Wacissa River and Wacissa Spring Group
Basin Management Action Plan

October 7, 2024 at 2:00 PM EDT

In-person

Jefferson County R.J. Bailar Public Library
375 S Water St.
Monticello, FL 32344

Agenda

- Wacissa River and Wacissa Spring Group (BMAP) Overview.
- Analysis results summary.
- Basin required reductions.
- Entity required reductions.
- Poster Session.

Please note the FTP site for documents pertaining to the various BMAPs:
publicfiles.dep.state.fl.us - /DEAR/BMAP/
For more information, contact: Sam Hankinson at (850) 245-8086 Samuel.Hankinson@FloridaDEP.gov .

WACISSA RIVER AND WACISSA SPRING GROUP BASIN MANAGEMENT ACTION PLAN (BMAP)

Sam Hankinson, P.G. II
Division of Environmental Assessment and Restoration/
Water Quality Restoration Program
Florida Department of Environmental Protection

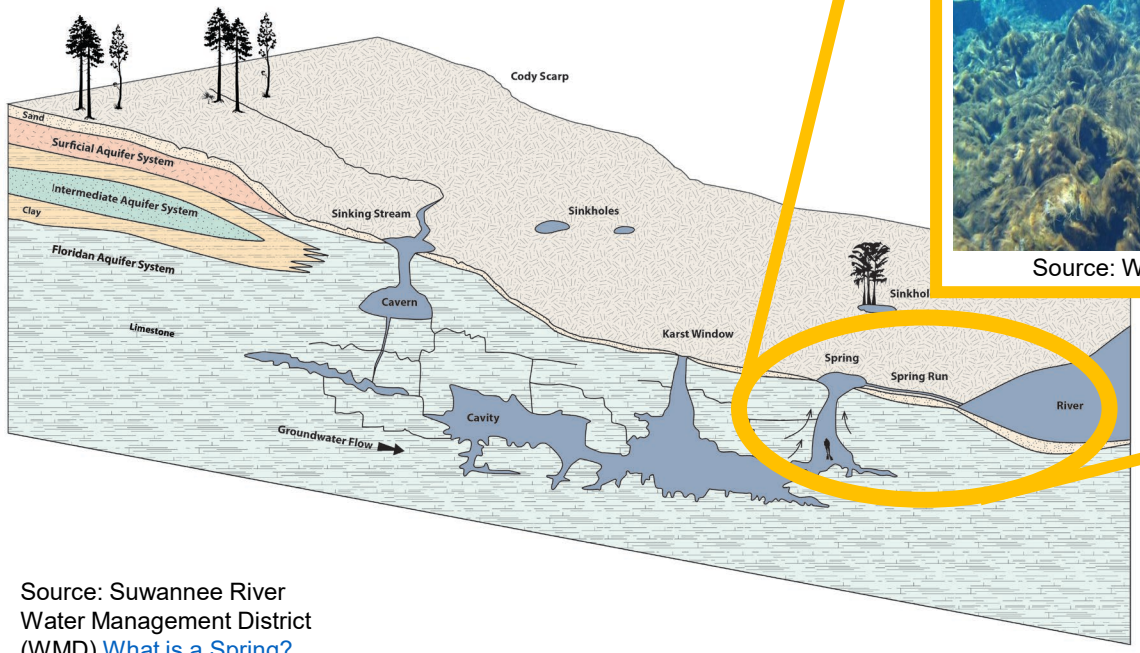
Monticello, FL | Oct. 7, 2024

Source: South Florida Water Management District (SFWMD)

AGENDA

- Background.
- Analysis results summary.
- Basin required reductions.
- Entity required reductions.
- Poster session.

BACKGROUND
SPRINGS RESTORATION

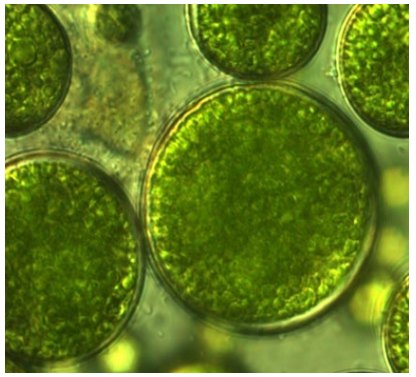


Source: Suwannee River Water Management District (WMD) What is a Spring?

Impairment: Not meeting water quality standards.

Source: Weeki Wachee TMDL

Algae growth can be caused by **excess nutrients.**



Source: Shutterstock

Total maximum daily load (TMDL): The maximum amount of a pollutant that a waterbody can receive and still maintain its designated uses. **This represents the target for restoration.**

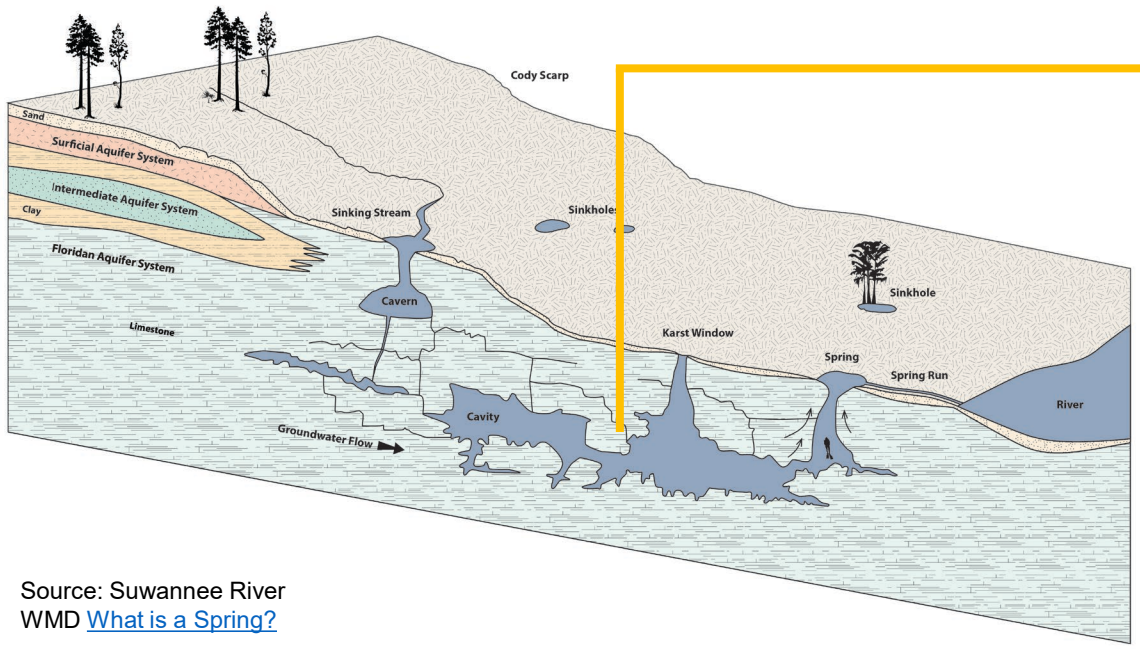
Source: Florida Geological Survey - Rainbow Spring #4

BACKGROUND
SPRINGS RESTORATION

Excess nutrients come from **sources on the landscape.**

Source: Beta Analytics

BMAP Projects: Efforts that result in the reduction or prevention of nutrients to the waterbodies addressed by the BMAP.



Source: Suwannee River WMD [What is a Spring?]

Complex groundwater dynamics lead to variable travel times to the spring vent.

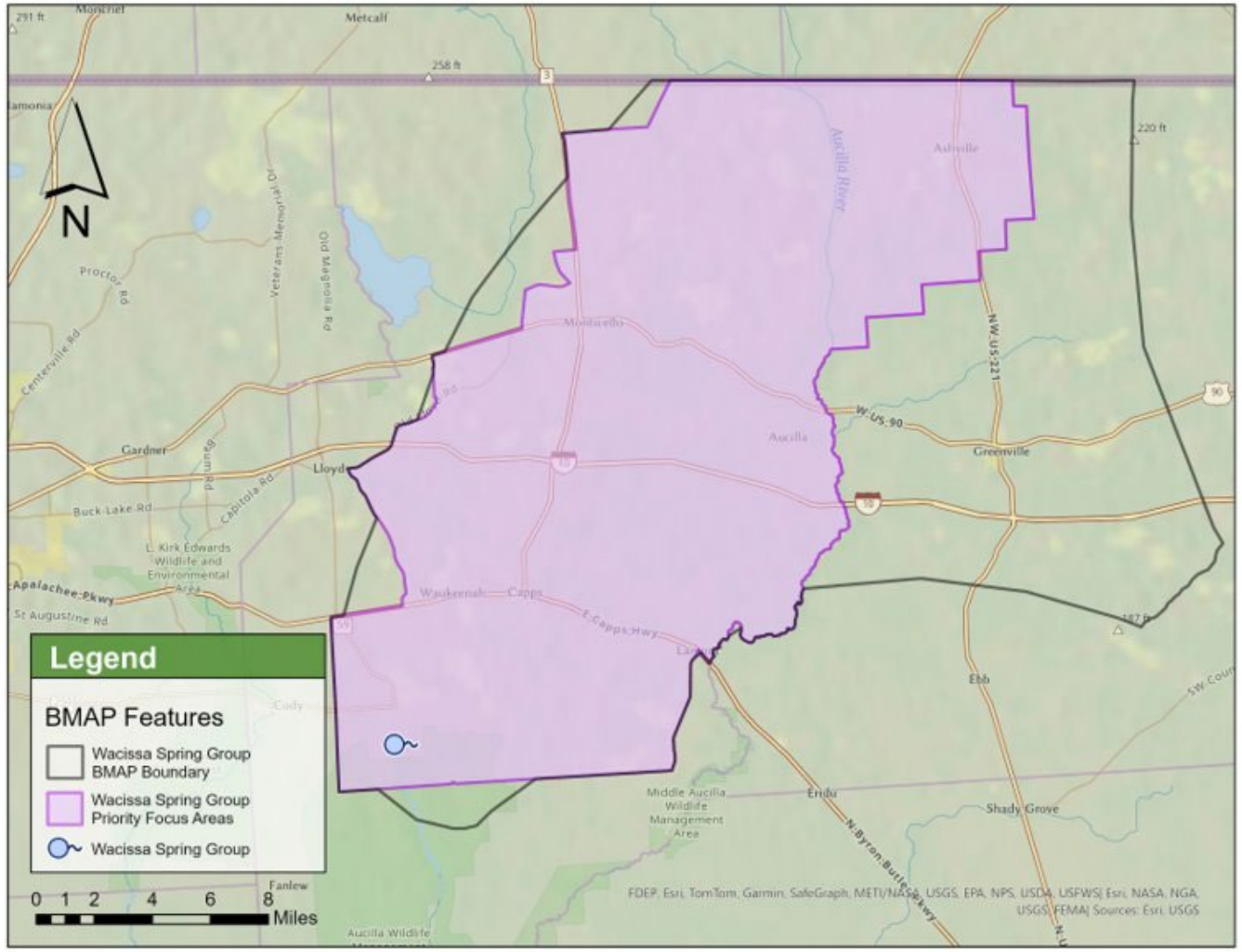
Water quality monitoring is performed through a network of surface water, spring vent and groundwater stations to assess waterbodies and measure progress towards restoration goals.

BMAP: An adaptive framework for water quality restoration that contains a comprehensive set of solutions developed to achieve the pollutant reductions established by TMDL.


Source: Florida Geological Survey - Rainbow Spring #4

BMAP: Basin Management Action Plan

BMAP BACKGROUND



- Approximately 327,585 acres/512 square miles in Jefferson and Madison counties.

Waterbody or Spring Name	Waterbody Identification (WBID) Number	Parameter	TMDL (mg/L)
Wacissa River	3424	Nitrate, monthly average	0.20
Wacissa Spring Group	3424Z	Nitrate, monthly average	0.24

mg/L: Milligrams per liter.

STAKEHOLDERS

Responsible Stakeholders:

- Agricultural Producers.
- Madison County.
- Jefferson County.
- City of Monticello.
- Town of Greenville.
- Private Golf Courses.
- Jefferson Correctional Institution Wastewater Treatment Facility.
- DOT Rest Area, I-10 and Aucilla River Wastewater Treatment Facility.

Responsible Agencies:

- Florida Department of Environmental Protection (DEP).
- Florida Department of Agriculture and Consumer Services (DACS).
- Florida Department of Health.
- Florida Department of Transportation (DOT).
- Northwest Florida Water Management District.
- Suwannee River Water Management District.

BILLS AND LEGISLATION
SUMMARY

- Florida Watershed Protection Act, section 403.067, Florida Statutes (F.S.).
- Florida Springs and Aquifer Protection Act, Part VIII of Chapter 373, F.S.
- 2020 Senate Bill (SB) 712, Clean Waterways Act.
- 2023 House Bill (HB) 1379.
- 2024 HB 1557.

Summary of latest updates:

- No new conventional onsite sewage treatment and disposal systems (OSTDS) on lots 1 acre or less.
- Wastewater treatment plans and OSTDS remediation plans from local governments.
- List of identified project to meet five-year milestones.
- Agricultural Cooperative Regional Elements (ACE).
- For the spring BMAPs, prohibitions expanded from priority focus area (PFA) to the entire BMAP.
- Advanced waste treatment (AWT) required for more types of effluent, including certain reclaimed water.

ACE

- Cooperative Agricultural Regional Water Quality Improvement Elements include a collaborative framework for identifying, prioritizing and implementing regional projects that address nutrient loading from agricultural operations in Florida's waterways.
- Continuous efforts among key stakeholders, including:
  - DEP.
  - DACS.
  - Water management districts.
  - Agricultural producers.
  - Local communities.

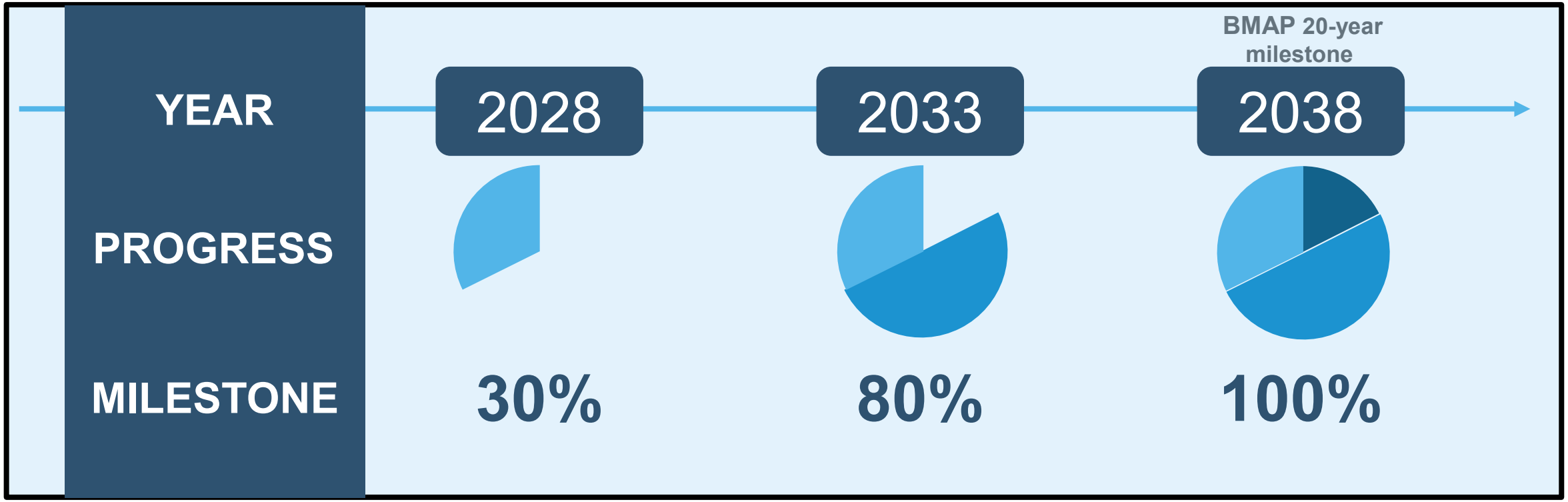
ACE

- Engaging producers in the decision-making process is key to this element and ensures that projects are practical, feasible and tailored to the needs and realities of agricultural operations.

- Partner agencies work in annual cycles to provide technical support, regulatory guidance and funding opportunities, enhancing the implementation and success of regional water quality improvement initiatives.

BMAP MILESTONES

FIVE-, 10- AND 15-YEAR MILESTONES/REDUCTION SCHEDULE



Assessment of progress toward these milestones must be conducted every five years and revisions to the plan must be made as appropriate. BMAPs use an adaptive management approach that allows for incremental load reductions through the implementation of projects and management strategies; however, the restoration target – the TMDL – remains the same.

BMAP UPDATES

DRAFT LOADING SUMMARY

	Nitrogen Loads (lb-N/yr)	Source
Total Load at Spring Vents (September 2023)	184,802	Upper 95% confidence interval - nitrate data and flow data from years 2013 to 2022
TMDL Load	108,541	TMDL target is 0.24 mg/L and using the same flow data from years 2013 to 2022
Percent Required Reduction	41%	
Total NSILT Load	550,679	2023 NSILT
Required Reduction	227,245	Proportional decrease in TMDL load

cfs: cubic feet per second

REDUCTIONS

DRAFT SPRINGSHED REQUIRED REDUCTIONS

Nitrogen Source	Allocations by Source (lb-N/yr)	Description	Percent of Total Reduction
Atmospheric Deposition	43,443	Spring Vent Percentage	18.88%
OSTDS	14,803	Spring Vent Percentage on All Lots	6.43%
Wastewater Treatment Facilities	5,567	BMAP Effluent Requirements (All)	2.42%
Farm Fertilizer (BMP)	40,508	15% reduction	17.60%
Livestock Waste (BMP)	10,296	10% reduction	4.47%
Livestock Waste - CAFO Dairy	2,586	10% reduction	1.12%
Other Agriculture	111,213	Assign additonal reductions to meet spring vent percentage reduction of ag loads	48.33%
Urban Turfgrass Fertilizers	1,510	Spring Vent Percentage	0.66%
Sports Turfgrass Fertilizers - Golf	147	Spring Vent Percentage	0.06%
Sports Turfgrass Fertilizers - Other	46	Spring Vent Percentage	0.02%
Total	**230,120**		**100.00%**

- The spring vent percentage of 41% was used to determine the required reduction for most categories.
- For WWTFs, reduction was determined based on the BMAP effluent standards.
- For agricultural sources, an estimated reduction of 15% will be achieved when crop producers are enrolled in the DACS Best Management Practice (BMP) program and implement BMPs, and a reduction of 10% is estimated when all livestock producers enroll in the DACS BMP program and implement BMPs. The remaining allocated reduction to agricultural sources will be addressed through a combination of regional projects, ACE, innovative technologies and cost-share projects.

REDUCTIONS

DRAFT ENTITY REQUIRED REDUCTIONS

All local municipalities will be allocated reductions based on the loading estimated to occur under their jurisdiction from wastewater, septic systems and urban fertilizers.

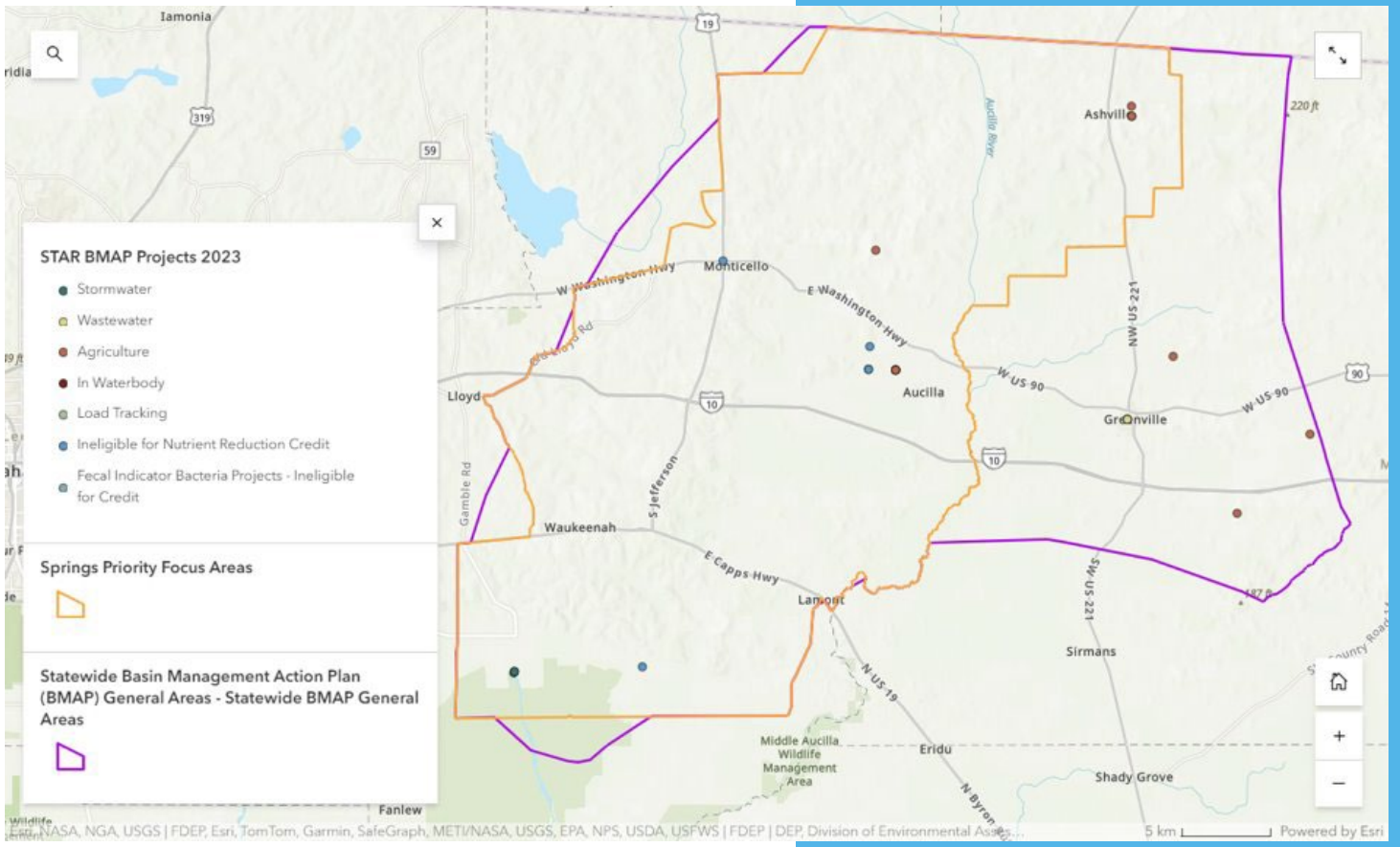
Entity	Milestone 2028 Required Reductions lbs-N/yr (30%)	Milestone 2033 Required Reductions lbs-N/yr (80%)	Milestone 2038 Required Reductions lbs-N/yr (100%)
Jefferson County	3,291	8,776	10,970
Madison County	872	2,324	2,905
City of Monticello	151	404	505
Town of Greenville	2,041	5,442	6,802
Jefferson Correctional Institution WWTF*	195	521	652
DOT Rest Area, I-10 & Aucilla River WWTF *	28	74	92
Agriculture	49,381	131,683	164,604
Private Golf Courses*	44	118	147

*Reductions for these entities will be tracked through permits and compliance actions.

PROJECTS

HB 1379 (2023) requires responsible entities to report on projects that meet their five-year milestones.

- Entities are required to plan and report projects to the state through the Statewide Annual Report (STAR) process. All projects needed to fulfill milestones should be added, even if a funding source has not been identified.
- Reporting projects in this process allows the state to evaluate funding needs and to assist in prioritizing projects to promote maximum environmental benefit.



UPCOMING SCHEDULE

May-Aug. 2024

Individual meetings on allocations and milestones with BMAP stakeholders.

Aug.1, 2024

Final wastewater and OSTDS plans due from stakeholders.

Aug. - Nov. 2024

BMAP Portal opened early for project collection. Public meetings on allocations.

Technical analyses, project identification and BMAP document drafting.

June - Dec. 2024

Final draft BMAP document and public meetings.

Dec. 2024

Statutory deadline to update nutrient BMAPs.

July 1, 2025

RESOURCES

BMAP WEBSITE AND STORY MAPS

Florida Springs Basin Management Action Plans (BMAPs)

Welcome to the Florida Springs Basin Management Action Plan (BMAP) StoryMap

The springs BMAPs are developed with specific provisions for the protection and restoration of the state's Outstanding Florida Springs. This story map focuses on the springs-related BMAPs; for more details about other BMAPs or more information about the BMAP program in general, visit https://floridadep.gov/bmaps.

* The story map will display differently depending on the screen size and resolution being used. Story map best viewed in Chrome or Firefox.

Overview

The Florida Springs and Aquifer Protection Act (Part VIII of Chapter 373, F.S.) provides for the protection and restoration of the state"s Outstanding Florida Springs (OFS), which comprise 24 first magnitude springs, 6 additional named springs, and their associated spring runs. The act provides specific requirements for OFS BMAPs beyond those

1 Legislative Requirements

2 Crystal River - Kings Bay BMAP StoryMap

3 DeLeon Spring Story Map

4 Gemini Springs Story Map

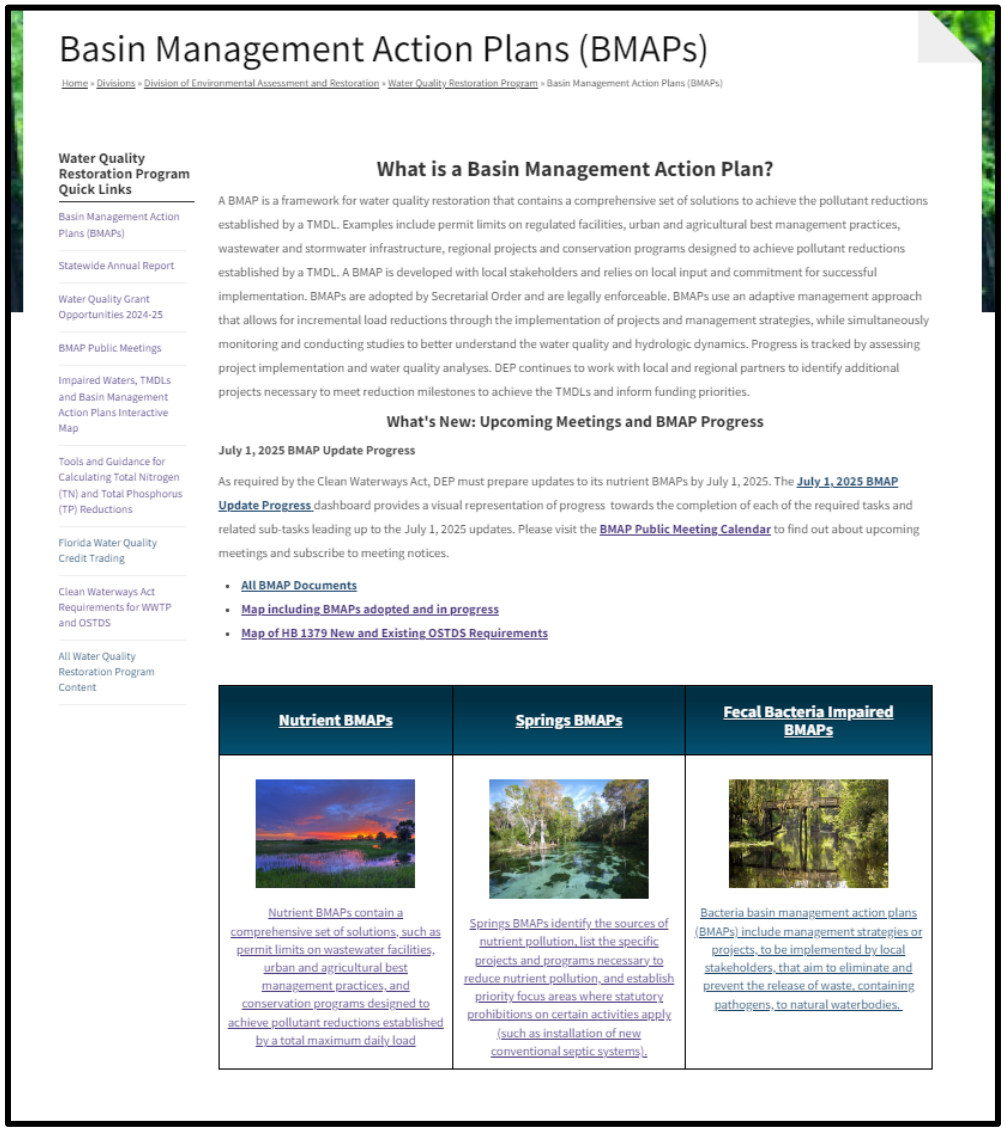
5 Homosassa and Chassahowitzka Springs...

6 Jackson Blue and Merritts Mill Pond BMAP Story Map

7 Rainbow Springs Group and Rainbow Springs Group Run...

8 Santa Fe River BMAP Story Map

9 Silver Springs and Upper Silver River BMAP Story Map



SUBSCRIBER PAGE

HOW TO CONTACT US

BMAPProgram@FloridaDEP.gov

THANK YOU

Samuel Hankinson, P.G. II
Division of Environmental Assessment and Restoration
Water Quality Restoration Program

Contact Information:
850-245-8086
Samuel.Hankinson@FloridaDEP.gov


FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

OVERVIEW - BASIN MANAGEMENT ACTION PLANS (BMAPS)

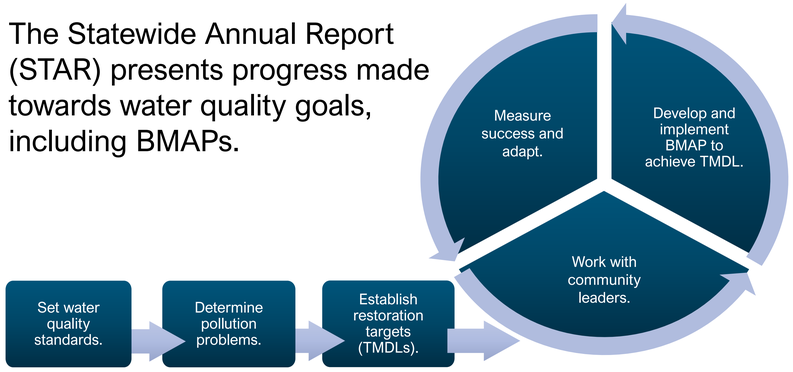
Outstanding Florida Springs Public Meetings, Fall 2024

Water Quality Framework

The Florida Department of Environmental Protection (DEP) monitors and assesses Florida's surface water and groundwater quality, including Outstanding Florida Springs.

DEP and partner agencies maintain and expand monitoring networks to provide water quality data for decision making.

The Statewide Annual Report (STAR) presents progress made towards water quality goals, including BMAPs.



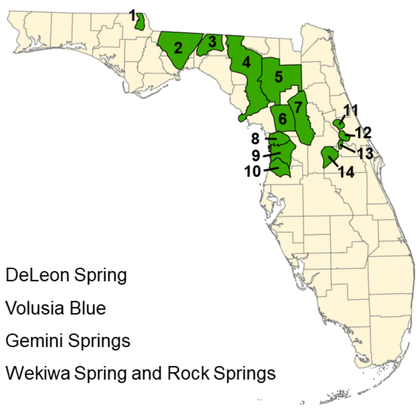
Outstanding Florida Springs BMAPs

A BMAP provides a water quality restoration framework to implement total maximum daily loads (TMDLs).

There are currently 13 BMAPs targeting the restoration of 24 Outstanding Florida Springs.

Springs BMAPs

1. Jackson Blue
2. Wakulla Spring
3. Wacissa
4. Suwannee
5. Santa Fe
6. Rainbow Springs
7. Silver Springs
8. Kings Bay-Crystal River
9. Chassahowitzka-Homosassa
10. Weeki Wachee
11. DeLeon Spring
12. Volusia Blue
13. Gemini Springs
14. Wekiwa Spring and Rock Springs



BMAP Legislation

Authority and responsibility for BMAPs is outlined in the following Florida Statutes (F.S.):

Florida Watershed Restoration Act (section 403.067, F.S) - Outlines the process for identifying impaired waters and the strategies to restore them, including cooperative plans, known as BMAPs.

Florida Springs and Aquifer Protection Act (sections 373.801 - .813, F.S.) -Provides for the protection and restoration of the state's Outstanding Florida Springs, which is comprised of 24 first-magnitude springs, six additional named springs and their associated spring runs.

Recent amendments to the above laws include:
2020 - Promotes resilient wastewater infrastructure and utilities; requires local governments to develop wastewater treatment facility (WWTF) plans and onsite sewage treatment and disposal system (OSTDS) remediation plans.

2023 - Requires a list of identified projects to achieve the five-year milestones in BMAPs and agricultural cooperative regional water quality improvement elements; adds requirements for local comprehensive planning; requires more stringent domestic wastewater treatment standards; expands eligibility for grant opportunities; and expands prohibitions in springs BMAP areas.

2024 - Requires advanced treatment of reclaimed water within BMAPs and requires private domestic wastewater facilities to coordinate with local governments in the development of wastewater treatment plans.

BMAP Components and Updates

Key Elements of BMAPs:
- The TMDL(s) that define the restoration targets.
- Physical description of the waterbody and contributing area.
- Description of the monitoring network and water quality.
- Identification of the pertinent pollution sources.
- Identification of responsible stakeholders.
- List of projects and strategies to reduce nutrient loading.

USFWS_CCBY2.0

Recent Updates:
- 2023 Nitrogen Source Inventory Loading Tool (NSILT).
- Spring Vent Analyses.
- Evaluation and expansion of the monitoring network.
- Local OSTDS and wastewater remediation plans.
- Determination of entity allocations and milestones.
- Evaluation of milestone progress with stakeholders.

New Additions to the Springs BMAPs:
- More detailed groundwater analyses.
- Updated spring vent water quality analyses.
- Incorporation of law requirements adopted 2020-24.
- Entity allocations.

BMAP Timeline

2018
Outstanding Florida Springs BMAPs adopted.

2020
Clean Waterways Act signed into Florida law.

2023
NSILT and spring vent analyses are updated with methodology revisions.

2025
Statutory deadline for updated nutrient BMAPs.

2028
Next BMAP milestone for entity reductions.

2018 | 2019 | 2020 | 2021 | 2022 | 2023 | **2024** | 2025 | 2026 | 2027 | 2028

January 2024
Public meeting about updated NSILT methodology.

May 2024
BMAP updates public meetings. Responsible entity meetings.

August 2024
Final OSTDS Remediation Plans and WWTF Plans due.

October 2024
Public meetings about allocated reductions and milestone progress.

December 2024
Final Draft BMAP documents and public meetings.

Moira Homann, Program Administrator
Moira.Homann@FloridaDEP.gov
850-245-8460

FLORIDA SPRINGS – AN OVERVIEW

Outstanding Florida Springs Public Meetings, Fall 2024

Springshed Diagram

The diagram below represents an overview of the complex processes that impact water flow through a spring system. It also shows how human behaviors on the landscape affect nitrogen pollution in the groundwater. Eventually, groundwater flows back to the surface through the Outstanding Florida Springs (OFS). Pollutants from the surface can travel long distances, negatively impacting water quality and the biology of springs and rivers. The variable distances and underground conditions means it can take time to observe water quality improvements at the spring vent from restoration projects being implemented on the land surface across the springshed.

OFS

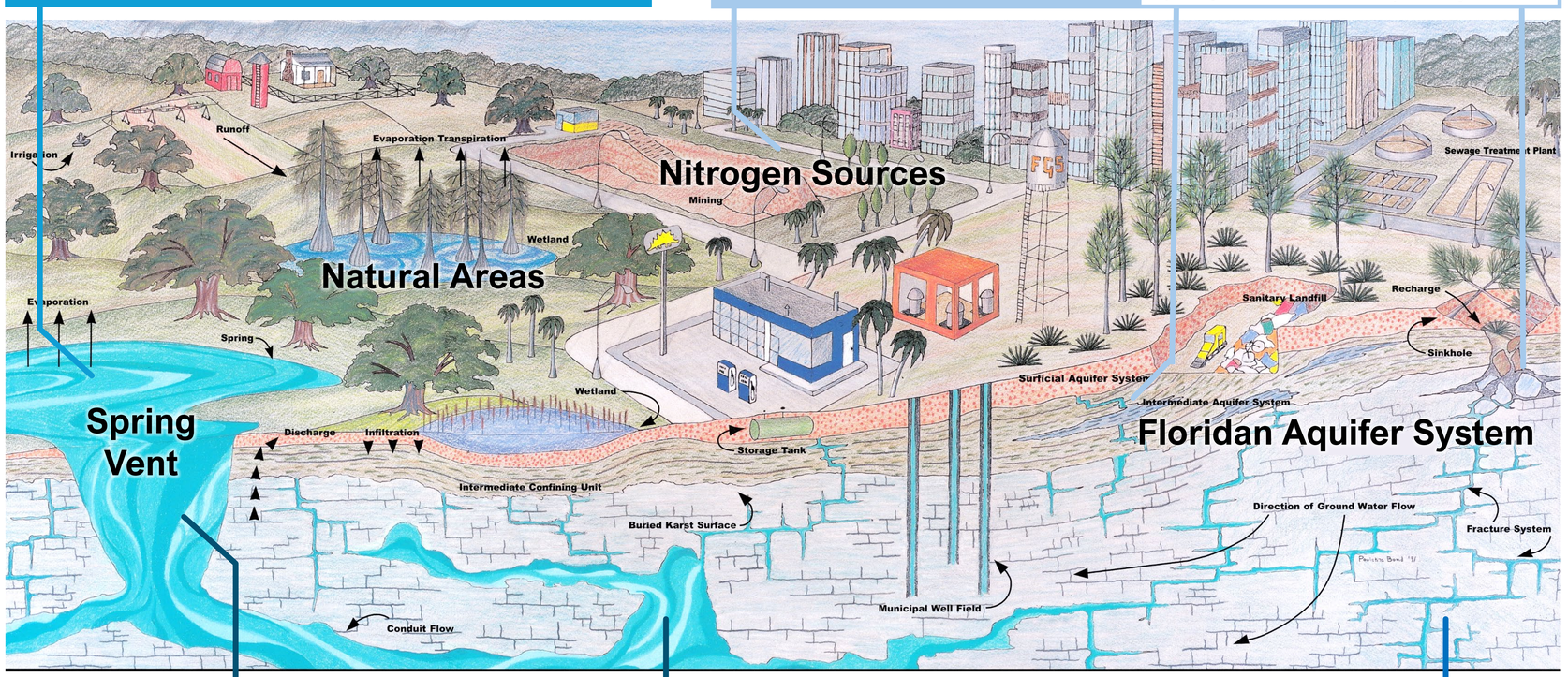
OFS includes all historic first magnitude springs and their associated spring runs as determined by DEP, using the most recent Florida Geological Survey springs bulletin (66), as well as the following additional springs and their associated spring runs: DeLeon Springs, Peacock Springs, Poe Springs, Rock Springs, Wekiwa Springs and Gemini Springs.

Impairment

Currently, 24 of the 30 OFS are impaired for the nitrate form of nitrogen. Anthropogenic sources of nitrogen such as human waste, livestock waste, farm fertilizer, urban fertilizer and other sources contribute to nitrate loading that results in an ecological imbalance.

Vulnerability evaluates how easily pollutants from the surface can impact groundwater quality.

Recharge occurs when rain or irrigation water infiltrates through the soil and enters an underlying aquifer system.



Monitoring

Spring vent monitoring is performed by DEP and partner agencies to measure progress towards meeting the total maximum daily loads (TMDLs).

Groundwater monitoring is performed by DEP and partner agencies to understand how nutrient loading and reduction activities impact water traveling to the spring vent.

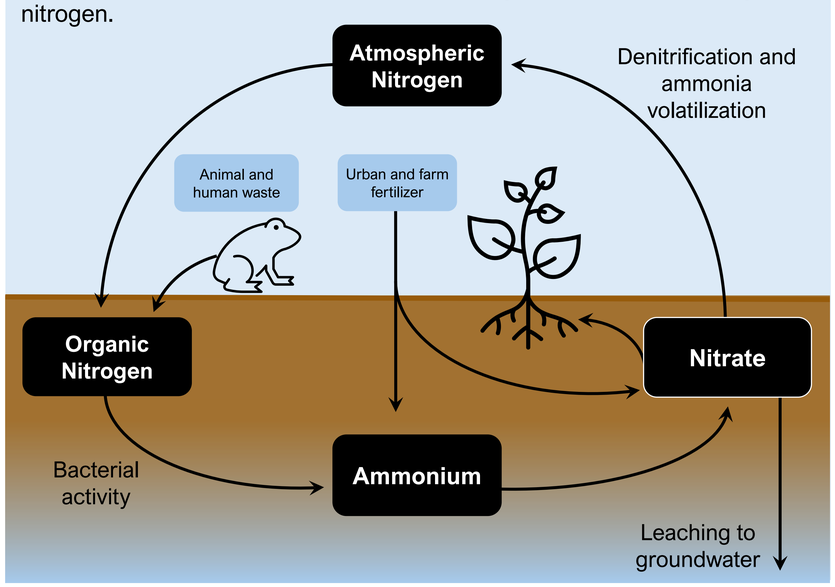
Karst Limestone

The Floridan aquifer is contained in limestone units that underly the state. Karst limestone results from the dissolution of calcium carbonate rock by acidic rainwater, creating voids and channels that result in sinkholes, conduits and springs. Water can travel rapidly from high recharge areas to spring vents through karst features.

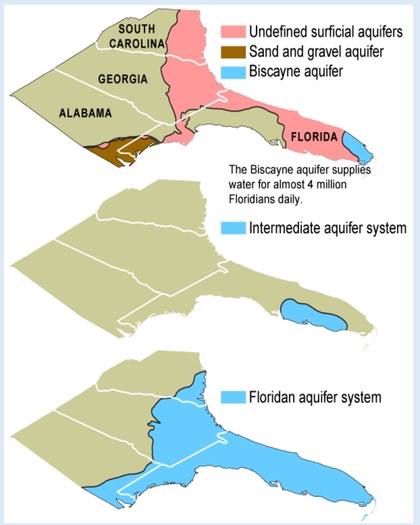
The Nitrogen Cycle

Nitrogen goes through biological, physical and chemical processes as it travels through the environment. This series of interactions is known as the nitrogen cycle.

Attenuation of nitrogen refers to the processes of immobilization, denitrification, volatilization and cation exchange that prevent leaching of nitrogen.



Florida's Aquifer Systems



The Floridan Aquifer underlies the entire state of Florida and is the source water for the state's springs.

In some areas of the state, a surficial aquifer system separates the Floridan Aquifer from the land surface.

In most OFS areas, the Floridan Aquifer is largely unconfined and vulnerable to leaching of nitrogen from the land surface.

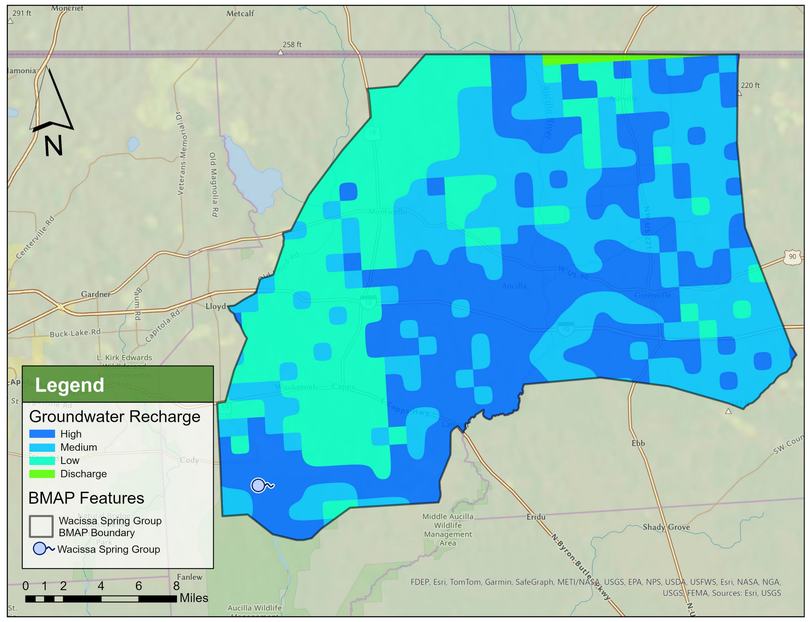
[Springshed diagram: FGS PR5]

[Aquifer diagram: St. Johns River Water Management District (SRJWMD)]

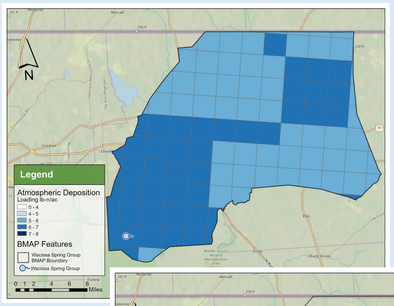
Lauren Campbell, PhD, Environmental Administrator
Lauren.Campbell@FloridaDEP.gov
850-245-8825

Wacissa River and Wacissa Spring Group Basin Summary

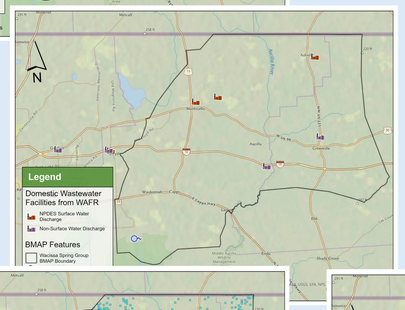
Wacissa Springs Basin Management Action Plan (BMAP)



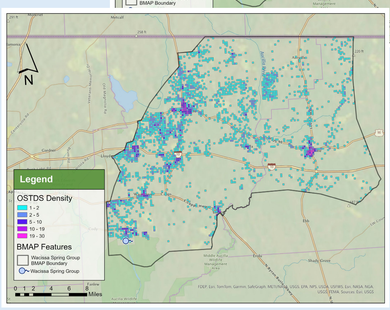
Nitrogen Source Loading

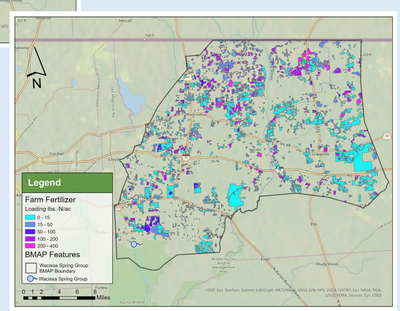


Nitrogen Loading: Nitrogen loading was estimated using the Nitrogen Source Inventory Loading Tool (NSILT). This is an evaluation tool that uses the best available data to estimate loading in pounds of nitrogen per year (lbs-N/yr) to the land surface from a variety of nitrogen sources. The calculations apply biochemical attenuation and hydrogeological attenuation factors to estimate the loading effects on groundwater (GW) quality. Sources reviewed include:

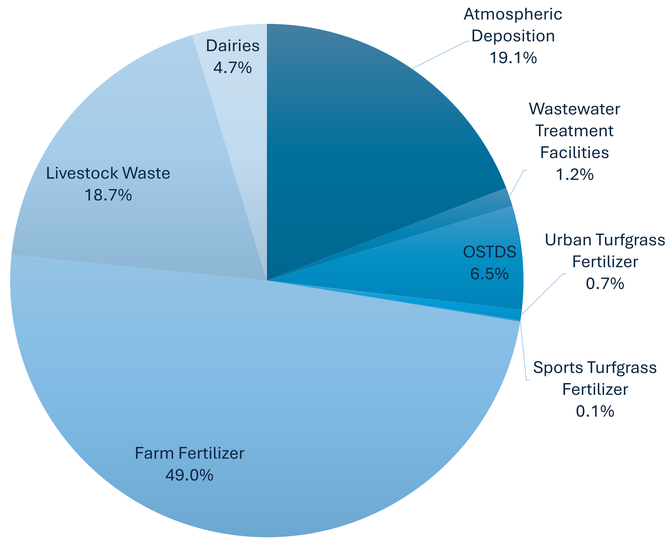


- Atmospheric Deposition
- Wastewater Treatment Facilities
- Onsite Sewage Treatment and Disposal Systems (OSTDS)
- Urban Turfgrass Fertilizer
- Sports Turfgrass Fertilizer
- Farm Fertilizer
- Livestock Waste
- Dairies
- Biosolids (not in the Wacissa BMAP)





Wacissa Spring Group Nitrogen Loading

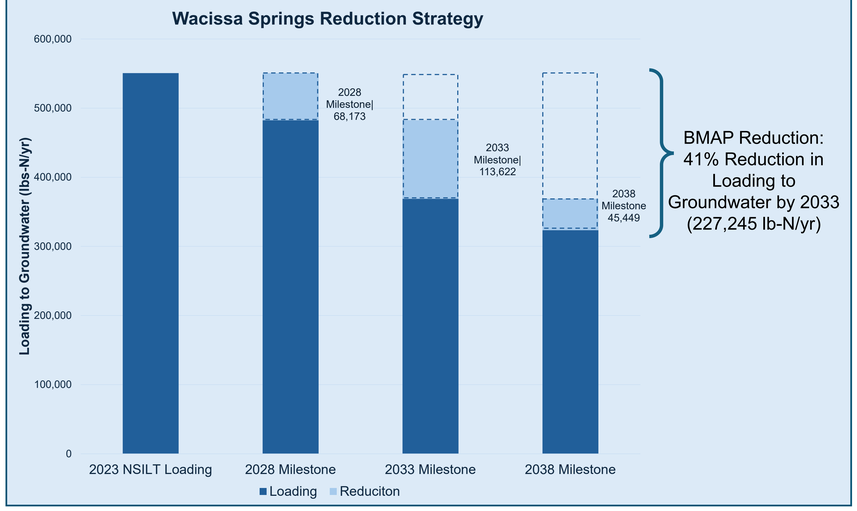


Nitrogen Source	Total Load to Groundwater (lbs-N/yr)
Atmospheric Deposition	105,275
Wastewater Treatment Facilities	6,524
OSTDS	35,872
Urban Turfgrass Fertilizer	3,659
Sports Turfgrass Fertilizer	468
Farm Fertilizer	270,052
Livestock Waste	102,964
Dairies	25,864
Total	550,679

Nitrogen Reduction Approach

	Nitrogen Loads (lb-N/yr)	Source
Total Load at Spring Vents (September 2023)	184,802	Upper 95% confidence interval - nitrate data and flow data from years 2013 to 2022
TMDL Load	108,541	TMDL target is 0.24 mg/L and using the same flow data from years 2013 to 2022
Percent Required Reduction	41%	
Total NSILT Load	550,679	2023 NSILT
Required Reduction	227,245	Proportional decrease in TMDL load

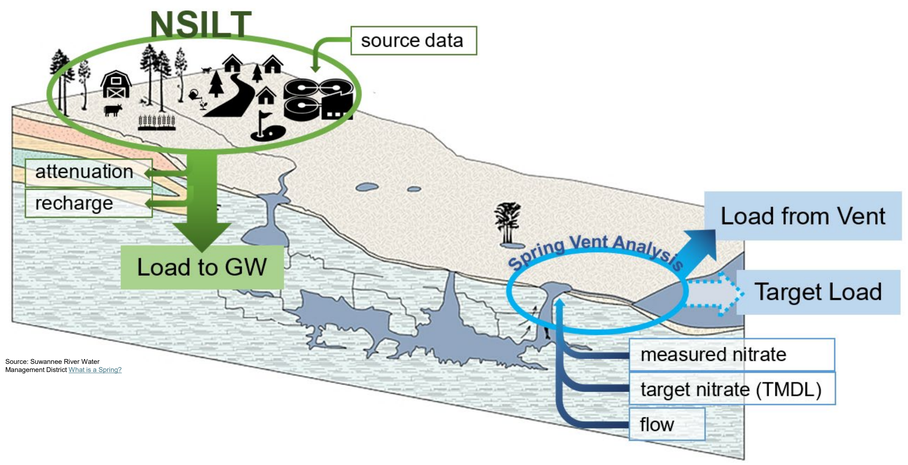
Spring flow and nitrate concentration data were reviewed to evaluate the nitrate load flowing from the spring. It was determined that approximately 41% more nitrate load is discharged than the waterbody can assimilate without impairment. A proportional decrease in loading from sources is needed to resolve this impairment.



Spring Vent Analysis

Load from Vent – **Target Load** = Reduction at vent

Percent Reduction at vent x **Load to Groundwater** = Required Reductions (from sources)



Spring	NO2+NO3 (mg-N/L)	TMDL (mg-N/L)	Discharge (cfs)	Loading (lb-N/yr)
Wacissa Head Spring #2	0.44	0.24	124.69	108,549
Big Blue	0.24*	0.24	27.80	13,121
Cassida/Cassidy	0.39	0.24	27.66	21,376
Log	0.44	0.24	31.17	26,851
Thomas	0.41	0.24	18.70	14,906

*Actual concentration below the TMDL.
NO2+NO3: Nitrite + nitrate.
mg-N/L: milligrams of nitrogen per liter.
cfs: cubic feet per second.

Sam Hankinson, P.G.
Samuel.Hankinson@FloridaDEP.gov
850-245-8086

Wacissa River and Wacissa Spring Group BMAP Allocated Reductions, Milestones and Progress

Nitrogen Sources

Nitrogen Source	Allocations by Source (lb-N/yr)	Percentage of Total Reduction
Atmospheric Deposition*	43,443	18.88%
Onsite Sewage Treatment and Disposal Systems	14,803	6.43%
Wastewater Treatment Facilities	5,567	2.42%
Farm Fertilizer (BMP Enrollment)	40,508	17.60%
Livestock Waste (BMP Enrollment)	10,296	4.47%
Dairies - Confined Animal Feeding Operations (CAFO)	2,586	1.12%
Other Agriculture	111,213	48.33%
Urban Turfgrass Fertilizer	1,510	0.66%
Sports Turfgrass Fertilizer - Golf	147	0.06%
Sports Turfgrass Fertilizer - Other	46	0.02%
Total	230,120	100.00%

*Not allocated to entities.

BMAP Management Strategies

General Approach for Entity Allocations and Reductions
While the loading evaluation and entity allocations were determined by source, nutrient reduction credits can be earned through implementing projects addressing any source. Achieving milestone reductions is needed to ensure sufficient progress towards meeting the total maximum daily load (TMDL) target.

Source-Specific Management Strategies:

- **Atmospheric Deposition:** Due to continuing air regulations and fuel switching, emissions of atmospheric nitrogen have been trending downwards in Florida since at least 2005 (Himes & Dawson, 2017).
- **Onsite Sewage Treatment and Disposal Systems (OSTDS):** New installation or repair permits for conventional OSTDS are not permitted on lots one acre or less.
- **Wastewater Treatment Facilities:** Surface water discharges from facilities must meet advanced waste treatment (AWT). Other discharge methods must meet AWT standards, if the Florida Department of Environmental Protection (DEP) determines the treatment is needed.
- **Farm Fertilizer Best Management Practice (BMP) Implementation:** An assumed 15% reduction in nitrogen when a producer enrolls in the Florida Department of Agriculture and Consumer Services (DACS) BMP program and implements BMPs.
- **Livestock Waste BMP Implementation:** An assumed 10% reduction in nitrogen when a livestock producer enrolls in the DACS BMP program and implements BMPs.
- **Other Agricultural Activities:** The remainder of reductions allocated to agricultural sources will need to be addressed through a combination of regional agricultural projects, agricultural cooperative regional elements, innovative technologies and cost-share projects.
- **Urban Turfgrass Fertilizer:** Ordinances, education, street sweeping and structural stormwater improvements to reduce impact from urban turfgrass fertilization.
- **Sports Turfgrass Fertilizer – Golf:** Operators will be required to develop a nutrient management plan to ensure responsible management of nutrients.
- **Sports Turfgrass Fertilizer – Other:** Owners/operators should follow the Sports Turfgrass BMP manual to ensure fertilizers are managed responsibly.

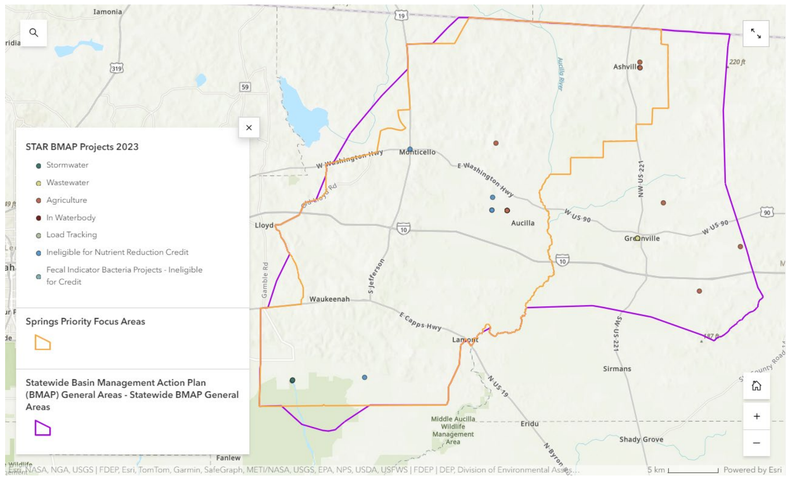
Projects

The Statewide Annual Report 2023

Project collection and reporting are crucial to the successful implementation and management of basin management action plans (BMAPs). Projects are reported to DEP annually through the Statewide Annual Report (STAR) process.

Stakeholders are required to report projects that are being implemented or planned that will be required to achieve reduction targets, along with an estimate of expected nutrient reduction benefits and financial costs.

It is important that all projects needed to achieve milestones are included in the STAR, even if a funding mechanism is not currently identified because this provides the state information on funding needs to achieve BMAP goals and assists with the prioritization of projects.

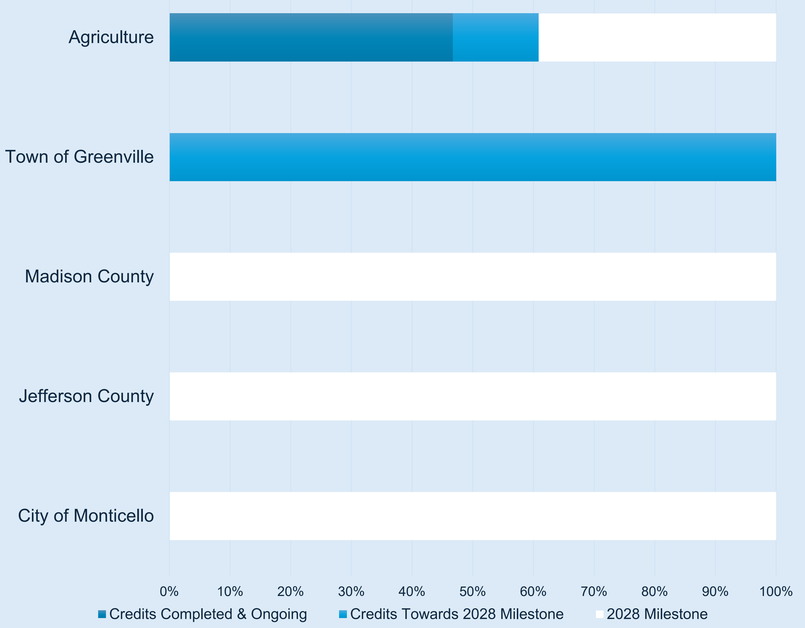


Entity Reduction Milestones and Progress

Entity	Milestone 2028 Required Reductions lbs-N/yr (30%)	Milestone 2033 Required Reductions lbs-N/yr (80%)	Milestone 2038 Required Reductions lbs-N/yr (100%)
Jefferson County	3,291	8,776	10,970
Madison County	872	2,324	2,905
City of Monticello	151	404	505
Town of Greenville	2,041	5,442	6,802
Jefferson Correctional Institution WWTF	195	521	652
DOT Rest Area, I-10 & Aucilla River WWTF	28	74	92
Agriculture	49,381	131,683	164,604
Private Golf Courses*	44	118	147

*Reductions for these entities will be tracked through permits and compliance actions.

Progress Towards 2028 Milestone



*Estimates through December 2023.

Source: Florida Geological Survey - Rainbow Spring #4

Sam Hankinson, P.G.
Samuel.Hankinson@FloridaDEP.gov
850-245-8086

Florida Department of Environmental Protection (DEP)
Wacissa Basin Management Action Plan (BMAP) Meeting Summary
October 7, 2024, 2:00 pm – 3:15 pm
Jefferson County R.J. Bailar Public Library
375 S. Water St., Monticello, FL

Attendees

Tiffany Busby, Wildwood Consulting
Lauren Campbell, DEP
Caraline Coombs, FFBF
Chris Denmark, FDACS
Dan Hamedani, Citizen
Sam Hankinson, DEP
Maddy Hart, FDACS
Moira Homann, DEP
Celeste Lyon, RES
Raulie Raulerson, FFBF
Douglas Walker, FDACS
Ken Weaver, DEP
Stefani Weeks, Weeks Engineering Services

Presentation

Sam Hankinson gave a brief overview of the Wacissa BMAP, basin required reductions, entity required reductions, and the upcoming BMAP schedule. He explained that the total maximum daily loads (TMDLs) are 0.24 milligrams per liter (mg/L) of nitrate for the Wacissa Spring Group and 0.20 mg/L for the Wacissa River (waterbody identification number 3424). Based on recent water quality data, an additional 41% reduction is needed to meet the water quality target.

Poster Session

Posters were presented, along with the opportunity for attendees to review BMAP information and ask questions of DEP and Florida Department of Agriculture and Consumer Services (FDACS) staff.

Written Comments

One written comment was submitted at the meeting. Dan Hamedani suggested that the local governments should install sewer service when water service is being extended to new parcels. Also, he suggested that projects prioritize moving electric utilities underground, for better storm resilience. He recommended local governments improve stormwater, sewer, and electric utilities to be less vulnerable to storms and flooding.