



Jackson Blue Spring and Merritts Mill Pond Basin Management Action Plan

October 8, 2024 at 10:00 AM CDT

In-person

*Peanut Hall at Jackson County University of
Florida Institute of Food and Agricultural
Sciences (UF/IFAS) Extension Office
2741 Penn Ave.
Marianna, FL 32448*

Agenda

- Jackson Blue Spring and Merritts Mill Pond (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/](https://publicfiles.dep.state.fl.us/-/DEAR/BMAP/)

For more information, contact: Sam Hankinson at (850) 245-8086 Samuel.Hankinson@FloridaDEP.gov .



JACKSON BLUE SPRING AND MERRITTS MILL POND BASIN MANAGEMENT ACTION PLAN

Sam Hankinson, P.G. II

Division of Environmental Assessment and Restoration/
Water Quality Restoration Program
Florida Department of Environmental Protection

Marianna, FL | Oct. 8, 2024



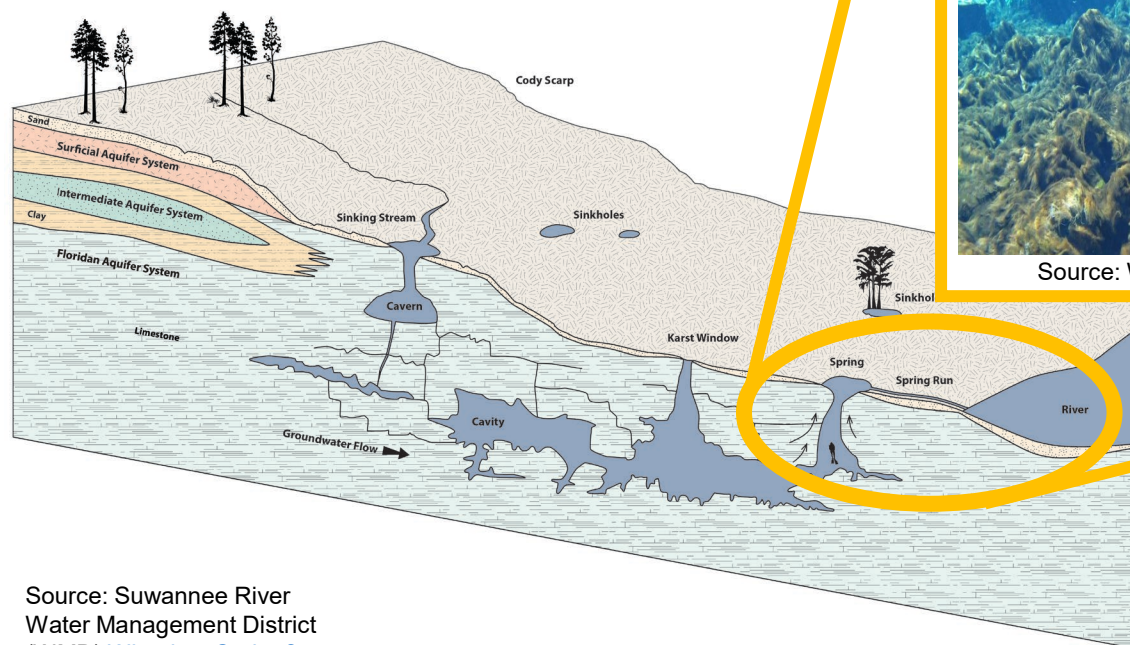
AGENDA

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





BACKGROUND SPRINGS RESTORATION



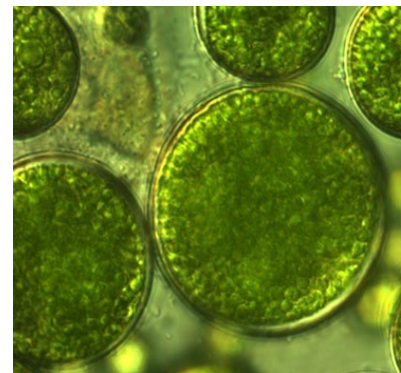
Source: Suwannee River Water Management District (WMD) [What is a Spring?](#)

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.**

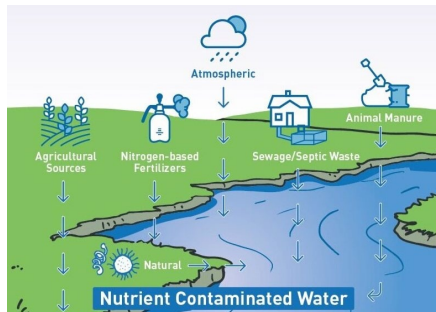


Source: Florida Geological Survey - Rainbow Spring #4



BACKGROUND SPRINGS RESTORATION

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



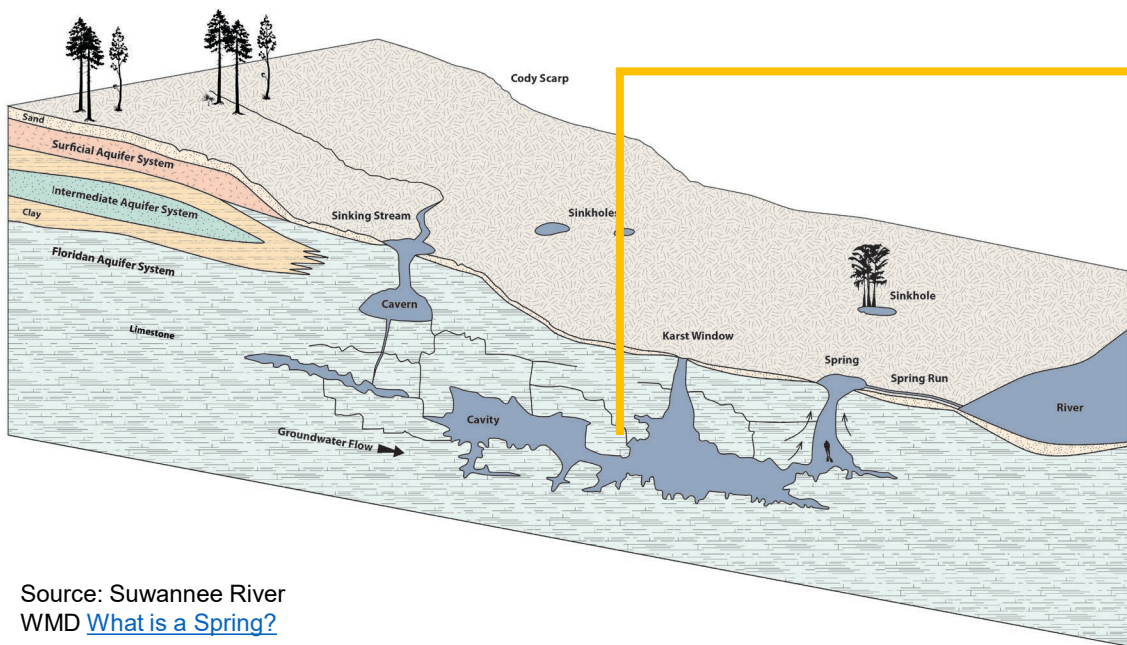
Source: Beta Analytics

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

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

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.



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

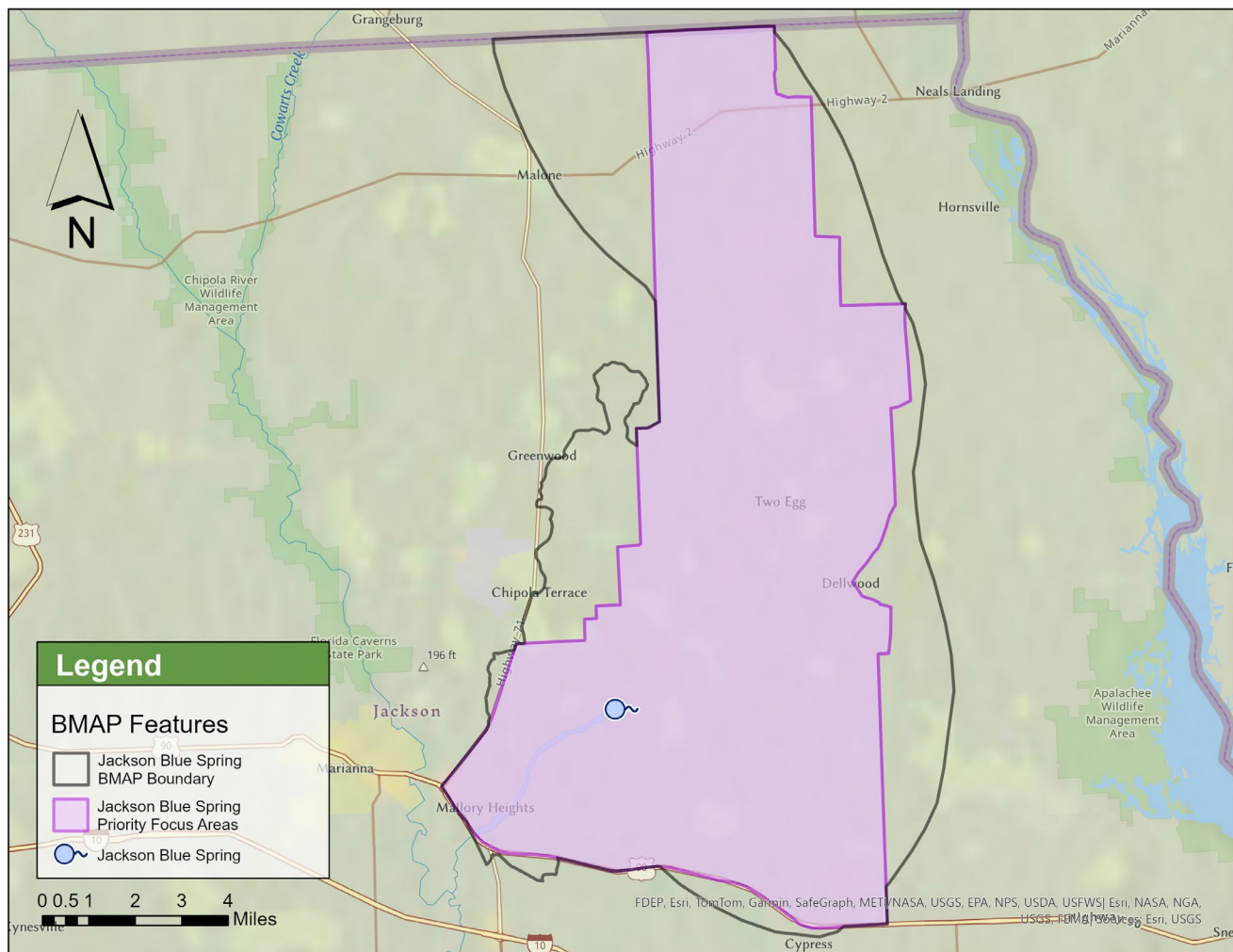


Source: Florida Geological Survey - Rainbow Spring #4

BMAP: Basin Management Action Plan



BMAP BACKGROUND



- Approximately 92,683 acres/145 square miles in Jackson County.

Waterbody or Spring Name	Waterbody Identification (WBID) Number	Parameter	TMDL (mg/L)
Jackson Blue Spring	180Z	Nitrate, monthly average	0.35
Merritts Mill Pond	180A	Nitrate, monthly average	0.35

mg/L: Milligrams per liter.



STAKEHOLDERS

Responsible Stakeholders:

- Agricultural Producers.
- Jackson County.
- Town of Bascom.
- Town of Malone.
- Town of Greenwood.
- Private Golf Courses.

Responsible Agencies:

- Florida Department of Environmental Protection (DEP).
- Florida Department of Agriculture and Consumer Services (DACCS).
- Florida Department of Health.
- Florida Fish and Wildlife Conservation Commission.
- Northwest Florida 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.
 - WMDs.
 - Agricultural producers.
 - Local communities.



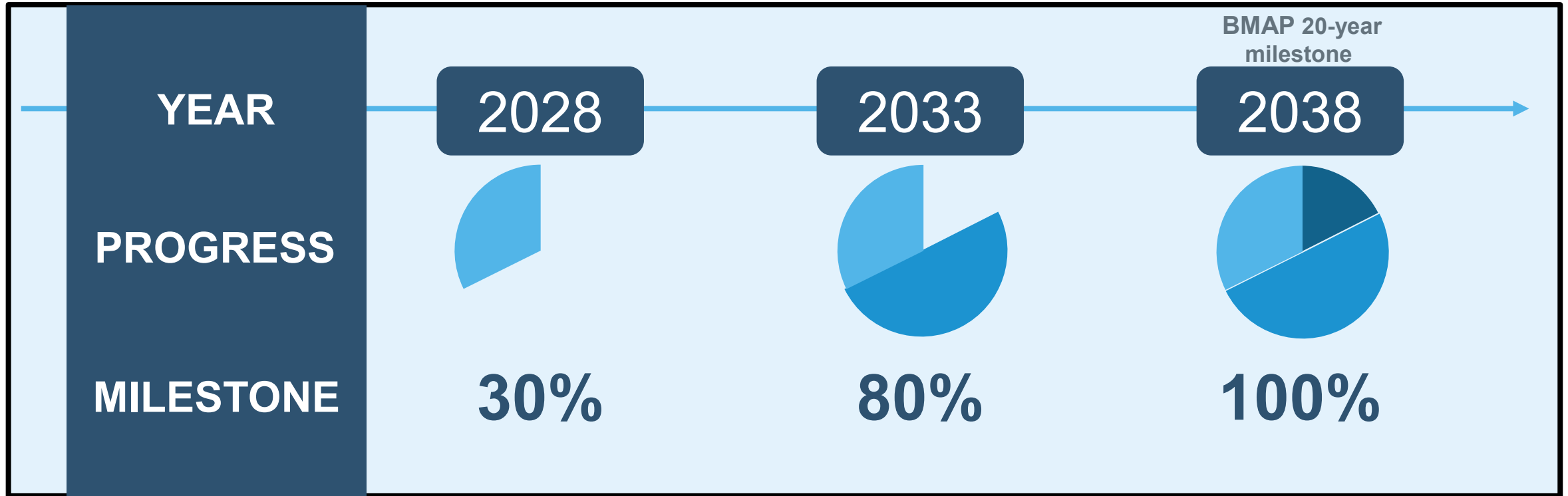
ACE

- 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 (August 2023)	839,637	Upper 95% confidence interval - nitrate data and flow data from years 2013 to 2022 (0.41 mg/L and 784.42 cfs)
TMDL Load	78,763	TMDL target is 0.35 mg/L and using the same flow data from years 2013 to 2022 (784.42 cfs)
Percent Required Reduction	91%	
Total NSILT Load (October 2023)	732,830	2023 NSILT
Required Reduction	664,086	Proportional decrease in TMDL load

cfs: Cubic feet per second.



REDUCTIONS

DRAFT SPRINGSHED REDUCTIONS

Nitrogen Source	Allocations by Source (lbs-N/yr)	Percentage of Total Reduction
Atmospheric Deposition*	32,717	4.93%
Onsite Sewage Treatment and Disposal Systems	29,710	4.47%
Farm Fertilizer (BMP Enrollment)	91,587	13.79%
Livestock Waste (BMP Enrollment)	4,569	0.69%
Other Agriculture	498,555	75.07%
Urban Turfgrass Fertilizer	3,914	0.59%
Sports Turfgrass Fertilizer - Golf	3,034	0.46%
Total	664,086	100.00%

- The spring vent percentage of 91% was used to determine the required reduction for most categories.
- 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, OSTDS and urban fertilizer.

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%)
Jackson County	9,647	25,726	32,158
Town of Bascom	228	609	762
Town of Malone	88	234	293
Town of Greenwood	124	329	412
Agriculture	178,413	475,769	594,711
Private Golf Courses*	910	2,427	3,034

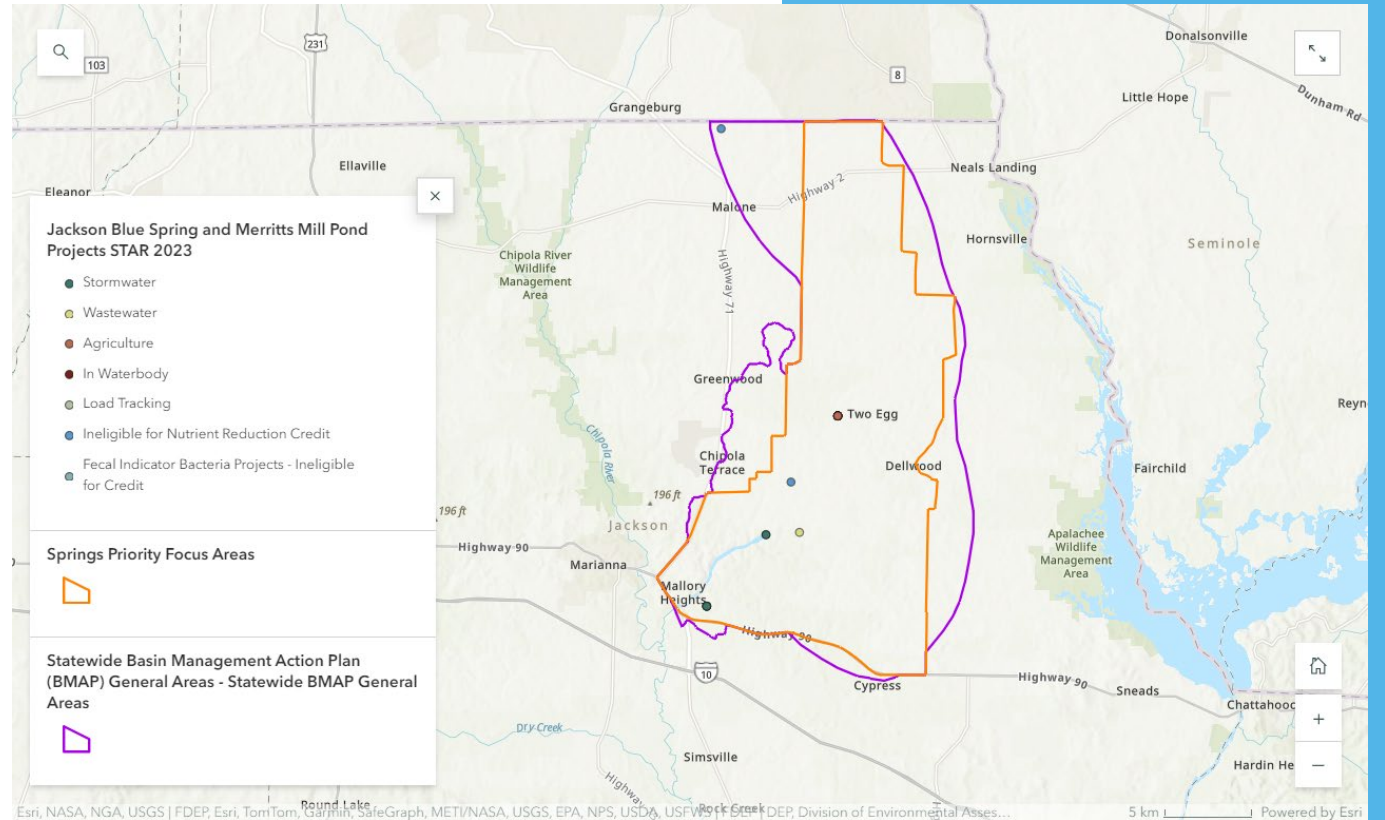
*Reductions for these entities will be tracked through permits and compliance actions.



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). All projects needed to fulfill milestones should be added, even if a funding source has not been identified.
- Reporting projects in the STAR 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



Basin Management Action Plans (BMAPs)

Home » Divisions » Division of Environmental Assessment and Restoration » Water Quality Restoration Program » Basin Management Action Plans (BMAPs)

Water Quality Restoration Program Quick Links

Basin Management Action Plans (BMAPs)

Statewide Annual Report

Water Quality Grant Opportunities 2024-25

BMAP Public Meetings

Impaired Waters, TMDLs and Basin Management Action Plans Interactive Map

Tools and Guidance for Calculating Total Nitrogen (TN) and Total Phosphorus (TP) Reductions

Florida Water Quality Credit Trading

Clean Waterways Act Requirements for WWTP and OSTDS

All Water Quality Restoration Program Content

What is a Basin Management Action Plan?

A BMAP is a framework for water quality restoration that contains a comprehensive set of solutions to achieve the pollutant reductions established by a TMDL. Examples include permit limits on regulated facilities, urban and agricultural best management practices, wastewater and stormwater infrastructure, regional projects and conservation programs designed to achieve pollutant reductions established by a TMDL. A BMAP is developed with local stakeholders and relies on local input and commitment for successful implementation. BMAPs are adopted by Secretarial Order and are legally enforceable. BMAPs use an adaptive management approach that allows for incremental load reductions through the implementation of projects and management strategies, while simultaneously monitoring and conducting studies to better understand the water quality and hydrologic dynamics. Progress is tracked by assessing project implementation and water quality analyses. DEP continues to work with local and regional partners to identify additional projects necessary to meet reduction milestones to achieve the TMDLs and inform funding priorities.

What's New: Upcoming Meetings and BMAP Progress

July 1, 2025 BMAP Update Progress

As required by the Clean Waterways Act, DEP must prepare updates to its nutrient BMAPs by July 1, 2025. The [July 1, 2025 BMAP Update Progress](#) dashboard provides a visual representation of progress towards the completion of each of the required tasks and related sub-tasks leading up to the July 1, 2025 updates. Please visit the [BMAP Public Meeting Calendar](#) to find out about upcoming meetings and subscribe to meeting notices.

- [All BMAP Documents](#)
- [Map including BMAPs adopted and in progress](#)
- [Map of HB 1379 New and Existing OSTDS Requirements](#)

Nutrient BMAPs	Springs BMAPs	Fecal Bacteria Impaired BMAPs
Nutrient BMAPs contain a comprehensive set of solutions, such as permit limits on wastewater facilities, urban and agricultural best management practices, and conservation programs designed to achieve pollutant reductions established by a total maximum daily load	Springs BMAPs identify the sources of nutrient pollution, list the specific projects and programs necessary to reduce nutrient pollution, and establish priority focus areas where statutory prohibitions on certain activities apply (such as installation of new conventional septic systems).	Bacteria basin management action plans (BMAPs) include management strategies or projects, to be implemented by local stakeholders, that aim to eliminate and prevent the release of waste, containing pathogens, to natural waterbodies.



SUBSCRIBER PAGE

HOW TO CONTACT US



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THANK YOU

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OVERVIEW - BASIN MANAGEMENT ACTION PLANS (BMAPS)

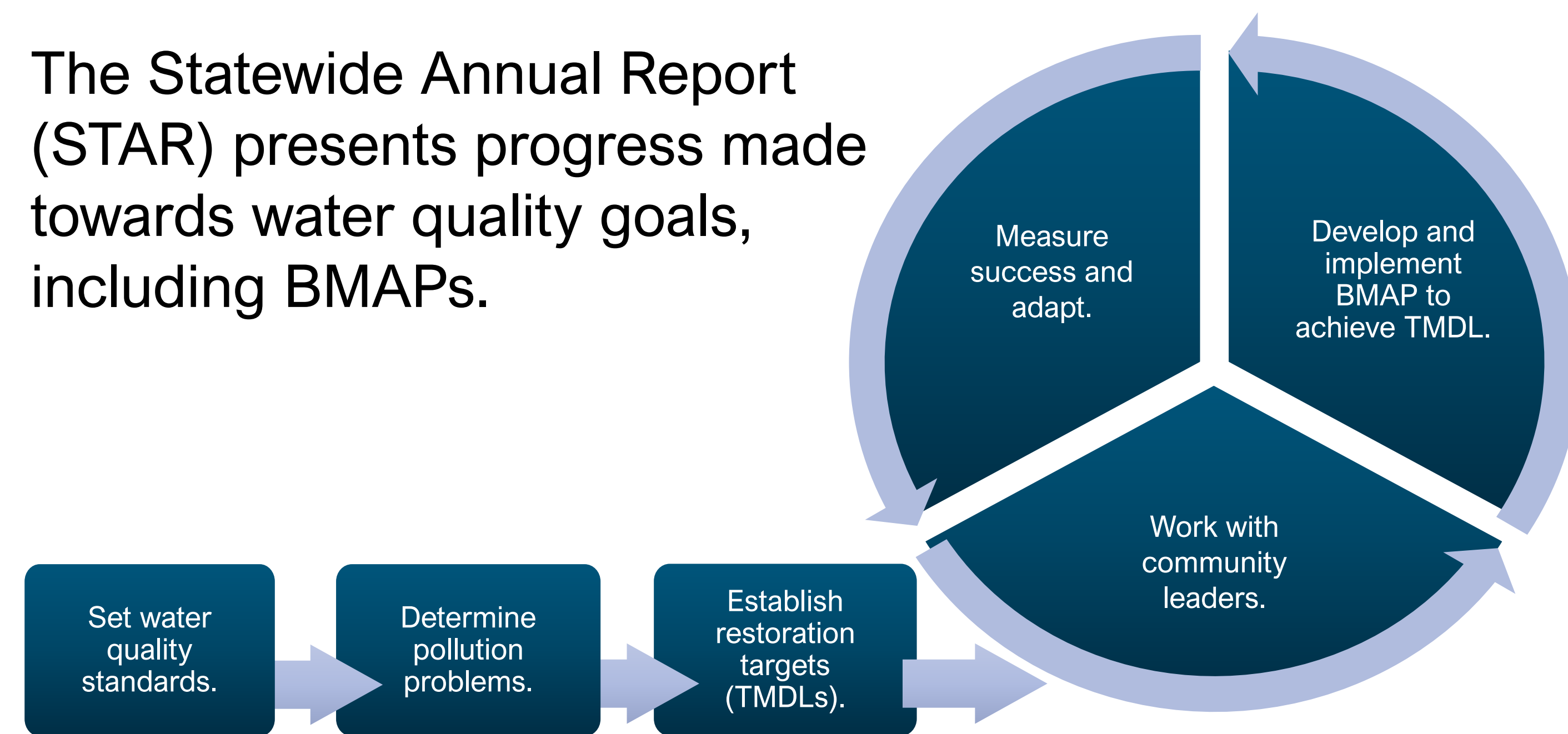
Outstanding Florida Springs Public Meetings, Fall 2024

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.



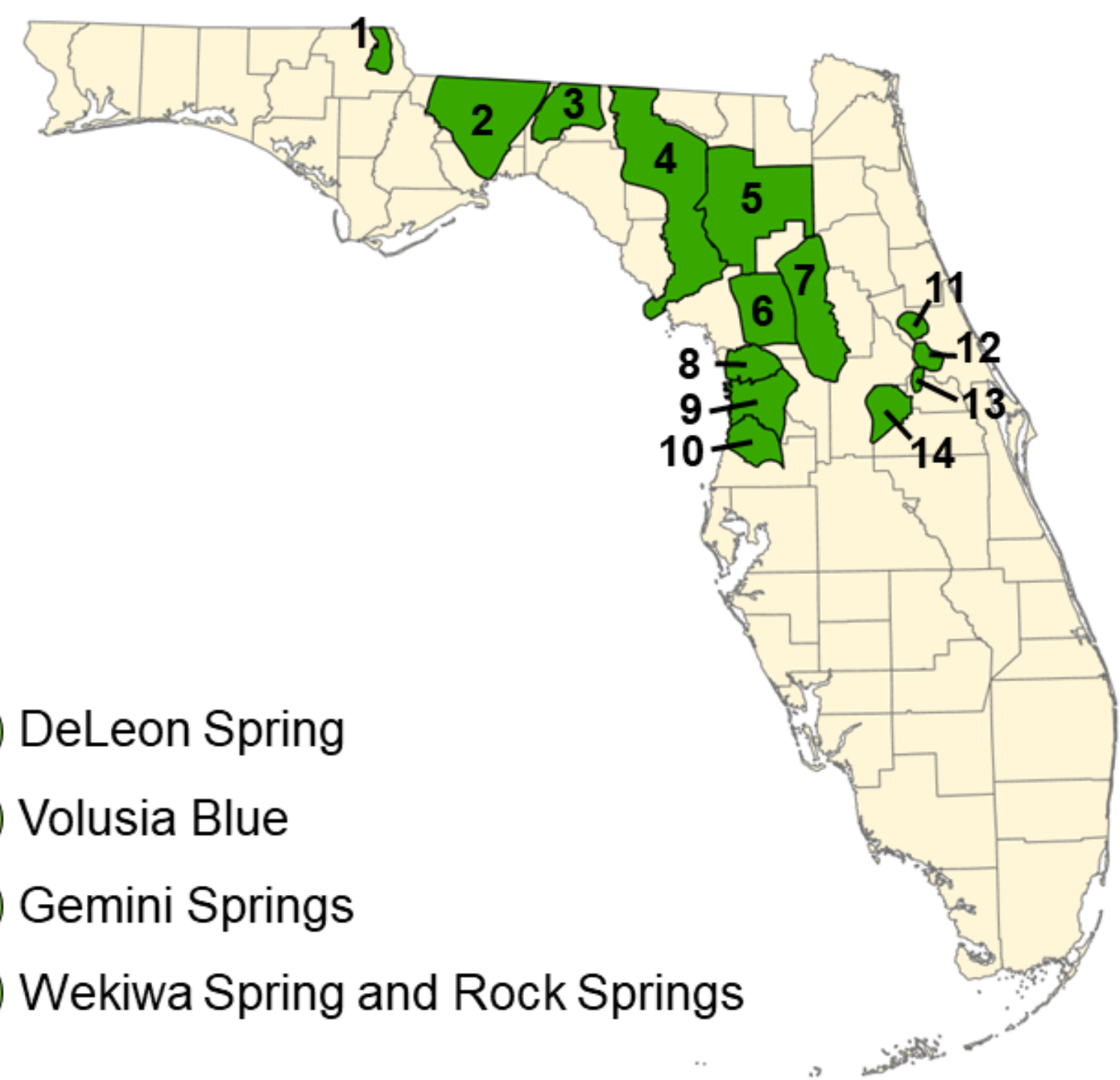
Outstanding Florida Springs BMAPs

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.



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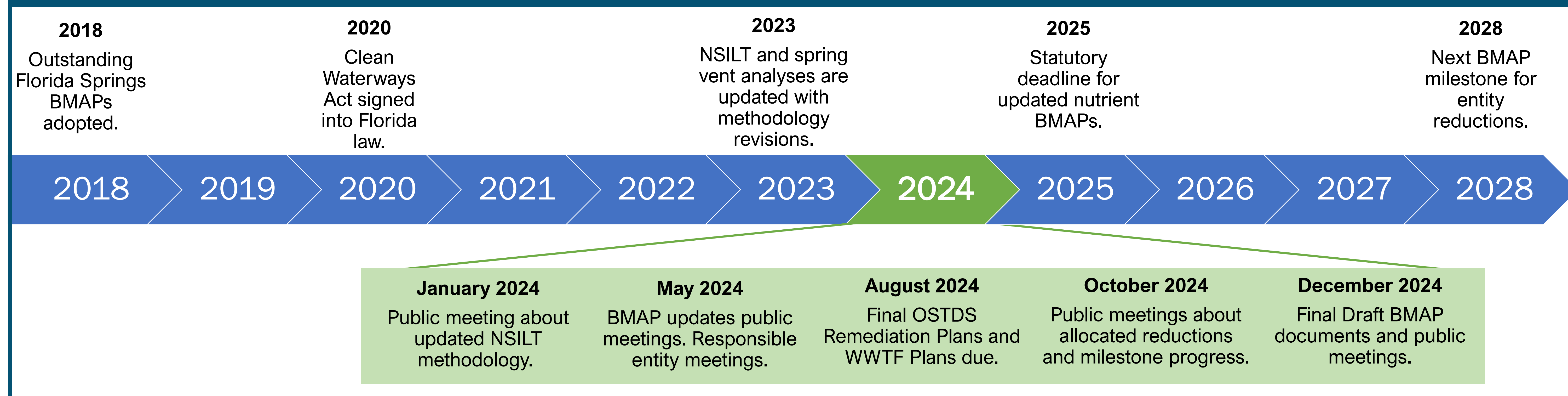
Recent Updates:

- 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



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

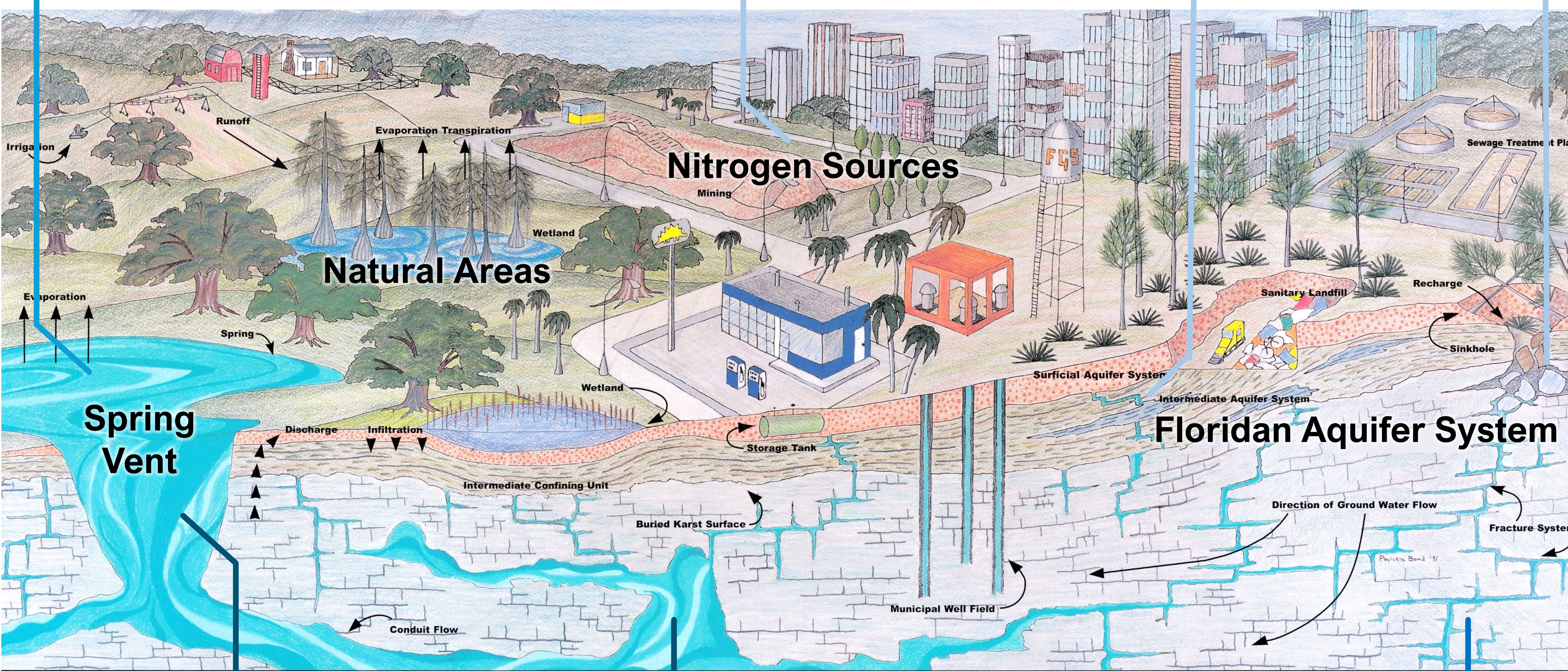
OFS includes all historic first magnitude springs and their associated spring runs as determined by DEP, using the most recent Florida Geological Survey springs bulletin (66), as well as the following additional springs and their associated spring runs: DeLeon Springs, Peacock Springs, Poe Springs, Rock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

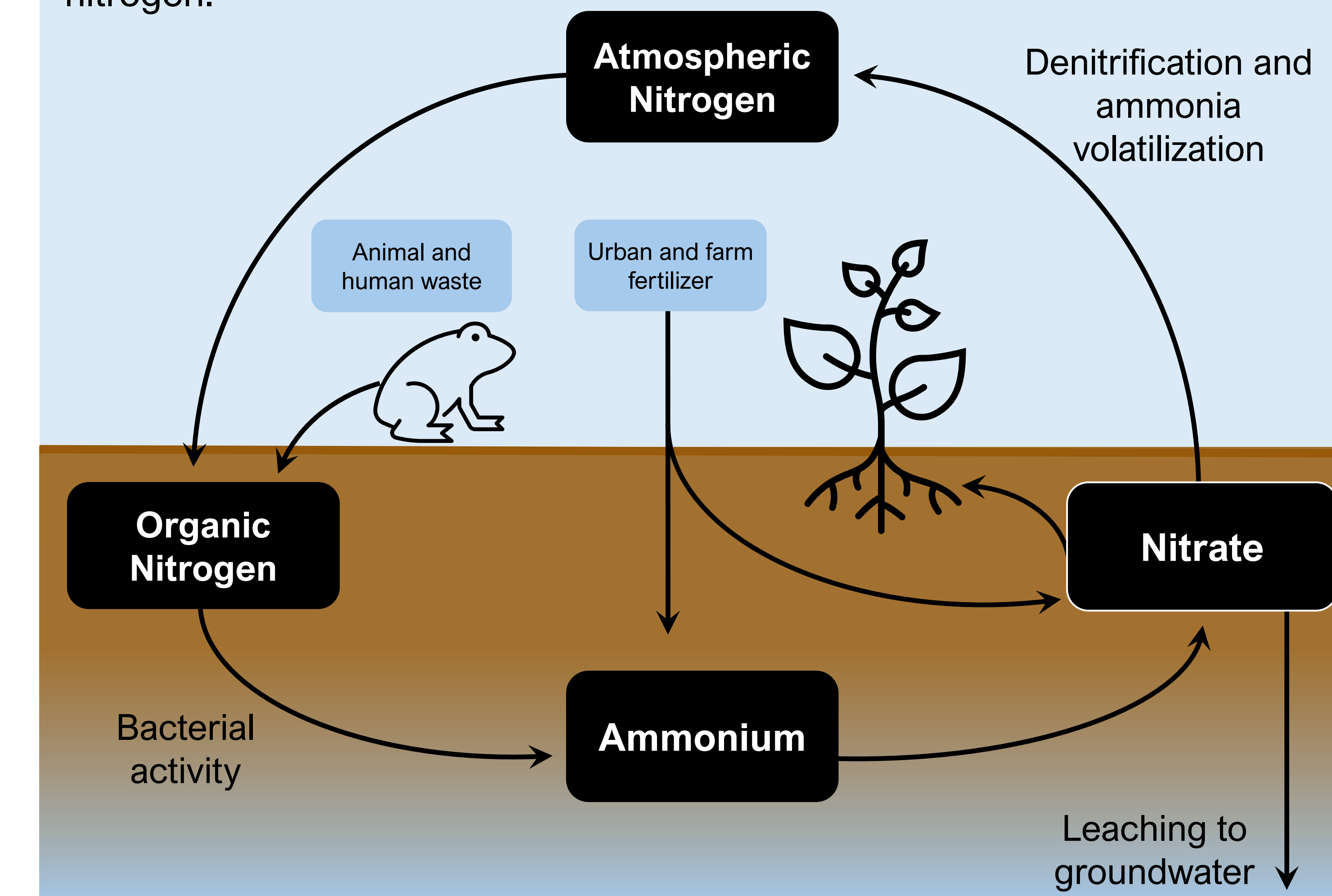
Karst Limestone

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.

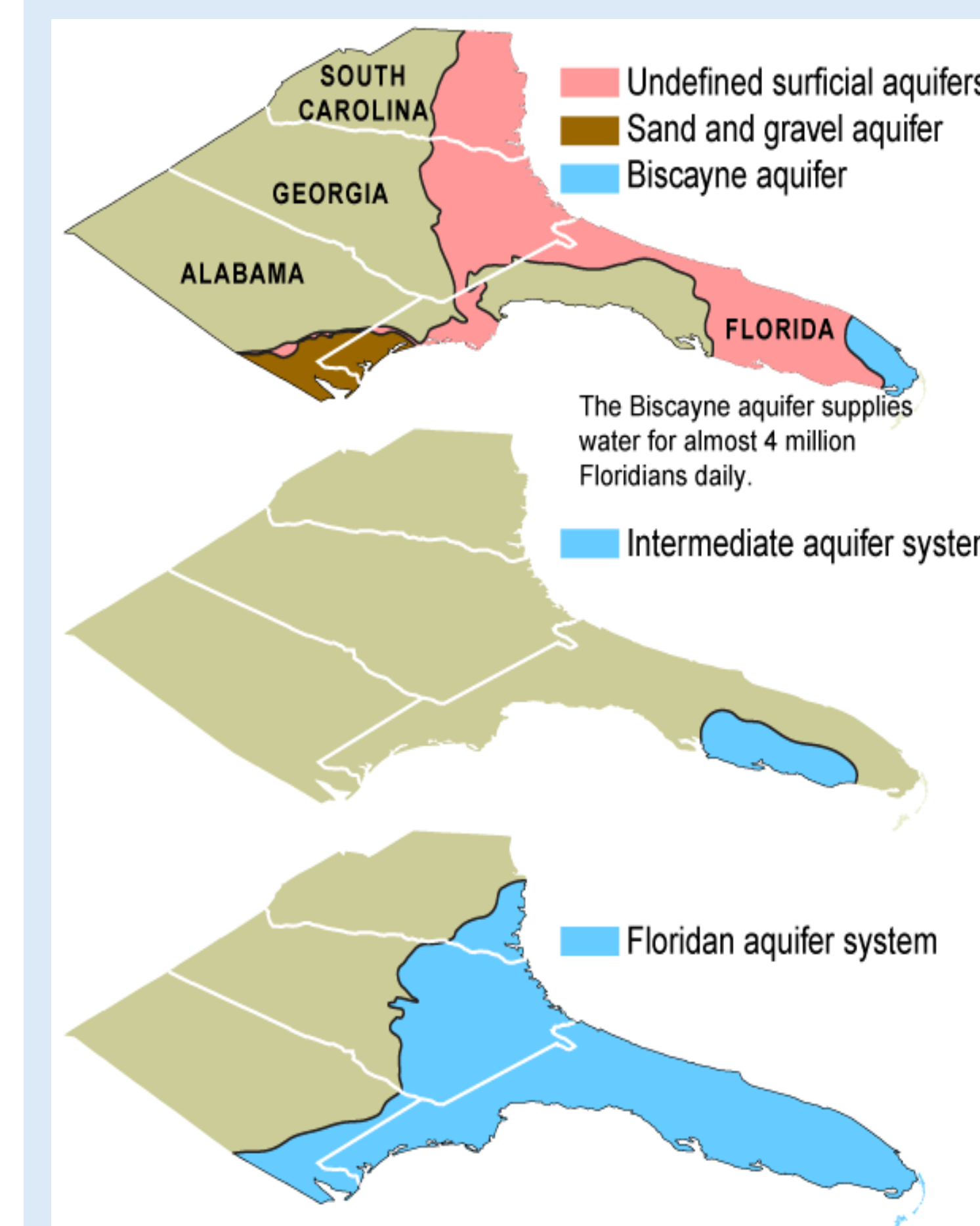
The Nitrogen Cycle

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.

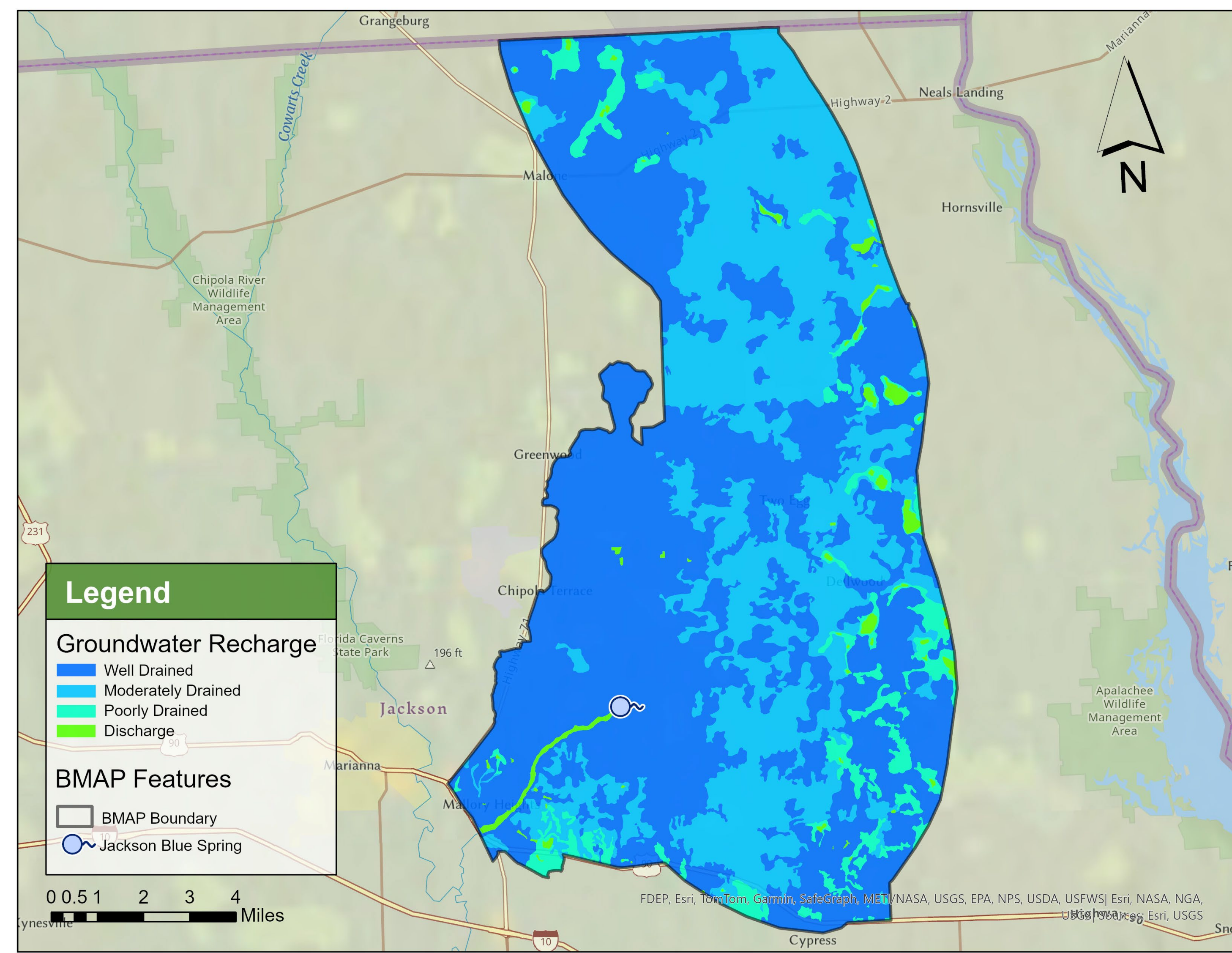
[Springshed diagram: FGS PR5]

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

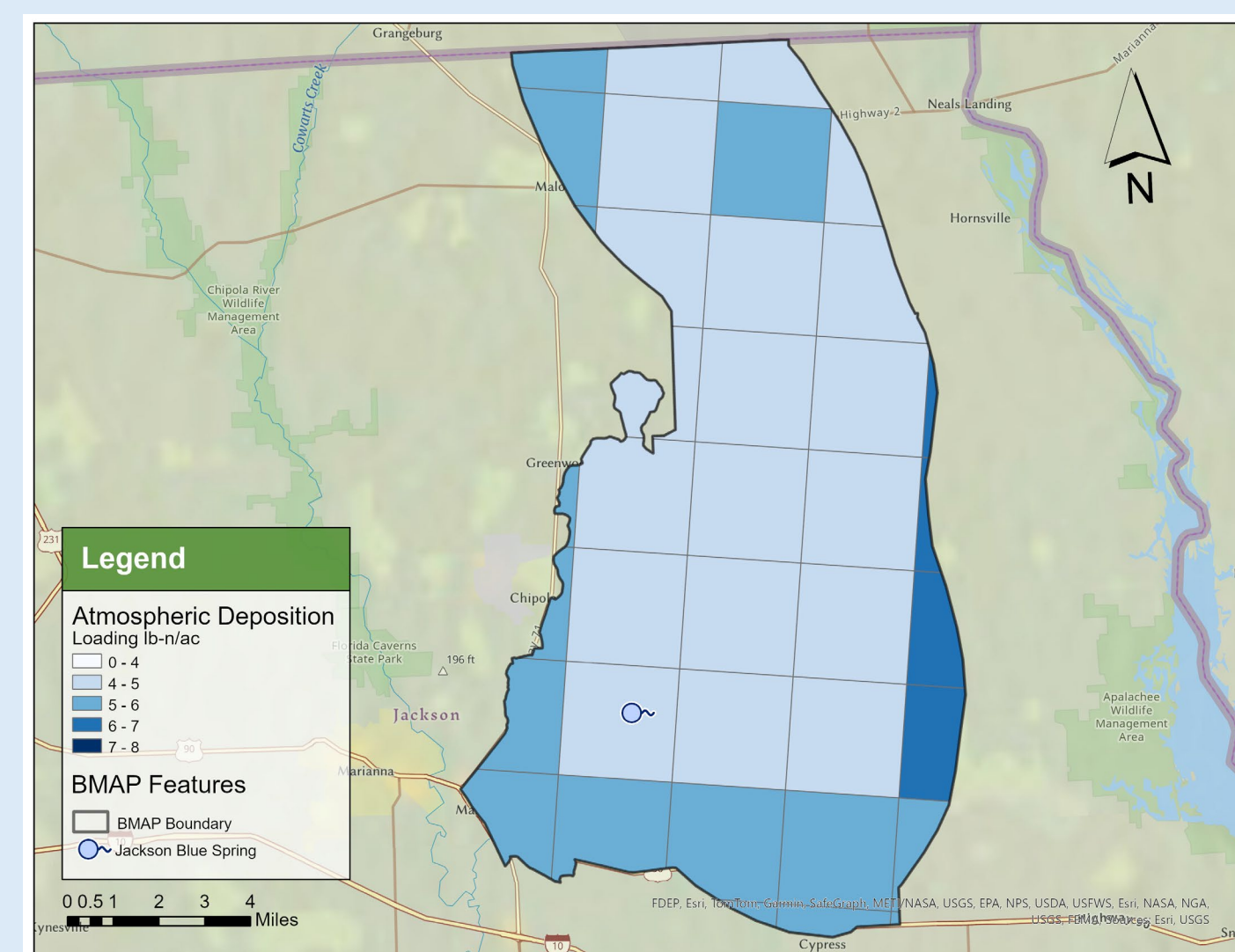


Jackson Blue Spring and Merritts Mill Pond (MMP) Basin Summary

Jackson Blue Spring Basin Management Action Plan (BMAP)

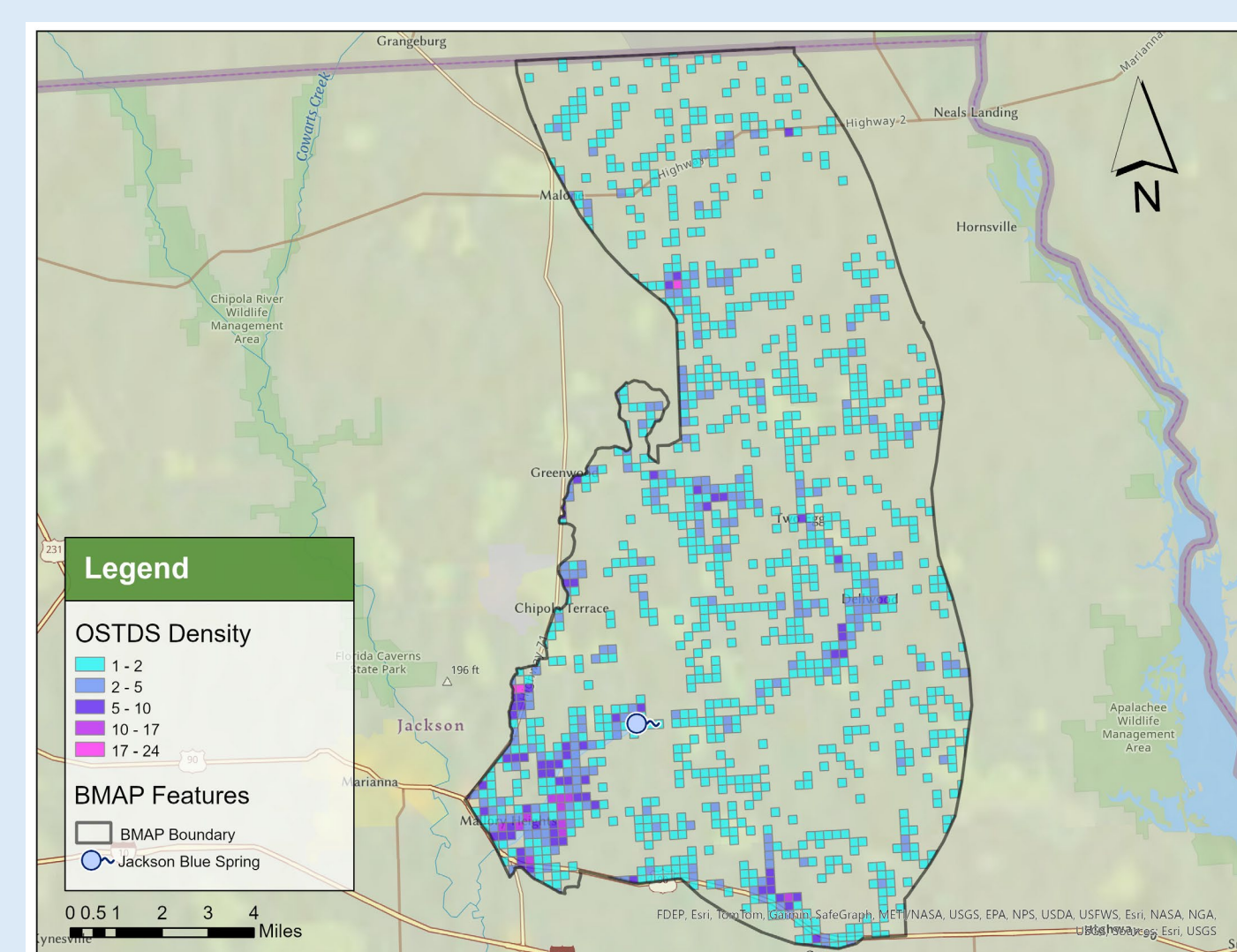
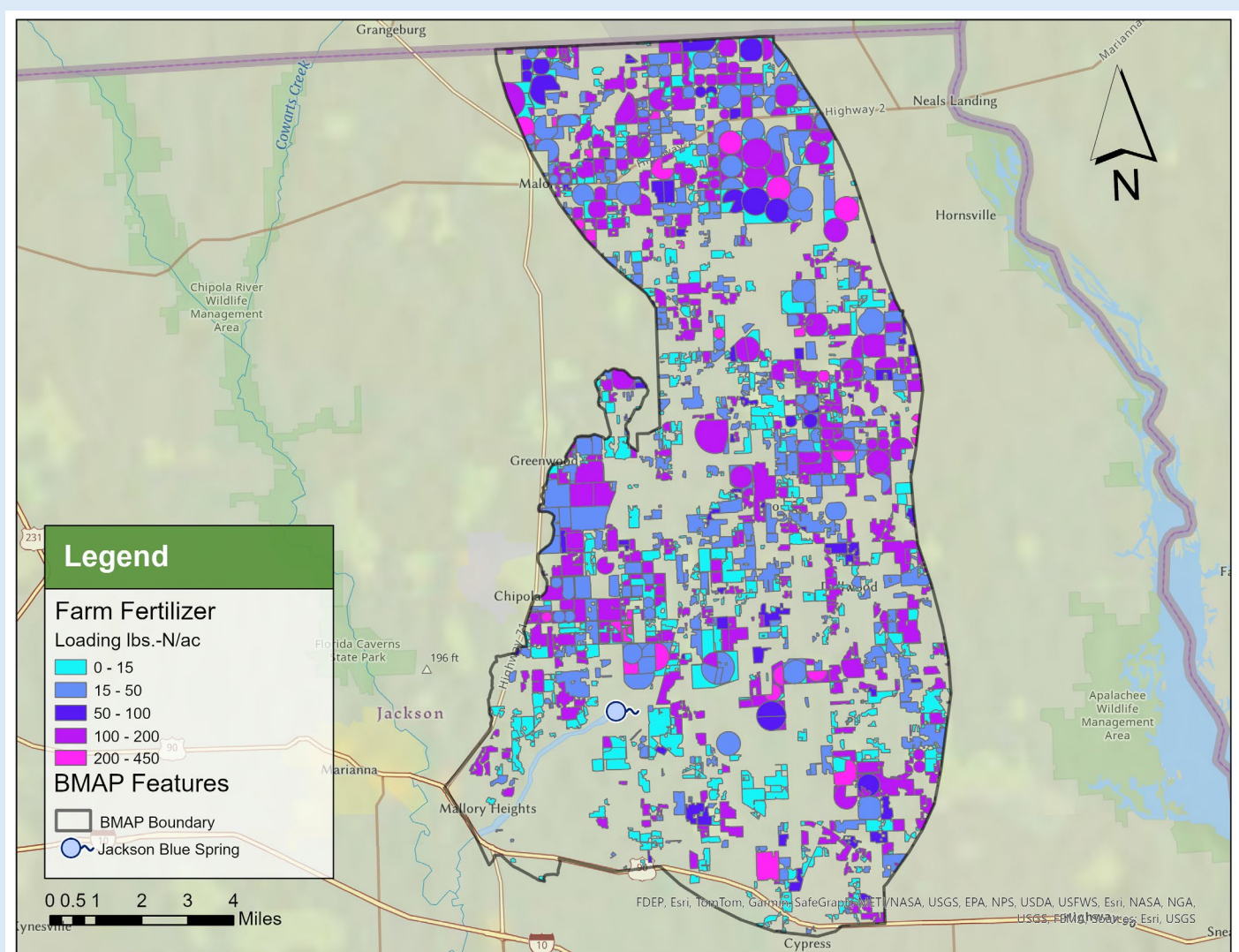


Nitrogen Source Loading

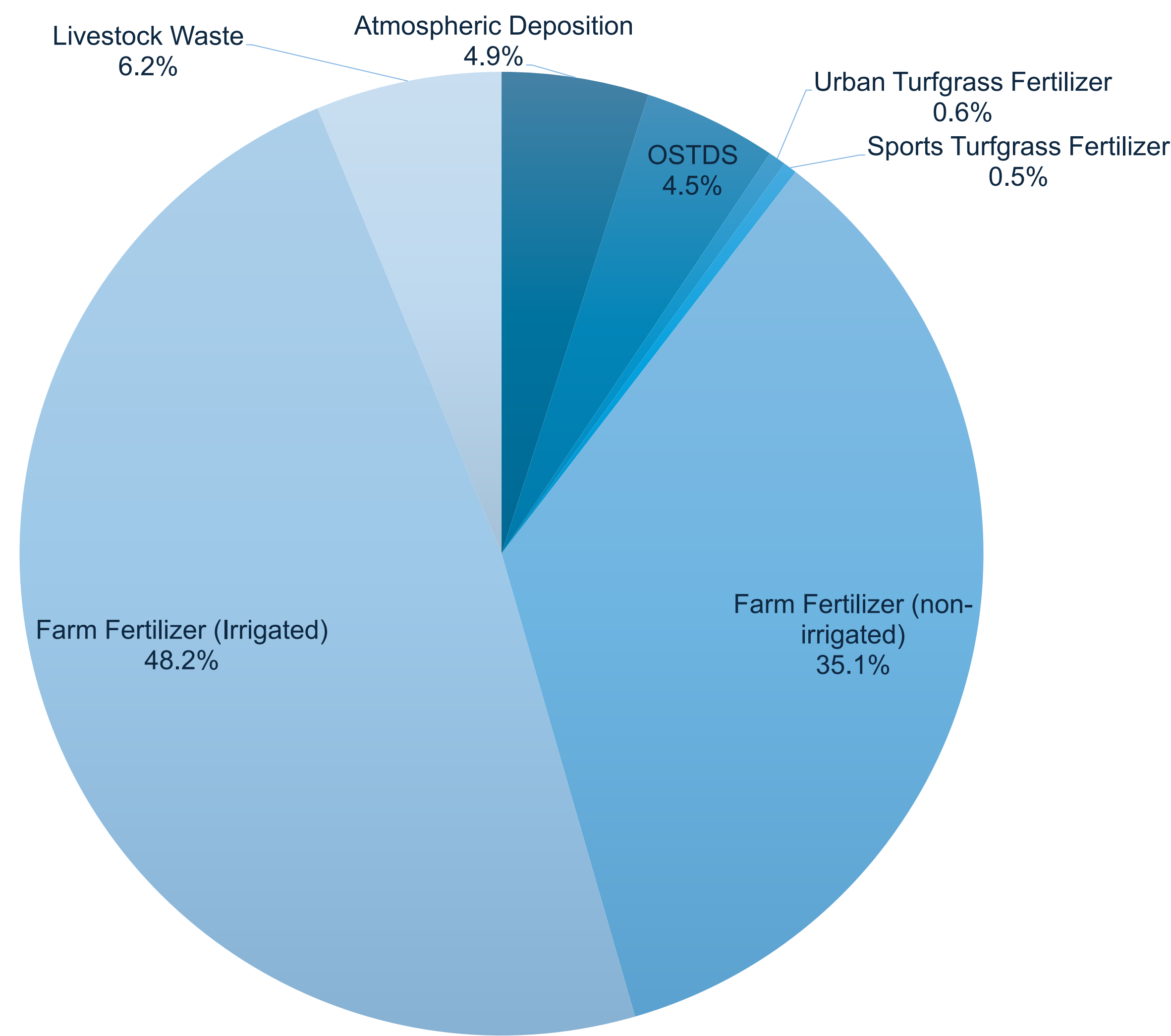


Nitrogen Loading: Nitrogen loading was estimated using the Nitrogen Source Inventory Loading Tool (NSILT). This is an evaluation tool that uses the best available data to estimate the loading of nitrogen per year (lbs-N/yr) to the land surface from a variety of nitrogen sources. The calculations apply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



Jackson Blue Spring and MMP Nitrogen Loading



Nitrogen Source	Loading to Groundwater (lbs-N/yr)
Atmospheric Deposition	36,104
OSTDS	32,786
Urban Turfgrass Fertilizer	4,319
Sports Turfgrass Fertilizer	3,348
Farm Fertilizer (non-irrigated)	257,120
Farm Fertilizer (Irrigated)	353,461
Livestock Waste	45,693
Total	732,830

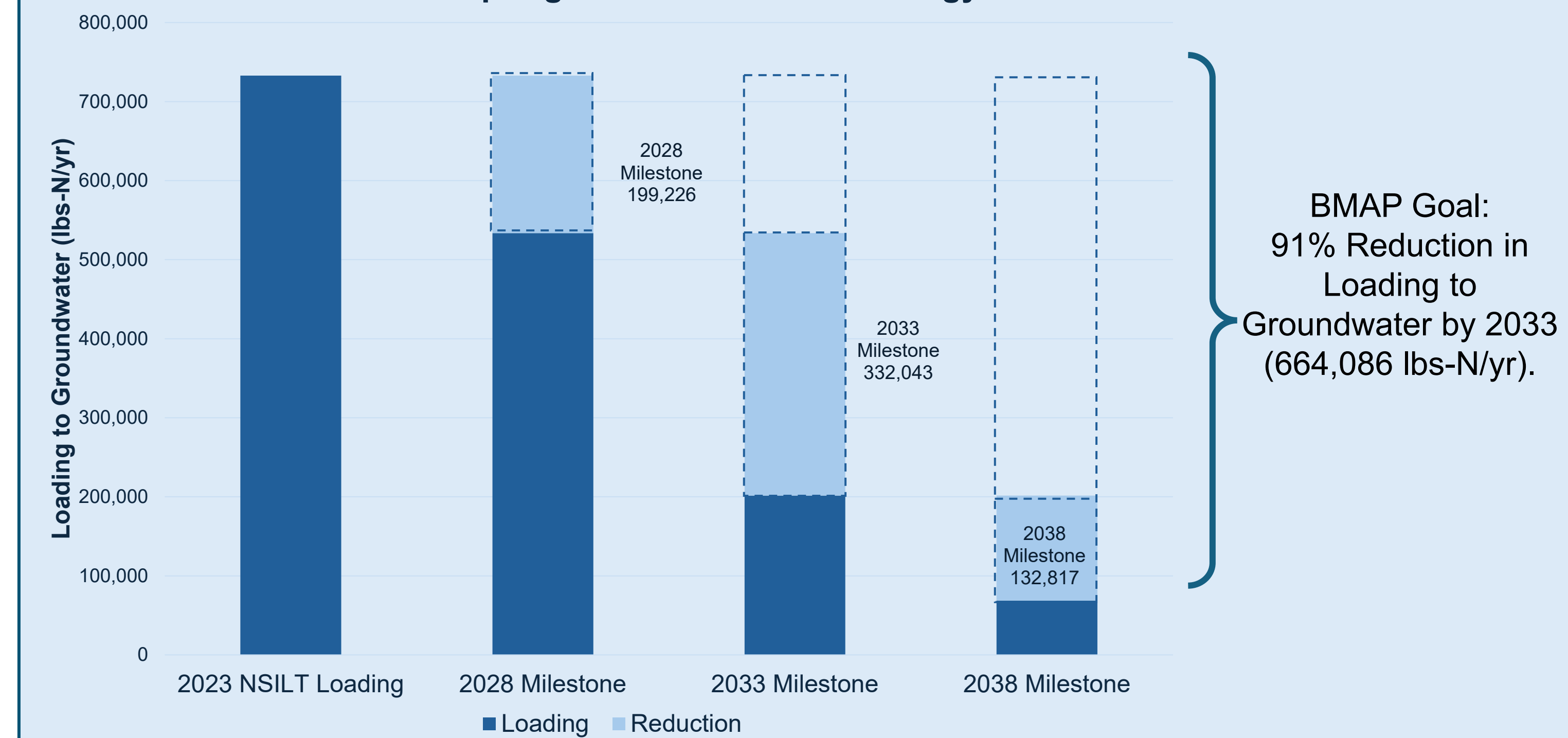
Nitrogen Reduction Approach

	Nitrogen Loads (lbs-N/yr)	Source
Total Load at Spring Vents (August 2023)	839,637	Upper 95% confidence interval – nitrate data and flow data from years 2013 to 2022 (0.41 mg/L and 784.42 cfs)
TMDL Load (August 2023)	78,763	TMDL target is 0.35 mg/L and using the same flow data from years 2013 to 2022 (784.42 cfs)
Percent Required Reduction	91%	
Total NSILT Load (October 2023)	732,830	2023 NSILT
Required Reduction	664,086	Proportional decrease in TMDL load

Spring flow and nitrate concentration data were reviewed to evaluate the load of nitrate flowing from the spring. It was determined that the loading is 91% more than the waterbody can assimilate without impairment. It is estimated that a proportional decrease in loading from nitrogen sources to groundwater is needed to resolve this impairment.

lbs-N/yr: Pounds of nitrogen per year.
TMDL: Total maximum daily load.
mg/L: Milligrams per liter.

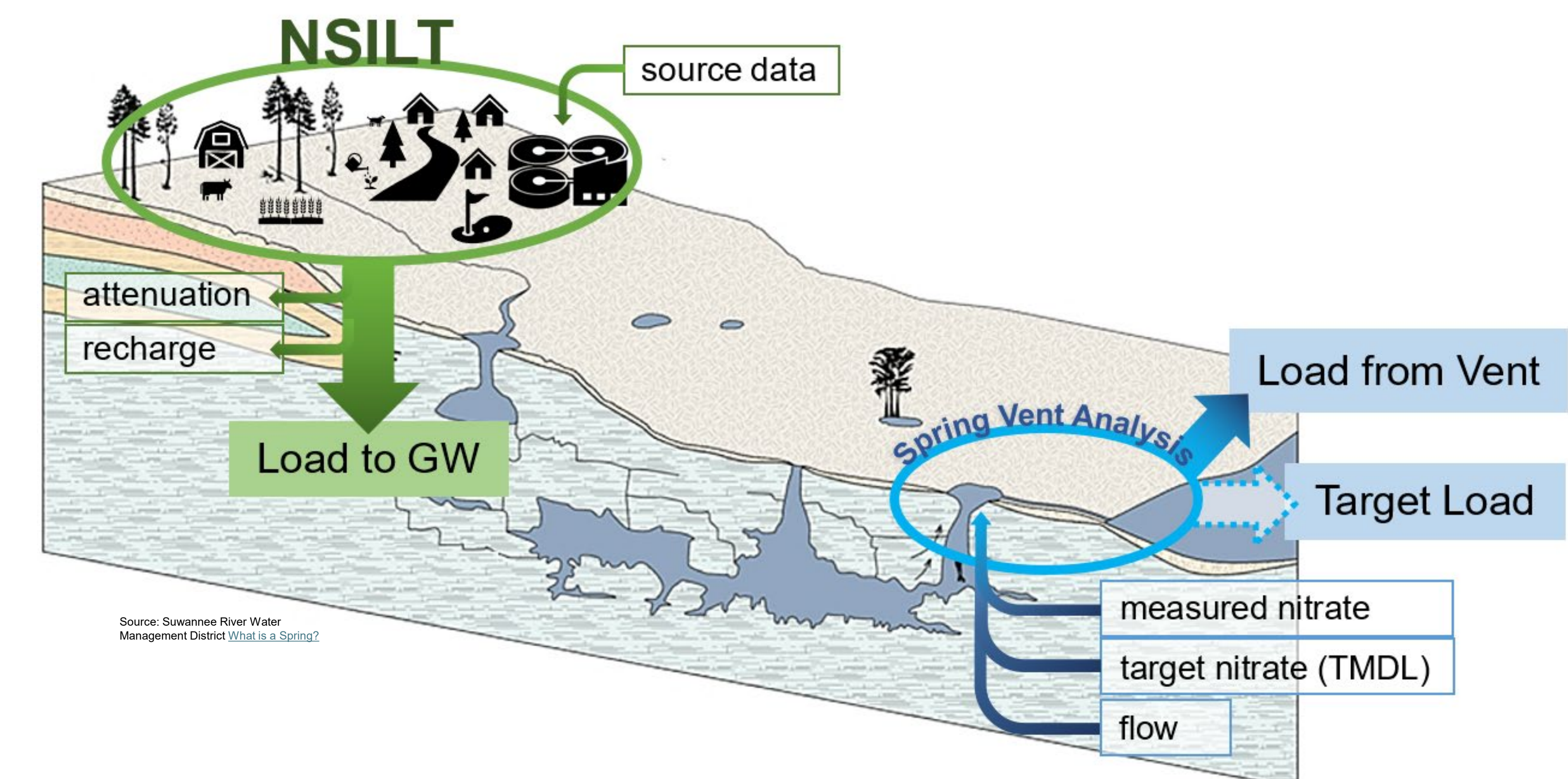
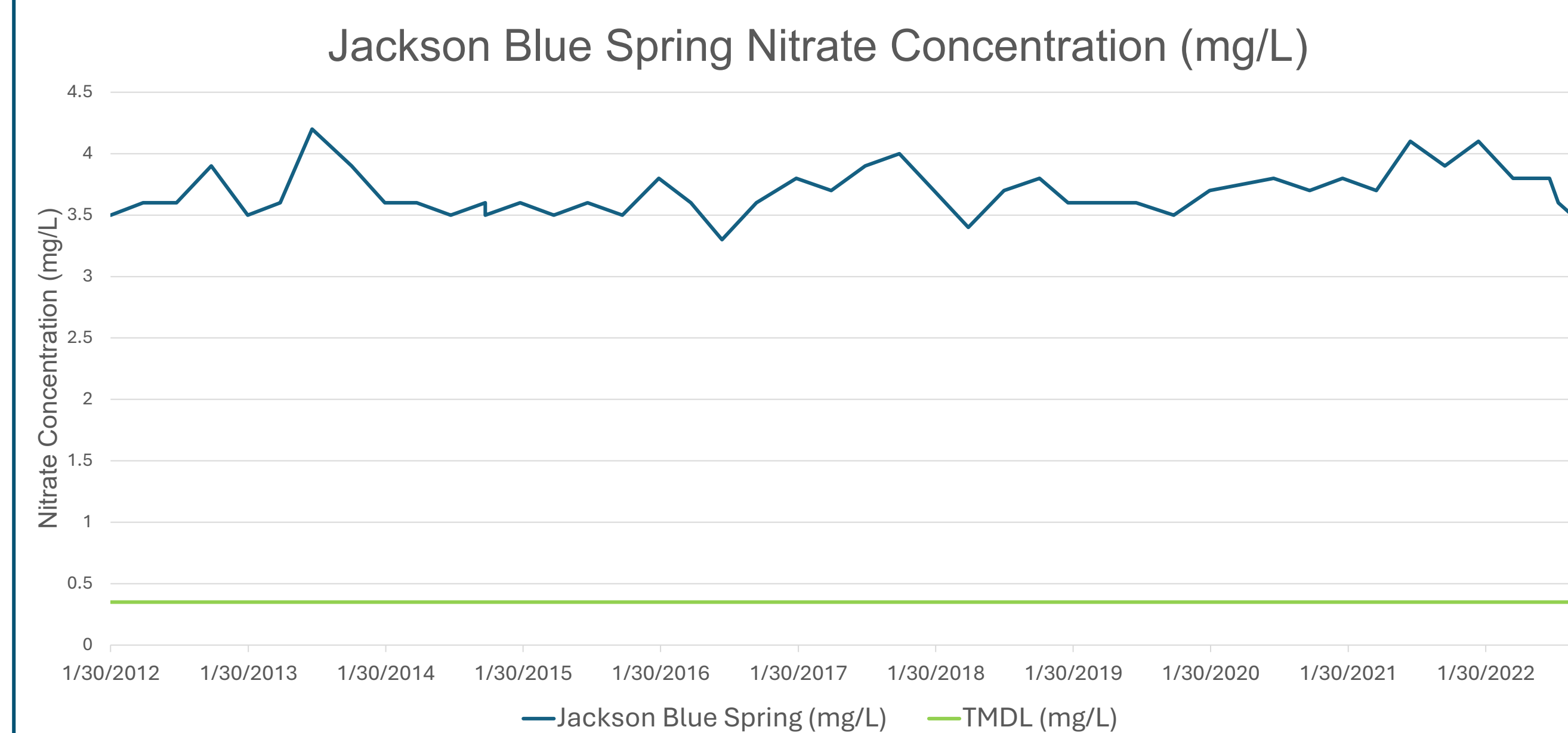
Jackson Blue Spring BMAP Reduction Strategy



Spring Vent Analysis

$$\text{Load from Vent} - \text{Target Load} = \text{Reduction Goal (at vent)}$$

$$\text{Percent Reduction at vent} \times \text{Load to Groundwater (GW)} = \text{Required Reductions (from sources)}$$



Jackson Blue Spring and Merritts Mill Pond BMAP Allocated Reductions, Milestones and Progress

Nitrogen Sources

Nitrogen Source	Allocations by Source (lbs-N/yr)	Percentage of Total Reduction
Atmospheric Deposition*	32,717	4.93%
Onsite Sewage Treatment and Disposal Systems	29,710	4.47%
Farm Fertilizer (BMP Enrollment)	91,587	13.79%
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Other Agriculture	498,555	75.07%
Urban Turfgrass Fertilizer	3,914	0.59%
Sports Turfgrass Fertilizer - Golf	3,034	0.46%
Total	664,086	100.00%

*Not allocated to entities.

BMAP Management Strategies

General Approach for Entity Allocations and Reductions

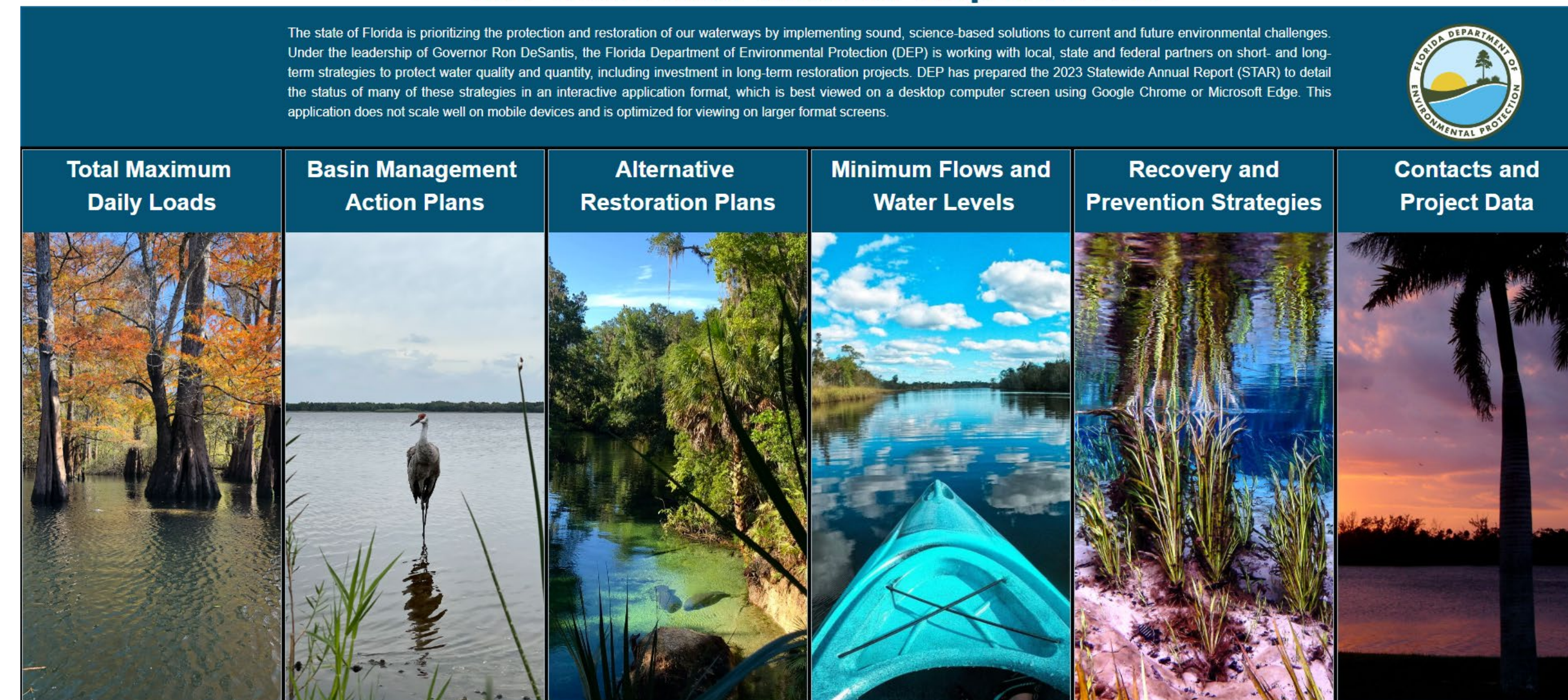
While the loading evaluation and entity allocations were determined by source, nutrient reduction credits can be earned through implementing projects addressing any source. Achieving milestone reductions is needed to ensure sufficient progress towards meeting the total maximum daily load (TMDL) target.

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 1 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 leaving the site 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 leaving the site 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 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

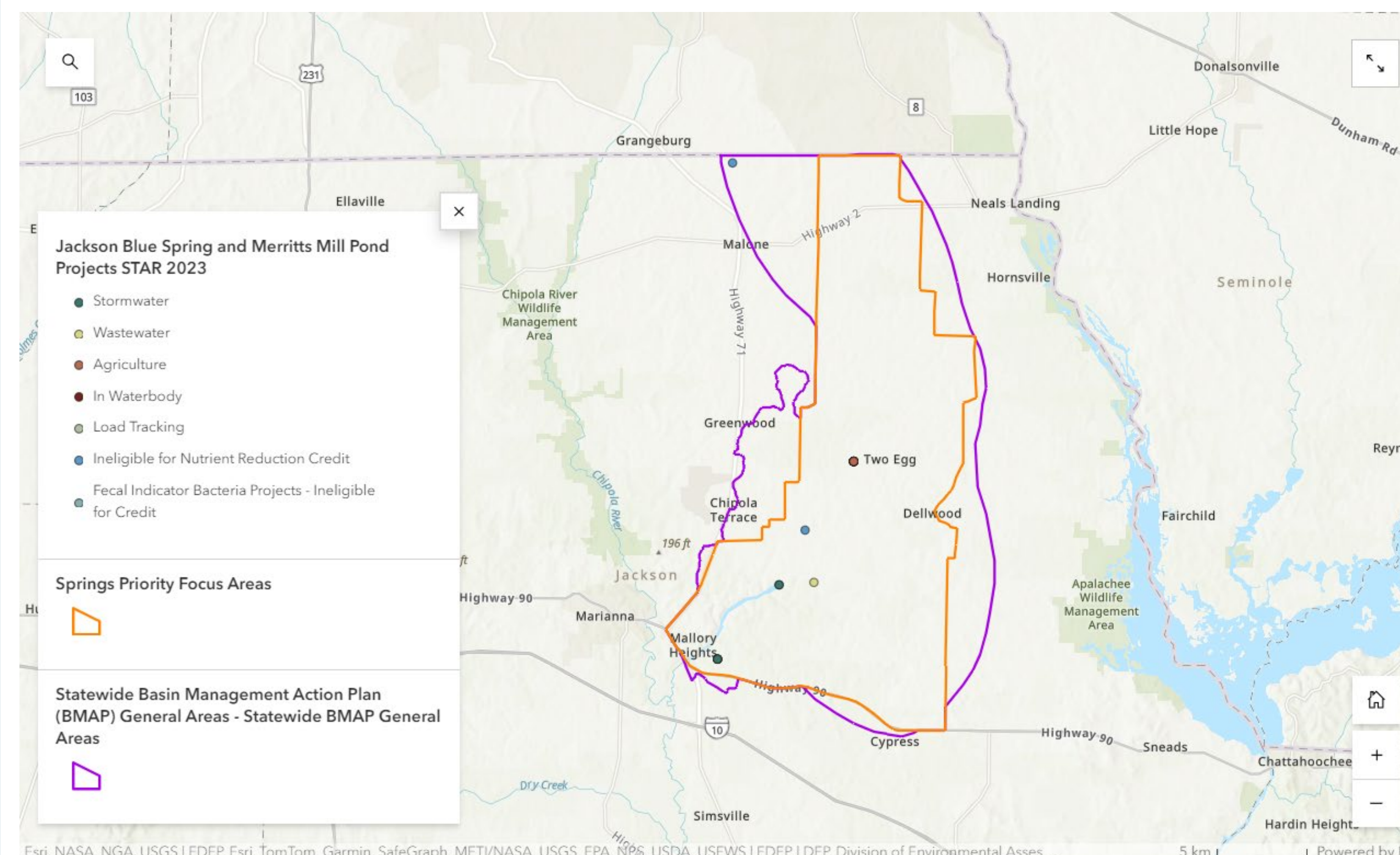
The Statewide Annual Report 2023



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

Stakeholders are required to report projects needed to achieve required reduction targets, along with an estimate of expected nutrient reduction benefits and financial costs.

Reporting projects in the STAR allows the state to evaluate funding needs and assist in prioritizing projects to promote maximum environmental benefit.

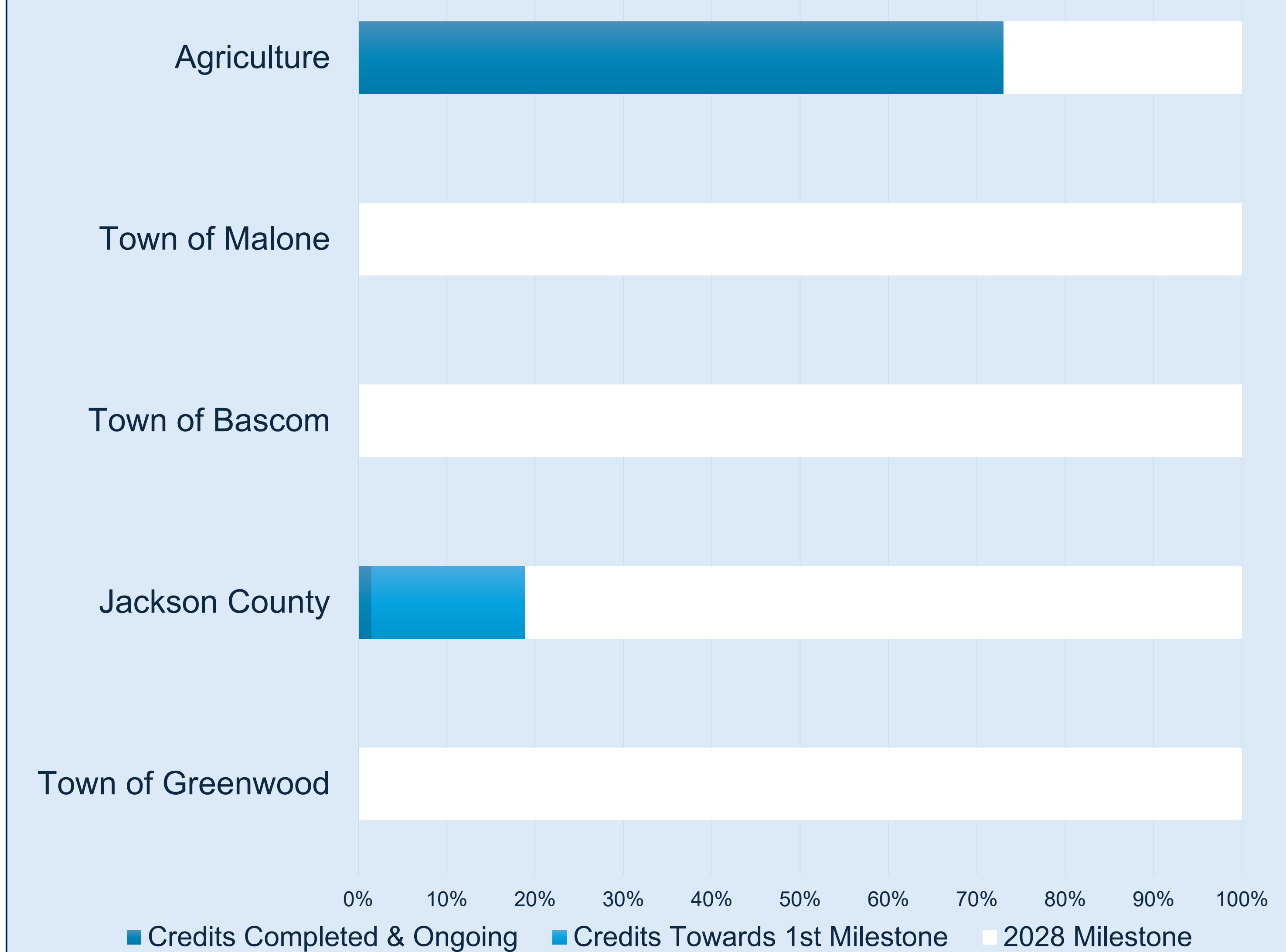


Entity Reduction Milestones and Progress

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%)
Jackson County	9,647	25,726	32,158
Town of Bascom	228	609	762
Town of Malone	88	234	293
Town of Greenwood	124	329	412
Agriculture	178,413	475,769	594,711
Private Golf Courses*	910	2,427	3,034

*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



**Florida Department of Environmental Protection (DEP)
Jackson Blue Basin Management Action Plan (BMAP) Meeting Summary
October 8, 2024, 10:00 am – 11:47 am CDT
Peanut Hall, Jackson County-University of Florida
Institute of Food and Agricultural Sciences Extension Office
2741 Penn Ave.
Marianna, FL 32448**

Attendees

John Baggett, FDACS	Celeste Lyon, RES
Robin Besczeynski, Alday-Howell Engineering	David Malley, Citizen
Tiffany Busby, Wildwood Consulting	Ginger Malley, Citizen
Lauren Campbell, DEP	Doug Mayo, UF/IFAS
Gary Chew, NFWFMD	Stephen Monroe, GSWCD
Daniel Colvin, Citizen	Rex Patterson, Mobile Irrigation Lab
Gene Commander, Florida Health	LaKarole Robertson, FDOH
Chris Denmark, FDACS	Haylee Sapp, Jackson Soil & Water Conservation District
Jessica Ferns, FDACS	Peter Scott, FDACS
Larry Ford, Citizen	Hardeep Singh, UF
Ken Friedman, NFWFMD	Jackson Swearingen, FDACS
Peggy Gilley, Jackson Soil & Water Conservation District	Becky Trott, Citizen
Roxanne Groover, FOWA	Larry Warder, Citizen
Sam Hankinson, DEP	Kevin Warren, Mobile Irrigation Lab
Terry Hansen, Citizen	Stefani Weeks, Weeks Engineering Services
Madeline Hart, FDACS	Garrett Williams, FDACS
Moira Homann, DEP	Eric Worrell, Alday-Howell Engineering

Presentation

Sam Hankinson gave a brief overview of the Jackson Blue BMAP, basin required reductions, entity required reductions, and the upcoming BMAP schedule. He explained that the total maximum daily load (TMDL) is 0.35 milligrams per liter (mg/L) of nitrate. Based on recent water quality data, an additional 91% 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

Three written comments were received from three representatives from the FDACS (John Baggett, Peter Scott, and Garrett Williams). All three suggested scheduling public meetings not during harvest time/July through December so that producers could be in attendance. Additionally, Mr. Williams noted the slides could have been more informative.