Orange Creek Basin Management Action Plan (BMAP)
Update Meeting

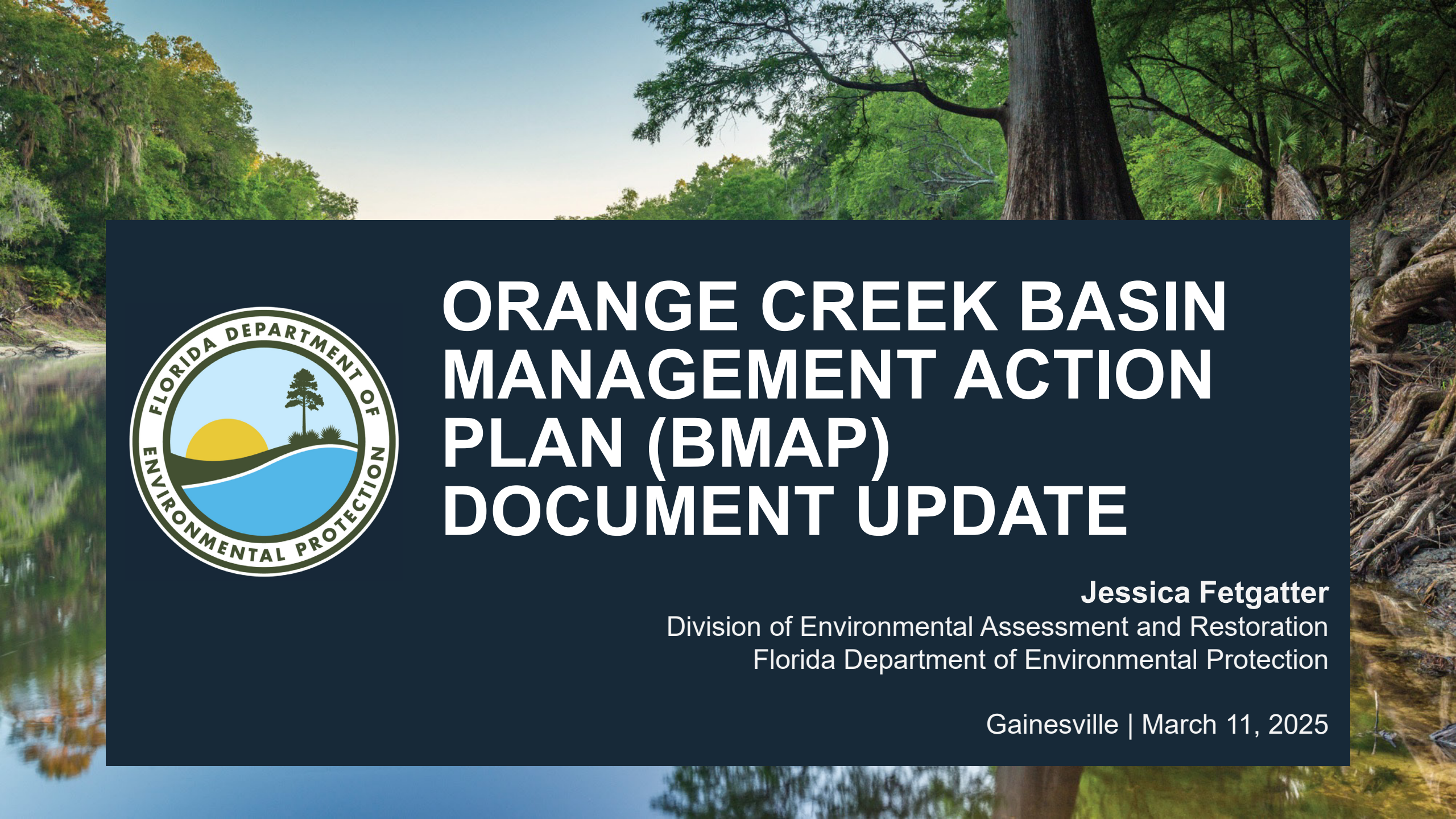
Gainesville Regional Utilities Administration Building
Multipurpose Room
301 SE 4th Ave.
Gainesville, FL 32601

March 11, 2025
1:00 PM EDT

Agenda

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

Please note the site for documents pertaining to the Orange Creek BMAP: BMAP Public Meetings | Florida Department of Environmental Protection
For more information on the Orange Creek BMAP, contact: Jessica Fetgatter, 850-245-8107.
Jessica.Fetgatter@FloridaDEP.gov



ORANGE CREEK BASIN MANAGEMENT ACTION PLAN (BMAP) DOCUMENT UPDATE

Jessica Fetgatter
Division of Environmental Assessment and Restoration
Florida Department of Environmental Protection

Gainesville | March 11, 2025

AGENDA

- Basin Management Action Plan (BMAP) Background.
- Document Update 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.

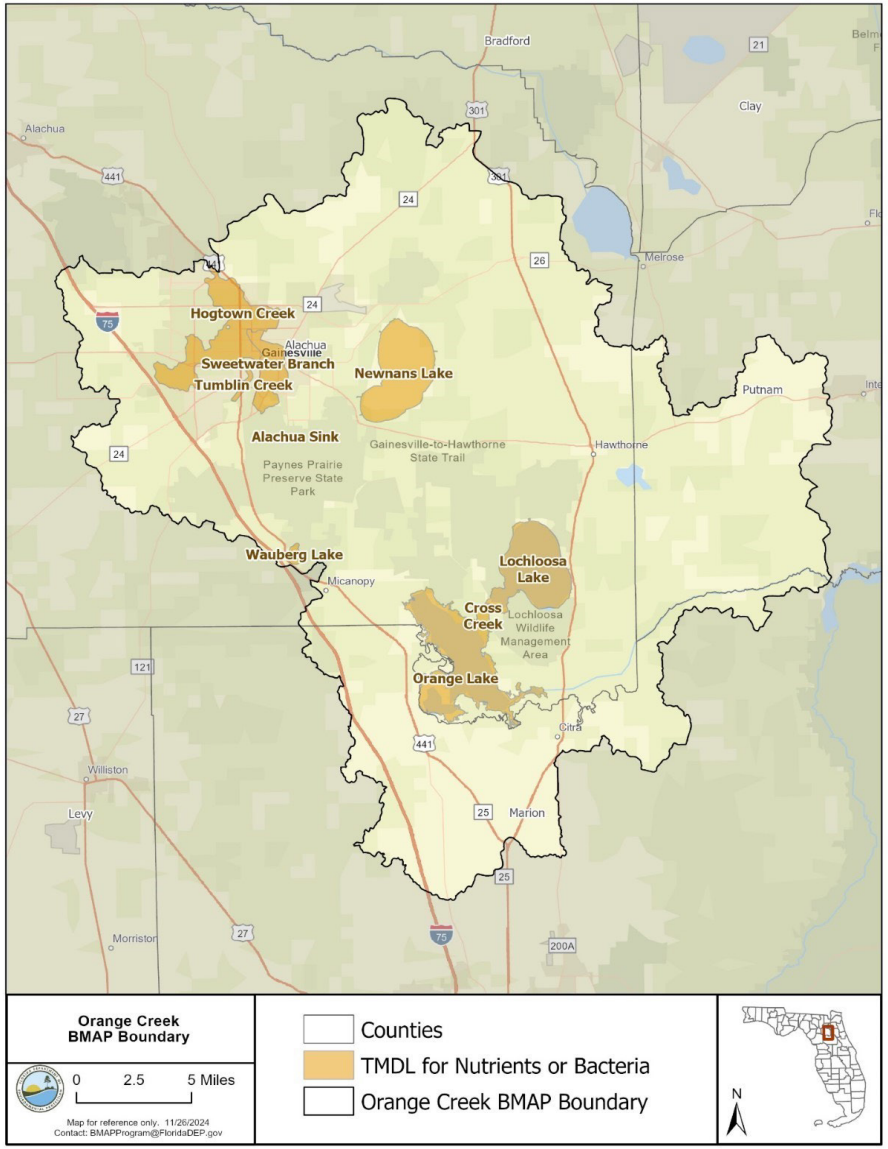
Projects to meet the TMDL:

- 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



Orange Creek BMAP:

- 2008: Initial adoption.
- 2014: Phase 2.
- 2019: Amendment adoption.
- 2025: BMAP update.

Orange Creek Target Concentrations		
Waterbody	Total Phosphorus (TP) (mg/L)	Total Nitrogen (TN) (mg/L)
Alachua Sink		None
Lochloosa	0.0552	1.152
Newnans	0.062	0.97
Orange	0.031	
Wauberg	0.056	1.01

BACKGROUND
ORANGE CREEK BMAP STAKEHOLDERS

Type of Organization/Entity	Name
Responsible Entities	Alachua County Marion County Putnam County City of Gainesville City of Hawthorne Town of McIntosh Town of Micanopy Town of Reddick City of Waldo Gainesville Regional Utilities Agriculture Wastewater Treatment Facilities
Responsible Agencies	County Health Departments Florida Department of Agriculture and Consumer Services (DACS) Florida Department of Environmental Protection (DEP) Florida Department of Transportation (DOT), Districts 2 & 5 Florida Fish and Wildlife Conservation Commission St. Johns River Water Management District University of Florida

Type of Organization/Entity	Name
Other Interested Stakeholders	Florida Forestry Association Rayonier Inc. Weyerhaeuser Company Suwannee-St. Johns Group Sierra Club Applied Technology and Management Environmental Consulting and Technology DB Environmental Pegasus Engineering AMEC Foster Wheeler Jones Edmunds Sierra Club

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: Jonathan Hunt


Source: DEP


Source: DEP

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

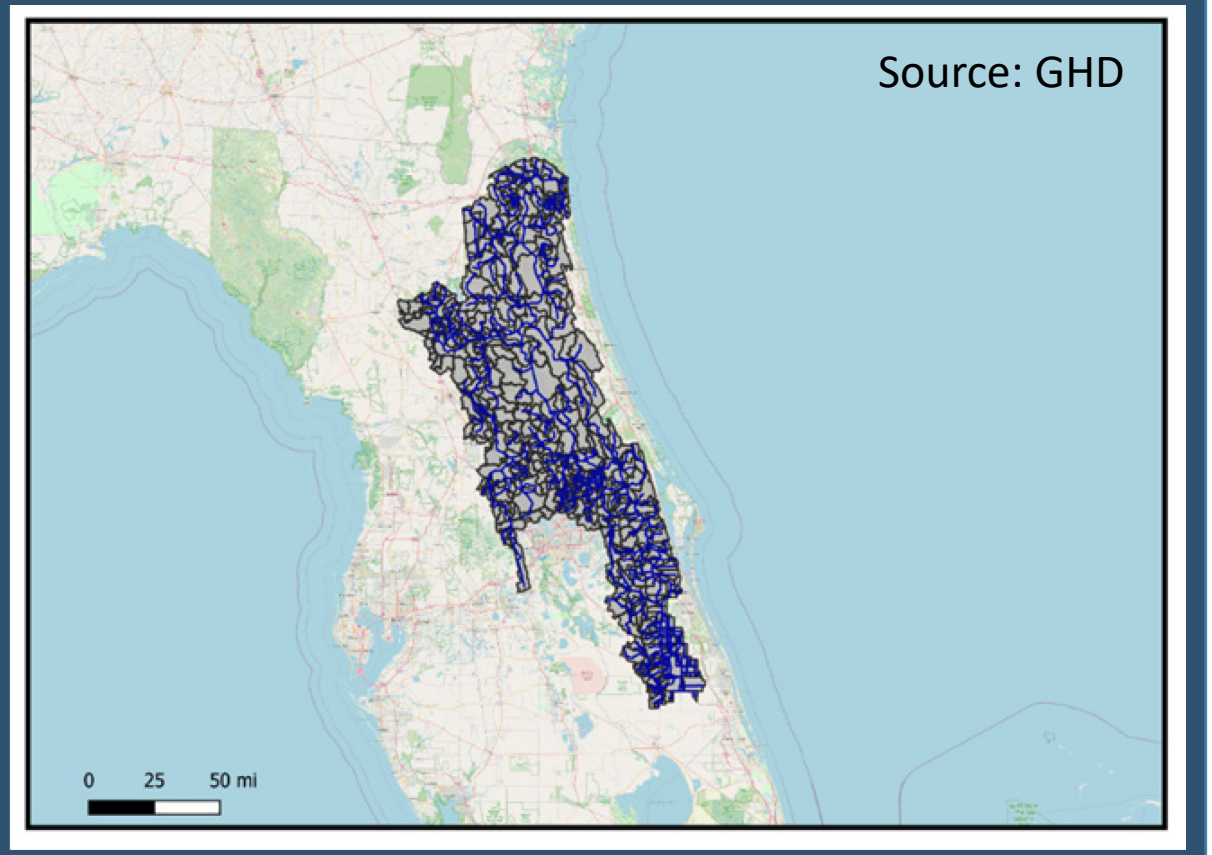
- Review of the 2008 and 2014 BMAP, and 2019 BMAP Amendment.
- Modeling from the previous adopted documents will remain the same.
- Loading estimates and allocations of load reduction to the responsible stakeholders detailed in the 2019 Amendment will remain in effect.
- **NEW**: Discussion on upcoming St. Johns River Basin Model.

ST JOHNS RIVER MODELING

SECTION 2: MODELING

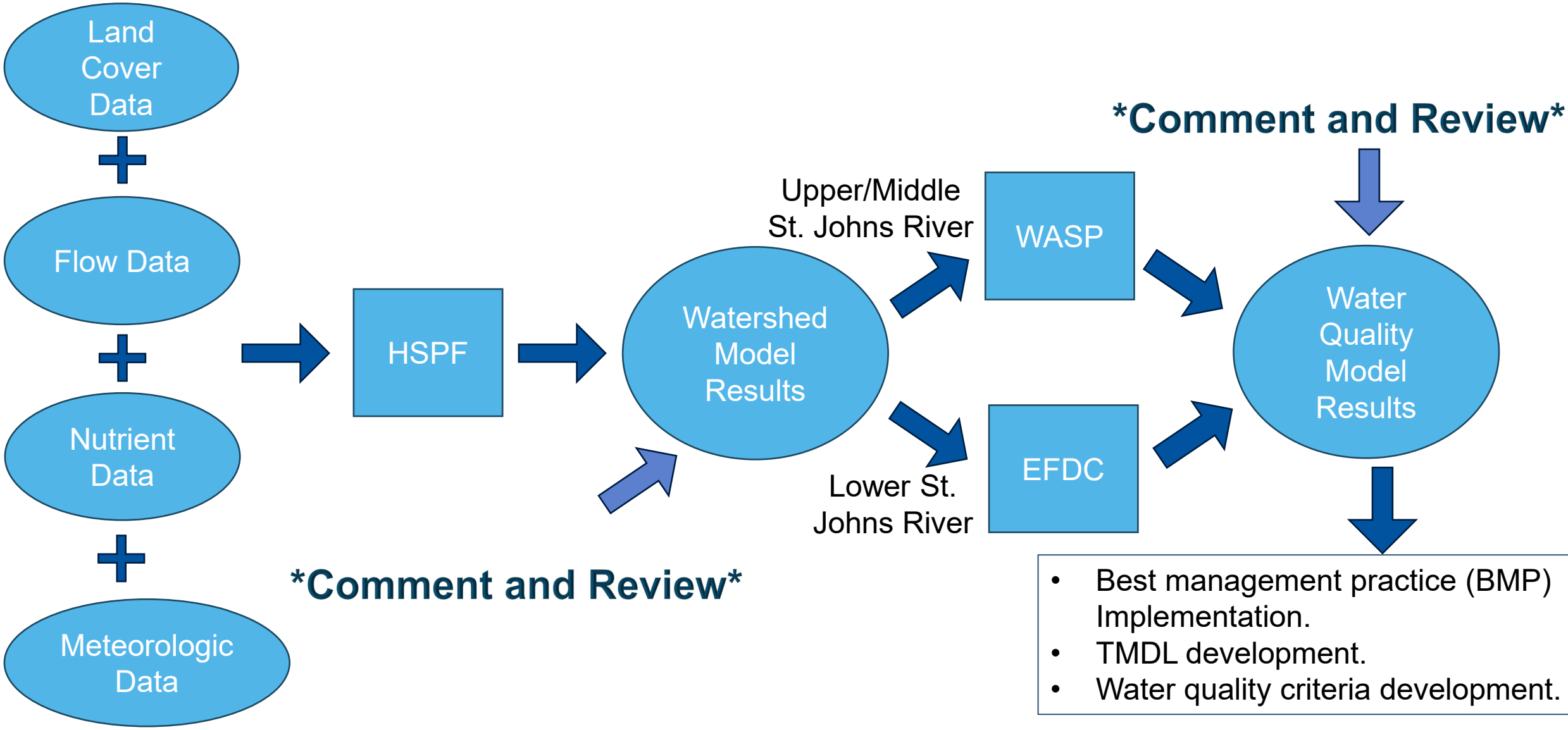
Modeling Updates Underway.

- 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



MODEL UPDATE SCHEDULE

SECTION 2: MODELING

April 2024:
Modeling Document/Quality Assessment (QA) 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.
- **NEW: 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.

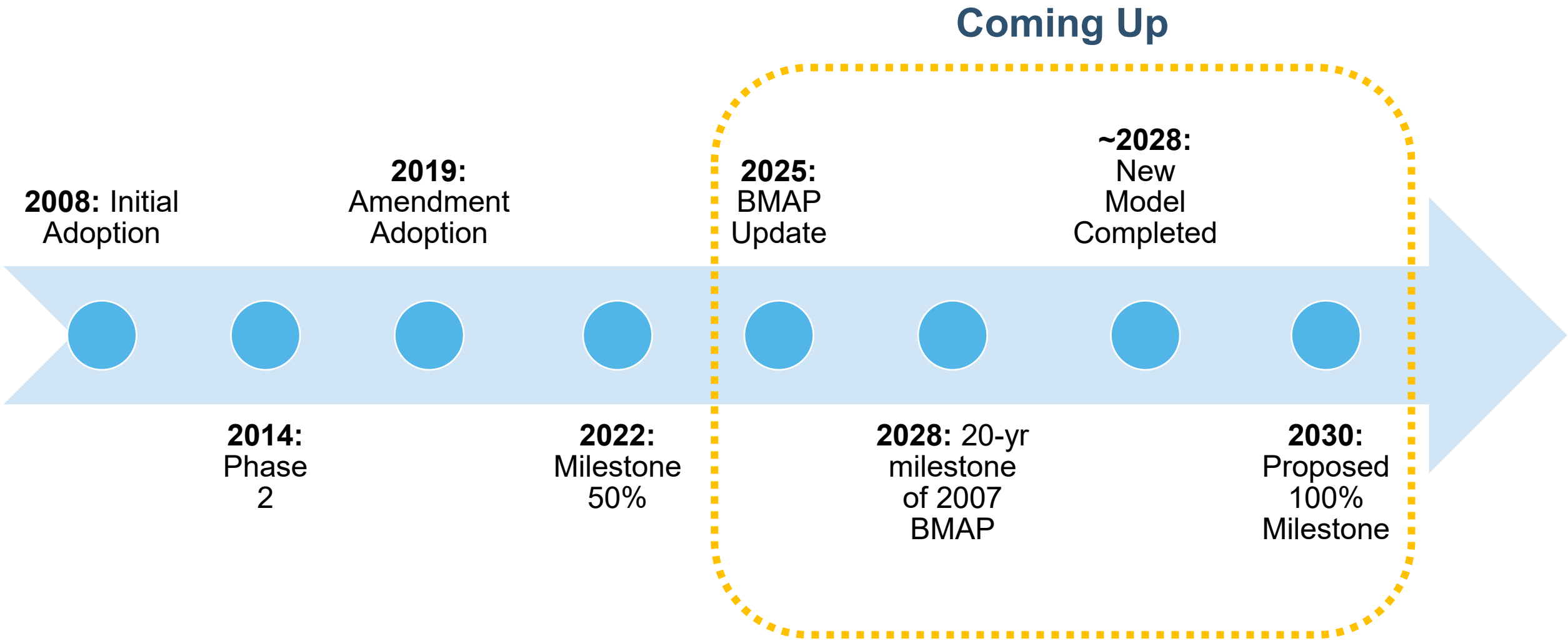
MILESTONES

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 5-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

- 2030- 100%

Waterbody	Entities	2030: 100% Milestone	
		TP (lbs/yr)	TN (lbs/yr)
Newnans Lake	Alachua County	663	5,603
	Gainesville	477	4207
	DOT, District 2	93	878
	Waldo	27	239
	Agriculture	437	2,989
Lochloosa Lake	Alachua County	411	4,055
	DOT, District 2	321	3,674
	Hawthorne	156	1,902
	Agriculture	1,339	16,265
Orange Lake	Alachua County	98	
	DOT, District 2	15	
	DOT, District 5	99	
	Marion County	439	
	McIntosh	71	
	Micanopy	31	
	Reddick	12	
Lake Wauburg		34	2,002
Alachua Sink			206,135

lbs/yr = pounds/year

PROGRESS: NEWNANS LAKE

SECTION 3: CALCULATING AND ALLOCATING LOAD REDUCTIONS

Entity	TN Full Required Reduction (lbs/yr)	TN Completed and Ongoing Project Credits (lbs/yr)	% of TN Reductions Achieved	TP Full Required Reduction (lbs/yr)	TP Completed and Ongoing Project Credits (lbs/yr)	% of TP Reductions Achieved
Alachua County	5,603	415	7%	663	96	14%
Gainesville	4,207	3,216	77%	477	5,887	100%
DOT, District 2	878	3,456	100%	93	529	100%
Waldo	239	10	4%	27	1	4%
Agriculture	2,989	121	4%	437	11	3%

PROGRESS: ORANGE LAKE

SECTION 3: CALCULATING AND ALLOCATING LOAD REDUCTIONS

Entity	TP Full Required Reduction (lbs/yr)	TP Completed and Ongoing Project Credits (lbs/yr)	% of TP Reductions Achieved
Alachua County	98	4	4%
DOT, District 2	15	55	100%
DOT District 5	99	2,935	100%
Marion County	439	32	7%
McIntosh	71	1	1%
Micanopy	31	2	6%
Reddick	12	1	8%
Agriculture	3,431	1,032	30%

PROGRESS: LOCHLOOSA LAKE

SECTION 3: CALCULATING AND ALLOCATING LOAD REDUCTIONS

Entity	TN Full Required Reduction (lbs/yr)	TN Completed and Ongoing Project Credits (lbs/yr)	% of TN Reductions Achieved	TP Full Required Reduction (lbs/yr)	TP Completed and Ongoing Project Credits (lbs/yr)	% of TP Reductions Achieved
Alachua County	4,055	335	8%	411	46	11%
DOT, District 2	3,674	4,962	100%	321	822	100%
Hawthorne	1,902	105	6%	156	12	8%
Agriculture	16,265	3327	20%	1,339	923	69%

PROGRESS: ALACHUA SINK AND LAKE WAUBERG

SECTION 3: CALCULATING AND ALLOCATING LOAD REDUCTIONS

Entity	TN Full Required Reduction (lbs/yr)	TN Completed and Ongoing Project Credits (lbs/yr)	% of TN Reductions Achieved	TP Full Required Reduction (lbs/yr)	TP Completed and Ongoing Project Credits (lbs/yr)	% of TP Reductions Achieved
Lake Wauberg	2002	167	8%	374	34	9%
Alachua Sink	206,135	75,616	37%	-	-	-

BMAP UPDATE DOCUMENT

Section 4: Management Actions

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

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

- **NEW**: 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 (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, or if unavailable, 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 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.
NA = not applicable

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.

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 and design criteria.
  - Applicants must demonstrate through calculations or modeling that the future stormwater management systems would provide additional treatment to meet new Environmental Resource Permits stormwater treatment performance standards for an 80% percent reduction for TP and 55% percent reduction TN, 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 must 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 (BEBR) 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 (FLWMI) 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 (EMCs) and runoff coefficients (ROCs).
- 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.**
- 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.**
- 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.**
- Remainder of new population has **conventional OSTDS.**
- **17% of undeveloped land** converted to low density development

FUTURE GROWTH ANALYSIS

TN

Entity	2040 People	Scenario 1 TN (lbs/yr)	Scenario 2 TN (lbs/yr)	Scenario 3 TN (lbs/yr)
Alachua County	11638	**6,650**	**9,703**	**19,228**
Gainesville	2942	**1,625**	**1,745**	**3,445**
Hawthorne	418	**239**	**290**	**574**
Micanopy	53	**30**	**82**	**163**
Waldo	58	**33**	**40**	**79**
Marion County	7398	**4,209**	**10,400**	**20,715**
McIntosh	61	**35**	**94**	**187**
Reddick	109	**62**	**168**	**334**
Putnam County	281	**195**	**592**	**1,129**

2040 Loading - Basin Totals

Scenario 1 Total	Scenario 2 Total	Scenario 3 Total
13,079	**23,113**	**45,851**

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

FUTURE GROWTH ANALYSIS

TP

Entity	2040 People	Scenario 1 TP (lbs/yr)	Scenario 2 TP (lbs/yr)	Scenario 3 TP (lbs/yr)
Alachua County	11638	**2,104**	**2,884**	**5,464**
Gainesville	2942	**518**	**559**	**1,418**
Hawthorne	418	**76**	**90**	**200**
Micanopy	53	**10**	**22**	**23**
Waldo	58	**11**	**12**	**28**
Marion County	7398	**1,331**	**2,839**	**3,195**
McIntosh	61	**11**	**25**	**26**
Reddick	109	**20**	**45**	**46**
Putnam County	281	**63**	**173**	**222**

2040 Loading - Basin Totals

Scenario 1 Total	Scenario 2 Total	Scenario 3 Total
4,143	**6,650**	**10,622**

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

BMAP UPDATE DOCUMENT

Section 5: Monitoring Strategies

- Review of monitoring network.

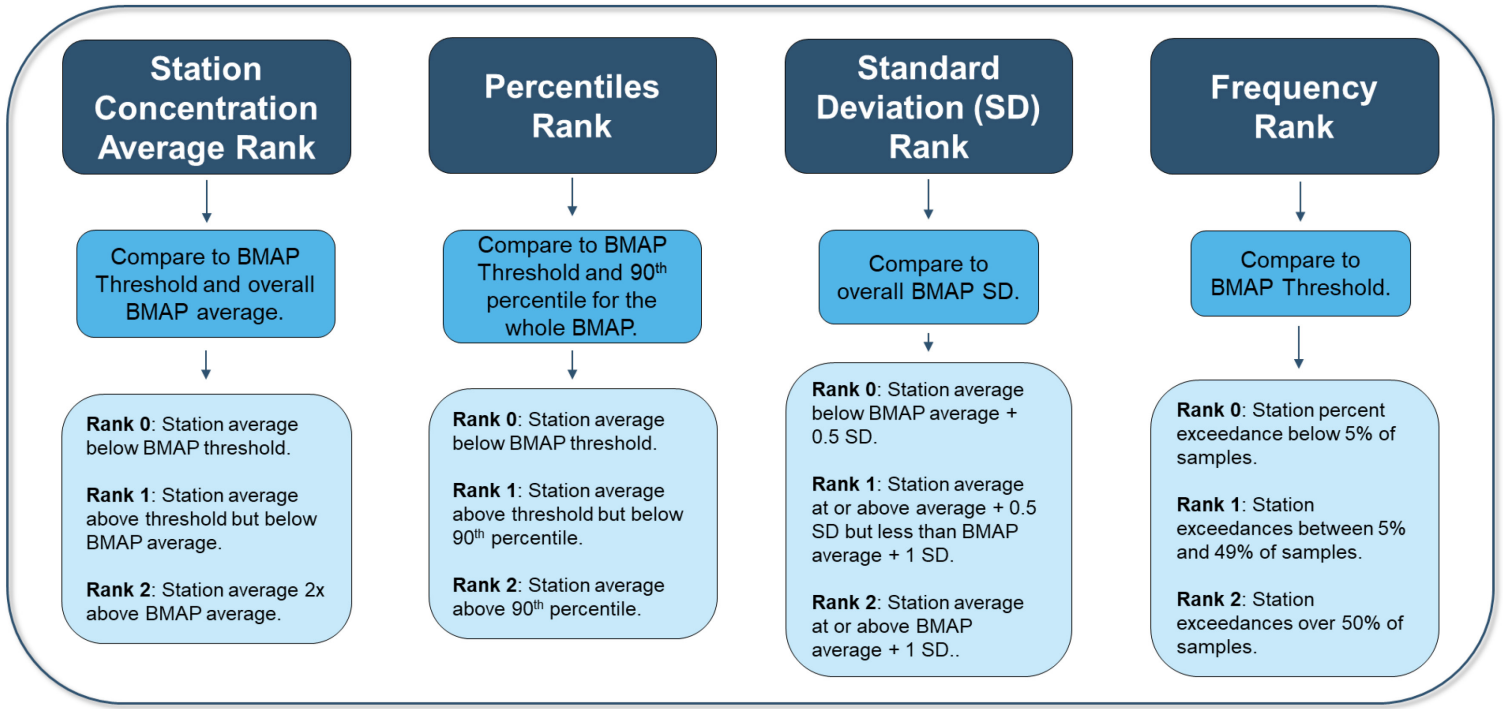
- **NEW**: Hot spot analysis.
  - Tool to better prioritize and focus resources to most efficiently achieve restoration.
  - Not intended to measure progress towards restoration or compliance.

Section 6: Commitment to Plan Implementation

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

HOT SPOT ANALYSIS
SECTION 5: MONITORING STRATEGIES

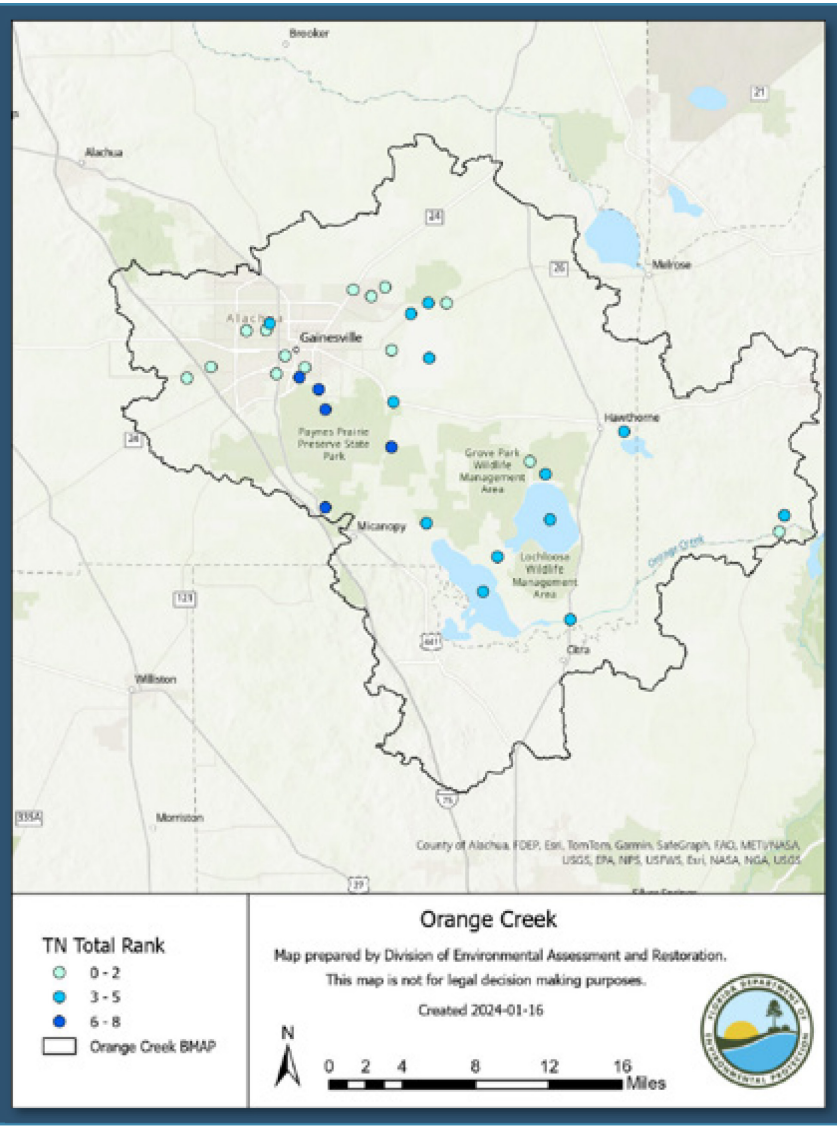
- Uses measured data collected throughout the watershed to evaluate TN and TP concentrations at monitoring stations.
- This process is not intended to be a management strategy under Chapter 403.067, F.S.
- The benchmarks are not intended to measure progress towards restoration; they will only be used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



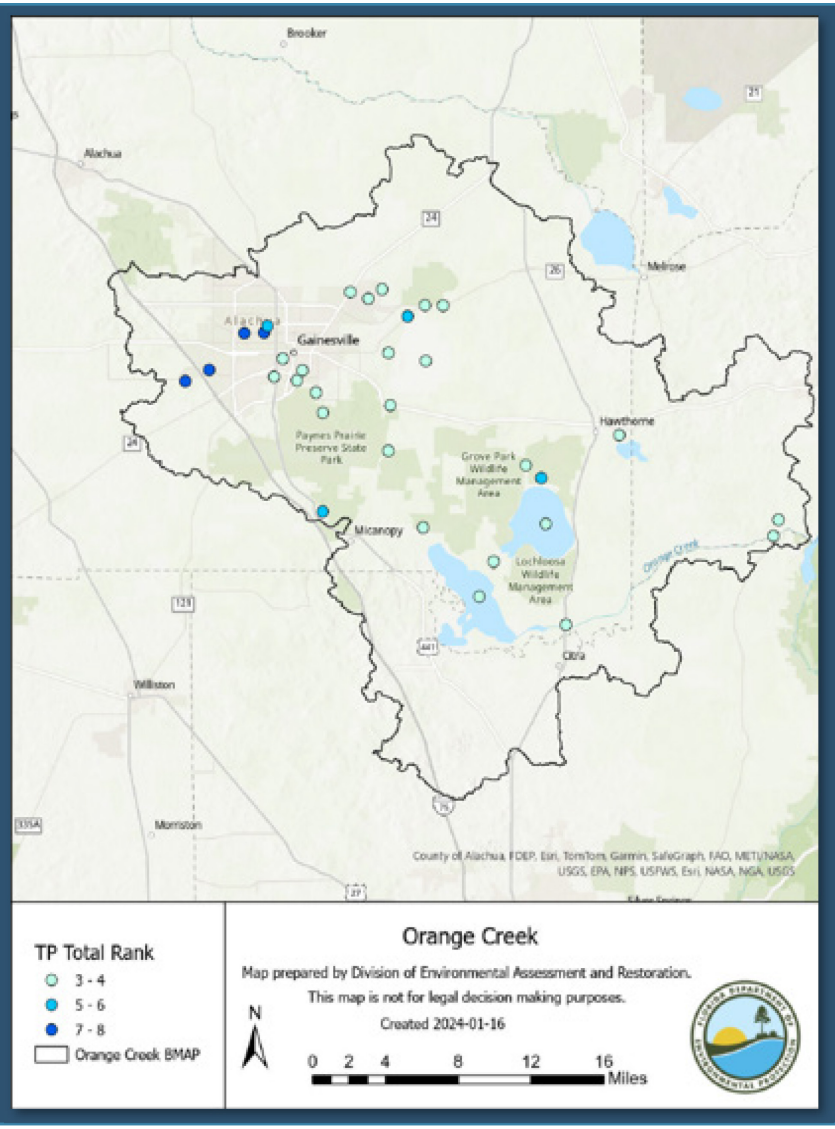
HOT SPOT ANALYSIS

SECTION 5: MONITORING STRATEGIES

TN:



TP:



BMAP UPDATE DOCUMENT

APPENDICES

- **NEW: 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
- **NEW:** Golf Course Nutrient Management Plans
- **Updated:** Agricultural Enrollment and Reductions (provided by DACS)

NEXT STEPS

BMAP update document draft review:

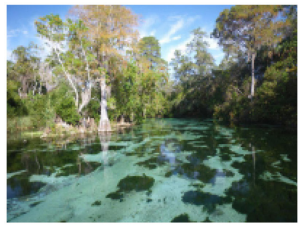
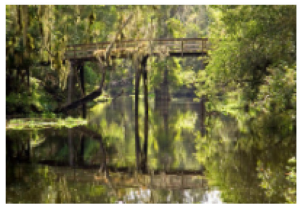
- Draft document sent out via GovDelivery **March 4, 2025**.
- Stakeholder review comments due **March 25, 2025**.

Submit comments to:
Jessica.Fetgatter@FloridaDEP.gov

UPCOMING SCHEDULE

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

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]

THANK YOU

Jessica Fetgatter
BMAP Coordinator

Contact Information:
850-245-8107
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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.

Florida Department of Environmental Protection (DEP)
Orange Creek Basin Management Action Plan (BMAP) Public Meeting
Gainesville Regional Utilities Administration Building
Multipurpose Room, 301 SE 4th Ave., Gainesville, FL 32601
March 11, 2025

1:00 pm – 11:20 pm

Attendees

Sally Adkins, City of Gainesville
Daniel Ammann, GRU
Suzanne Baird, ECT
Vanessa Bauza, FDACS
Leslie Burges, Geosyntec
Tiffany Busby, Wildwood Consulting
Jian Di, SJRWMD
Douglas Dycus, FDOT
Jessica Fetgatter, DEP
Amy Goodden, Wetland Solutions, Inc.
Stacie Greco, ACEPD
Jim Gross, FL Defenders of the Environment
Janet Hearn, Citizen
Robin Holland, FL Forest Service
Moira Homann, DEP
Steven Hooley, FWC
Rick Hutton, GRU
Natalia Larsen, GRU
Lori McCloud, SJRWMD
Jim Myles, DB Environmental
Gregory Owen, ACEPD
Lindsey Pavao, ACEPD
Jim Peterson, SJRWMD
Steve Robitaille, FL Defenders of the Environment
Kristen Sealey, GRU
Mary Szoka, Alachua County
Efrain Tavarez, Alachua County
Ken Weaver, DEP
Shane Williams, City of Gainesville

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 March 25, 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 March 25, 2025.

Questions and Answers

Question (Q): Do the estimated loads from agriculture include silviculture land uses?
Answer (A): No, agricultural loads are separated from silvicultural loads in the loading estimates and assignments. Furthermore, the best management practice (BMP) enrollment programs within the Florida Department of Agriculture and Consumer Services (FDACS) for silviculture (as well

as aquaculture) is located in a different program than the BMP Program for other crops and animal production operations.

Q: How many Florida impaired waterbodies are in BMAP areas? How many are meeting water quality standards?
A: The statewide assessment statistics are not part of this presentation. The Orange Creek BMAP focuses on the nutrient impairments in the Orange Creek Basin. The BMAP needs full implementation to restore these specific waterbodies to meet the water quality standards for nutrients.

Q: How will the internal recycling of nutrients in the lakes be addressed?
A: The new model will provide additional information about the effects of the internal loads in the lakes. In the current loading estimates, the internal loads are not fully considered.

Q: When you look at the 5-year milestones, they look difficult to achieve. What kinds of projects are allowed?
A: Please contact DEP for a specific discussion on your entity's plan for compliance. Each entity is required to show how they will meet their next milestone. There are materials posted online and available that describe the various efforts that are eligible for reduction credits—it is a long list.

Q: Will the total maximum daily loads (TMDLs) change with the updated model?
A: No, the TMDLs set the assimilative capacity of the lakes, which is not expected to change over time. The updated models are used to revise the current loading estimates and how much we need to reduce the current loads to meet the assimilative capacity of the lakes.

Q: Will information be provided on the methods used in the updated model?
A: Yes, there was a public meeting in March 2024 to kick off the effort and to provide preliminary information about the scope of work. Notifications about model updates will be sent through the DEP GovDelivery system. You can manage your subscriptions for DEP GovDelivery notices here: https://floridadep.gov/dear/dear/content/subscribe. There will be periodic updates as the modeling effort progresses. If you would like to receive notifications of occasional highly technical modeling discussions about the model's specific attributes, contact Jessica Fetgatter at DEP to be added to the technical email list for the St. Johns River Model.

Q: Will the new model be calibrated?
A: Yes.

Q: Will sediment samples from the lakes in the Orange Creek Basin be collected to provide information on sediment flux for the revised St. Johns River Model?

A: DEP is coordinating with the St. Johns River Water Management District to collect extra samples with spatial diversity to provide more sediment flux data for the model update.

Q: How will the allocations work for Lake Wauberg and Alachua Sink since there are not loading models for those areas?
A: We do not have the load estimates to assign entity allocations right now, but DEP still requires projects to address the loads to Lake Wauberg and Alachua Sink.

Q: How do we know who needs to do what in the Lake Wauberg and Alachua Sink basins?
A: DEP recommends that the lead entities in these basins coordinate their efforts and work together on load reductions. DEP has a list of entities who have jurisdictions in those basins if you need help with identifying those organizations. This is not a new situation that we have not had entity allocations in those areas and the BMAP requirements still apply.

Q: For Lake Wauberg, has DEP engaged with the University of Florida and the state park, both of which have important recreational facilities in the basin?
A: There has been engagement with these entities in the past, but staff changes at these institutions have made recent communications difficult. DEP would appreciate help with identifying the appropriate contacts.

Q: Are the University of Florida and the state park on the list of responsible entities for the Lake Wauberg Basin?
A: DEP will try to engage all the responsible entities prior to completion of the model update and the related new allocations.

Q: Can reduction assignments go down?
A: Yes, they can go down or up when new starting loads are estimated.

Q: How were the downstream effects handled and the benefits downstream from projects upstream?
A: The allocations were shared among the entities contributing to the applicable basin.

Q: You say this is an adaptive process and new starting loads are being calculated with the modeling updates, but the entities also need to meet 100% of their current allocations by 2030. How will that work when we do not know what our new goals will be?
A: We know the prior loads need to be reduced, and the 100% goal is reducing the historic nutrient loads. We know there are also new loads from additional development and possible changes in agricultural loads since the original BMAP loading was quantified. The model update will estimate those new loads, and the revised allocations will address those new loads. Periodic revisions to the starting loads are expected in the iterative BMAP process. Those updates should

not detract from addressing the historic loads that were identified 20 years ago and working on implementing the 2007 BMAP.

Q: If a local government submitted to DEP the required onsite sewage treatment and disposal system (OSTDS) and/or wastewater facility remediation plan(s), are those plans part of the BMAP?
A: Yes, the projects from those plans were compiled into draft project lists and sent to the local governments to add to their BMAP project lists so they would become part of the adopted BMAPs.

Q: Can in-lake projects be credited?
A: Please discuss any in-lake projects beforehand, as the watershed loads are the focus of the crediting process and in-lake efforts, while welcome, may not count towards your milestones to address watershed loads.

Q: Can you explain the difference between "responsible entities" and "responsible agencies"?
A: Responsible entities have watershed load reduction assignments. The responsible agencies have a variety of roles such as regulation, research, monitoring, or they may be responsible for their own load reductions (e.g., the Florida Department of Transportation is assigned loading from state roads).

Q: Can we share project credits among entities?
A: Yes, sharing project credits is common in BMAPs, but DEP does not determine how project credits are shared. The entities conducting projects are responsible for determining how project credits are shared; DEP merely verifies the project benefits and checks to prevent double-counting when projects credits are shared.

Comments

Verbal Comment: The future growth estimates seem to be too large for urban stormwater. The newly adopted updated stormwater rule should help with the growth of new urban development given the additional protection provided in the rule. The rule requires pre versus post or the new treatment standards—whichever is more protective—which should significantly reduce load increases from future urbanization.

Verbal Comment: The first water quality models for Lake Wauberg and Alachua Sink were primitive. This is a challenge to plan new projects and to understand the importance of internal cycling in these systems.

Written Comment from Alachua County:

- Can the 2028 update replace the existing documents, as it is hard to reference ALL the documents?
- Table 2 – make on 1 page.
- We need guidance on the regional allocation for Alachua Sink & Lake Wauburg. Can the state do a regional project?
- What is the future of the fecal coliform TMDL?
- Could Alachua County reduce bacteria monitoring to annual?
- If a local government submitted OSTDS & WWTP plans in 2024, have we met the requirements?
- If we change development practices with something like soil amendments & fertilizer bans, can we get credit or a reduced future allocation?
- What types of projects can a local government do to meet allocations? For example, could we partner with a farm to reduce loading & get credit in our allocation even though our allocation is from urban loads not agricultural loads?
- How will the University of Florida & Paynes Prairie State Park contribute to Lake Wauburg restoration?
- Can the new model do allocations for Alachua Sink & Lake Wauburg?

Adjournment

The meeting ended at 2:41 pm.