

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

Stacie Greco
Alachua County
Environmental Protection
Department



### 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**



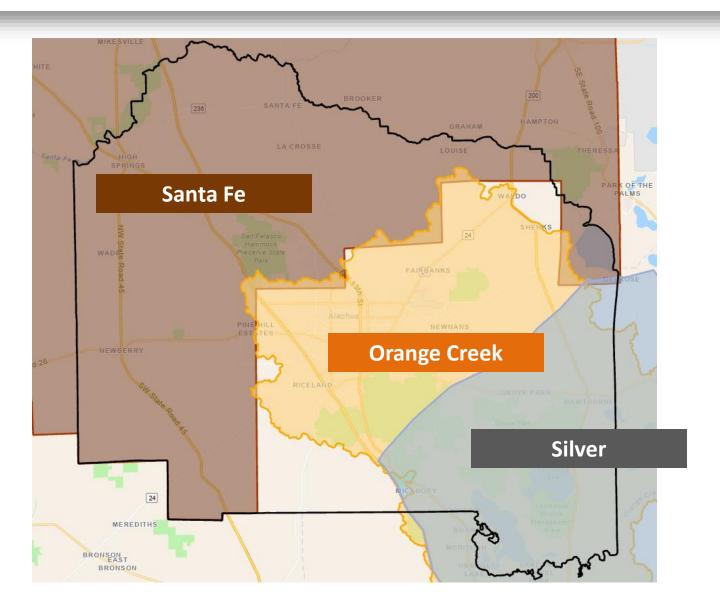
- The Clean Waterways Act required FDEP to update nutrient BMAPs by July 1, 2025
- Responsible entities (local government, ag, etc.)
  must submit their plans for meeting 100% of
  allocation by January 14, 2026
- Must add BMAP projects to Comp Plans

## 2025 BMAP Legal Challenges (may not be exhaustive)

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Basin	Challenger(s)			
Caloosahatchee River	Calusa Waterkeeper, Florida Oceanographic Society			
Everglades West Coast	Calusa Waterkeeper			
Homosassa and Chassahowitzka Springs	Homosassa River Alliance, Save the Manatee Club, and Florida Springs Council			
Lake Okeechobee	Calusa Waterkeeper and Florida Oceanographic Society			
Lower and Middle Suwannee River	Florida Springs Council and Save the Manatee Club			
Lower St. Johns River	St. Johns Riverkeeper			
Santa Fe River	Ichetucknee Alliance, Save the Manatee Club, and Florida Springs Council			
Silver & Rainbow Springs/Rivers	Rainbow River Conservation, Save the Manatee Club, and Florida Springs Council			
St. Lucie River	Florida Oceanographic Society			
Upper Wakulla River/ Spring	Wakulla Springs Alliance, Tallahassee Regional Environmental Group, Save the Manatee Club, and Florida Springs Council			
Wekiwa and Rock Springs	Friends of Wekiva River, Save the Manatee Club, and Florida Springs Council			

### **Alachua County BMAPs**





### Alachua County Annual Allocations



BMAP		Total Nitrogen	Total Phosphorus	
Area	<b>Crediting Area</b>	Reduction (lbs/yr)	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	

<sup>\*</sup>Allocation shared with other entities

### Alachua County Allocation Perspective



Upgrading All Septic Systems in the Silver 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	\$ 2	9,743	61%

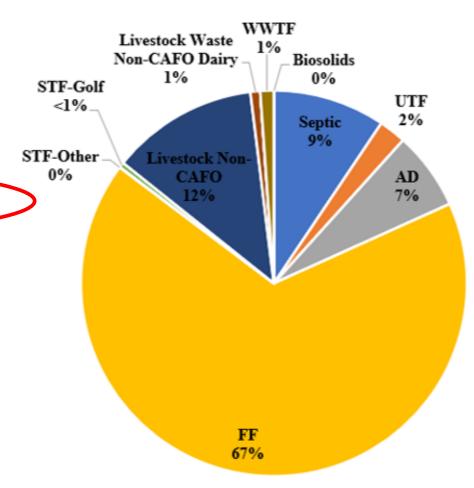
Current rebate program has low participation, but revised update will require ENR systems for modifications and repairs IF enforced

<sup>\*</sup>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%)(Ibs/yr)	TN Completed and Ongoing Project Credits (lbs/yr)	TN Reductions from Planned and Underway Projects* (Not Verified) (Ibs/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

 Allocations just assigned for springs basin and review is time consuming



### **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.

### **Local Government Challenges**



- Projects are expensive!
- For stormwater projects treating larger portions of the watershed is critical for improved costeffectiveness

 Where the aquifer is unconfined, regional stormwater projects a challenge

#### Main Street Pond- \$583,594



53.9 lb-N/yr 5.4 lb-P/yr

\$541/lb-N \$5,403/lb-P

### **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.

# How Do We Meet This Goal Together?



 FLERA Water Committee focusing on BMAP issues and has created a TEAMS space.

 Share our experiences with working with FDEP, consultants, projects, etc.

 Provide feedback to FDEP regarding methods, process, and needed tools.

### **Thank You**



Stacie Greco, Water Resources Program Manager Alachua County Environmental Protection Department 352-264-6829

Sgreco@AlachuaCounty.us



## FERTILIZER BANNED

July - February

Learn more at MyYardOurWater.org

