



Alachua County's Road to Meeting the Basin Management Action Plans

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Department**

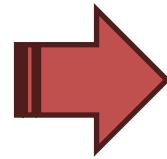
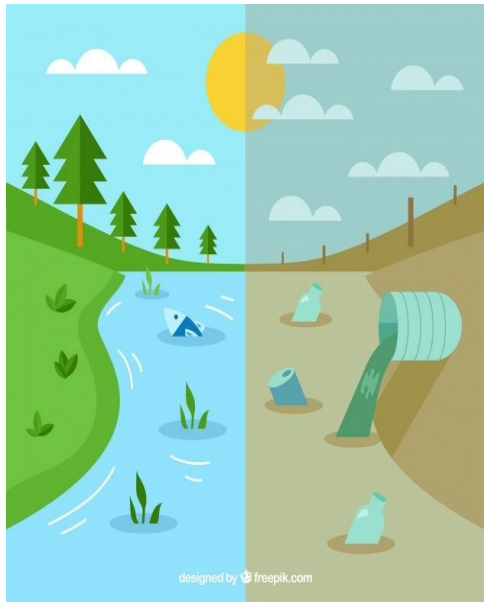
A photograph of a river scene. In the foreground, the bow of a dark-colored canoe is visible, floating on the water. The river is surrounded by dense, lush green trees and foliage. The water reflects the surrounding greenery. The image is partially framed by a curved blue and green border on the left side.

*Where Nature and
Culture Meet*

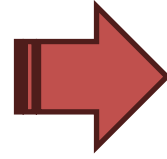
What is a BMAP?

TMDL = Total Maximum Daily Load

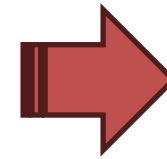
BMAP = Basin Management Action Plan



TMDL
*the maximum
amount of a
pollutant that
can be
discharged while
still meeting
water quality
standards*

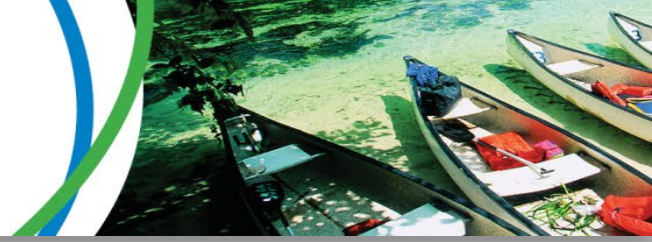


BMAP
*a water quality
restoration plan to
achieve TMDL
through projects
and management
strategies*



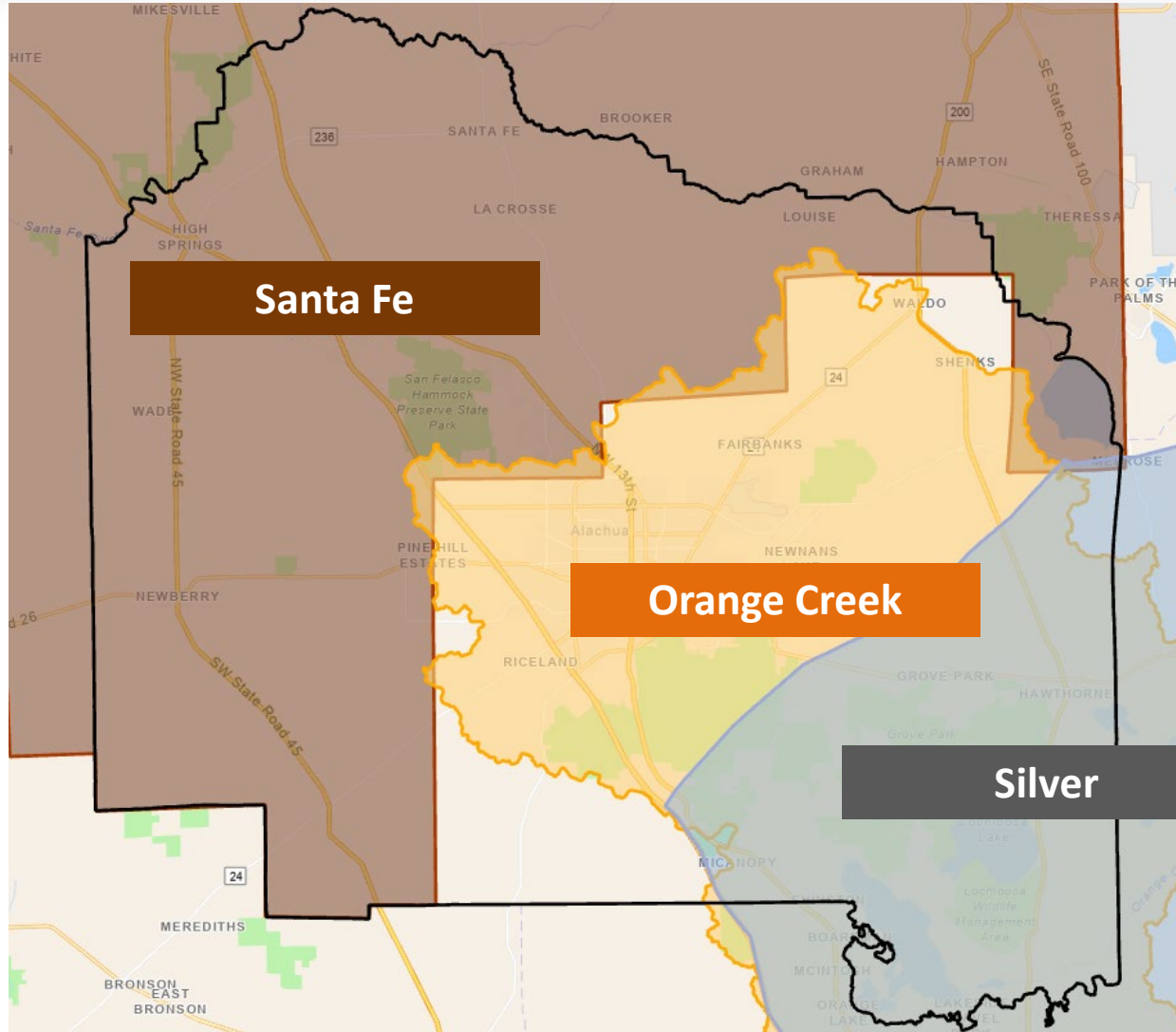
BMAPs identify
responsible
stakeholders
and assign load
reduction
allocations

2025 BMAP Updates



- **The Clean Waterways Act required FDEP to update nutrient BMAPs**
 - **Adopted on 6/27/2025, with a 21-day challenge period**
- **Responsible entities (local government, ag, etc.) must submit their plans for meeting 100% of allocation by 1/14/2026**
- **Must add BMAP projects to Comp Plan by April 2026**

Alachua County BMAPs



Alachua County Annual Allocations



BMAP Area	Crediting Area	Total Nitrogen Reduction (lbs/yr)	Total Phosphorus Reduction (lbs/yr)	Deadline
Santa Fe	Devils Ear	17,674	N/A	2038
Santa Fe	Hornsby	4,457	N/A	2038
Santa Fe	Santa Fe River	14,830	N/A	2038
Silver	Silver/Rainbow	16,004	N/A	2038
OCB	Newnans Lake	5,603	663	2030
OCB	Orange Lake	N/A	98	2030
OCB	Lochloosa Lake	4,055	411	2030
OCB	Lake Wauberg*	2,002	374	2030
OCB	Alachua Sink*	206,135	N/A	2030
	TOTAL	270,760	1,546	

*Allocation shared with other entities

Alachua County Allocation Perspective

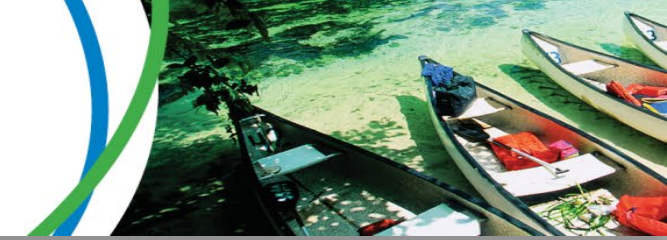


Upgrading All Septic Systems in the Basin to Enhanced Nutrient Reducing Systems

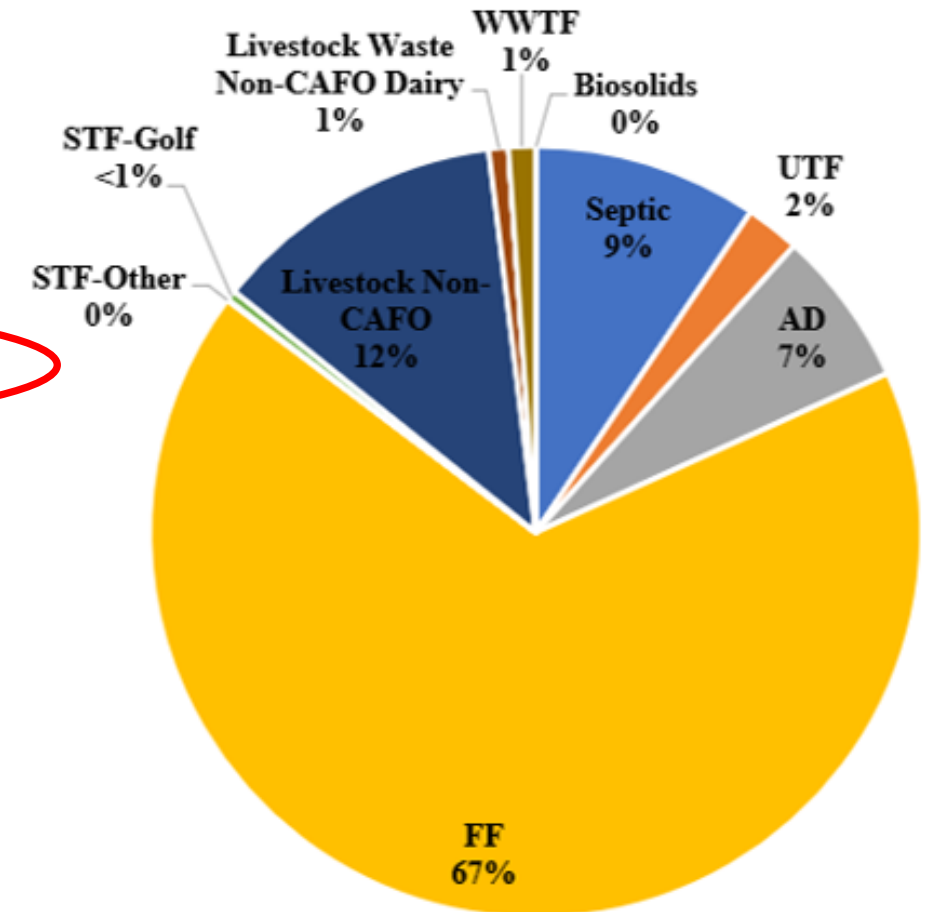
Watershed	County Allocation (lb N/yr)	Number of septic systems	Cost (millions)*	Possible Reductions (lb N/yr)	Allocation
Silver	16,004	2,719	\$ 27	9,743	61%

**Assumes \$10,000 per system, which is likely an underestimate*

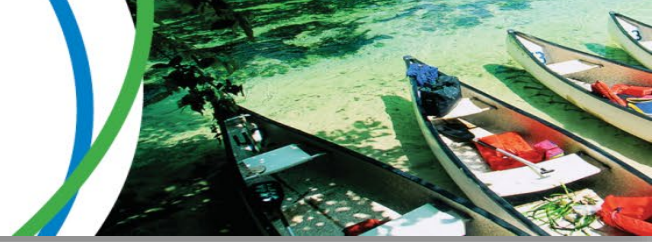
Santa Fe BMAP Sources (Hornsby)



Nitrogen Source	TN Load to Groundwater (lbs/yr)	% Contribution
OSTDS	26,750	9%
UTF	6,466	2%
AD	18,671	7%
FF	190,615	67%
STF	1,316	<1%
LW Non-CAFO Dairy and Poultry	37,341	13%
LW CAFO Dairy	0	0%
Biosolids	0	0%
WWTFs	3,225	1%
Total	284,383	100%



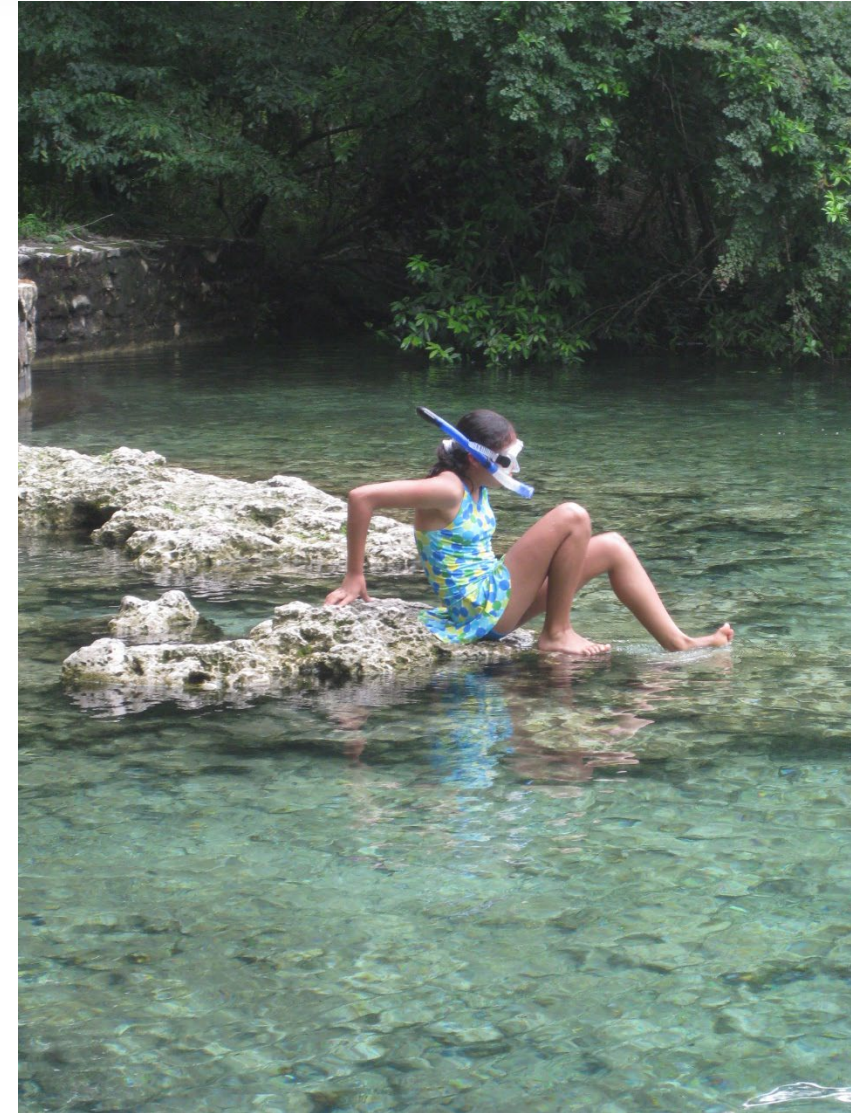
Santa Fe BMAP Allocations (Hornsby)



Hornsby Springshed Entity	2028 Milestone Assigned Reductions (30%)(lbs/yr)	TN Completed and Ongoing Project Credits (lbs/yr)	TN Reductions from Planned and Underway Projects* (Not Verified) (lbs/yr)	Total Projected** Project TN Reductions by Entity Through 2028 (lbs/yr)
Agriculture	18,694	36,977	0	36,977
Alachua County	1,337	76	0	76
City of High Springs	149	0	0	0
Town of La Crosse	24	0	0	0
City of Alachua	1,506	0	0	0
Private WWTFs	4	0	0	0
Private Golf Courses	99	0	0	0
Total, All Reductions	21,813	37,053	0	37,053

Local Government Challenges

- BMAP does not identify specific sources and project locations
- Alachua County has spent significant time and money to evaluate nutrient sources in our watersheds because projects are expensive
- Allocations just assigned for springs basin and keep changing



Local Government Challenges



- Fertilizer ordinance prohibits nitrogen July - February
- Alachua County implements a behavior change campaign to decrease residential fertilizer use.
 - Survey data combined with models (NSILT and Simple Model) estimated the first year of the campaign reduced total nitrogen by over 20,000 pounds.
 - The “removal” costs ranged from \$1 - \$8 compared to up to \$500 per pound of nitrogen for construction projects.
- Alachua County only receives credit for 299 pounds of nitrogen/year, because FDEP only allows 6% credit for education/ordinances.

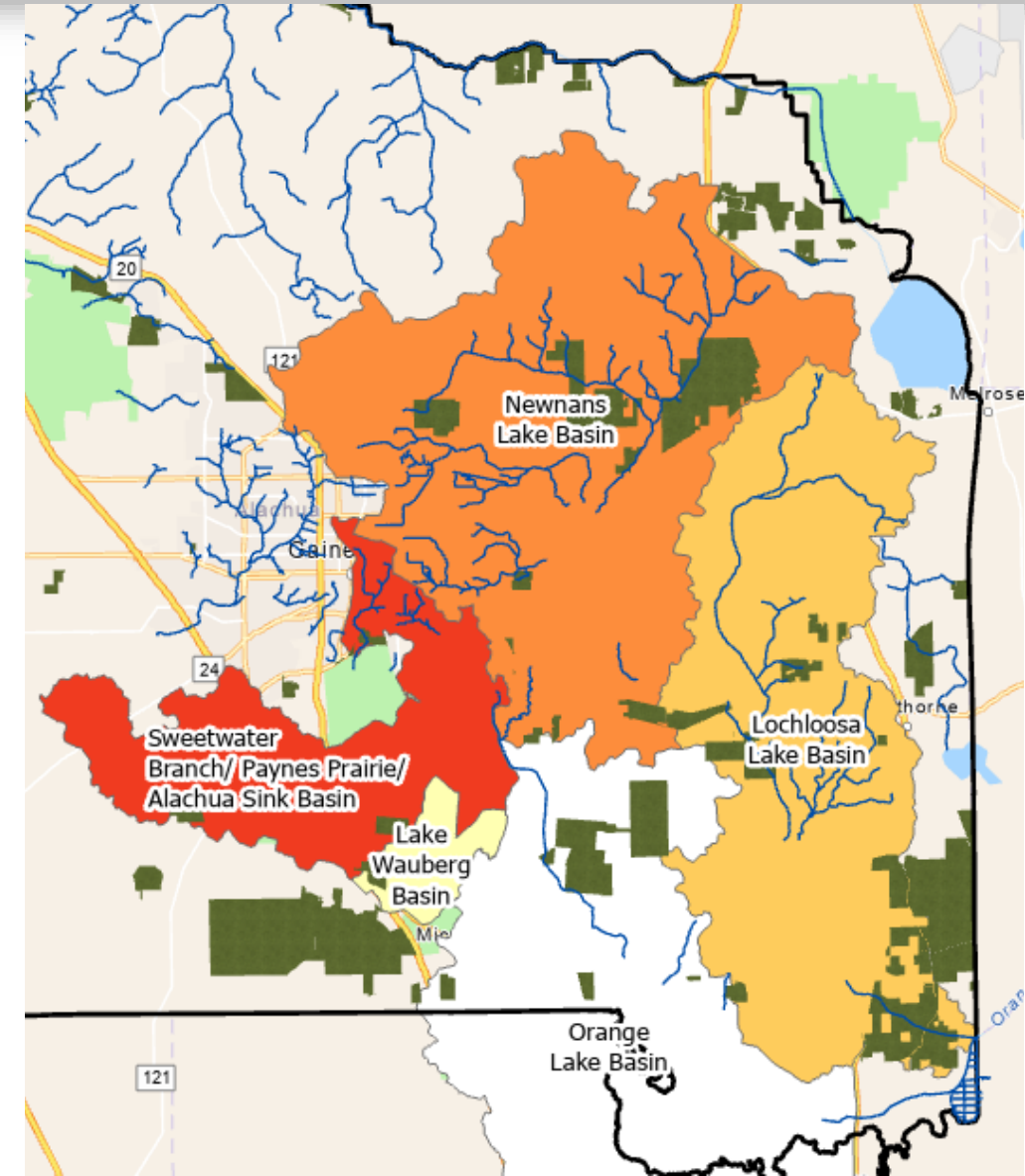
Orange Creek BMAP

100% Milestone = 2030

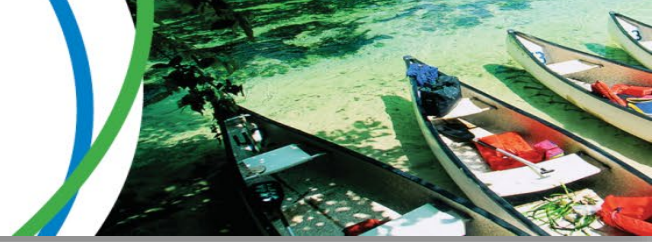


Alachua County Required Reductions

Crediting Area	Nitrogen		Phosphorus	
	(lbs/yr)	% Met	(lbs/yr)	% Met
Newnans Lake	5,603	7%	663	14%
Orange Lake	N/A	N/A	98	4%
Lochloosa Lake	4,055	8%	411	11%



Newnans Lake Progress



2016 - 2017: \$456, 000 legislative appropriation to evaluate Little Hatchet Creek.

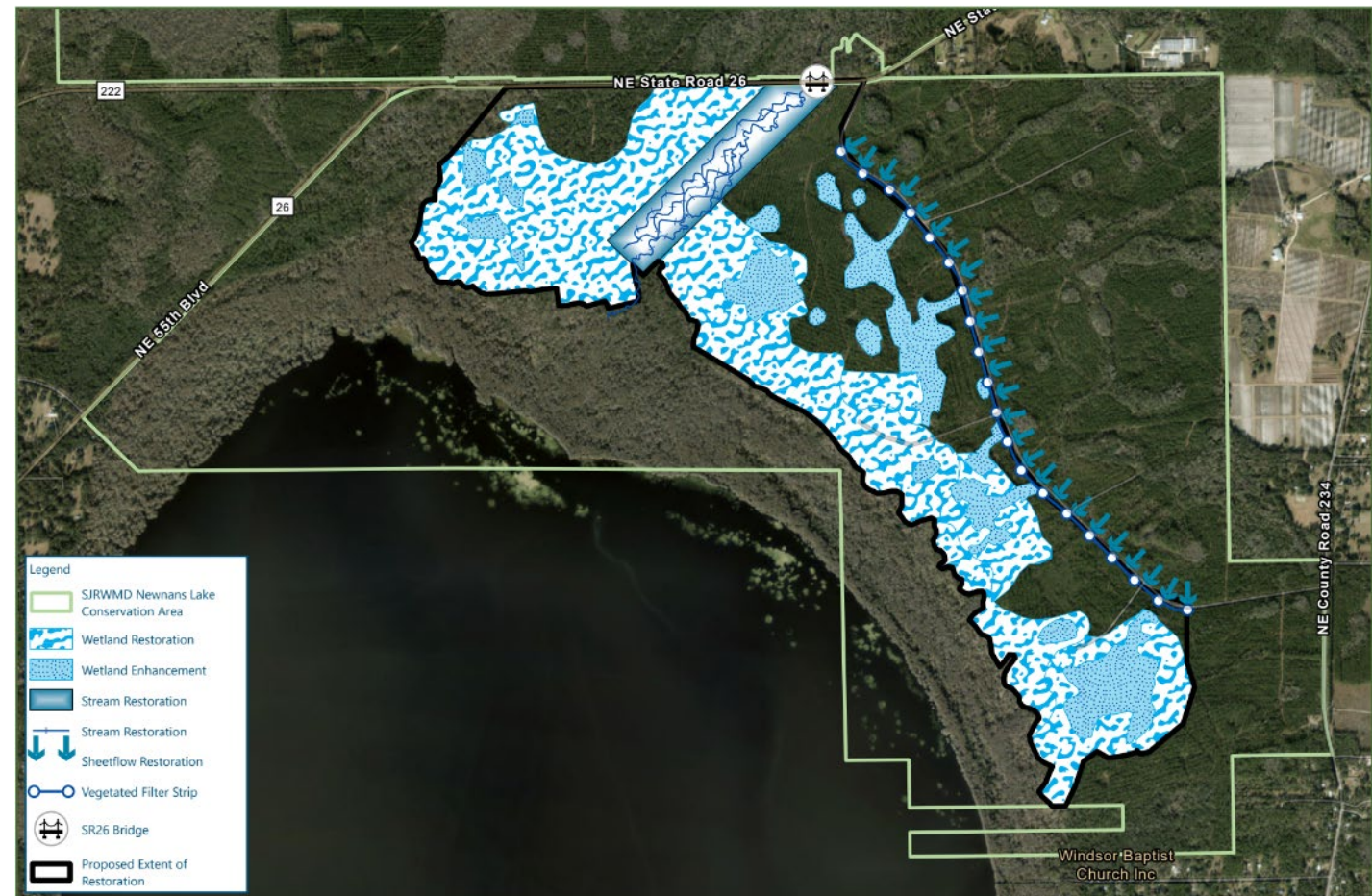
2017 - 2021: \$250,000 legislative appropriation and \$65,000 from SJRWMD to install two bioreactive weirs on Little Hatchet Creek and to evaluate sources to Hatchet Creek.

2020: \$57,000 Newnan's Lake Treatment Wetland feasibility study. Significant challenges were identified and a legislative request was not awarded.

2024 - 2027: FDEP grant for \$1,100,000 to design a restoration project in the Hatchet Creek watershed.

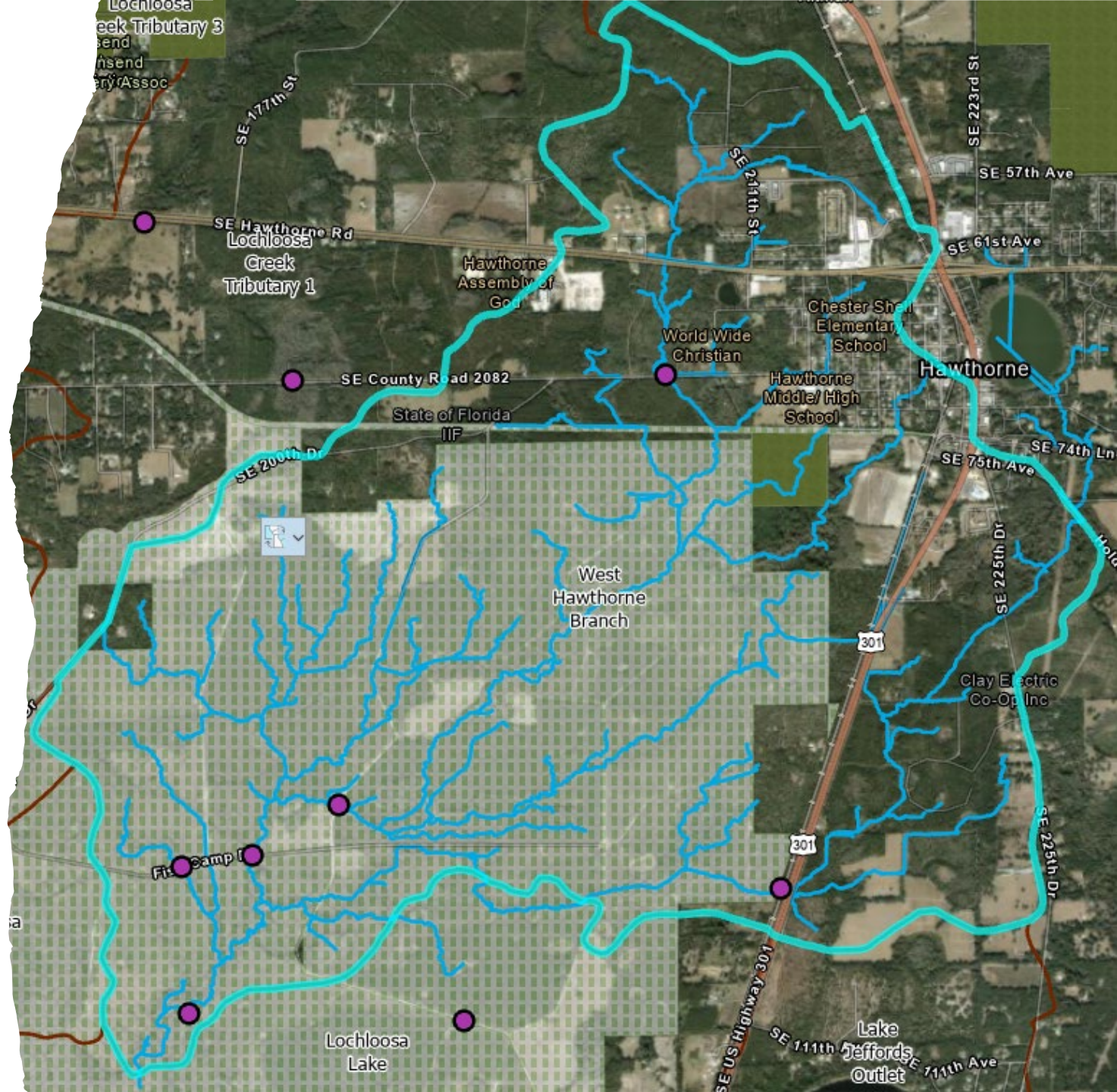
Orange Creek BMAP- Proposed Newnans Lake Restoration Project

- Hatchet Creek floodplain restoration project
- Will almost meet the County's phosphorus allocation
- Located on conservation land owned by SJRWMD
- Estimated completion date of 2030



Lochloosa Watershed

- Alachua County has funded a \$371,000 watershed analysis to identify sources and projects.
 - Two tributaries in agricultural watersheds with high nutrient loading.
- Initial treatment wetland modeling results- 30-60 acres
 - 397 lbs TP
 - 400+ lbs TN
- Trying to locate public lands where restoration could occur.

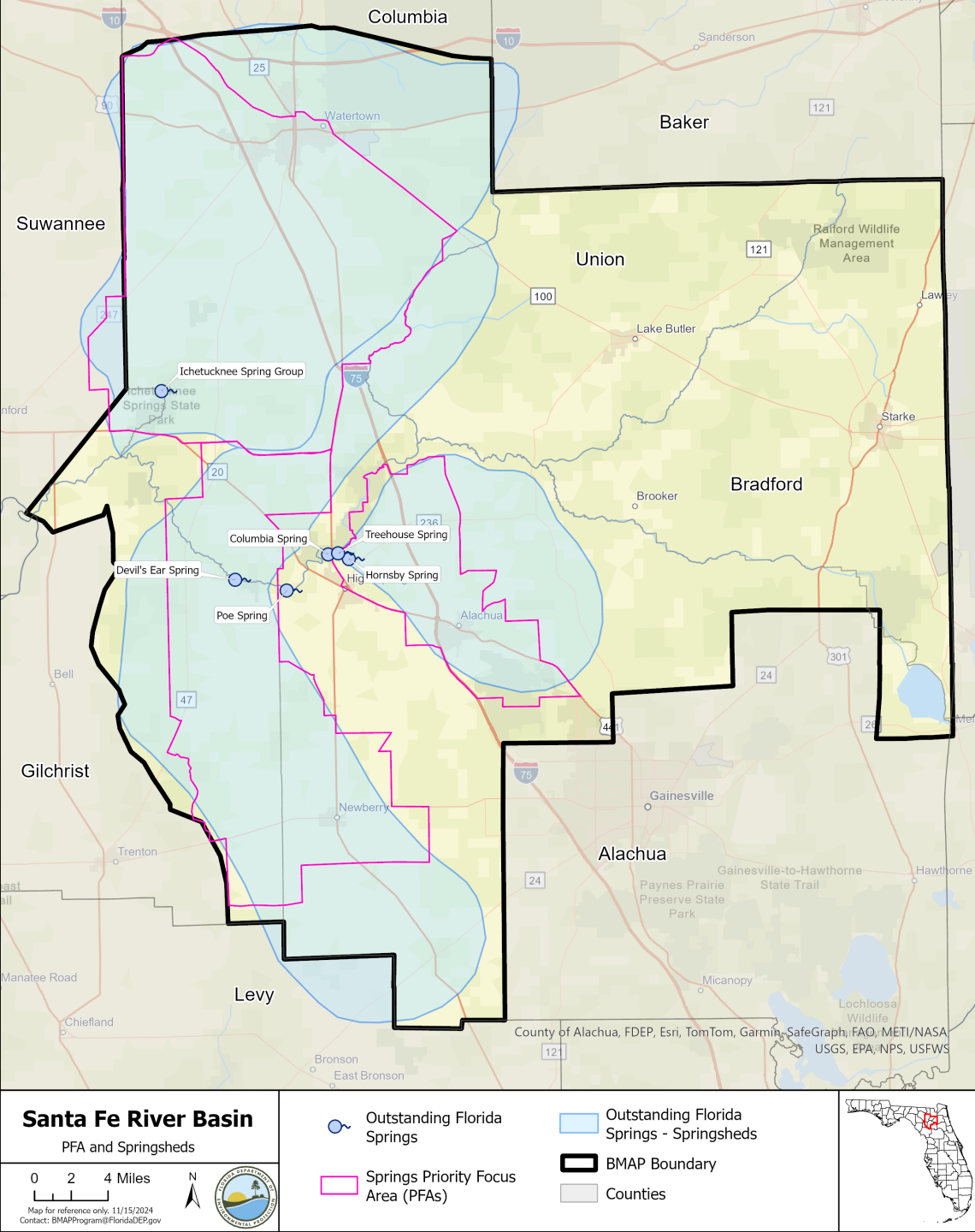


Santa Fe BMAP

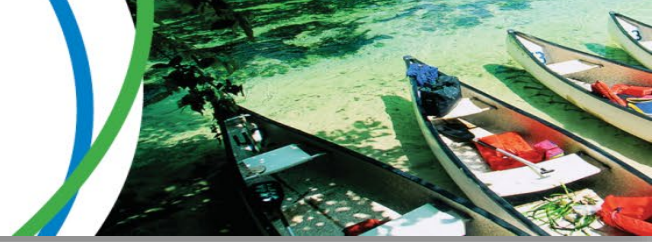
- Allocations assigned in 2025
- 100% Milestone- 2038

Alachua County Required Reductions

Crediting Area	Total Nitrogen (lbs/yr)	Achieved (lbs/yr)	% Achieved
Devils Ear	17,674	104	1%
Hornsby	4,457	76	2%
Santa Fe River	14,830	888	6%



Alachua County Santa Fe Projects



- Alachua County funded a Poe Springs Watershed Analysis (~\$125,000)
 - Identified important conservation land that has been purchased
 - Currently investigating stormwater projects
- Projects
 - Poe Springs Septic Upgrade (~\$162,000)- 225 lbs of Nitrogen
 - Lake Santa Fe Septic Upgrade (~\$30,000)- 22 lbs of Nitrogen
 - Septic Rebates- low participation to date- ~15 lbs of Nitrogen
 - Conservation Easements that lead to reduced nutrients - ?
 - Public Outreach credit- maxed out at 6%

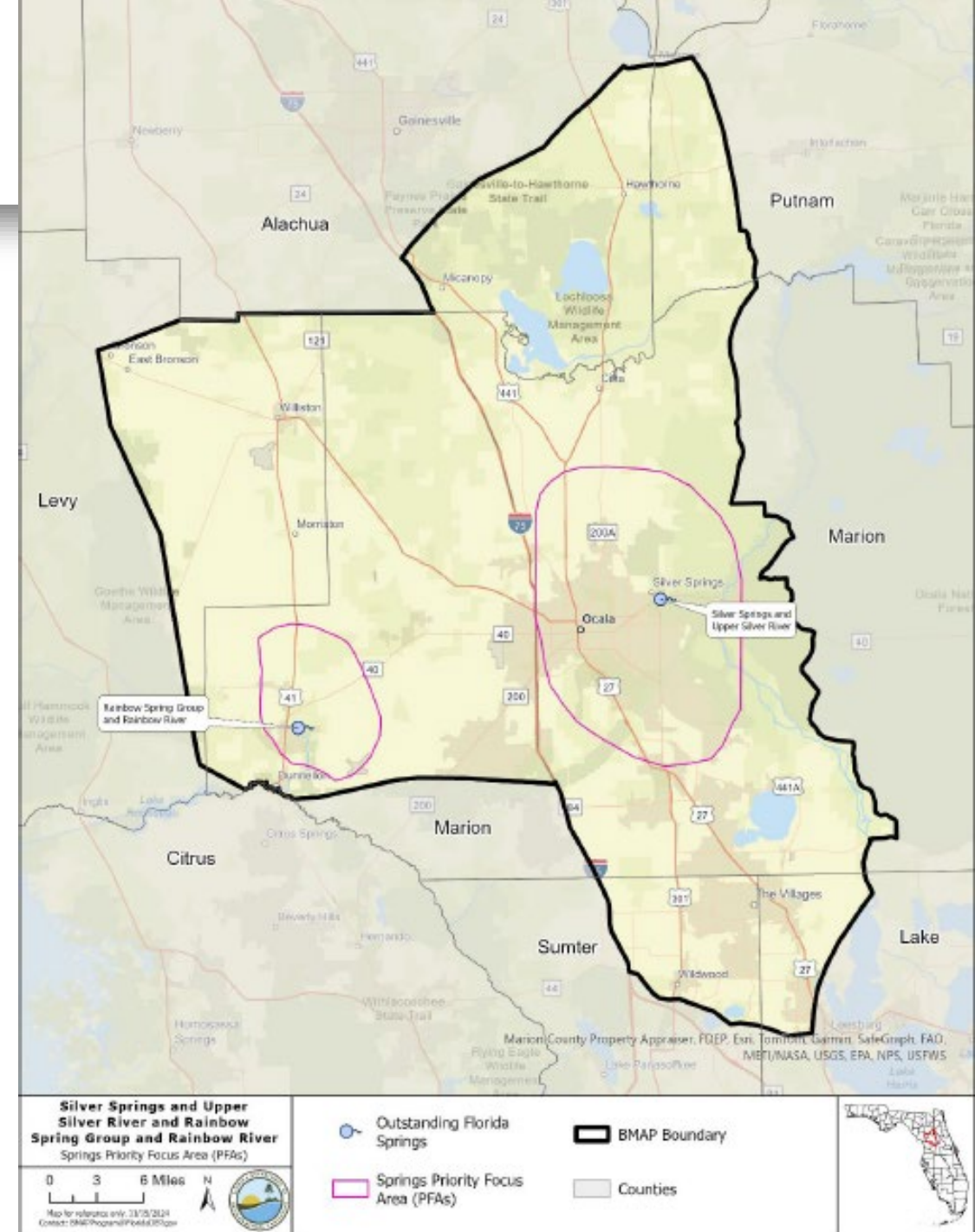
Santa Fe Allocation
36,961 lbs TN/Year

Silver Springs BMAP

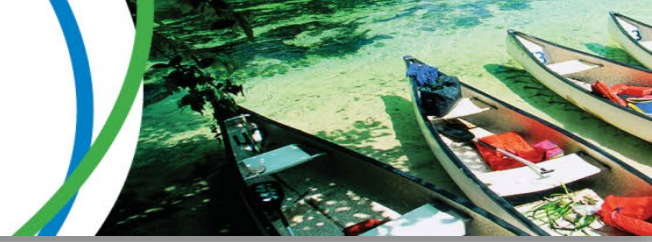
- Likely adopted in summer of 2025
- Allocations assigned in 2025
- 100% Milestone- 2038

Alachua County Required Reductions

Total Nitrogen (lbs/yr)	Achieved (lbs/yr)	% Achieved
16,004	164	1%

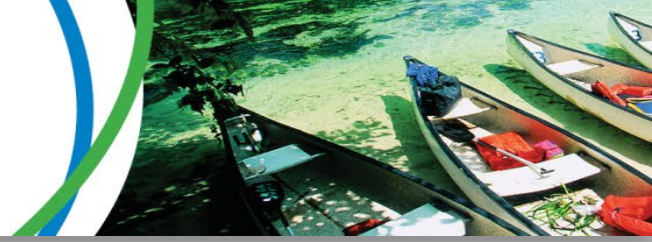


Silver Springs Projects



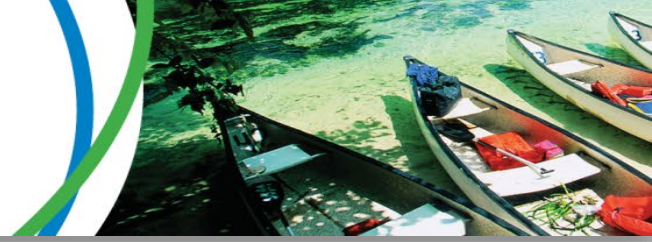
- Silver Springs crediting area overlaps with portions of the Orange Creek basin
- **Projects**
 - Septic Rebates- low participation to date, but BMAP update will require upgrades during repairs.
 - Enforcement may be a challenge
 - Conservation Easements that lead to reduced nutrients?
 - Public Outreach credit- maxed out at 6%

Next Steps



- Alachua County BMAP Team has been created (EPD, Facilities, Parks, Public Works, Growth Management, OMB) to identify BMAP credits
- Leading a statewide team through the Florida Local Environmental Resource Agencies to address general BMAP issues (crediting, outreach, etc.)
- Identifying new projects and continue existing projects
- Consider a septic system ordinance
- Will come back with proposed project list in the fall of 2025

Thank You



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