Lake Jesup Basin Management Action Plan (BMAP)
Update Meeting

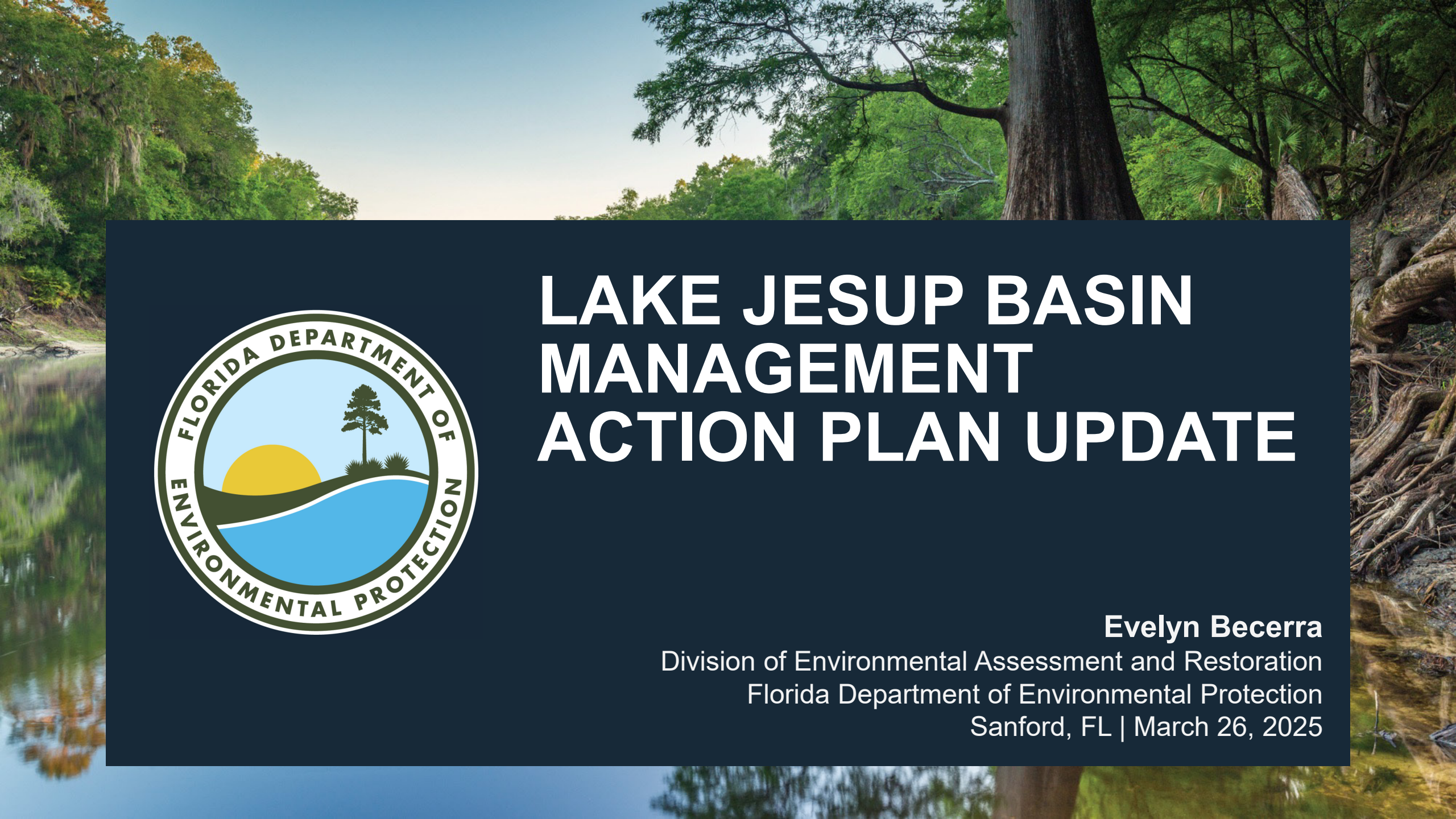
University of Florida/Institute of Food and Agricultural Sciences (UF/IFAS)
Meeting Room B
250 W. County Home Road
Sanford, FL 32773

March 26, 2025
10 AM EDT

Agenda

- Lake Jesup Basin Management Action Plan (BMAP) Background.
- Overview of Draft Lake Jesup Basin Management Action Plan (BMAP).
- Questions/Comments.

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

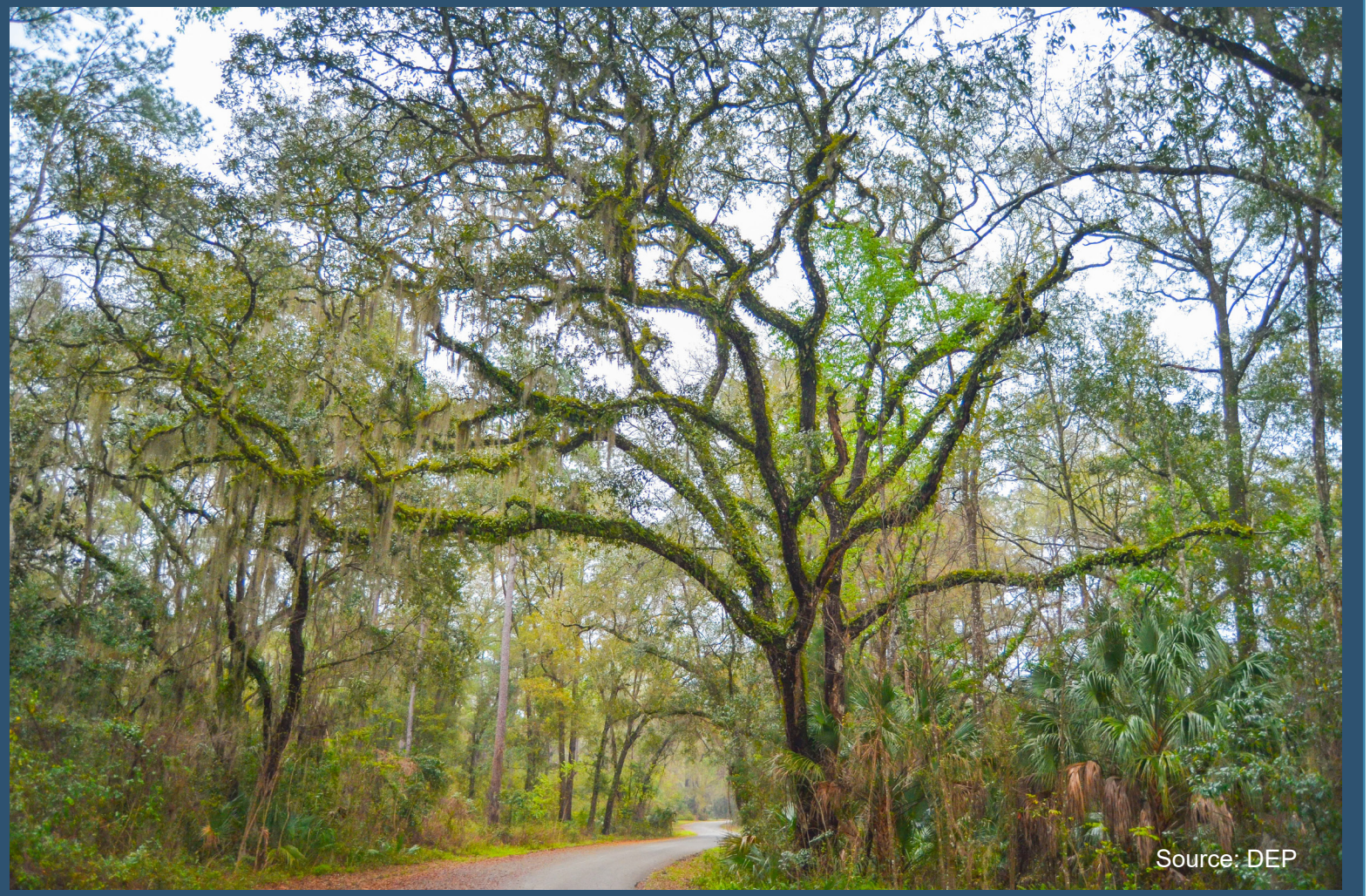


LAKE JESUP BASIN MANAGEMENT ACTION PLAN UPDATE

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.

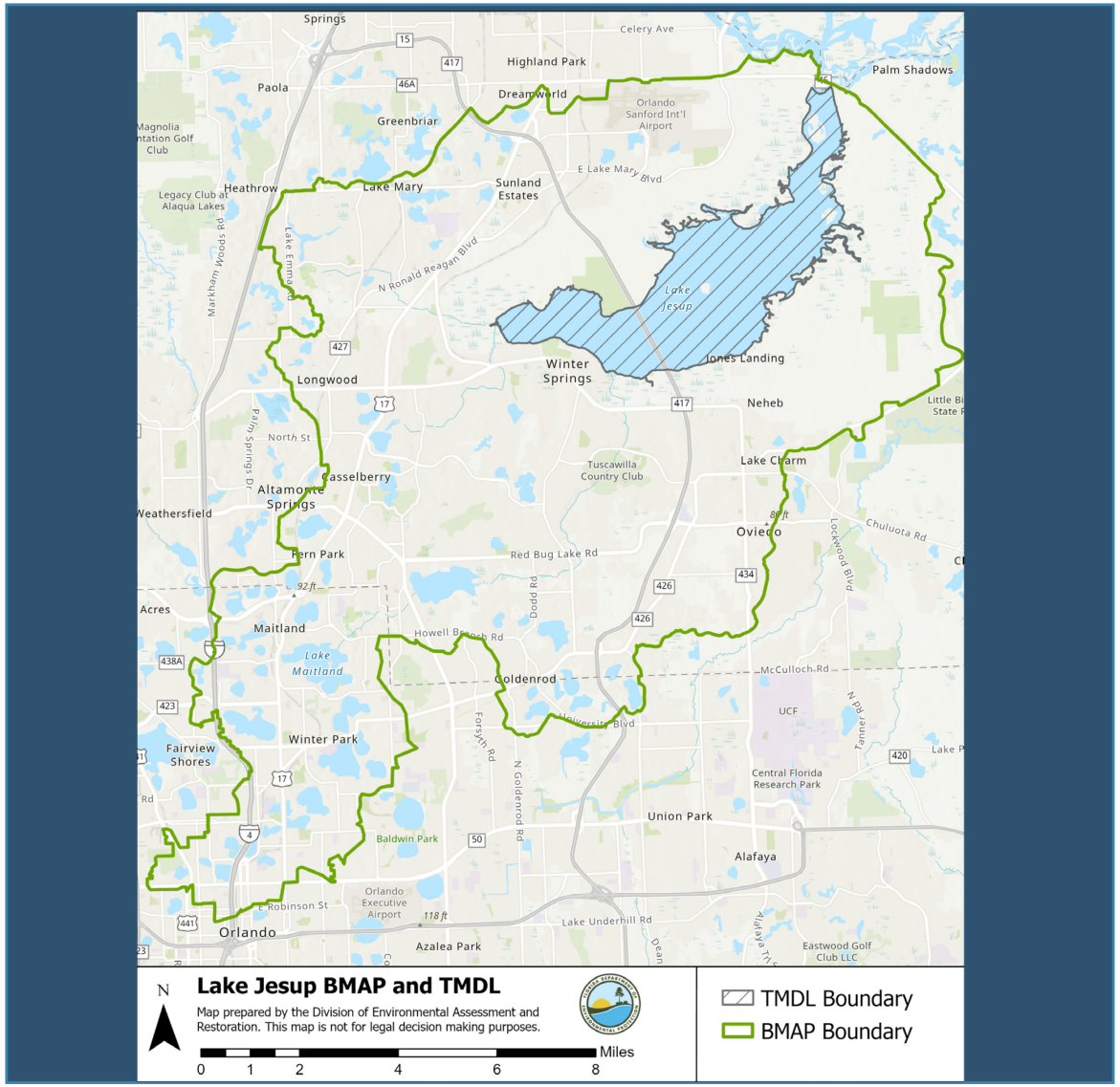
Projects to meet the TMDL:

- 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 JESUP BMAP



Lake Jesup TMDL:

- Adopted 2006 for total phosphorus (TP) and total nitrogen (TN).

Lake Jesup BMAP:

- Adopted April 2010 to implement the Lake Jesup TMDLs.

BMAP Amendment:

- Adopted July 2019.
- Provides information on changes since the 2010 BMAP was adopted.

- Total required reductions:
  - 11,019 pounds per year (lbs/yr) TP.
  - 55,013 lbs/yr TN.

BACKGROUND
LAKE JESUP BMAP STAKEHOLDERS

Type of Organization/Entity	Name
Responsible Entities	Agriculture Orange County Seminole County City of Altamonte Springs City of Casselberry City of Lake Mary City of Longwood City of Maitland City of Orlando City of Oviedo City of Sanford City of Winter Park City of Winter Springs Town of Eatonville
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

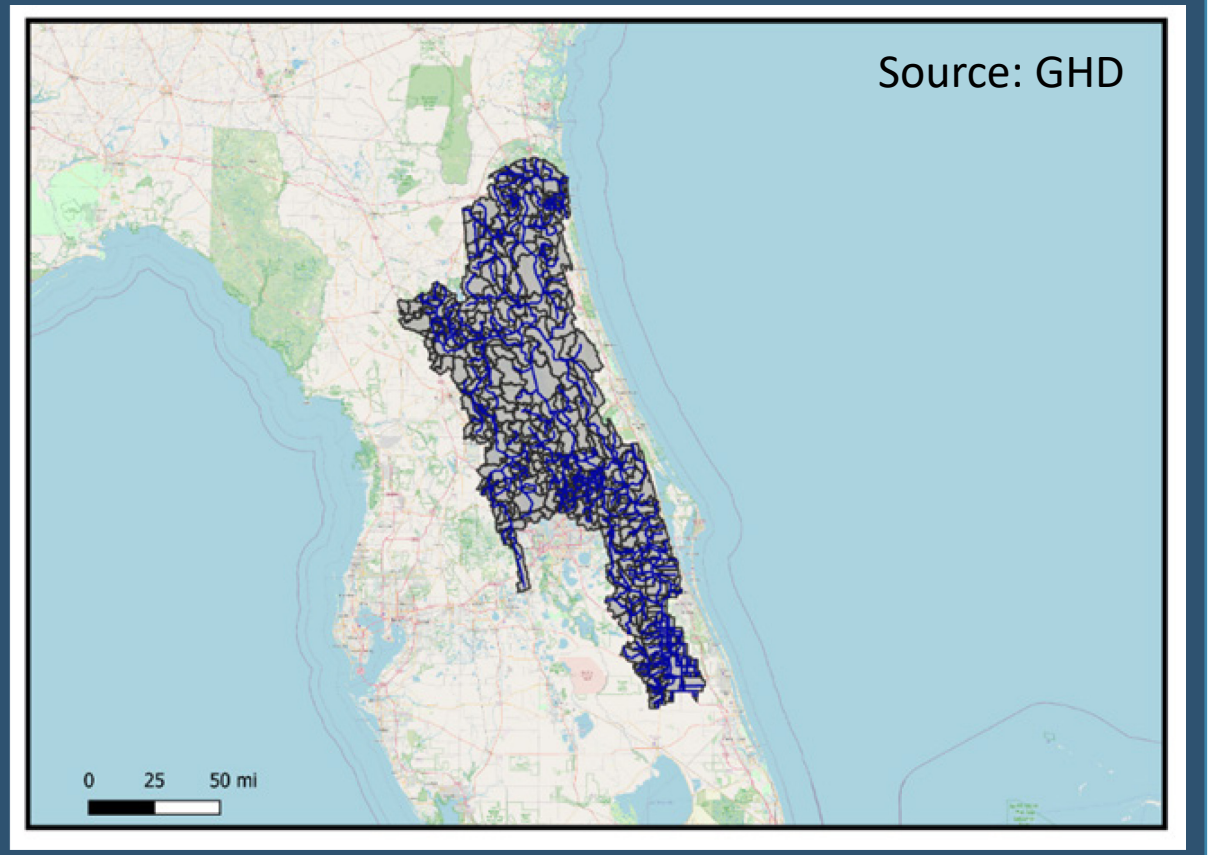
- Review of the 2010 BMAP and 2019 BMAP Amendment.
- Modeling from previous adopted document will remain the same.
- Loading estimates and allocations of load reduction to the responsible stakeholders detailed in the 2019 Amendment will remain in effect.
- Discussion on upcoming St. Johns River Basin Model.

ST. JOHNS RIVER MODELING

SECTION 2: MODELING

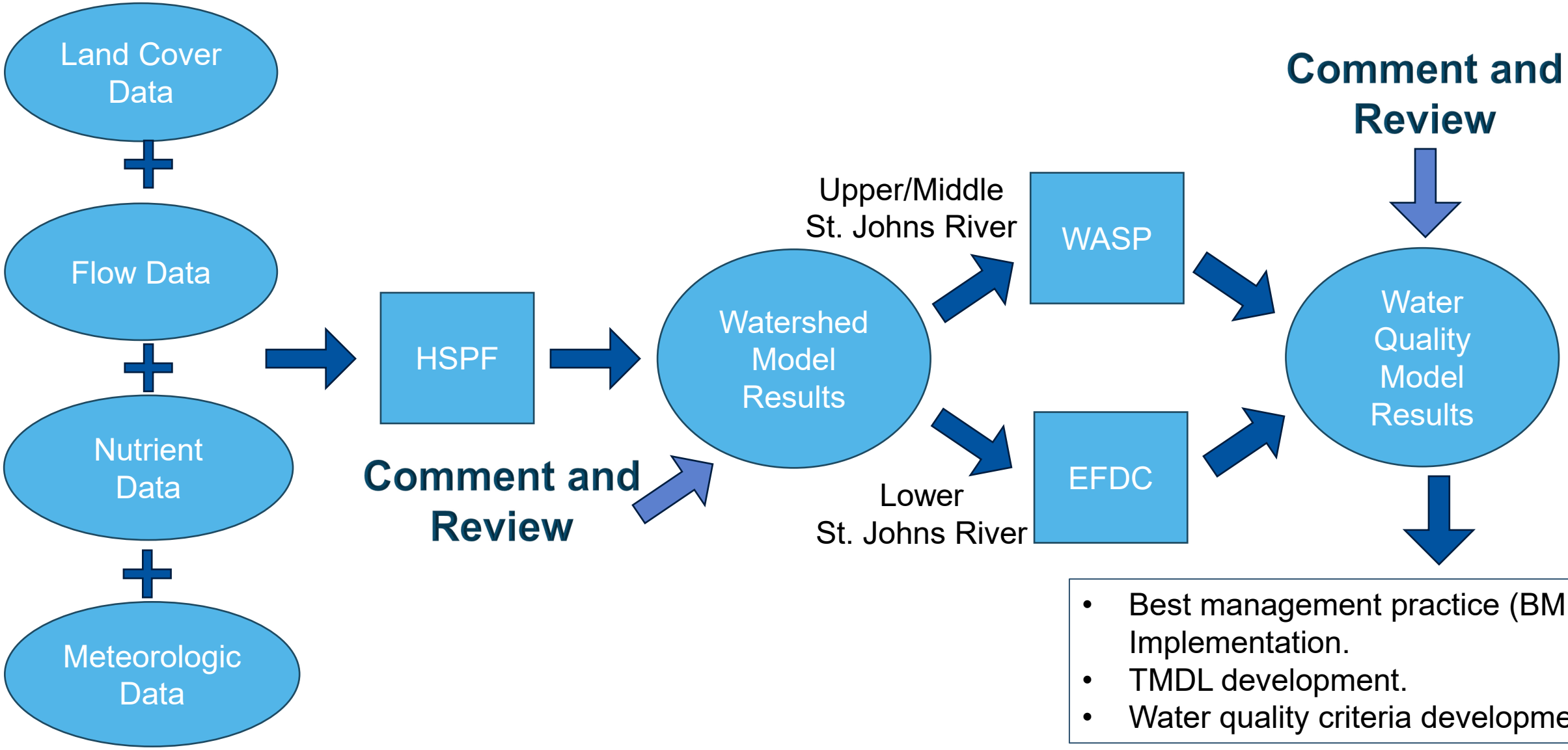
Modeling Updates Underway.

- 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 2019 Amendment.
- **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.

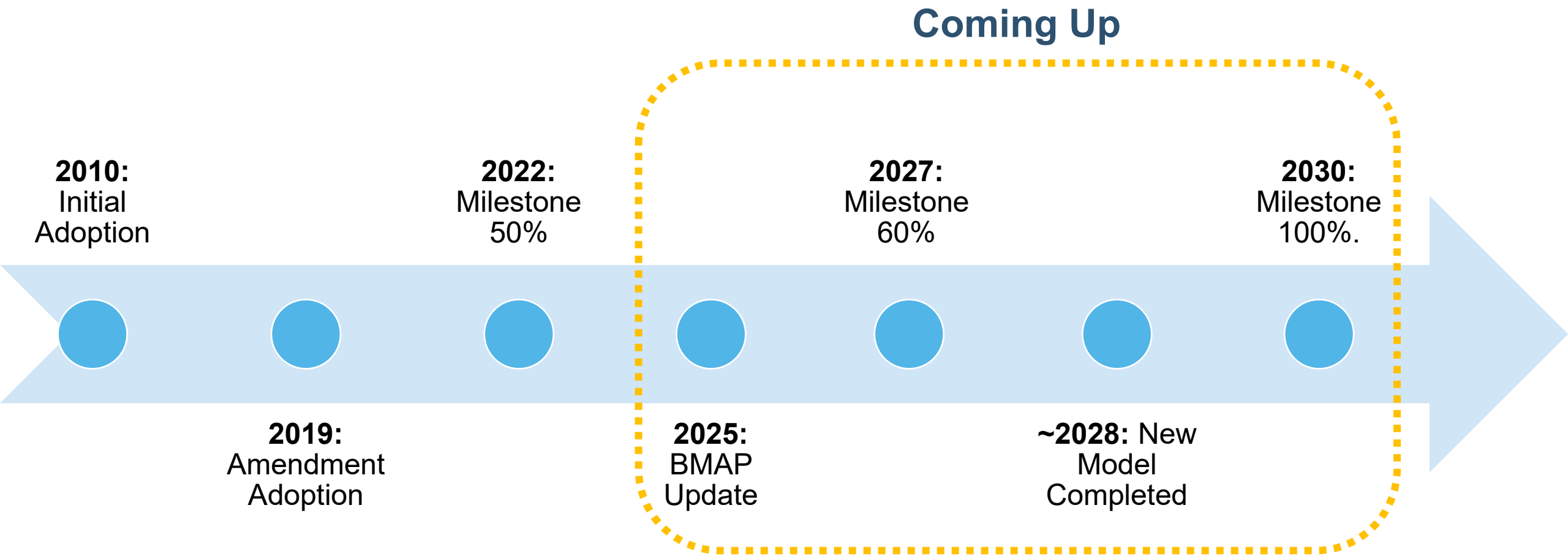
MILESTONES

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



MILESTONES

SECTION 3: CALCULATING AND ALLOCATING LOAD REDUCTIONS

Timeline

- 2027 - 60%
- 2030 - 100%

Entity	2027 60% Milestone TN (lbs/yr)	2027 60% Milestone TP (lbs/yr)	2030 100% Milestone TN (lbs/yr)	2030 100% Milestone TP (lbs/yr)
Agriculture	4,457	936	7,428	1,560
City of Altamonte Springs	35	4	58	6
City of Casselberry	1,774	328	2,956	547
City of Lake Mary	601	108	1,002	180
City of Longwood	672	109	1,120	181
City of Maitland	388	82	646	137
City of Orlando	34	8	57	14
City of Oviedo	2,823	621	4,705	1,035
City of Sanford	2,578	798	4,297	1,330
City of Winter Park	559	103	932	171
City of Winter Springs	5,325	996	8,875	1,660
DOT District 5	563	134	938	223
Orange County	442	42	736	70
Seminole County	11,663	2,096	19,439	3,493
Town of Eatonville	11	3	19	5
Turnpike Enterprise	619	155	1,031	258
Site 10	464	88	774	146
Totals	**33,008**	**6,611**	**55,013**	**11,019**

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 Altamonte Springs	58	50	86%	6	12	200%
City of Casselberry	2,956	1,866	63%	547	691	126%
City of Lake Mary	1,002	593	59%	180	97	54%
City of Longwood	1,120	2,426	217%	181	377	208%
City of Maitland	646	575	89%	137	324	236%
City of Orlando	57	133	233%	14	122	871%
City of Oviedo	4,705	3,108	66%	1,035	575	56%
City of Sanford	4,297	12,916	301%	1,330	2,782	209%
City of Winter Park	932	681	73%	171	317	185%
City of Winter Springs	8,875	5,169	58%	1,660	934	56%
DACS	7,428	9,536	128%	1,560	717	46%
DOT District 5	938	1,979	211%	223	926	415%
Orange County	736	1,002	136%	70	182	260%
Seminole County	19,439	33,901	174%	3,494	4,465	128%
Town of Eatonville	19	1	5%	5	0	0%
Turnpike Authority	1,031	981	95%	258	118	46%
Site 10	774	1,150	149%	146	146	100%
Totals	**55,013**	**76,067**	**138%**	**11,016**	**12,785**	**116%**

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)
Orange	Orange County	1,456	**871**	**1,319**	**2,558**
Orange	Eatonville	307	**153**	**198**	**379**
Orange	Maitland	1,764	**1,055**	**1,317**	**2,537**
Orange	Orlando	2,757	**1,517**	**1,923**	**3,693**
Orange	Winter Park	3,343	**1,999**	**2,755**	**5,327**
Seminole	Seminole County	10,804	**6,875**	**10,931**	**20,644**
Seminole	Altamonte Springs	143	**80**	**123**	**229**
Seminole	Casselberry	1,494	**863**	**1,312**	**2,456**
Seminole	Lake Mary	848	**540**	**1,037**	**1,978**
Seminole	Longwood	961	**611**	**1,098**	**2,087**
Seminole	Oviedo	1,540	**980**	**2,242**	**4,310**
Seminole	Sanford	2,529	**1,398**	**2,157**	**4,030**
Seminole	Winter Springs	3,204	**1,879**	**2,841**	**5,322**

2040 Loading — Basin Totals

Scenario 1 Total	Scenario 2 Total	Scenario 3 Total
18,819	**29,253**	**55,551**

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.

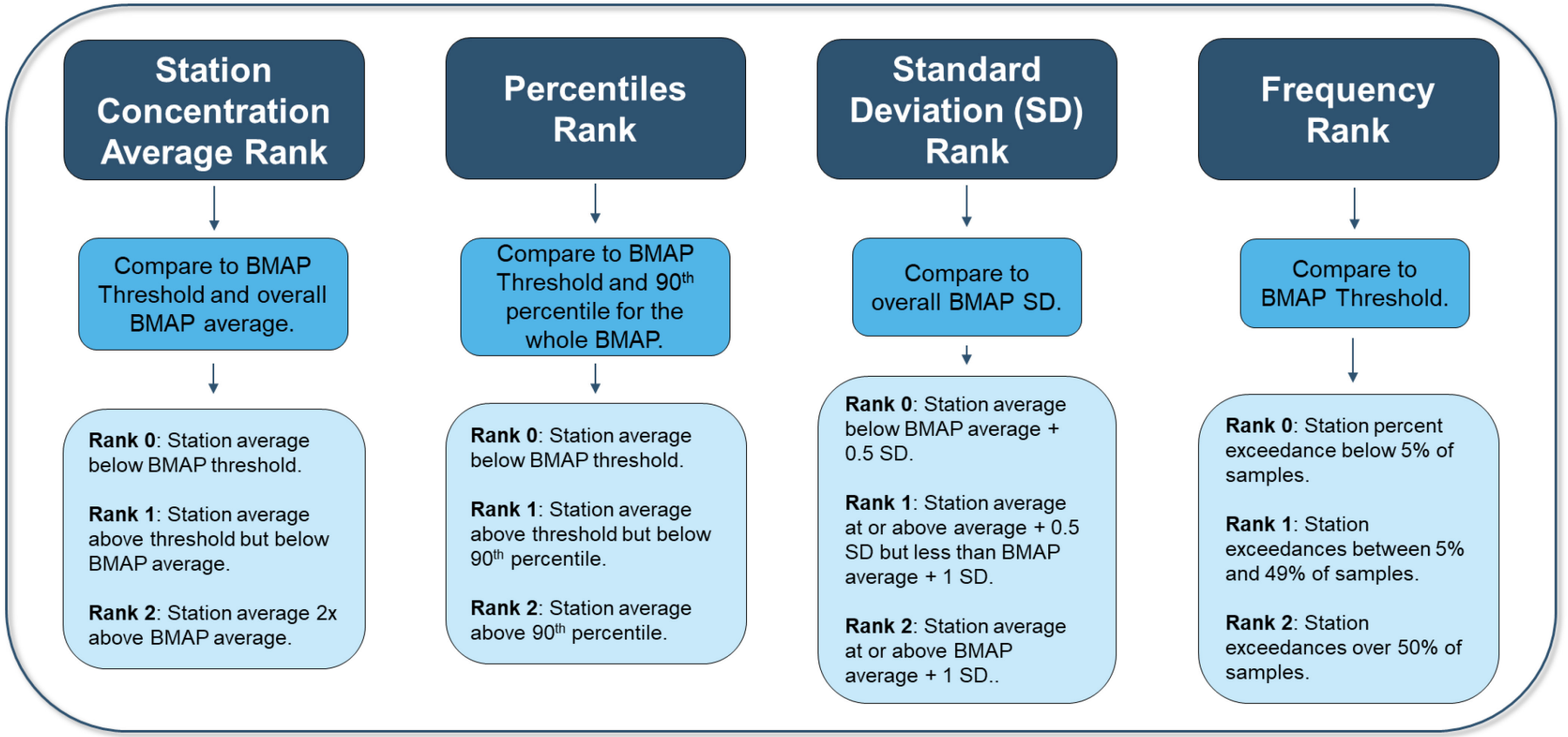
- Hot spot analysis.
  - Tool to better prioritize and focus resources to most efficiently achieve restoration.
  - Not intended to measure progress towards restoration or compliance.

Section 6: Commitment to Plan Implementation

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

HOT SPOT ANALYSIS
SECTION 5: MONITORING STRATEGIES

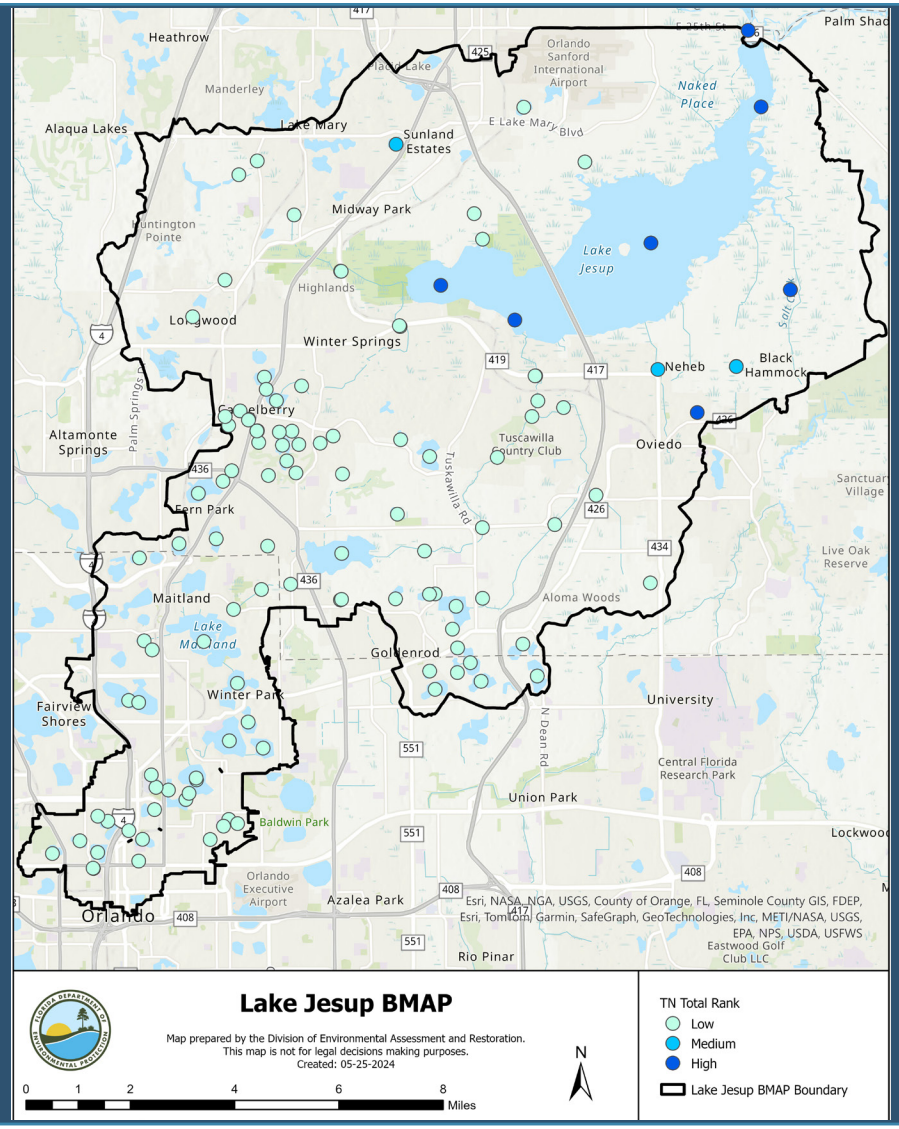
- Uses measured data collected throughout the watershed to evaluate TN and TP concentrations at monitoring stations.
- This process is not intended to be a management strategy under Chapter 403.067, F.S.
- The benchmarks are not intended to measure progress towards restoration; they will only be used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



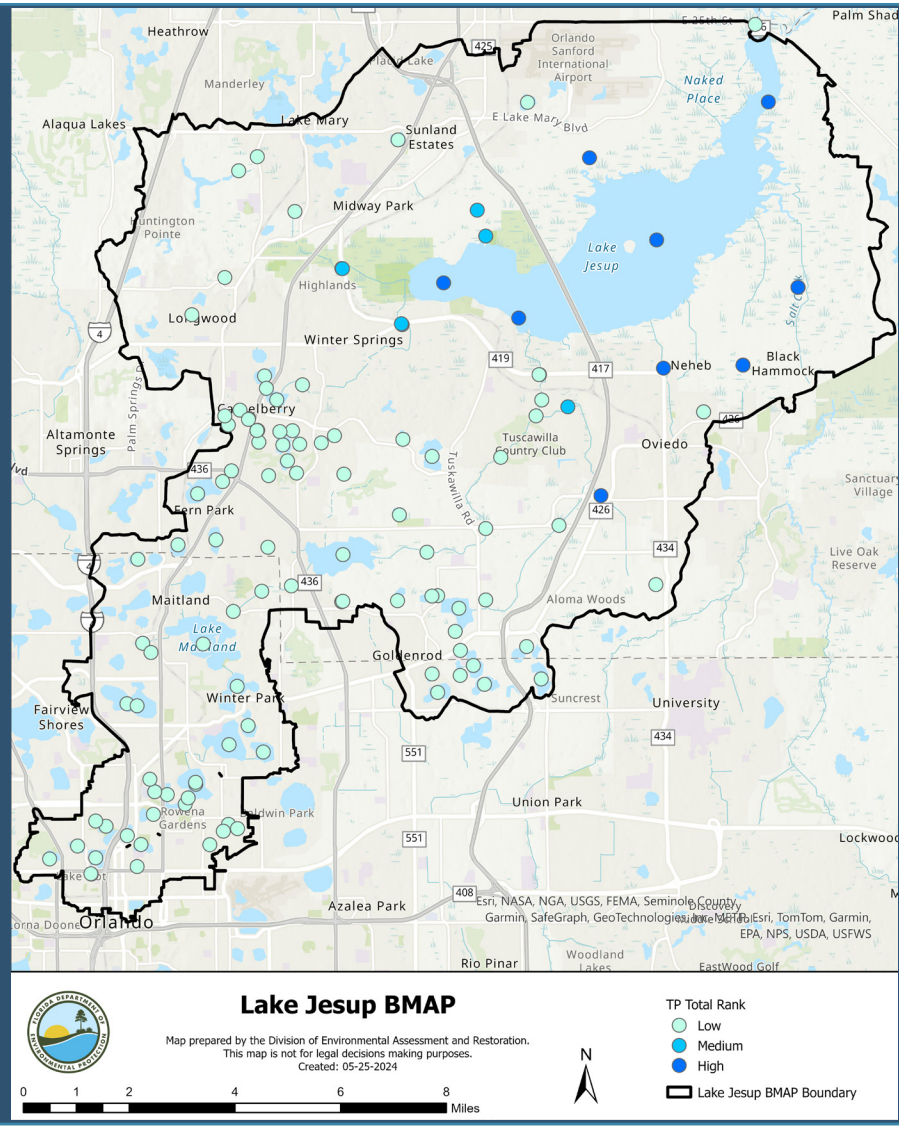
HOT SPOT ANALYSIS

SECTION 5: MONITORING STRATEGIES

TN:



TP:



BMAP UPDATE DOCUMENT

APPENDICES

- **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.

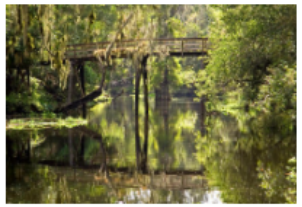
NEXT STEPS

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 Jesup BMAP Coordinator

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

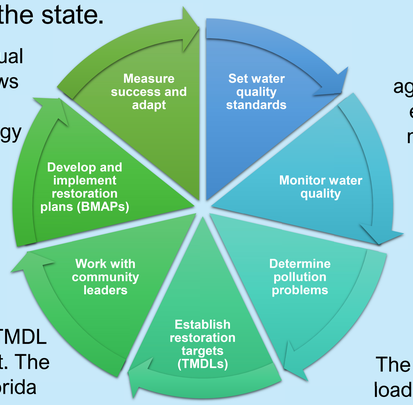
BASIN MANAGEMENT ACTION PLANS (BMAPS)

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:

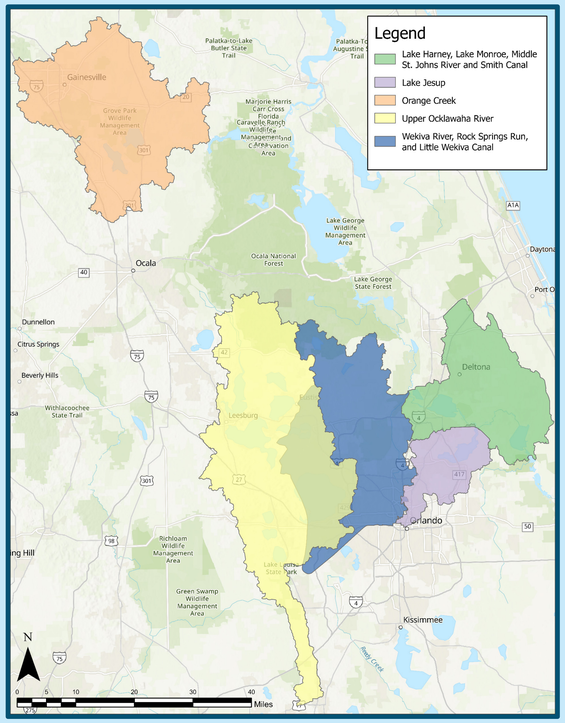
Florida Watershed Restoration Act (Section 403.067, F.S)
- Cooperative implementation of plans to restore our waters, known as BMAPs.

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.

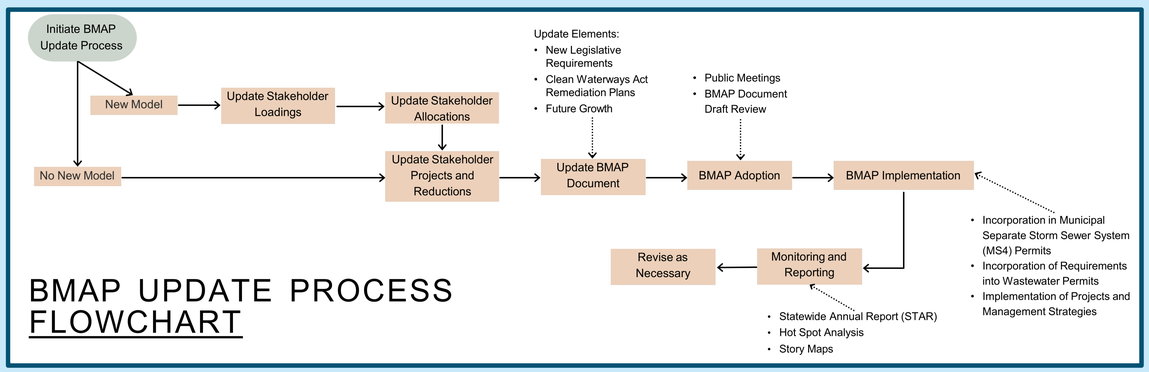
Central Florida Surface Water BMAPs



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.



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Florida Department of Environmental Protection (DEP)
Lake Jesup Basin Management Action Plan (BMAP)
Public Meeting
Seminole County Extension, 250 W. County Home Road, Sanford, Florida
March 26, 2025
10:00 am – 11:31 am EDT

Attendees

Evelyn Becerra, DEP
Kellie Bracht, City of Altamonte Springs
Commissioner Sheena Britton, City of Sanford
Victoria Bruce, City of Winter Springs
Tiffany Busby, Wildwood Consulting
Steve Collins, JMT
Nick Cooper, city of Casselberry
Cammie Dewey, SJRWMD
Dean Dobberfuhl, SJRWMD
Sara Driggers, Wildwood Consulting
Agustin Francisco, FDACS
Fred Gaines, Atkins Realis/Florida Turnpike
Moira Homann, DEP
Robert King, Citizen
Heather Lindell, Orange County
Celeste Lyon, RES
Kim McCue, Seminole County Farm Bureau
Gabrille Milch, Volunteer
Kim Ornberg, Seminole County
Josh Papacek, SJRWMD
Joe Parish, Seminole County
Robert Potts, Geosyntec
Raulie Raulerson, Florida Farm Bureau
Shannon Salvotori, SJRWMD
Karen Snyder, RES for FDOT D5
Victoria Steinecker, Carollo Engineers
Toriahre Thornes, Citizen
Kimberley Tracy, Maitland
Max Wallace, Drummond Carpenter
Ken Weaver, DEP
Shannon Wetzel, Seminole County
Michael Wirsing, Seminole County
Jack Wyatt, Carollo Engineers

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): Did you say that the Statewide Annual Report (STAR) isn't working?

Answer (A): No, we said that the DEP BMAP Project Portal opens and then closes each year; right now, the portal is close for editing, pending production of the annual report.

Q: Can you define "sufficient projects"? What qualifies as a sufficient list of projects—is it the number of projects lists (i.e., five, 10)?
A: Entities need to submit enough projects whose estimated reductions equal or exceed their assigned load reductions. There is not a required count – the requirement is based on the estimated load reduction from the list of projects.

Q: Where are we with meeting the required reductions?
A: Once the new St. Johns River (SJR) model is complete, we will know more on the status of the reductions.

Q: Will there be an opportunity to adjust the acres being used for agriculture? We keep losing land from agricultural production to other land uses.
A: Land use will be updated in the new SJR model. The updated land use will also be addressed at that time.

Q: Do the provisions of 2023 House Bill 1379 only apply to new septic systems or will repair permits trigger the requirement for additional nitrogen treatment?
A: Currently, if a septic system can be fixed under the provisions of a repair permit, the property owner will not be required to provide enhanced nitrogen treatment in surface water BMAPs. However, there are some springs BMAPs where some parcels will be required to install a system that achieved 65% nitrogen reduction when a repair permit is necessary.

Q: Can you clarify what the difference is between the requirements for wastewater facilities with rapid rate disposal and those with other disposal types?
A: The allocations are based on the contribution of each wastewater treatment facility (WWTF) to the impairment, the WWTF disposal types for each facility, and the volume being generated (the WWTF capacity). The rapid rate disposal types are generally given more stringent treatment requirements because there is less opportunity for attenuation of the loading before it reaches a surface water. For slow rate disposal types, such as public access reuse, there is more opportunity for soils and plants to uptake the nutrients and to divert them from reaching surface waters.

Q: Does the requirement to submit a nutrient management plan (NMP) apply to both public and private golf courses?
A: Yes.

Q: Where is the Sports Turfgrass Best Management Practices (BMP) information located?

A: The BMP Manual is currently under development and is expected to be completed in 2025.

Q: Are other kinds of sports facilities—such as soccer fields at parks--also required to submit NMPs?
A: No, public golf courses have the requirement to obtain the superintendent certification and all golf courses must submit an NMP.

Q: Would the requirements for sports turfgrass facilities include county school board facilities?
A: Yes.

Q: Are the BMAP loading updates going to occur every 10 years?
A: Florida Statutes require the BMAPs to be updated every five years. However, the loading update schedule is not fixed

Q: How have the atmospheric deposition levels benefited from electric vehicles?
A: The nitrogen atmospheric deposition reductions referenced in the presentation include the benefits from the use of electric vehicles and other combustion sources. We do not have a separate account of the benefits from each source type, although the DEP Air Program may have more details about those. We will work closely with the DEP Division of Air to incorporate their available data moving forward.

Q: Will the future growth table be incorporated into allocations for this update?
A: No, the future growth data is intended for use with planning. More refinements to the future growth estimates is planned and feedback is welcome on both the approach and on additional data sources that could be used.

Q: Do the future growth loading numbers represent total loading or just the additional loading predictions?
A: The future growth loads represent only the additional loading predicted from the population growth.

Q: Can future growth prediction information be provided by individual entities? Some predictions may not include all conservation lands.
A: We believe that most conservation lands were accounted for in the future growth calculations. For the next iteration of the BMAP, we will consider more local feedback on additional conservation areas and growth limitations such as density restrictions.

Q: Will the Florida Statewide Agricultural Irrigation Demand (FSAID) (FDACS data) be used to estimate agricultural land uses in the BMAP update when the SJR model comes out?

A: The FSAID data on specific agricultural land uses will not be used in the initial model that characterize the whole river. For this purpose, the land uses are compressed into a small number of land use types because of the scale of the model. When the modeling process moves to the more detailed modeling at the BMAP-level, then the land use information will also become more detailed. At this stage, DEP intends for the modelers to use the FSAID as one of the land use data sources.

Q: The model update timing is less than ideal – can this process be accelerated so we do not have two sets of loading numbers?

A: To model such a large river system is an extensive effort that requires enough time to complete the process. We hope we can update the BMAP shortly after the model results are available.

Q: Is the 2009 land use data what is currently being used? Is there a statutory deadline for the model updates?

A: Yes, the 2009 land use data were used for the current loading estimates. There is no statutory timeline for model updates.

Q: We have updated watershed studies in Seminole County, are you accounting for that information in the new models?

A: We are working to get as much detail as possible into the models. The modeling team meets once a month with the agency modelers. We also had a public meeting in 2024 to kick off the modeling process. There have not been any additional public stakeholder meetings yet. If you are interested in participating in the technical process of reviewing the model, Tiffany Busby will take your information and add you to the technical modeling update list.

Q: Are there any funding opportunities for upgrades for entities?

A: The 2024/2025 grant awards were just released. You can go to protectingfloridatogether.gov to apply for future grants; Governor DeSantis just announced additional grant opportunities. The grant portal for nonpoint source grants is open until March 31, 2025.

Q: Based on the 2022 water quality enhancement legislation, is that a component that might be considered for project implementation?

A: The water quality enhancement areas require rulemaking to be implemented. DEP is planning public meetings for this rulemaking in the May 2025 timeframe.

Q: The original assessments on the lake had additional monitoring stations, but now we have hot spots which are not represented by the current monitoring network. How can we ensure that the monitoring network is adequate and the modeling has the right data?

A: It is anticipated that the modeling will consider more stations and data than the stations identified for the BMAP monitoring network. If the modeling process identifies data gaps, we can consider additional monitoring to address those gaps.

Comments

Verbal Comment: A few areas for correction in the draft BMAP document were addressed:

1. Acronyms – "Nutrient management plan (NMP)" is not in the list.
2. Section 1.4 references Upper Ocklawaha instead of Lake Jesup.
3. The estimated future growth table in the draft document is slightly different than the one in the presentation.

Verbal Comment: There have been concerns about the requirements for existing OSTDS and the enhancement requirements in springs areas. Instead of upgrading their OSTDS when the need a repair permit, some homeowners are refusing to repair their OSTDS and not correcting the problems.

No written comments were submitted during the meeting.

Adjournment

The meeting ended at 11:31 am EDT.