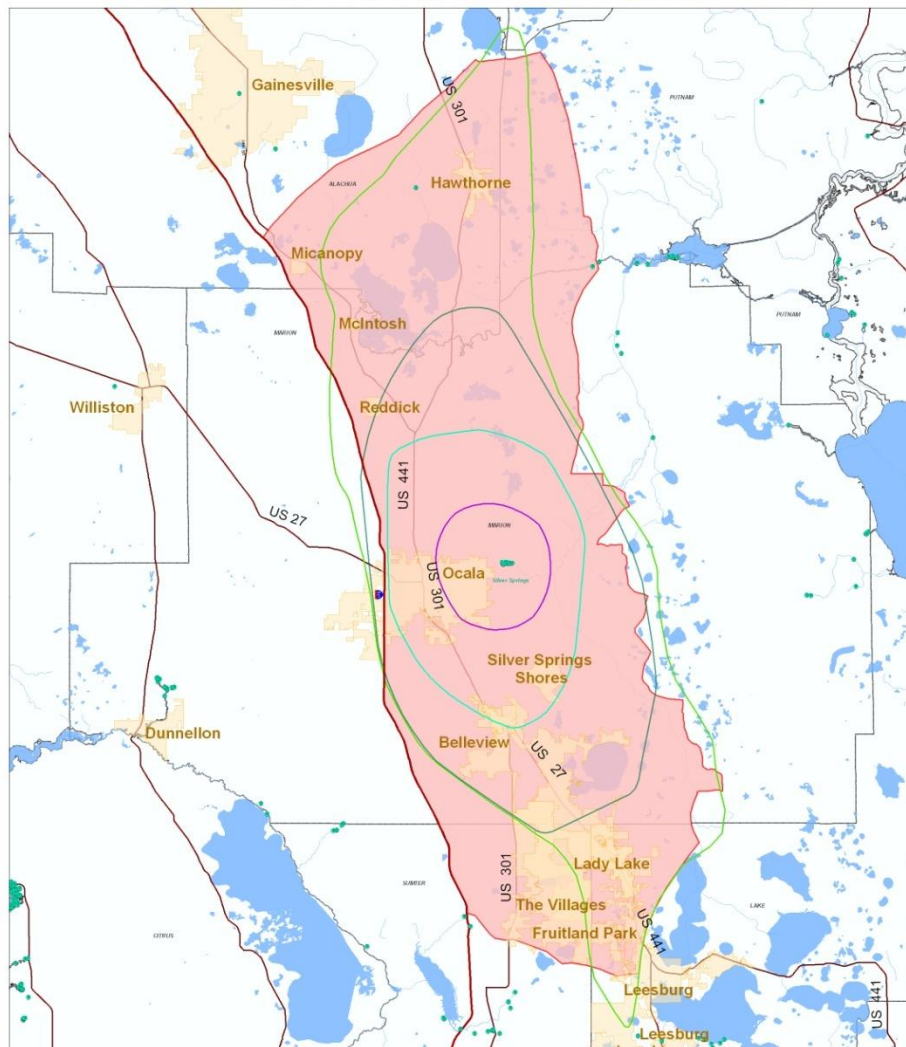


BMAP Management Area

- Proposed draft management area in May.
- Received comments on boundary through July 12.
- Comments fall into two categories:
 - Propose smaller area, specifically 100 year time of travel or focus on Marion County; and
 - Larger area to include Marion Oaks area.
- Concern expressed that areas west of I-75 would fall through “the cracks”.
- How do we address Ocala?

BMAP Area

- Generally follows roadways.
 - I-75 western boundary to Separate from Rainbow Springs BMAP;
 - SR 26 in north;
 - SR 44 in the south; and
 - Numerous roads to east.



Legend

- Springs
- 2 Year Capture Zone
- 10 Year Capture Zone
- 100 Year Capture Zone
- 1000 Year Capture Zone
- Silver Springs BMAP Area version 1.1
- Florida Counties with Shoreline



0 5 10 15 20 Miles

The Silver Springs management area boundary was derived from the Silver_BMAP_area_v1.1, created June 14, 2013.

The purpose of this boundary is to delineate a management area boundary for the Silver Springs Basin Management Action Plan. The management area provides a basis for estimating nitrate loads to the springs from different sources and for identifying focus areas for remediation activities.

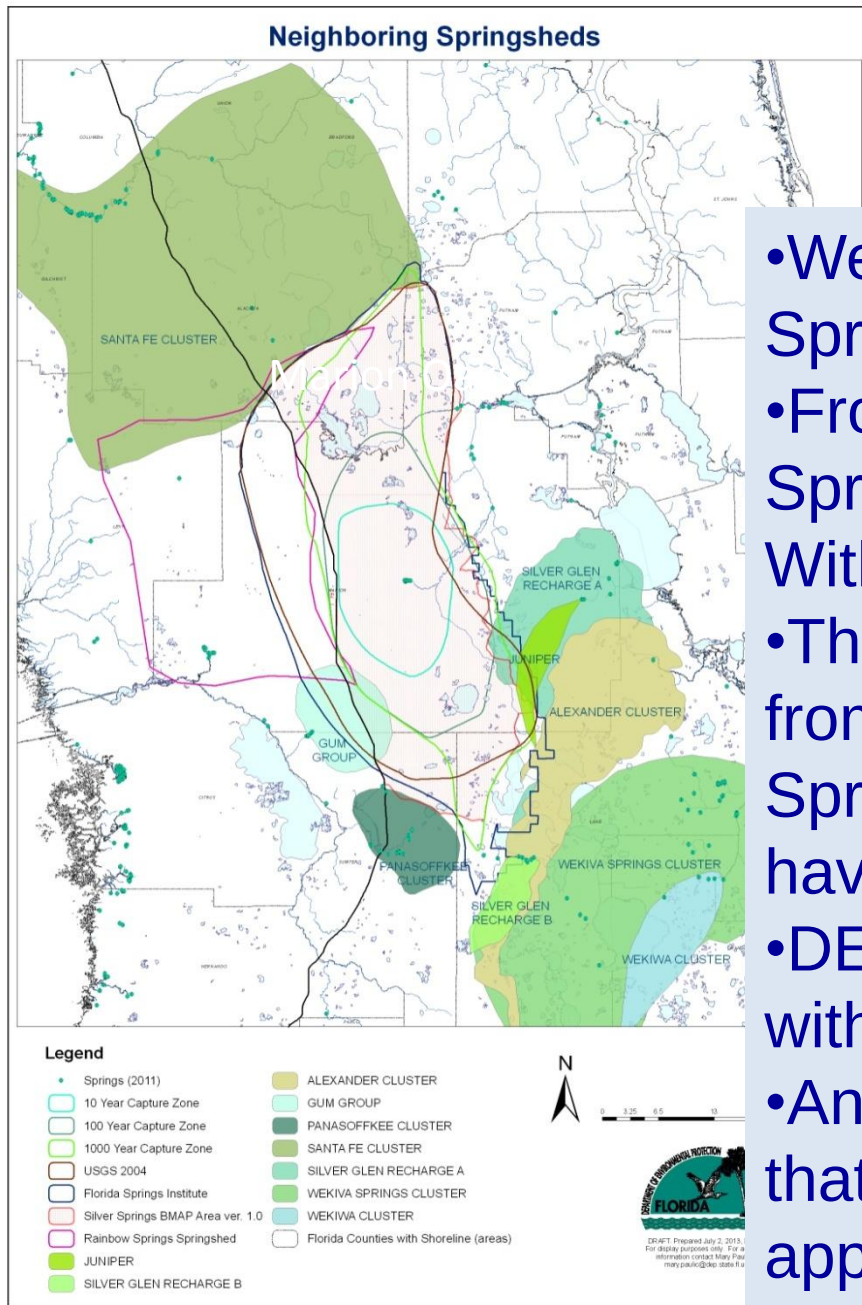
Estimated times of travel or capture zones were created from the Silver Springs, Jacksonville, July 10 created in July 2010 by the Florida Geological Survey. Data were obtained from the St. Johns River Water Management District and represent modeling estimates of time of travel. Confined flow is not considered in these models.



Prepared August 5, 2013, Division of Environmental Assessment and Restoration, Water Quality Restoration Program. For additional information contact Mary Paele at mary.paele@dep.state.fl.us or (850) 245-6965.

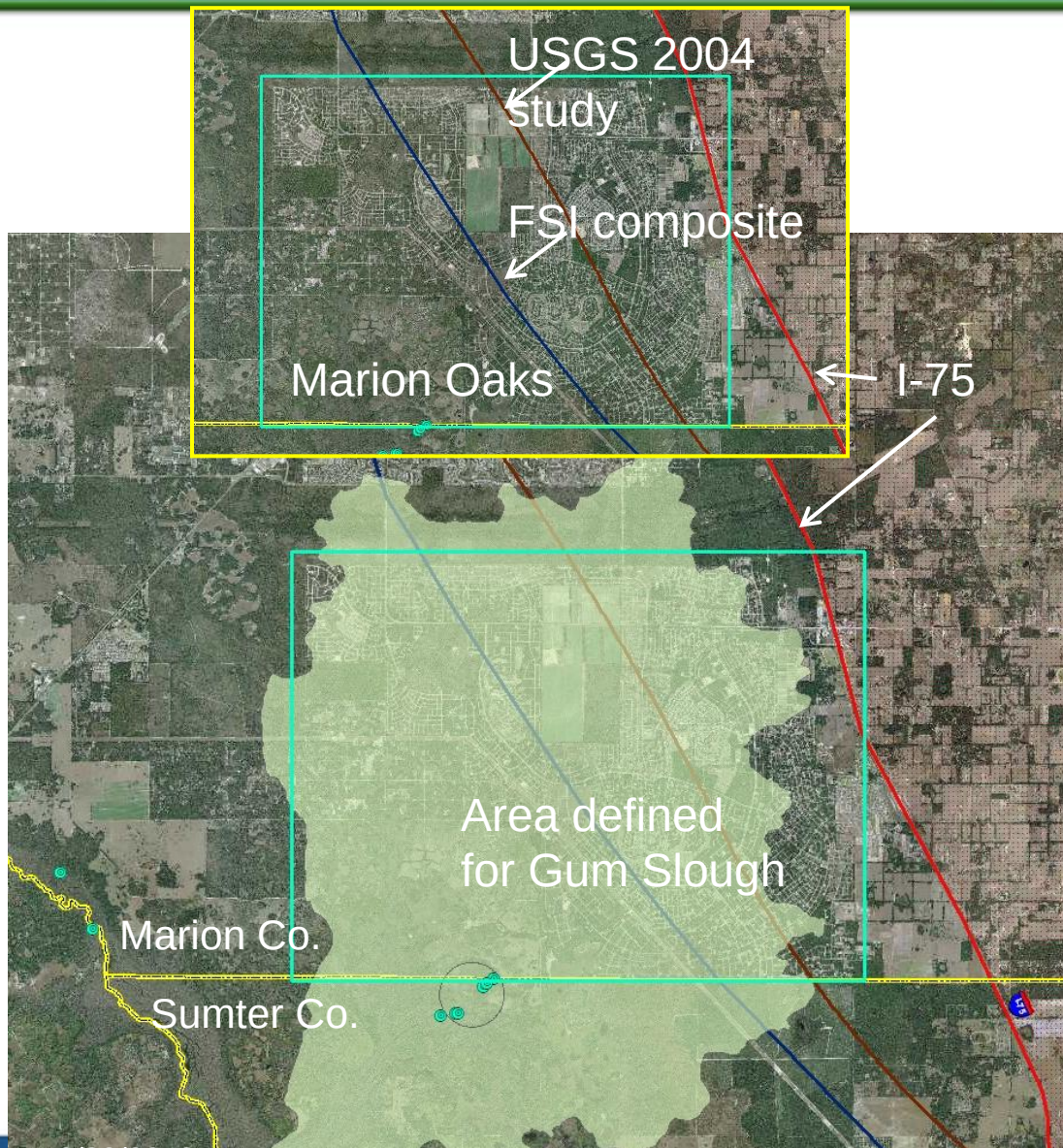
This file is provisional and subject to update and revision. It is not for engineering, survey, cadastral, or land conservation purposes.

Marion Oaks



- West of I-75 and south of Rainbow Springs BMAP area.
- From evaluation of neighboring Springsheds appears to be part of Withlacoochee Basin.
- The Gum Group springs (map data from 1998 no longer accurate for Gum Springs) is listed as impaired and may have a TMDL in the near future.
- DEP would like to minimize overlap with a future BMAP area.
- Any actions taken by Marion County that apply County-wide would also apply to Marion Oaks.

Gum Slough



- Area included as part of “Proposed Minimum Flows and Levels for the Gum Slough Spring Run”, May 26, 2011, SWFWMD.

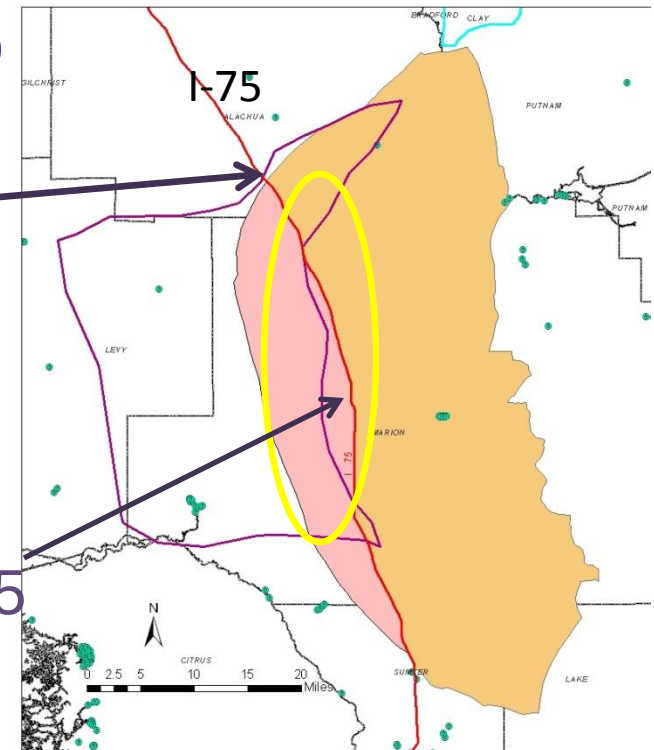
- Most likely part of future Withlacoochee River BMAPs.

- Future BMAP boundary would be matched to Silver and Rainbow.

Rainbow Springs

- Second springs BMAP initiated in July.
- To avoid gaps between BMAP areas, propose matching Rainbow Springs up to I-75 to join with western boundary of Silver Springs.
- Both BMAPs have the same nitrate target of 0.35 mg/L.

Close gaps along I-75





What Next?

- Nitrogen inventory will help us “focus” in on problem areas.
 - Better define basin management area.
- Purpose of focus areas is to concentrate remediation efforts where they will do the most good.



Focus Areas

- Purpose of focus areas is to concentrate remediation efforts where they will do the most good.
- Concerns have been expressed that effort will be diluted if too spread out.
- Best use of available dollars.
- How to do this?



Goal

Establish Focus Areas

- Identify sources with highest loading.
- Identify where there are current activities.
- What other management strategies are needed? Where is additional effort needed?
- Cost has to be considered.
- Practical application.



Next Step

Sufficiency of Effort

- Set 5 year target of achievable restoration goals.
- Consider identification of additional projects or management strategies needed for restoration of Silver Springs.
- Locating focus areas will help direct where new projects are located.
- Summary of current projects will identify gaps in management strategies.





Future Meetings

- We are approaching a juncture where decisions about what goes into the BMAP will be made.
 - Lead will shift from DEP to stakeholders.
- Schedule meetings for the rest of the year.
 - Identify topics for each meeting.
 - Identify additional work effort.
 - Tentative dates for September, October, November, and December.
 - May need to hold smaller more focused technical meetings.



Public Meetings

- Plan is to hold public outreach meetings as we progress toward development of the BMAP.
 - Several brief presentations have been given as part of other events;
 - Next step is to schedule a Silver Springs BMAP public meeting.
 - Tentative dates?

Questions?





Website and FTP Addresses

- <http://www.dep.state.fl.us/water/watersheds/bmap.htm> - website for meeting announcements.
- http://www.dep.state.fl.us/water/tmdl/final_tmdl.htm - website for TMDL documents, under Ocklawaha Basin.
- http://publicfiles.dep.state.fl.us/DEAR/BMAP/Silver_springs/ - FTP site for meeting notes and presentations.