Lake Harney, Lake Monroe, Middle St. Johns River (MSJR), and Smith Canal Basin Management Action Plan (BMAP)
Update Meeting

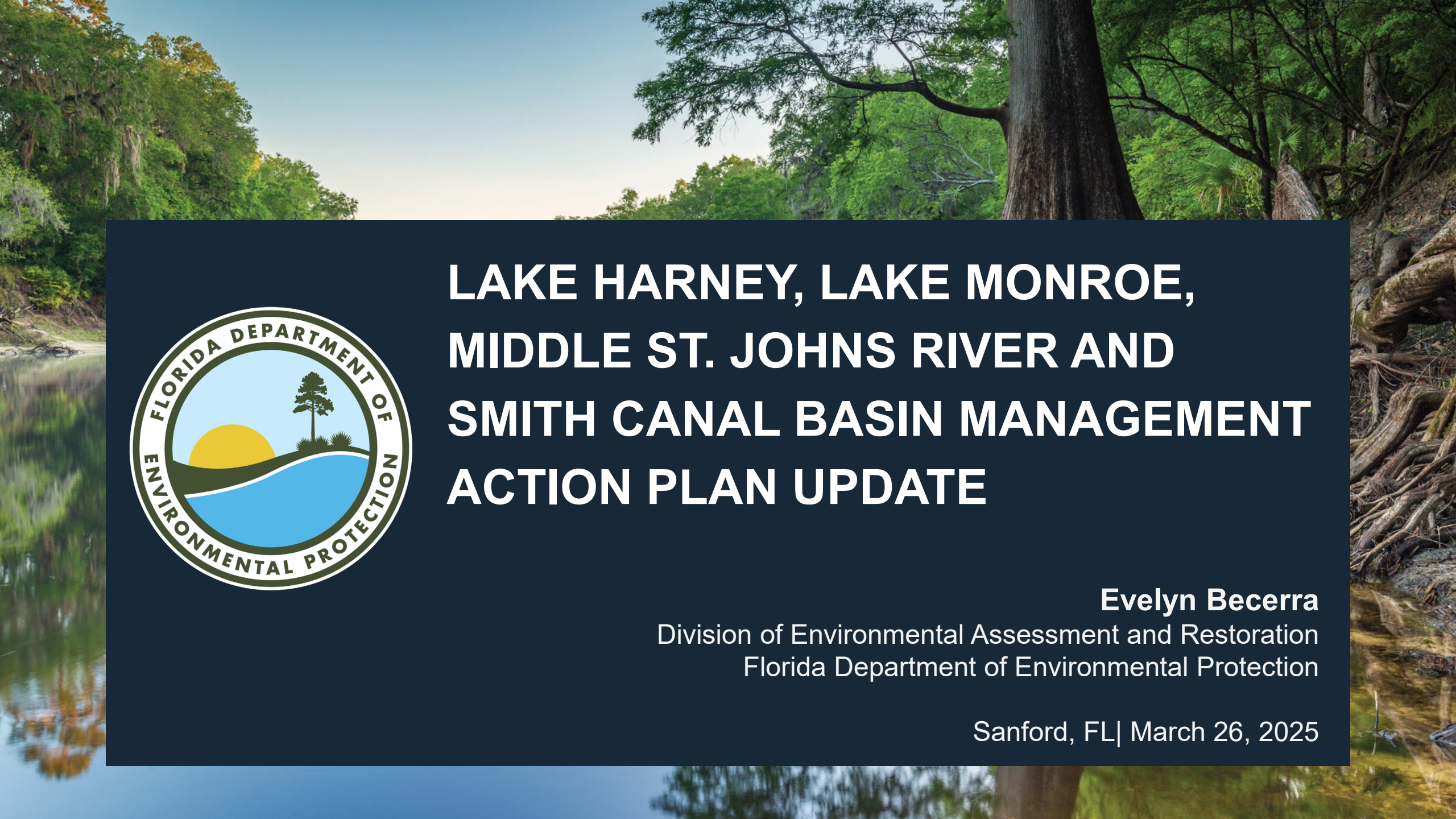
University of Florida/Institute of Food and Agricultural Sciences (UF/IFAS)
Meeting Room B
250 W. County Home Road
Sanford, FL 32773

March 26, 2025
1 PM EDT

Agenda

- Lake Harney, Lake Monroe, MSJR, and Smith Canal Basin Management Action Plan (BMAP) Background.
- Overview of Draft Lake Harney, Lake Monroe, MSJR, and Smith Canal Basin Management Action Plan (BMAP).
- Questions/Comments.

Please note the site for documents pertaining to the Lake Harney, Lake Monroe, MSJR, and Smith Canal BMAP:
BMAP Public Meetings | Florida Department of Environmental Protection
For more information on the Lake Harney, Lake Monroe, MSJR, and Smith Canal BMAP, contact: Evelyn Becerra, 850-245-8547.
Evelyn.Becerra@FloridaDEP.gov



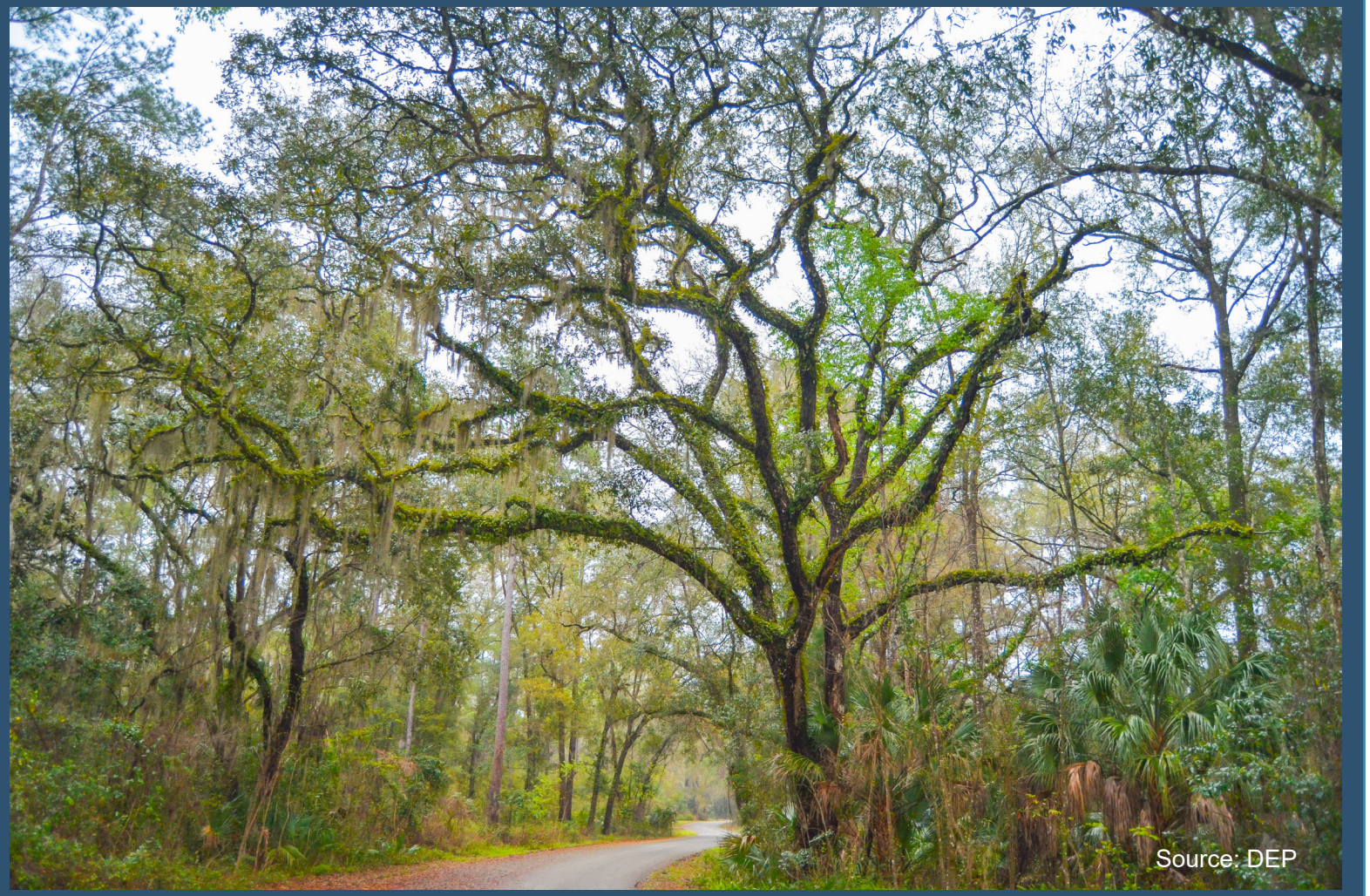
LAKE HARNEY, LAKE MONROE, MIDDLE ST. JOHNS RIVER AND SMITH CANAL BASIN MANAGEMENT ACTION PLAN UPDATE

Evelyn Becerra
Division of Environmental Assessment and Restoration
Florida Department of Environmental Protection

Sanford, FL| March 26, 2025

AGENDA

- Basin Management Action Plan (BMAP) background.
- 2025 BMAP update draft document walk-through.
- Next steps.



KEY BMAP COMPONENTS

- Total maximum daily loads (TMDLs) being addressed.
- Area addressed by the restoration plan.
- Identify sources.
- Phased implementation approach.
- Milestones.
- Projects and management strategies.
- Future growth impacts.

Projects to meet the TMDL:

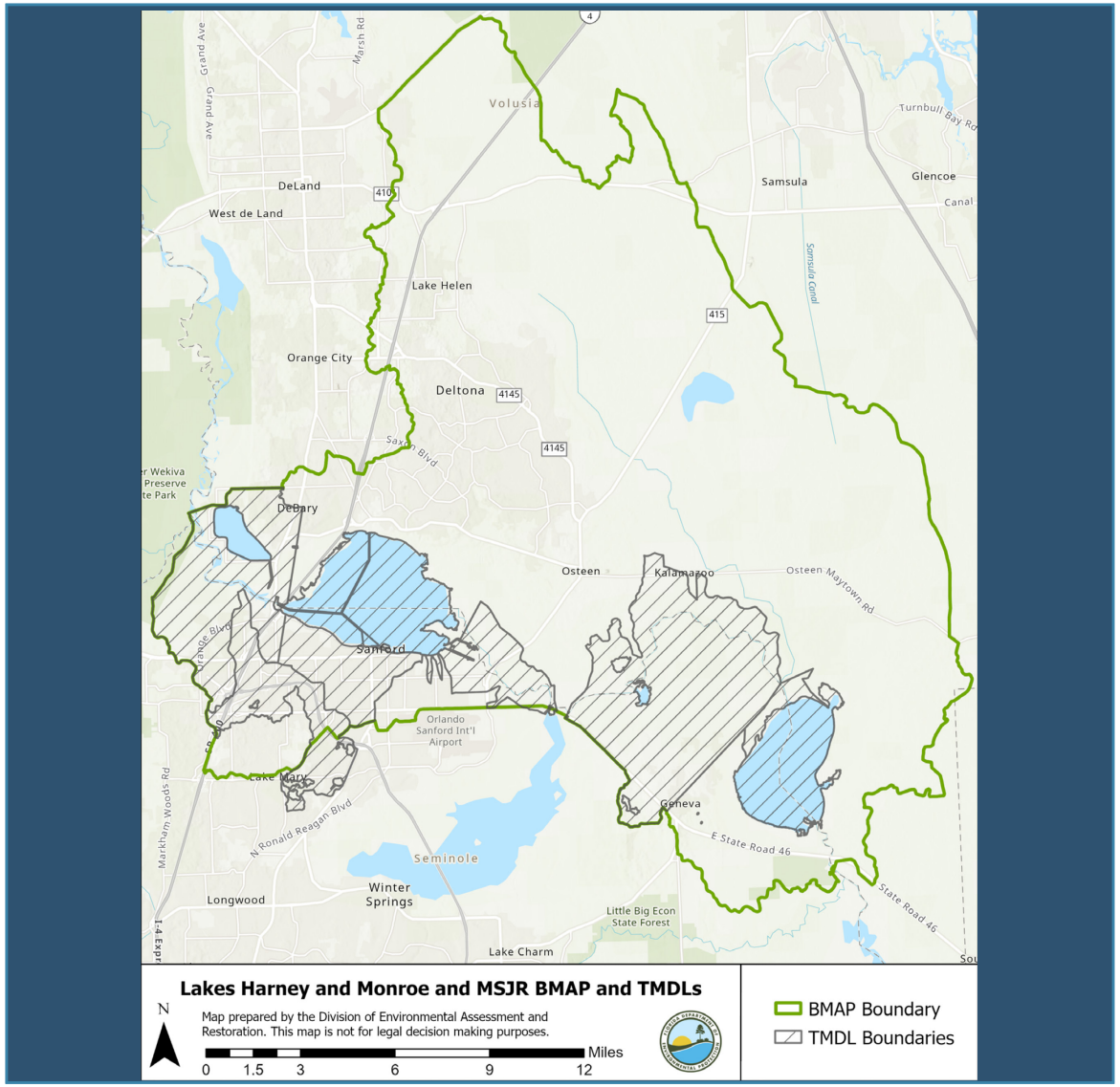
- Implementation timeline.
- Commitment to projects.
- Expected water quality improvement from projects and management strategies.

Process to assess progress toward achieving the TMDL:

- Monitoring plan.
- Project reporting.
- Periodic follow-up meetings.
- Water quality analyses.

BACKGROUND

LAKE HARNEY, LAKE MONROE, MIDDLE ST. JOHNS RIVER AND SMITH CANAL BMAP (HAMO)



HAMO TMDLs:

- Adopted 2009 for total phosphorus (TP) and total nitrogen (TN) for lakes and river segments.

HAMO BMAP:

- Adopted April 2012 to implement the TMDL.

- Total required reductions:
  - 17,710 lbs/yr TP.
  - 87,656 lbs/yr TN.

BACKGROUND
HAMO BMAP STAKEHOLDERS

Type of Organization/Entity	Name
Responsible Entities	Agriculture City of DeBary City of DeLand City of Deltona City of Lake Helen City of Lake Mary City of Orange City City of Sanford Seminole County Volusia County
Responsible Agencies	County Health Departments Florida Department of Agriculture and Consumer Services (DACS) Florida Department of Environmental Protection (DEP) Florida Department of Transportation (DOT) District 5 Florida Turnpike Enterprise St. Johns River Water Management District
Other Interested Stakeholders	Agricultural Producers Citizens/Homeowners East Central Florida Regional Planning Council Florida Farm Bureau Florida Onsite Wastewater Association Septic System Contractors

BMAP UPDATE COMPONENTS

ADOPT BY JULY 1, 2025

- Management strategies.
- Future growth update.
- Incorporate the 2020 Clean Waterways Act, 2023 House Bill (HB) 1379 and 2024 HB 1557 requirements.
- Incorporate regional projects.
- Water quality data evaluation:
  - Evaluation of the monitoring networks.
  - Hotspot Analysis.
- Evaluate further onsite sewage treatment and disposal systems (OSTDS) provisions.
- Evaluate the need for advanced wastewater treatment (AWT) or other more stringent effluent limits for domestic wastewater treatment facilities (WWTF).


Source: SJRWMD


Source: DEP


Source: SJRWMD

DRAFT DOCUMENT

Section 1: Context, Purpose and Scope of the Plan.

Section 2: Modeling.

Section 3: Calculating and Allocating Load Reductions.

Section 4: Management Actions.

Section 5: Monitoring Strategy.

Section 6: Commitment to Plan Implementation.

Appendices.

BMAP UPDATE DOCUMENT

Section 1: Context, Purpose and Scope of the Plan

- Review of the TMDLs, BMAP process and stakeholder involvement.

Section 2: Modeling

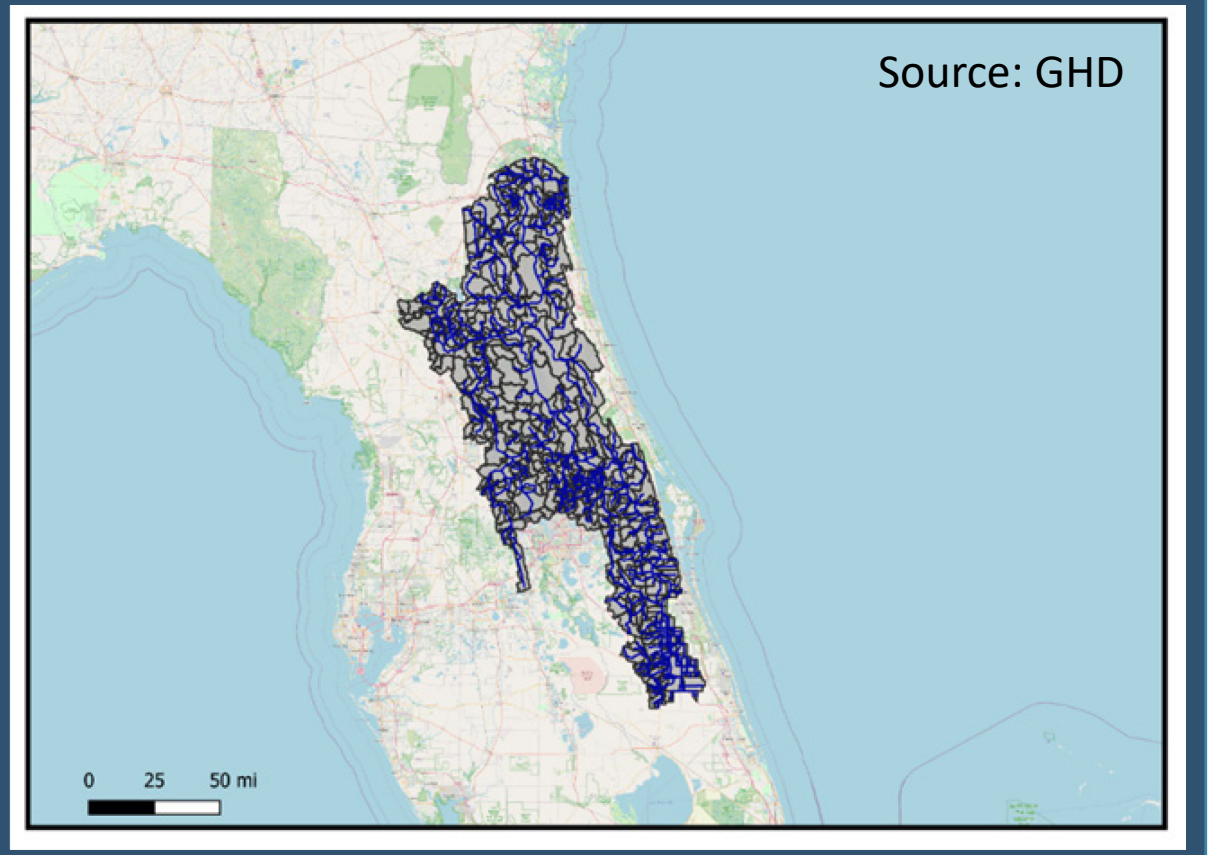
- Review of the 2012 BMAP.
- Modeling from previous adopted documents will remain the same.
- Loading estimates and allocations of load reduction to the responsible stakeholders detailed in the 2012 BMAP will remain in effect.
- Discussion on upcoming St. Johns River Basin Model.

ST. JOHNS RIVER MODELING

SECTION 2: MODELING

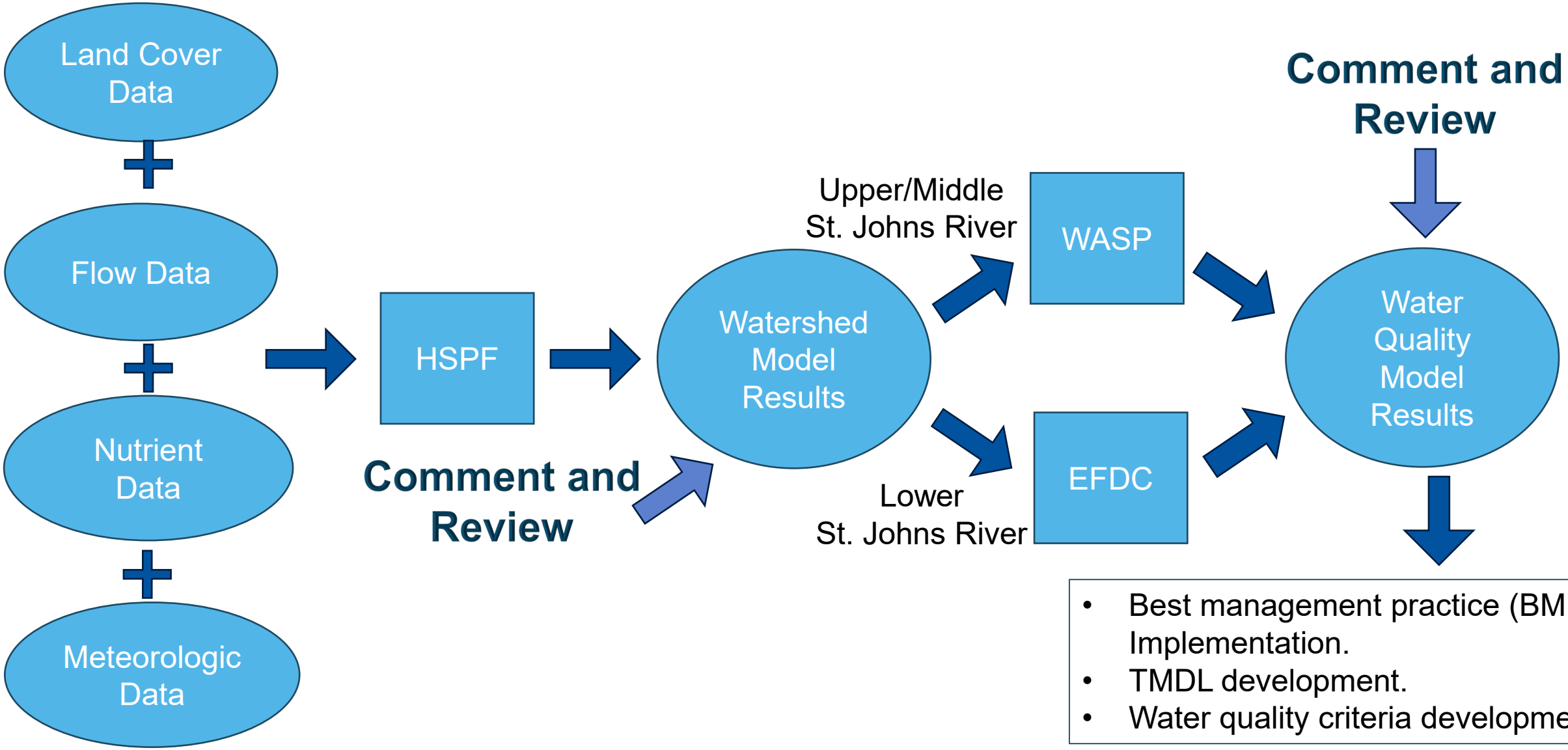
Modeling Updates Underway.

- Entire St. Johns River Basin.
- Updated input data.
- Watershed Model: Hydrological Simulation Program – FORTRAN (HSPF).
- Receiving Waterbody Model: Water Quality Analysis Simulation Program (WASP).
- Hydrodynamic Model: Environmental Fluid Dynamics Code (EFDC).



MODELING WORKFLOW

SECTION 2: MODELING



- Best management practice (BMP) Implementation.
- TMDL development.
- Water quality criteria development.

MODEL UPDATE SCHEDULE

SECTION 2: MODELING

April 2024:
Modeling Document/Quality Assessment Plan

March 2025:
HSPF Model

July 2025:
EFDC Model

June 2026:
WASP Model

BMAP UPDATE DOCUMENT

Section 3: Calculating and Allocating Load Reductions

- Review of entity allocations calculated in 2012 BMAP.
- **Five Year Milestones**
  - Requirement under section 403.067, Florida Statutes (F.S.) (amended in 2023 HB 1379).

Source: SJRMWD

MILESTONES

SECTION 3: CALCULATING AND ALLOCATING LOAD REDUCTIONS

- Consistent with statutes, entities must provide a list of projects and strategies to DEP that show how entities will meet their required reductions to achieve the next upcoming BMAP milestone, even if the identified project or strategy will not be completed by the milestone.
- All projects needed to achieve milestone targets should be included in the Statewide Annual Report (STAR), even if a funding mechanism is not currently identified, as this information gives the state an understanding of the support is necessary to achieve BMAP goals and assists with the prioritization of projects.
- It is critical for each BMAP that entities plan for and report projects and project updates to the state through the STAR process.

MILESTONES

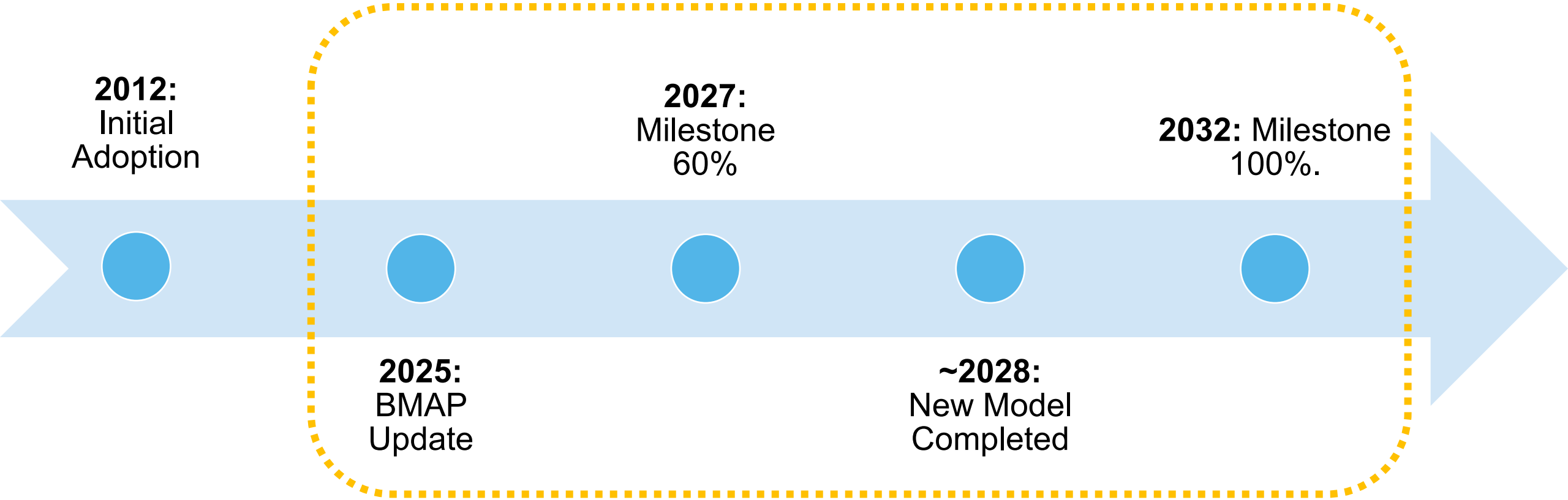
SECTION 3: CALCULATING AND ALLOCATING LOAD REDUCTIONS

- Responsible entities must submit a **sufficient list** of additional projects and management strategies to DEP by **Jan. 14, 2026**, to be compliant with the upcoming BMAP milestone or be subject to further department enforcement.
- If any lead entity is unable to submit a sufficient project list, then specific project identification efforts must be submitted **by Jan. 14, 2026**:
  - These responsible entities must submit project identification efforts whose purpose and timeline will provide projects to meet the five-year milestone.
  - These efforts create a compliance schedule that must reflect the urgency of defining, funding and implementing projects to meet the upcoming and future milestones.
  - These planning efforts are ineligible for BMAP credit themselves but are necessary to demonstrate that additional eligible management actions will be forthcoming and BMAP compliance will be achieved.

BMAP TIMELINE AND MILESTONES

SECTION 3: CALCULATING AND ALLOCATING LOAD REDUCTIONS

Coming Up



MILESTONES

SECTION 3: CALCULATING AND ALLOCATING LOAD REDUCTIONS

Timeline

- 2027 — 60%
- 2032 — 100%

Entity	2027 60% Milestone TN (lbs/yr)	2027 60% Milestone TP (lbs/yr)	2032 100% Milestone TN (lbs/yr)	2032 100% Milestone TP (lbs/yr)
City of DeBary	2,256	104	3,760	173
City of DeLand	-	-	-	-
City of Deltona	4,330	466	7,217	777
City of Lake Helen	-	-	-	-
City of Lake Mary	-	-	-	-
City of Orange City	-	-	-	-
City of Sanford	12,432	1,607	20,720	2,679
FDACS	25,369	8,262	42,282	13,770
FDOT District 5	1,478	-	2,464	-
Seminole County	4,768	187	7,947	311
Turnpike Enterprise	-	-	-	-
Volusia County	1,960	-	3,266	-
Totals	**52,594**	**10,626**	**87,657**	**17,710**

lbs/yr = pounds/year

PROJECT PROGRESS

SECTION 3: CALCULATING AND ALLOCATING LOAD REDUCTIONS

Total required reductions and the estimated reductions achieved for completed and ongoing projects

Entity	TN Full Required Reduction (lbs/yr)	TN Completed and Ongoing Project Reductions Achieved (lbs/yr)	% of TN Reductions Achieved	TP Full Required Reduction (lbs/yr)	TP Completed and Ongoing Project Reductions Achieved (lbs/yr)	% of TP Reductions Achieved
City of DeBary	3,760	14,135	376%	173	2,367	1370%
City of DeLand	-	9	-	-	1	-
City of Deltona	7,217	8,410	117%	777	1,371	177%
City of Lake Helen	-	31	-	-	4	-
City of Lake Mary	-	372	-	-	58	-
City of Orange City	-	13	-	-	4	-
City of Sanford	20,720	14,454	70%	2,679	5,339	199%
FDACS	42,282	21,054	50%	13,770	3,869	28%
FDOT District 5	2,464	3,129	127%	-	632	-
Seminole County	7,947	7,812	98%	311	1,940	624%
Turnpike Enterprise	-	1	-	-	0	-
Volusia County	3,266	7,215	221%	-	3,032	-
Totals	**87,657**	**76,635**	**87%**	**17,710**	**18,617**	**105%**

BMAP UPDATE DOCUMENT

Section 4: Management Actions

- Bills and legislation updates.
  - 2020 Clean Waterways Act, 2021 Senate Bill (SB) 64, 2023 HB 1379 and 2024 HB 1557.

- Management actions by source.
  - Wastewater — OSTDS, WWTFs and biosolids.
  - Stormwater.
  - Sports turfgrass.
  - Agriculture (BMPs and agricultural cooperative regional elements).
  - Atmospheric deposition.

- Future Growth Analysis.
  - Considers impact of future population on loading from wastewater.

WASTEWATER

SECTION 4: MANAGEMENT ACTIONS

Recent legislative updates have expanded the requirements for addressing wastewater sources within BMAPs.

Clean Waterways Act SB 712 (2020)

- Requires local governments within a nutrient BMAP to develop wastewater treatment plans and/or OSTDS remediation plans to be incorporated into BMAP updates.

Reclaimed Water SB 64 (2021)

- Subsection 403.064(16), F.S., requires domestic wastewater utilities that dispose of effluent, reclaimed water or reuse water by surface water discharge to submit for DEP review and approval, a plan for eliminating non-beneficial surface water discharge by Jan. 1, 2032.
  - A utility must fully implement the approved plan by Jan. 1, 2032.
- If a plan was not timely submitted or approved by DEP, the utility's domestic WWTFs may not dispose of effluent, reclaimed water or reuse water by surface water discharge after Jan. 1, 2028.

WASTEWATER

SECTION 4: MANAGEMENT ACTIONS

Recent legislative updates have expanded the requirements for addressing wastewater sources within BMAPs.

Environmental Protection HB 1379 (2023)

- Requires facilities discharging to a waterbody impaired for nutrients or subject to a BMAP to upgrade to AWT within 10 years.
- Requires applicants for new septic systems serving lots of one acre or less within BMAPs to connect to central sewer if available. If unavailable, requires applicants to install an enhanced nutrient-reducing system or other wastewater system that achieves a nitrogen reduction of 65%.

Environmental Protection HB 1557 (2024)

- Requires advanced treatment of reclaimed water within BMAPs (403.086, F.S.).
- DEP has determined that the use of reclaimed water is causing or contributing to the nutrient impairments being addressed in this BMAP area.
- The facilities listed in the BMAP — Appendix D have 10 years from BMAP adoption to meet the applicable AWT standards.

WASTEWATER

SECTION 4: MANAGEMENT ACTIONS

The nitrogen and phosphorus effluent limits will be applied as an annual average, taken at the end of pipe before any land disposal (or other authorized compliance point), to all new and existing WWTFs with a DEP-permitted discharge or disposal area within this BMAP.

Nitrogen effluent limits for wastewater facilities

Facility Capacity (mgd)	Surface Water Discharges (mg/L)	WWTFs Listed in Appendix D (mg/L)	WWTFs Not Listed in Appendix D — Rapid Rate Land Application Effluent Disposal System (mg/L)	WWTFs Not Listed in Appendix D — All Other Disposal Methods, Including Reuse (mg/L)
≥ 0.5	3	3	3	10
< 0.5, ≥ 0.1	3	3	6	10
< 0.1	3	NA	10	10

Phosphorus effluent limits for wastewater facilities

Facility Capacity (mgd)	Surface Water Discharges (mg/L)	WWTFs Listed in Appendix D (mg/L)	WWTFs Not Listed in Appendix D — Rapid Rate Land Application Effluent Disposal System (mg/L)	WWTFs Not Listed in Appendix D — All Other Disposal Methods, Including Reuse (mg/L)
≥ 0.5	1	1	1	6
< 0.5, ≥ 0.1	1	1	3	6
< 0.1	1	NA	6	6

mgd = million gallons per day. mg/L = milligrams per liter.

WASTEWATER

SECTION 4: MANAGEMENT ACTIONS

Biosolids

- To provide assurance that nitrogen losses to surface water and groundwater are minimized from the permitted application of biosolids and septage in the BMAP, requirements in accordance with Chapter 62-640, F.A.C., apply to newly-permitted application sites and existing application sites upon permit renewal.

Source: SJRWMD

STORMWATER AND SPORTING FACILITIES

SECTION 4: MANAGEMENT ACTIONS

Stormwater

- The National Pollutant Discharge Elimination System (NPDES) Stormwater Program will, within five years of BMAP adoption, evaluate any entity located in the BMAP area that serves a minimum resident population of at least 1,000 individuals that is not currently covered by an MS4 permit and designate eligible entities as regulated MS4s, in accordance with Chapter 62-624, F.A.C.
- Chapter 62-330, F.A.C. (2024)
  - Updated Florida's stormwater rule for design criteria and to strengthen the operation and maintenance requirements.
    - Applicants must demonstrate a level of treatment sufficient to accomplish the greater of the following nutrient load reduction criteria through calculations or modeling that the future stormwater management systems would provide additional treatment to meet new Environmental Resource Permits stormwater treatment performance standards of 80% reduction for TP and 55% reduction for TN, or post-development condition average annual loading of nutrients does not exceed the predevelopment condition nutrient loading, along with additional requirements that would apply where a project discharges to Outstanding Florida Waters or impaired waters.

STORMWATER AND SPORTING FACILITIES

SECTION 4: MANAGEMENT ACTIONS

Sports Turfgrass and Golf Courses

- Sporting facilities are required to follow the 2025 Sports Turf BMP Manual.
- Superintendents of all publicly owned golf courses within the BMAP must obtain a certification for golf course BMPs under section 403.9339, F.S. and all golf courses must implement the BMPs described in the 2021 DEP golf course BMP manual.
- All golf courses located within a BMAP are required to submit a Nutrient Management Plan (NMP).

AGRICULTURE

SECTION 4: MANAGEMENT ACTIONS

Dairy Operations with Confined Animal Feeding Operations (CAFO) Permits, Chapter 62-670, F.A.C.

- Waste storage ponds must be lined and demonstrate no leaking.
- Sampling for TN and TP or land-applied effluent/wastewater must be included in the monitoring plan.

Livestock Operations Without CAFO Permits

- Section 403.067, F.S., requires livestock operations not large enough to require a NPDES CAFO permit to enroll in and implement the applicable DACS BMP Program **OR**
- Conduct a monitoring program approved by DEP or the applicable water management district.

Aquaculture

- Chapter 597, F.S., required DACS to create a program that requires those who sell aquatic species to annually acquire an Aquaculture Certificate of Registration and implement Chapter 5L-3, F.A.C. Aquaculture BMPs. Permit holders must be certified every year.

Silviculture

- The Florida Forest Service implements Chapter 5I-6, F.A.C. and requires both private and public forest landowners across the state to comply with BMPs and the rule.

AGRICULTURE

SECTION 4: MANAGEMENT ACTIONS

Agricultural Cooperative Regional Elements (ACE)

- Section 403.067, F.S., requires DACS, DEP and agricultural producers to work together to establish an ACE.
- DACS is responsible for providing DEP a list of projects which, in combination with BMPs, state-sponsored regional projects and other management strategies will achieve the needed pollutant load reductions established for agricultural nonpoint sources.
- DACS is assigned the lead role on project solicitation, development, selection and implementation. However, they will work closely with all the key stakeholders, including DEP as a partner agency, to define and identify regional projects that will be included in the BMAP.
- DACS and DEP will work together to track progress on agricultural water quality projects under the ACE framework through the development of performance metrics and evaluation of water quality monitoring data in the basin.
- DACS will report on projects annually through the DEP STAR process and during BMAP update and/or development.
- Projects and other management strategies implemented through the ACE will be evaluated cooperatively by partner agencies using the predetermined performance metrics.

ATMOSPHERIC DEPOSITION

SECTION 4: MANAGEMENT ACTIONS

- Atmospheric sources of nutrients are local, national and international.
- Recent data indicate that the deposition of nitrogen has been generally decreasing in Florida with an up to 55% decrease in atmospheric deposition by 2028 possibly as result of the following:
  - Power plant fuel source changes.
  - Air treatment upgrades.
  - Increased use of electric vehicles.
  - Decreasing mobile sources.
- No specific nitrogen or phosphorus reductions were assigned to this source category in this BMAP.
- Atmospheric deposition sources and trends will be re-evaluated periodically.

FUTURE GROWTH

SECTION 4: MANAGEMENT ACTIONS

Assessed additional loading to the basin by 2040 under different growth management scenarios.

- 2040 population “additional people” based on Bureau of Business and Economic Research medium growth projections per county.
- Growth distributed to jurisdictional boundaries based on available land area.
- Determined percentage of population sewered based on Florida Water Management Inventory parcel to point data.
- Applied per person loading values for portions of future population on centralized sewer or OSTDS.
- Assumed increase in urban stormwater loading based on percentage of undeveloped acres converted to low density residential land use, using statewide event mean concentrations and runoff coefficients.
- Ran three management scenarios to look at loading by entity, source and overall basin.

FUTURE GROWTH

SECTION 4: MANAGEMENT ACTIONS

Scenario 1

By 2040:

- **90%** or more of **new population** is connected to central sewer.
- All wastewater treating to **3 mg/L TN** and **1 mg/L TP.**
- Remainder of new population has **enhanced OSTDS.**
- **2% of undeveloped land** converted to low density development.

Scenario 2

By 2040:

- **New population** is connected to central sewer at **same rate as today.**
- All wastewater treating to **3 mg/L TN** and **1 mg/L TP.**
- Remainder of new population has **enhanced OSTDS.**
- **10% of undeveloped land** converted to low density development.

Scenario 3

By 2040:

- **New population** is connected to central sewer at **same rate as today**.
- All wastewater treating to **6 mg/L TN** and **3 mg/L TP.**
- Remainder of new population has **conventional OSTDS.**
- **17% of undeveloped land** converted to low density development.

FUTURE GROWTH

SECTION 4: MANAGEMENT ACTIONS

County	Entity	2040 People	Scenario 1 TN (lbs/yr)	Scenario 2 TN (lbs/yr)	Scenario 3 TN (lbs/yr)
Seminole	Seminole County	10329	**6,572**	**10,743**	**20,323**
Seminole	Lake Mary	955	**608**	**1,168**	**2,228**
Seminole	Sanford	2980	**1,647**	**2,542**	**4,748**
Volusia	Volusia County	16190	**10,947**	**31,056**	**59,320**
Volusia	DeBary	1588	**1,074**	**2,518**	**4,762**
Volusia	DeLand	419	**283**	**691**	**1,310**
Volusia	Deltona	5182	**3,504**	**10,608**	**20,323**
Volusia	Lake Helen	672	**455**	**1,394**	**2,672**
Volusia	Orange City	111	**75**	**204**	**388**

2040 Loading — Basin Totals

Scenario 1 Total	Scenario 2 Total	Scenario 3 Total
25,165	**60,924**	**116,074**

In every scenario, additional loading is expected in the basin by 2040 due to increasing populations. However, entities should proactively be working to both remediate existing loading AND plan to mitigate loading from future growth.

BMAP UPDATE DOCUMENT

Section 5: Monitoring Strategies

- Review of monitoring network.

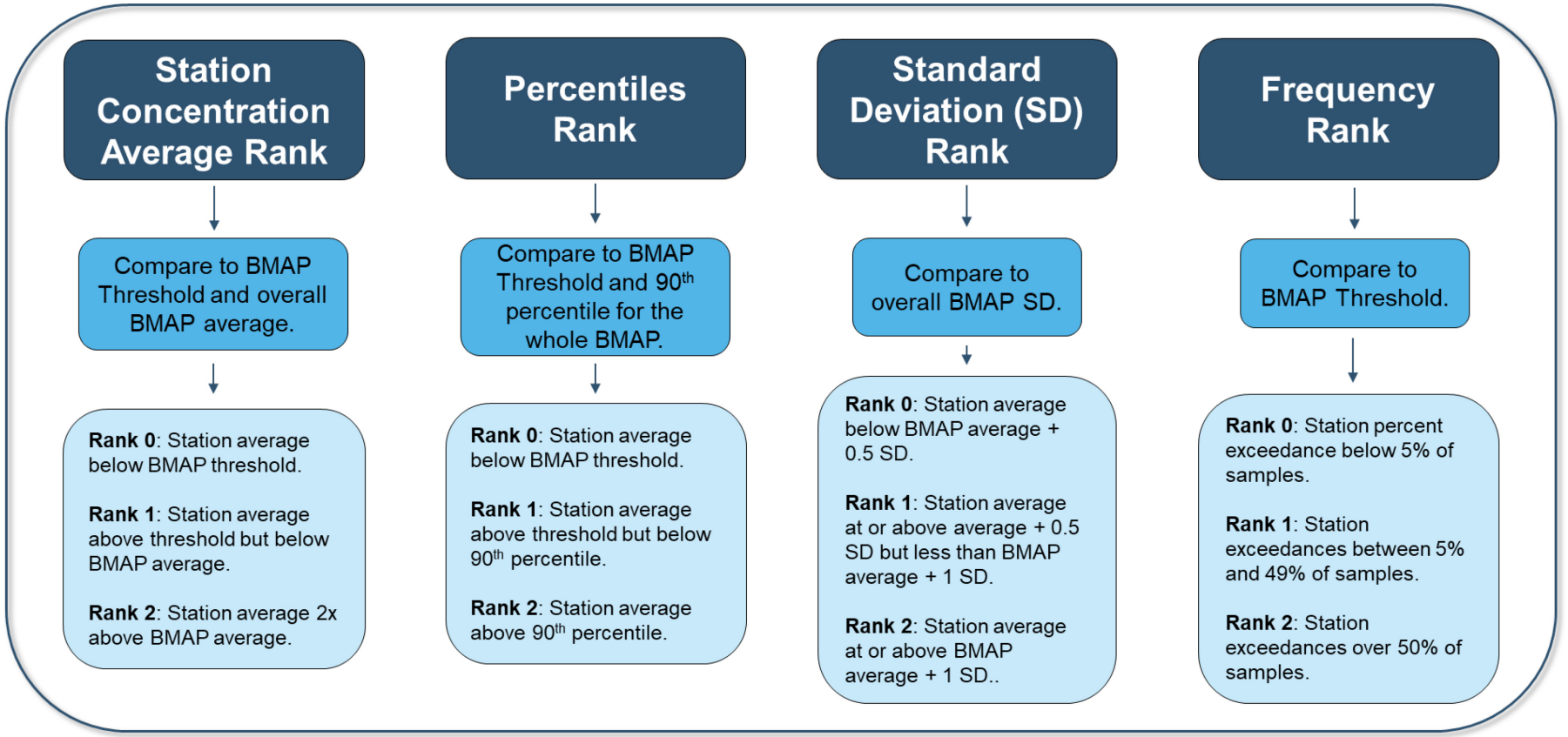
- Hot spot analysis.
  - Tool to better prioritize and focus resources to most efficiently achieve restoration.
  - Not intended to measure progress towards restoration or compliance.

Section 6: Commitment to Plan Implementation

- Review of process for BMAP adoption, tracking and adaptive management.

HOT SPOT ANALYSIS
SECTION 5: MONITORING STRATEGIES

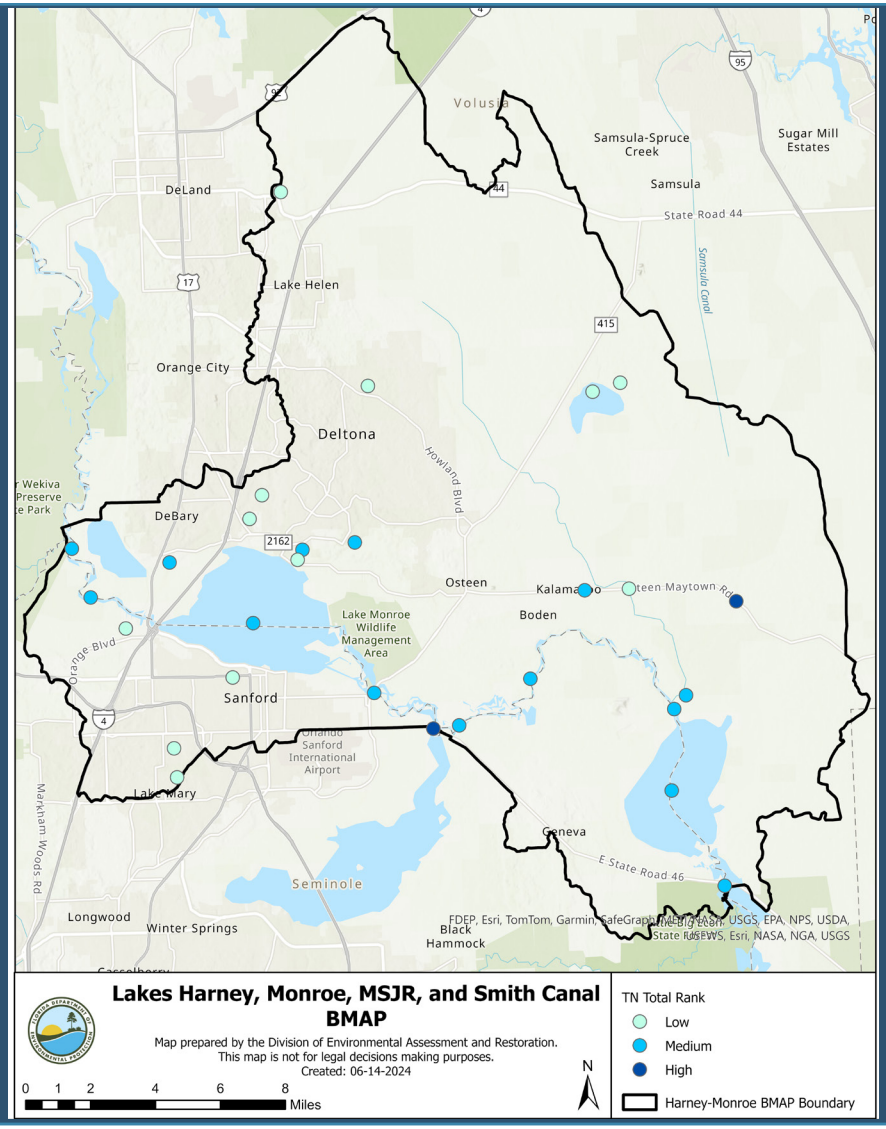
- Uses measured data collected throughout the watershed to evaluate TN and TP concentrations at monitoring stations.
- This process is not intended to be a management strategy under Chapter 403.067, F.S.
- The benchmarks are not intended to measure progress towards restoration; they will only be used to prioritize resources.



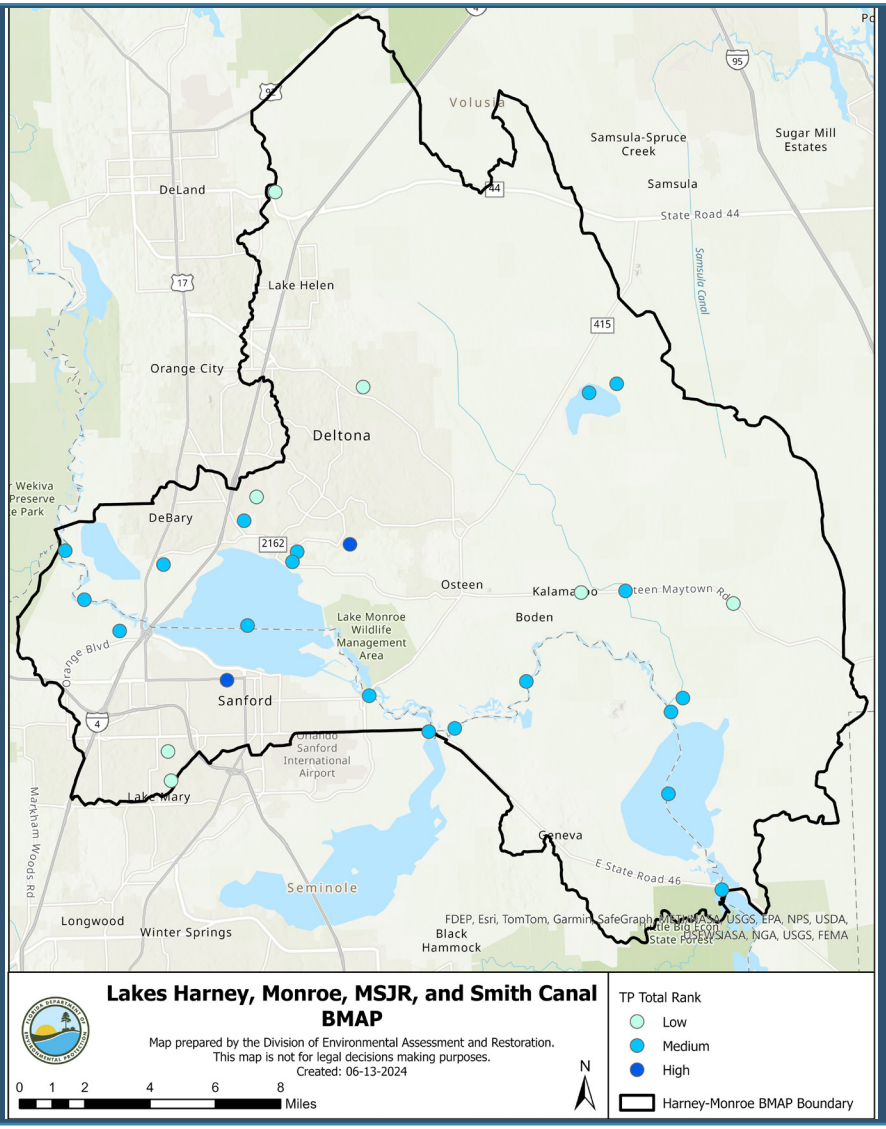
HOT SPOT ANALYSIS

SECTION 5: MONITORING STRATEGIES

TN:



TP:



BMAP UPDATE DOCUMENT

APPENDICES

- **Updated:** Important links
- **Updated:** Project tables.
  - Projects submitted by responsible entities through the BMAP portal through October 2024.
  - Includes projects from the 2020 Clean Waterways Act WWTF and OSTDS plans submitted by local governments August 2024.
- **NEW:** Additional Management Strategies
  - Examples of project efforts entities can identify to meet their milestone reduction requirements.
- **NEW:** Wastewater Facilities
  - List of facilities with reclaimed water that are causing or contributing to nutrient impairments.
- **Updated:** Agricultural Enrollment and Reductions (provided by DACS).

UPCOMING SCHEDULE

- July 2024, Technical BMAP update public meeting.
- March 2025, Draft BMAP document available for review.
- March 2025, Draft BMAP update public meeting.
- March- April 2025, Draft BMAP update comment period.
- July 1, 2025, Statutory deadline for updated nutrient BMAPs.

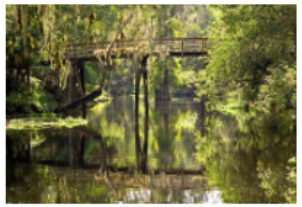
NEXT STEPS

BMAP update document draft review:

- Draft document sent out via GovDelivery **March 19, 2025**.
- Stakeholder review comments due **April 9, 2025**.

Submit comments to:
Evelyn.Becerra@FloridaDEP.gov

RESOURCES
BMAP WEBSITE AND STORYMAPS

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.

Basin Management Action Plans (BMAPs) | Florida Department of Environmental Protection

BMAP MEETING
PUBLIC QUESTIONS PERIOD

Verbal Questions

- We ask that questions and comments be limited to **two minutes** so that we may hear from everyone.

Written Comments

- Submit written comments concerning today's meeting to: BMAPProgram@FloridaDEP.gov.

THANK YOU

Evelyn Becerra
Lake Harney, Lake Monroe, Middle St. Johns River, and Smith Canal BMAP Coordinator

Contact Information:
850-245-8547
Evelyn.Becerra@FloridaDEP.gov

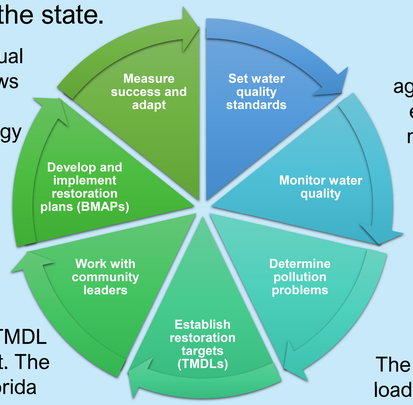
BASIN MANAGEMENT ACTION PLANS (BMAPS)

CENTRAL FLORIDA SURFACE WATER BMAPS

Water Quality Restoration Cycle

The Florida Department of Environmental Protection's (DEP's) Division of Environmental Assessment and Restoration (DEAR) monitors and assesses Florida's surface water and groundwater quality across the state.

The Statewide Annual Report (STAR) shows project and management strategy implementation progress made in BMAPs.



DEP and partner agencies maintain and expand water quality monitoring networks.

BMAPs address a TMDL for a given pollutant. The BMAPs in south Florida target nitrogen and phosphorus.

The total maximum daily load (TMDL) is the water quality target

Statutory Requirements

Authority and responsibility comes from several Florida Statutes (F.S.), with some highlights described below:

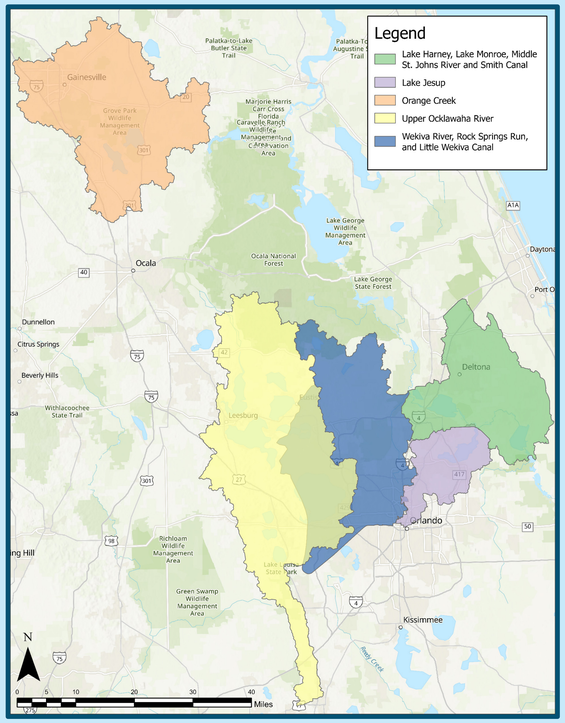
Florida Watershed Restoration Act (Section 403.067, F.S)
- Cooperative implementation of plans to restore our waters, known as BMAPs.

Clean Waterways Act (2020)
- Promotes resilient wastewater infrastructure and utilities and looks at future growth.
- Requires local governments within a BMAP to develop wastewater treatment plans and/or onsite sewage treatment and disposal system (OSTDS) remediation plans to be incorporated into BMAP updates.

House Bill 1557 (2024)
- Requires advanced treatment of reclaimed water within BMAPs.
- Requires facilities (including private) to provide information to local entities developing domestic wastewater treatment plans and OSTDS remediation plans within BMAP or other restoration areas.

House Bill 1379 (2023)
- Requires BMAPs be assessed and updated every five years as needed to include implementation milestones and other requirements.
- Requires a list of projects and strategies that will achieve the five-year implementation milestones to meet TMDLs, as well as agricultural cooperative regional water quality improvement elements.
- Requires facilities discharging to a waterbody impaired for nutrients or subject to a BMAP or reasonable assurance plan (RAP) area to upgrade to advanced wastewater treatment (AWT) within 10 years.
- Requires applicants for new septic systems serving lots of 1 acre or less within BMAPs and RAPs to connect to central sewer if available, or if unavailable, to install an enhanced nutrient-reducing system or other wastewater system that achieves 65% reduction.
- Requires local governments to include BMAP projects in their comprehensive plans so these projects can be prioritized to achieve restoration benefits.
- Expands grant opportunities to accelerate project implementation.

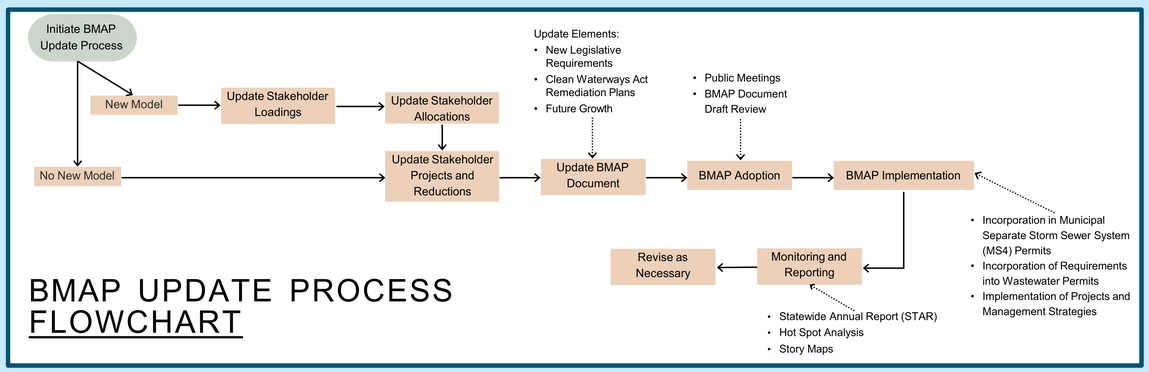
Central Florida Surface Water BMAPs



BMAP Update Process

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.
- 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.

Key Elements of a BMAP:
- TMDL(s) being addressed. These are the restoration targets.
- Physical description of the waterbody and contributing area.
- Description of the monitoring network and water quality.
- Identification of pollutant sources.
- Identification of responsible stakeholders.
- List of projects and strategies to reduce loading.
- Applicable legal requirements.
- Discussion of future growth.



Moira Homann, Program Administrator
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Florida Department of Environmental Protection (DEP)
Lake Harney, Lake Monroe, Middle St. Johns River (MSJR), and Smith Canal Basin Management Action Plan (BMAP)
Public Meeting
Seminole County Extension, 250 W. County Home Road, Sanford, Florida
March 26, 2025
1:00 pm – 3:33 pm EDT

Attendees

Ruth Amato, Brevard County Commission Office, District 1
Evelyn Becerra, DEP
Tiffany Busby, Wildwood Consulting
Cammie Dewey, SJRWMD
Lauren Dorval, FDACS
Marie Dupray, City of Sanford
Sara Driggers, Wildwood Consulting
Sarah Fayed, DEP
Agustin Francisco, FDACS
Cindy Haller, Citizen
Moira Homann, DEP
Robert King, Citizen
Celeste Lyon, RES
Tina McIntyre, UF-IFAS Extension-Seminole County
Gabrille Milch, St. Johns Riverkeeper
Kim Ornberg, Seminole County
Joe Parish, Seminole County
Robert Potts, Geosyntec
Raulie Raulerson, Florida Farm Bureau
Stacey Simmons, FDACS
Jennifer Spain, Volusia County
Karen Snyder, RES for FDOT D5
Ricardo Vazquez, DOH
Max Wallace, Drummond Carpenter
Ken Weaver, DEP
Shannon Wetzel, Seminole County
Kelly Young, Volusia County

Overall

The draft BMAP document can be downloaded here: https://floridadep.gov/dear/water-quality-restoration/content/bmap-public-meetings. Comments on the draft BMAP document are due by April 9, 2025. Verbal comments at this meeting were welcome. Written comments submitted at the meeting were invited. Comments after the meeting should be sent to BMAPProgram@FloridaDEP.gov by April 9, 2025.

Questions and Answers

Question (Q): The City of Sanford achieved 199% for their required TP reductions?
Answer (A): That means that they have gone above and beyond their required reductions with the projects they have submitted.

Q: Why are some entities listed here that were not listed in the 2012 BMAP?
A: Back then, some entities were listed as *de minimis*, which means that they were contributing less than 1% loads and were expected to make reductions but did not have an assigned number of reductions. With the new requirements from 2023 House Bill 1379, these entities will have an assigned load reduction in a future update; they will have allocations based on the new model, when that assessment is available.

Q: Can you clarify what is considered reclaimed water use?
A: Reclaimed water is the disposal of wastewater effluent to the land surface. These methods include rapid rate disposal such as rapid infiltration basins (RIBs), adsorption fields, and sprayfields as well as slow-release disposal methods such as public access reuse to golf courses and residential properties.

Q: Where is the *2025 DEP Sports Turf Best Management Practices (BMP) Manual* available?
A: The *2025 Sports Turf Best Management Practices (BMP) Manual* is pending development. The BMAP Program will let everyone know when it has been completed.

Q: Is the golf course superintendent certification being offered through the extension offices?
A: Yes.

Q: Is the Florida Water Management Inventory septic system data posted on the DEP website?
A: No, the Florida Water Management Inventory is a Florida Department of Health (FDOH) database that is posted on their website.

Q: What agency will seek the legislative budget request (LBR) for the agricultural cooperative regional elements (ACE) projects? Is it DEP, the Florida Department of Agriculture and Consumer Services (FDACS), or another agency?
A: The agencies have not yet determined who will be submitting the LBRs.

Q: Site 10 has legacy biosolids that wash into Lake Jesup and the monitoring that was conducted is no longer activities. Was it assumed that we cleaned up Lake Jesup?
A: What we assigned for this BMAP was to reduce the watershed load within the Harney Monroe drainage area. The reduction totals are based on the watershed loads and not the incoming loads from upstream areas (i.e., Lake Jesup, the Upper St. Johns River). This approach does not mean that we assumed the incoming loads are actually zero, but we did not assign reductions to those areas in this BMAP. The St. Johns River Model update that is currently underway will give us a better look at that data and how the water is flowing into the watershed to make better adjustments.

Q: For the City of Sanford, some of the surface water BMAP boundaries overlap within the city. Are those expected to change in the new modeling? We went through a lot of effort to make it right, but now we have areas that aren't in any basin, even if it's closed, some areas would discharge. Should the city list projects in those areas in two BMAPs?

A: It could be that those boundaries are an artifact of the geographic information systems (GIS) layers that can create small silvers of overlap and excluded areas. DEP discourages double-counting those projects right now because those overlapping areas should be corrected, if they are surface water overlaps. We do expect springs BMAP boundaries to overlap with some surface waters, because the springs reflect the groundwater contribution areas while the surface waters reflect surface drainage. For springs and surface water overlap areas, we encourage stakeholders to list projects in both BMAPs. If you need some of those overlapping surface water area projects to meet your milestones, contact Evelyn Becerra so that we can figure out where those projects would be correctly listed.

Q: For surface waters, how do golf course requirements affect entity allocations?

A: Golf course allocations are included in the local jurisdiction's stormwater loading.

Q: If a golf course has submitted a nutrient management plan (NMP), will that plan count towards their reductions?

A: Entities will be given credits if their activities are validated properly.

Q: What is the monitoring process for the golf courses and their practices?

A: We are still trying to define the best outreach methods for golf courses.

Q: Who are "FDACS" and what do they do?

A: "FDACS" is the acronym for the Florida Department of Agriculture and Consumer Services. This state agency is responsible for the enrollment process, verification, and reporting for agricultural best management practices. This program is administered by the FDACS Office of Agricultural Water Policy (OAWP). Additionally, FDACS has best management practices programs for silviculture and aquaculture, which are administered by other offices within FDACS.

Q: Are the education credits being reworked?

A: Currently, the maximum BMAP credits are set at 6% of the urban load, by jurisdiction. DEP is trying to determine how the credits are implemented and how to identify accurately how well these measured are implemented. We have been working internally to review the approach and have been seeking input from some of the University of Florida-Institute of Food and Agricultural Sciences (UF-IFAS) folks. We anticipate additional outreach to our stakeholders once we are done with the BMAP updates. The education credit updates will not be included in the 2025 BMAPs. DEP does not anticipate increasing the credit percentage.

The update is to determine how we can better confirm the benefits of source controls. We are also looking at other sources of information, like how the credits are being reported to the DEP Municipal Separate Storm Sewer System (MS4) program.

Q: Is there a guidance document for muck removal?
A: There is a muck removal guidance document for the Indian River Lagoon. The approach is geographically specific and has very specialized requirements. For example, the muck must be completely removed down to the sandy substrate. You also lose the credit if the muck reaccumulates and you must measure the reaccumulation over time after the muck has been removed. This BMAP is really focused on reducing watershed loads. With muck removal credits, you must go back out and measure the muck in future years to keep the credit, and the credit durations are limited. The water quality benefit is derived from the improvement of the nutrient flux between the substrate and the water column. A muck removal guidance approach could be developed for other areas, but it requires local data and must show that there is a long-term benefit to the water column.

Q: Will there be limitations to projects that merely sequester muck and do not remove it?
A: Any sequestration allowed would need to be fully reviewed for both muck removal concerns and how permanently any sequestration could be achieved.

Q: Has the department looked at establishing muck/sediment testing for all basins?
A: The focus of BMAP reductions is reducing inputs from the watershed (or springshed) into the waterbody, and not on removing loads that are already in the receiving water (i.e., muck). Focusing on reducing loads from the landscape is preferred since those controls prevent new muck/sediment from going into the lakes and creating more internal loads.

Q: At the Wekiwa Springs BMAP meeting last fall, a new sources pie chart was shown. Is a similar chart available for this basin?
A: This BMAP uses current data and references, therefore, does not have a new pie chart. For Wekiwa Springs, DEP updated the Nitrogen Source Inventory Loading Tool (NSILT) which prompted the presentation of a revised pie chart. For this BMAP, the whole St. Johns River Model will be updated, including this area, but that information is not currently available. We will add more detailed land use information once the model is complete, and once refined, we can use that to update the BMAP loading information.

Comments

Verbal Comment: There is an overlap where the Lake Jesup basin intersects with the Lakes Harney and Monroe Basin where transfer of nutrients occurs. It has been assigned zero reduction in the previous allocations. These inputs from Lake Jesup to the river are going to start affecting

things. I'm concerned that we need to start putting a realistic number on this. There has been an assumption that there is nothing to clean up, but when it becomes problematic in the future, this isn't the fault of the basin.

Written Comment: Not all available land has to be used for housing. Some counties and cities within have land buying programs which are supported by taxpayer dollars. I understand that all future development is set to be housing/residential.

Adjournment

The meeting ended at 3:33 pm EDT.