



Lower St. Johns River Main Stem Basin Management Action Plan (BMAP) Update Meeting

Via Webinar

Webinar Registration Link:

<https://register.gotowebinar.com/register/2869538876754955100>

*April 3, 2025
1:00 PM EDT*

Agenda

- Lower St. Johns River Main Stem BMAP Background.
- Overview of Draft Lower St. Johns River Main Stem BMAP Update.
- Questions/Comments.

Please note the site for documents pertaining to the Lower St. Johns River Main Stem BMAP: [BMAP Public Meetings](#)
[| Florida Department of Environmental Protection](#)

For more information on the Lower St. Johns River Main Stem BMAP, contact: Moira Homann, (850) 245-8460,
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LOWER ST. JOHNS RIVER MAIN STEM BASIN MANAGEMENT ACTION PLAN UPDATE

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Division of Environmental Assessment and Restoration
Florida Department of Environmental Protection
GoToWebinar | April 3, 2025



WEBINAR TIPS

Audience Participation

Open your control panel.

Join audio:

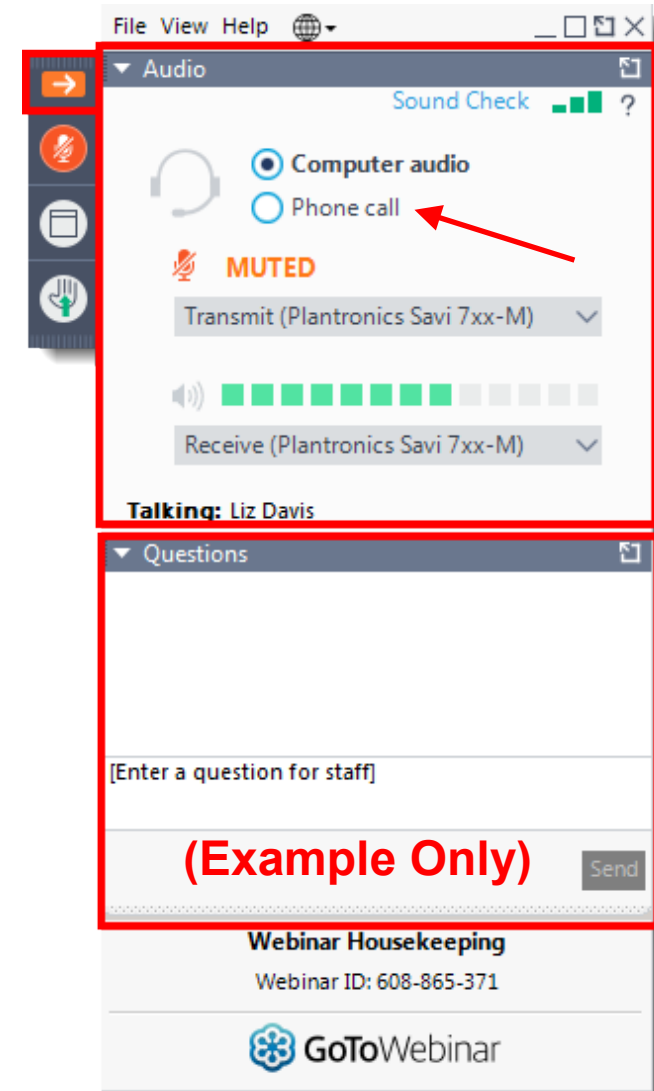
- Choose Computer Audio or
- Choose Phone Call and dial using the information provided with your registration

Attendee audio will automatically be muted.

Submit questions and comments via the **Questions** panel.

If viewing this webinar as a group, please provide a list of attendees via the **Questions** panel.

Note: Today's presentation is being recorded and will be provided on the website after the webinar.





AGENDA

- Basin Management Action Plan (BMAP) Background.
- 2025 BMAP Update Draft Document.
- 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:

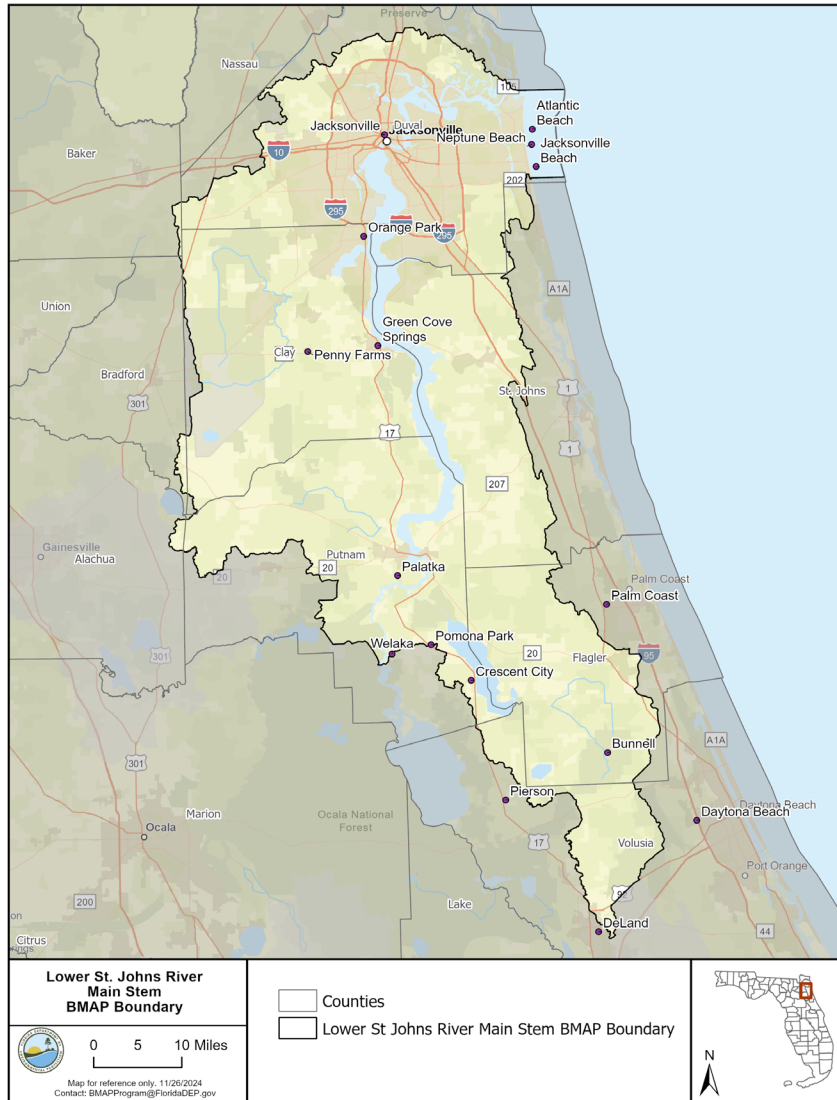
- Implementation timeline.
- Commitment to projects.
- Expected water quality improvement from projects and management strategies.

Process to assess progress toward achieving the TMDL:

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



BACKGROUND



- 2008: Initial BMAP adoption.
- 2025: BMAP update.



BACKGROUND

TOTAL NITROGEN (TN) AND TOTAL PHOSPHORUS (TP)

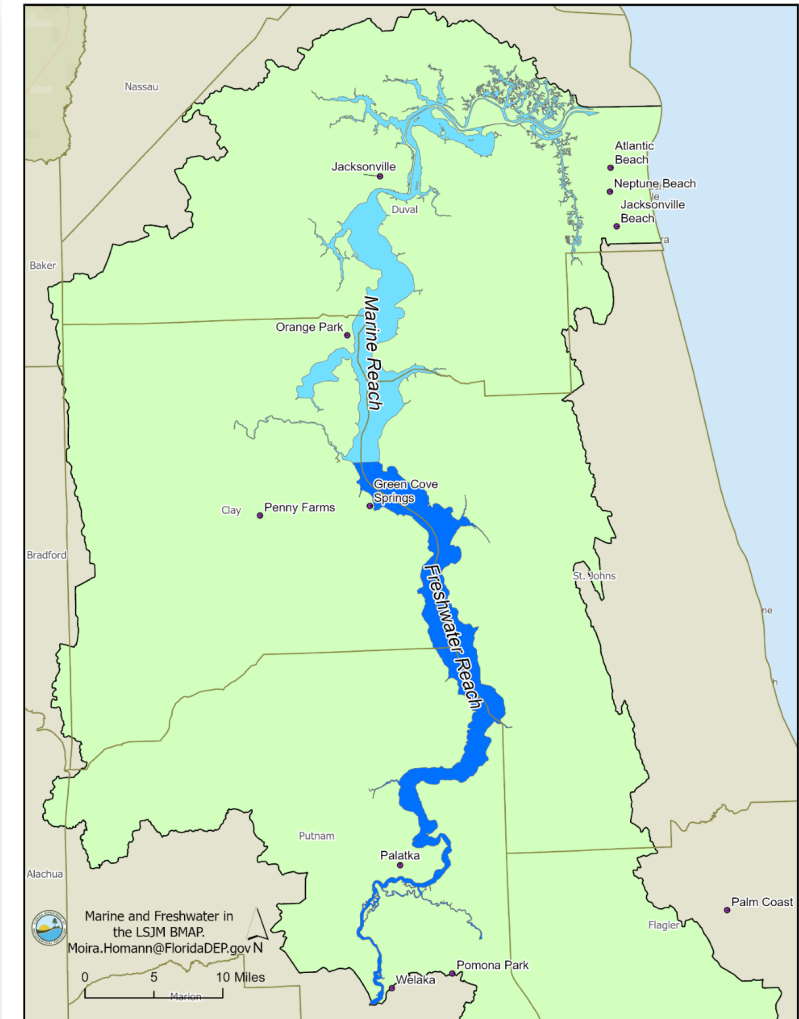
LSJR Main Stem Adopted TMDLs

WBID(s)	TMDL (kg/yr)	TMDL Baseline Load (kg/yr)	Wasteload Allocation* (kg/yr)	Load Allocation (nonpoint) (kg/yr)	Overall Needed Reduction (kg/yr)
Freshwater					
2213I to 2213N	500,325 TP	599,610 TP	46,357 TP	453,968 TP	99,285 TP
2213I to 2213N	8,571,563 TN	10,115,552 TN	236,695 TN	8,334,868 TN	1,543,989 TN
Marine					
2213A to 2213H	1,376,855 TN	2,453,258 TN	1,027,590 TN	349,265 TN	1,076,403 TN

*Includes a percent reduction from NPDES stormwater sources

kg/yr = kilograms per year

WBID = Waterbody Identification Number





BACKGROUND

LOWER ST. JOHNS RIVER MAIN STEM BMAP STAKEHOLDERS

Type of Entity	Name
Responsible Entities	Agriculture
	Alachua County
	American Water Military Services
	Anheuser Busch
	Baker County
	Bradford County
	Camp Blanding
	City of Atlantic Beach
	City of Bunnell
	City of Crescent City
	City of Daytona Beach
	City of Deland
	City of Green Cove Springs
	City of Jacksonville/Duval County
	City of Jacksonville Beach
	City of Keystone Heights
	City of Neptune Beach
	City of Palatka
	City of Palm Coast
	City of Pamona Park
	Clay County
	Clay County Utility Authority (CCUA)
	Flagler County
	Georgia-Pacific

Type of Entity	Name
Responsible Entities	JEA
	Seminole Electric Cooperative
	Town of Penney Farms
	Town of Pomona Park
	Town of Pierson
	Town of Welaka
	Turnpike Enterprise
	U.S. Navy
	Volusia County
	WestRock
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 2
	St. Johns River Water Management District (SJRWMD)
Other Interested Stakeholders	Residents/Homeowners
	Florida Audubon
	Jacksonville University
	Northeast Florida Regional Planning Council
	Florida Farm Bureau
	Florida Onsite Wastewater Association
	Septic System Contractors
	St. Johns Riverkeeper
	University of North Florida



NEW RESPONSIBLE ENTITIES



- Alachua County.*
- Baker County.*
- Bradford County.*
- Flagler County.
- Volusia County.
- Penney Farms.
- Bunnell.
- Palm Coast.
- Crescent City.
- Pomona Park.
- Daytona.*
- DeLand.
- Pierson.

Image Source:
[Big Talbot Island State Park | Florida State Parks](#)

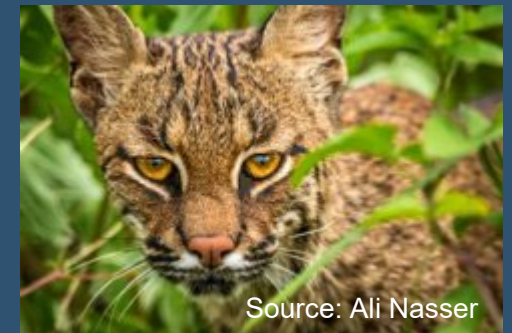
*Small area within boundary.



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).





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

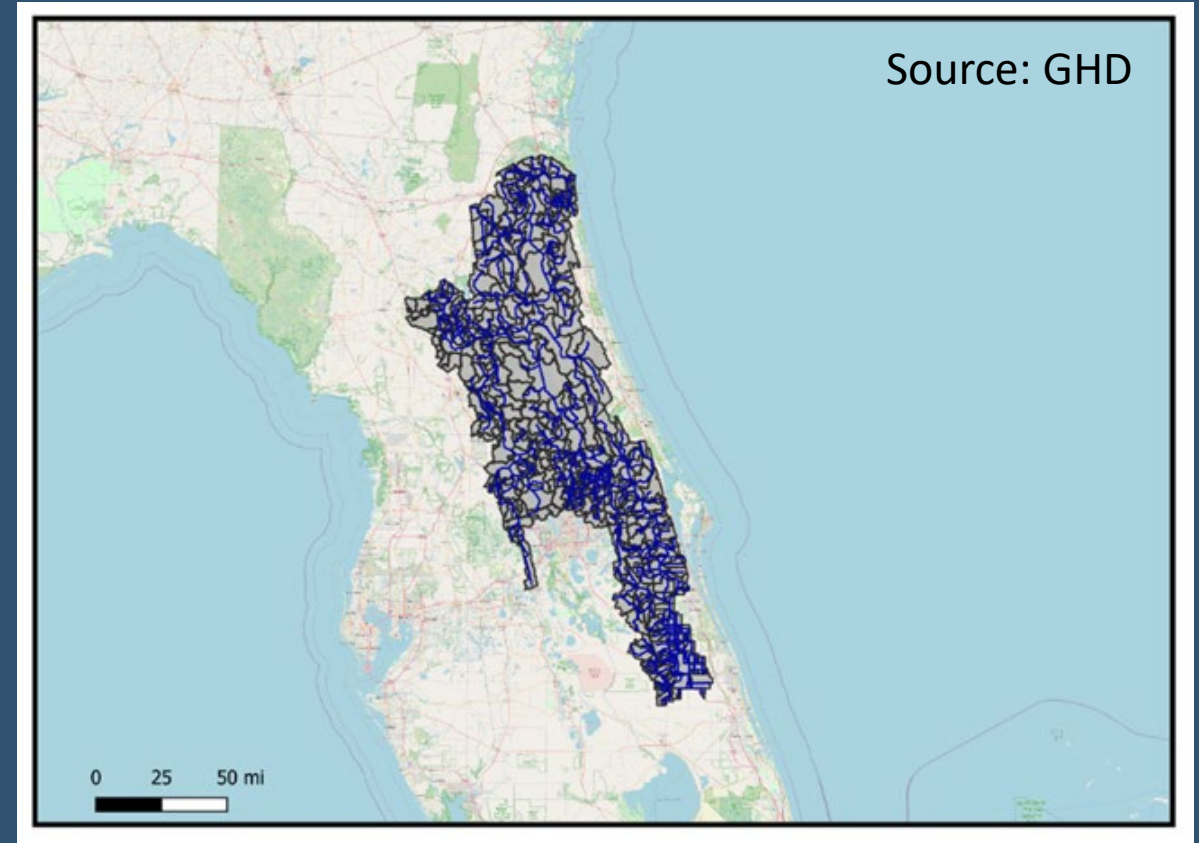


ST. JOHNS RIVER MODELING

SECTION 2: MODELING

Modeling Updates Underway.

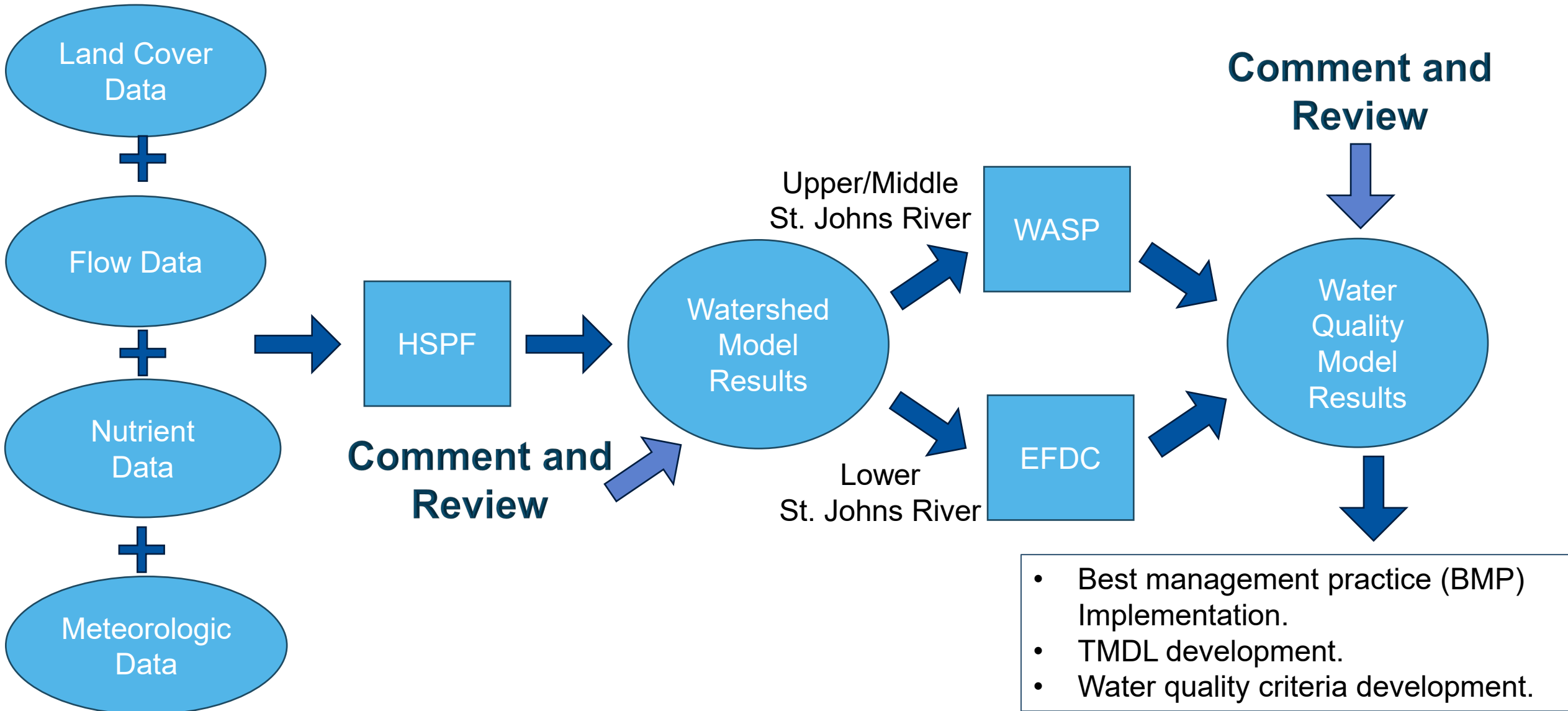
- Entire St. Johns River Basin.
- Updated input data.
- Watershed Model: Hydrological Simulation Program – FORTRAN (HSPF).
- Receiving Waterbody Model: Water Quality Analysis Simulation Program (WASP).
- Hydrodynamic Model: Environmental Fluid Dynamics Code (EFDC).





MODELING WORKFLOW

SECTION 2: MODELING





MODEL UPDATE SCHEDULE

SECTION 2: MODELING

April 2024:
Modeling
Document/Quality
Assessment Plan

July 2025:
EFDC Model

March 2025:
HSPF Model

June 2026:
WASP Model





BMAP UPDATE DOCUMENT

Section 3: Calculating and Allocating Load Reductions

- Entity allocations calculated for the 2008 BMAP remain in effect.
- **Five Year Milestones**
 - Requirement under section 403.067, Florida Statutes (F.S.) (amended in 2023 HB 1379).
 - Responsible entities must maintain compliance with their existing BMAP allocations.



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.
- New entities should plan to receive allocations after the St. Johns River Model is updated.



MILESTONES

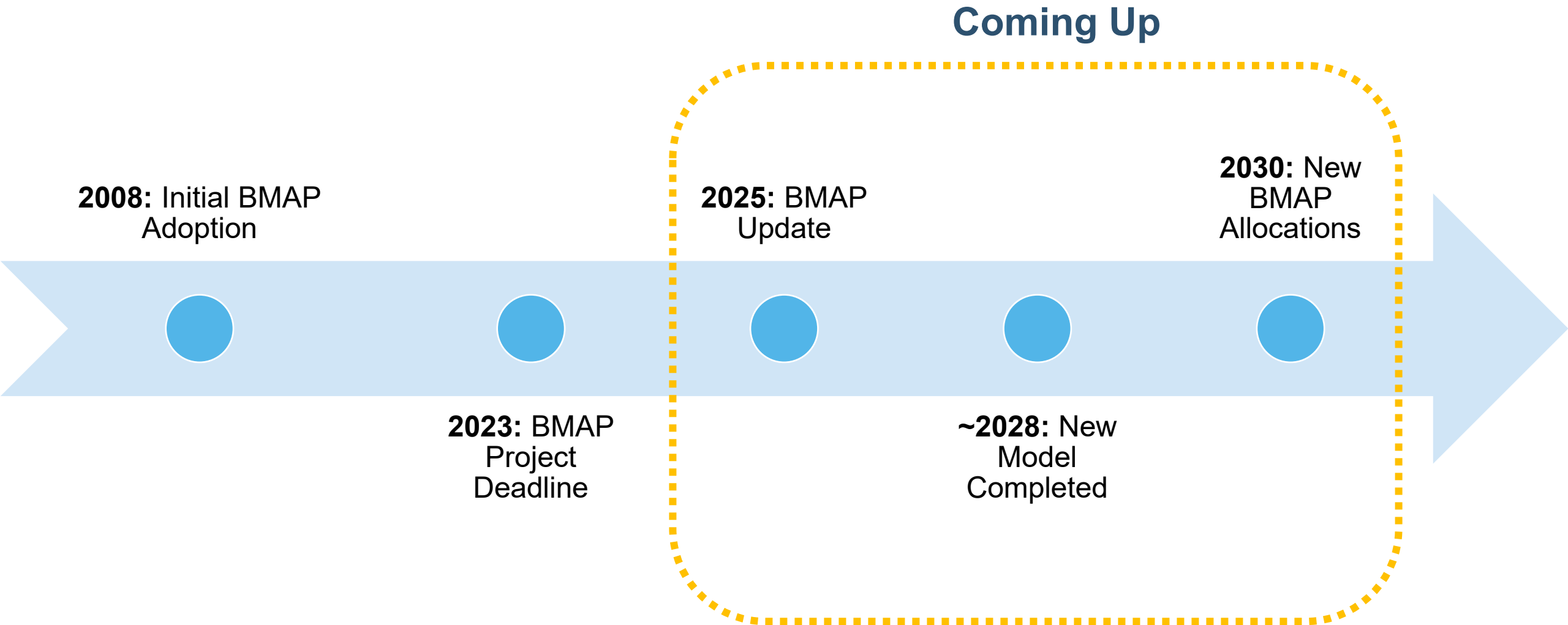
SECTION 3: CALCULATING AND ALLOCATING LOAD REDUCTIONS

- 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





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	3	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	1	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.
- 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 Concentrated 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 sewerred 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 ANALYSIS

TN

Entity	2040 Additional Population	2040 Additional TN Loading (kg/yr) Scenario 1	2040 Additional TN Loading (kg/yr) Scenario 2	2040 Additional TN Loading (kg/yr) Scenario 3
Alachua County	300	546	1,557	2,849
Baker County	44	280	819	1,435
Bradford County	35	266	1,229	2,124
Clay County	43,556	67,838	144,570	268,050
Green Cove Springs	1,150	1,532	3,016	5,476
Keystone Heights	117	183	538	1,019
Orange Park	632	856	1,672	3,038
Penney Farms	175	273	515	945
Duval County	91	125	201	385
Atlantic Beach	652	797	1,141	2,153
Jacksonville	154,950	211,787	339,866	649,021

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

TN

Entity	2040 Additional Population	2040 Additional TN Loading (kg/yr) Scenario 1	2040 Additional TN Loading (kg/yr) Scenario 2	2040 Additional TN Loading (kg/yr) Scenario 3
Jacksonville Beach	1,584	2,165	4,288	8,263
Neptune Beach	559	765	1,158	2,205
Flagler County	18,569	27,881	61,154	114,877
Bunnell	13,109	18,492	32,482	59,719
Palm Coast	1,691	2,151	3,955	7,233
Putnam County	1,774	15,707	72,636	124,996
Crescent City	11	92	413	705
Palatka	45	395	1,757	3,005
Pomona Park	11	100	469	808
Welaka	4	33	145	248

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

TN

Entity	2040 Additional Population	2040 Additional TN Loading (kg/yr) Scenario 1	2040 Additional TN Loading (kg/yr) Scenario 2	2040 Additional TN Loading (kg/yr) Scenario 3
St. Johns County	64,300	91,377	159,148	300,315
Hastings	571	812	2,365	4,571
Volusia County	9,984	14,852	41,190	78,592
Daytona Beach	4	15	20	38
DeLand	654	973	2,375	4,501
Pierson	53	79	243	467
Totals	314,626	460,371	878,922	1,647,038

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.
- 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

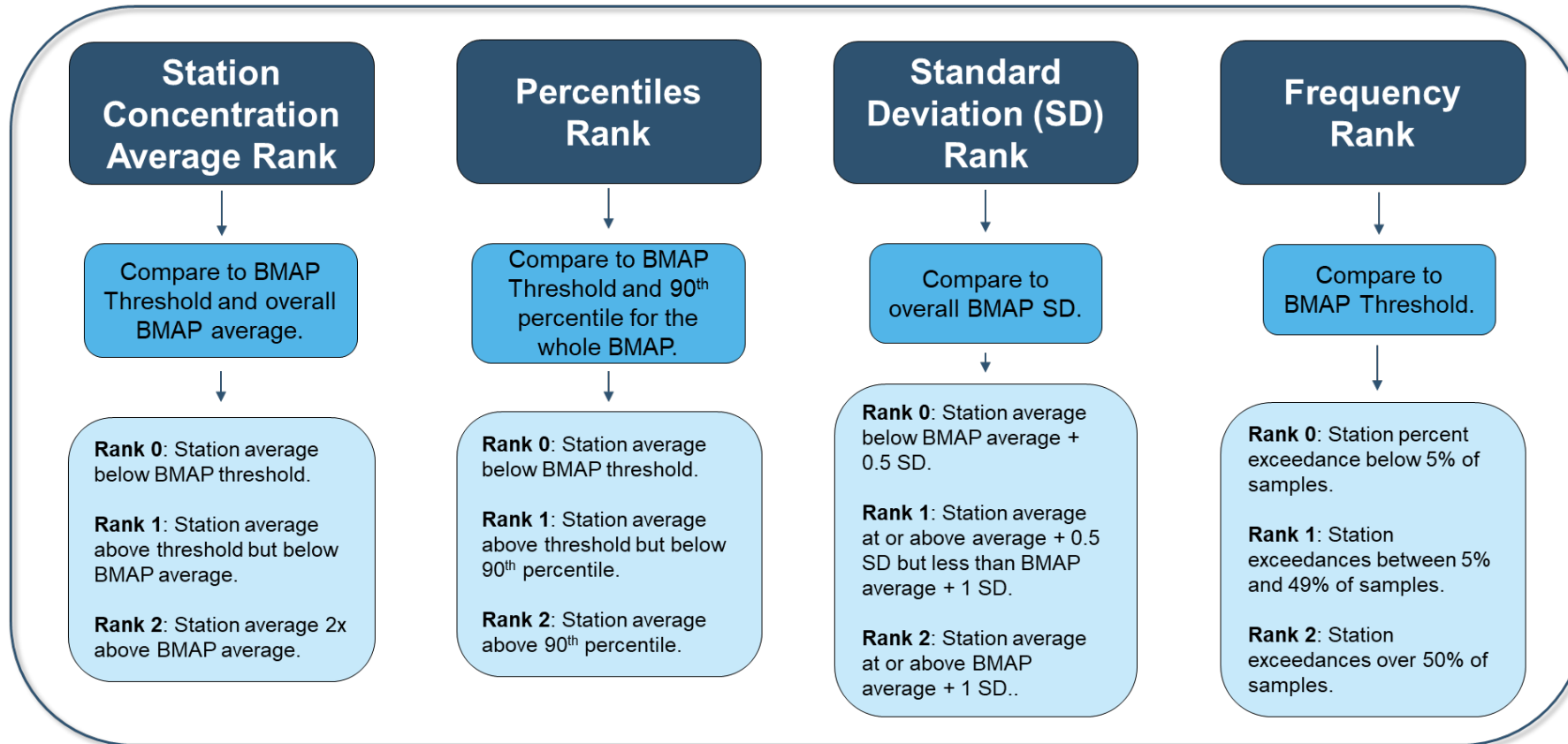
- Review of process for BMAP adoption, tracking and adaptive management.



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.

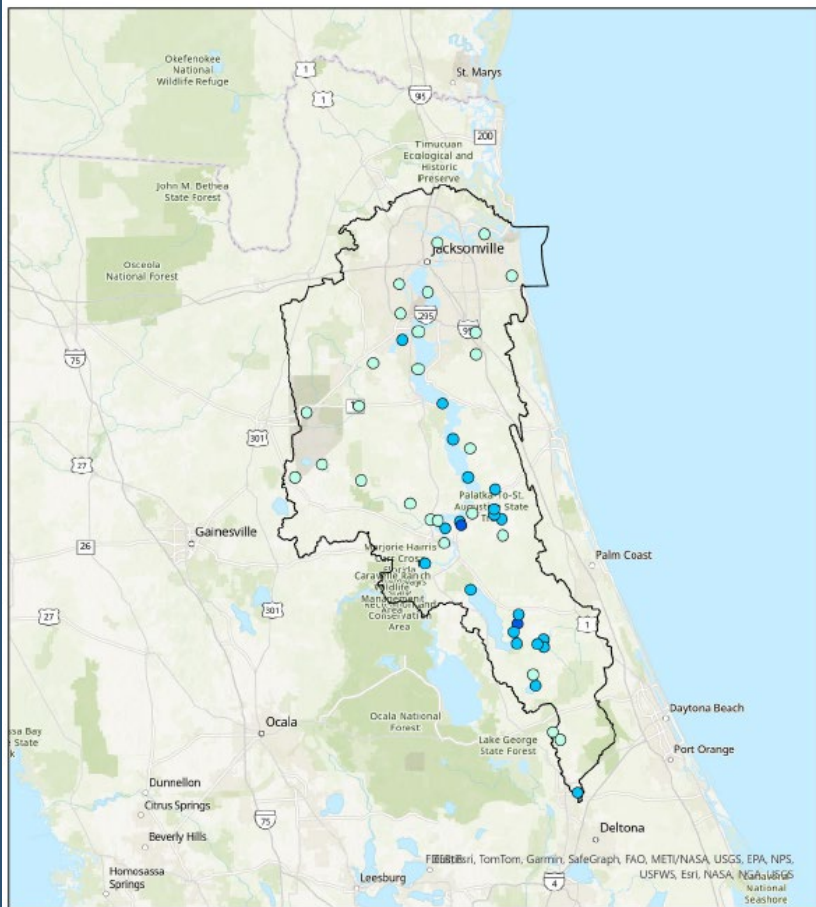




HOT SPOT ANALYSIS

SECTION 5: MONITORING STRATEGIES

TN:



Lower St. Johns Main Stem

Map prepared by Division of Environmental Assessment and Restoration.
This map is not for legal decision making purposes.
Created 2024-11-14



0 5 10 20 30 40 Miles

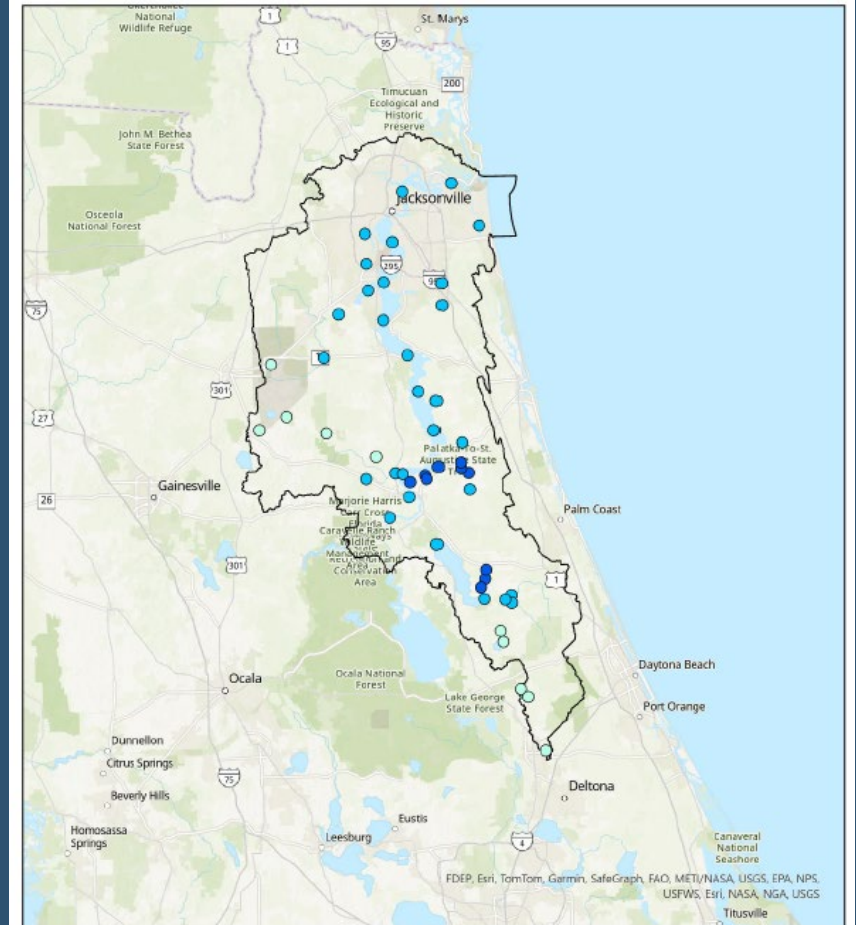


TN Total Rank

- 0 - 2
- 3 - 5
- 6 - 8

Lower St. Johns Main Stem BMAP

TP:



Lower St. Johns Main Stem

Map prepared by Division of Environmental Assessment and Restoration.
This map is not for legal decision making purposes.
Created 2024-11-14



0 5 10 20 30 40 Miles



TP Total Rank

- 0 - 1
- 2 - 4
- 5 - 8

Lower St. Johns Main Stem BMAP



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.
- **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 27, 2025.**
- Stakeholder review comments due on **April 17, 2025.**

Submit comments to:
Moira.Homann@FloridaDEP.gov





SCHEDULE

Dec. 2024 was the Technical BMAP update public meeting.

In March 2025 the Draft BMAP document was available for review.

In April 2025 are the Draft BMAP update public meetings.

March to April 2025 is the Draft BMAP update comment period.

On July 1, 2025 is the Statutory deadline for updated nutrient BMAPs.



RESOURCES

BMAP WEBSITE AND STORYMAPS

Basin Management Action Plans (BMAPs)

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

Water Quality Restoration Program Quick Links

[Basin Management Action Plans \(BMAPs\)](#)

[Statewide Annual Report](#)

[Water Quality Grant Opportunities 2024-25](#)

[BMAP Public Meetings](#)

[Impaired Waters, TMDLs and Basin Management Action Plans Interactive Map](#)

[Tools and Guidance for Calculating Total Nitrogen \(TN\) and Total Phosphorus \(TP\) Reductions](#)

[Florida Water Quality Credit Trading](#)

What is a Basin Management Action Plan?

A BMAP is a framework for water quality restoration that contains a comprehensive set of solutions to achieve the pollutant reductions established by a TMDL. Examples include permit limits on regulated facilities, urban and agricultural best management practices, and conservation programs designed to achieve pollutant reductions established by a total maximum daily load. A BMAP is developed with local stakeholders and relies on local input for implementation. BMAPs are adopted by Secretarial Order and are legally enforceable. BMAPs that allows for incremental load reductions through the implementation of projects and monitoring and conducting studies to better understand the water quality and hydrologic dynamics. DEP continues to work with local and regional projects necessary to meet reduction milestones to achieve the TMDLs and inform funding priorities.

What's New: Upcoming Meetings and BMAP Updates

July 1, 2025 BMAP Update Progress

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

Nutrient BMAPs



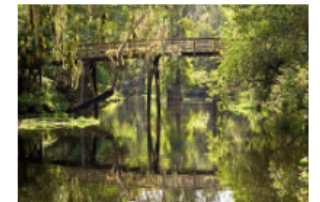
Nutrient BMAPs contain a comprehensive set of solutions, such as permit limits on wastewater facilities, urban and agricultural best management practices, and conservation programs designed to achieve pollutant reductions established by a total maximum daily load.

Springs BMAPs



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).

Fecal Bacteria Impaired BMAPs



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 \(BMAPs\) | DEP](#)



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

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Program Administrator

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Florida Department of Environmental Protection (DEP)
Lower St. Johns Main Stem Basin Management Action Plan (BMAP)
Virtual Public Meeting via GoToWebinar
April 3, 2025
1:00 pm – 2:07 pm EDT

Attendees

Soraya Aidinejad, St. Johns Riverkeeper	Richard Haynes, Citizen
Jim Ailes, City of DeLand	Cori Hermle, SJRWMD
Lisa Bally, Applied Technology & Management	Stefanie Herrera, Richardson Soils
Geoffrey Batteiger, Citizen	Robin Holland, DACS
Pauline Buford, Town of Welaka	Mike Hollingworth, USACE
Tyler Buford, Town of Welaka	Moirra Homann, DEP
Tiffany Busby, Wildwood Consulting	Laila Hudda, EPA
Thomas Calhoun, Seminole County	Ryan Hutton, NPS
Terry Carr, City of Jacksonville	Cameron Jaggard, Pew Charitable Trusts
Tim Casey, Casey Engineering Services	Tom Kallemeyn, DEP
Carolin Ciarlariello, DEP	Woo-Jun Kang, DEP
Doug Conkey, SJRWMD	William Karlavige, City of Jacksonville
Robin Cook, City of Daytona Beach	Duane Kent, St. Johns County
Ed Cordova, JEA	Matt Krug, City of Atlantic Beach
Tony Cubbedge, St. Johns County	Kalicia Lawrimore, Smurfit Westrock
Briston De Armas, FDOT/Florida Turnpike	Madison Lloyd, CCUA
Ryan Deeney, City of Jacksonville Beach	Sol Looker, DACS
Sara Driggers, Wildwood Consulting	Celeste Lyon, RES
Samantha Epstein, SJRWMD	Lori McCloud, SJRWMD
Jessica Fetgatter, DEP	Jennifer McElroy, GRU
Randy Fink, SJRWMD	Jennifer Mitchell, SJRWMD
Steve Fitzgibbons, SJRWMD	Jessica Mostyn, DEP
Corrine Flumerfelt, DEP	Walter Murphree, Citizen
Cathy Foerster, Drummond Carpenter	Mark Nelson, Jones Edmunds
Agustin Francisco, DACS	Sue Nicosia, Citizen
Justin Gostnell, Seminole Electric	Sky Notestein, Wetland Solutions
Alexa Graf, England-Thims & Miller	Jarek Nowak, DACS
Hollie Greer, Alachua County	Kevin O'Donnell, DEP
Roxanne Groover, FOWA	Benjamin Powell, Citizen
Patricia Grunwald, Tetra Tech	Ray Pribble, Janicki Environmental
Raichel Gulde, RES	Victoria Quick, U.S. Navy
Madeline Hart, DACS	Tom Rauth, U.S. Navy

Joyce Rebar, FDOT
Cassidy Reichert, City of Jacksonville
Katie Rowland, Georgia-Pacific
Michele Rundlett, Smurfit Westrock
Laura Savage, Georgia-Pacific
Hala Sfeir, JHS Environmental Engineering
Stacey Simmons, DACS
Eric Simpson, DEP
Jennifer Spain, Volusia County
Stephen Swann, City of Atlantic Beach
Don Thimas, Citizen

Zoe Tressel, St. Johns Riverkeeper
Diana Turner, DEP
Dung-Anh Vo, DEP
Taren Wadley, Citizen
Ken Weaver, DEP
Kaylene Wheeler, City of Dewberry
Latisia Whittle, Lake County
Bruce Williams, Jacksonville Zoo
Katrina Yancey, DEP
Kelly Young, Volusia County

Overall

The draft BMAP document can be downloaded here: <https://floridadep.gov/dear/water-quality-restoration/documents/march-2025-lsjm-draft-bmap>. Comments on the draft BMAP document are due by April 17, 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 17, 2025.

Questions and Answers

Question (Q): Regarding stakeholders, what criteria differentiate responsible entities from responsible agencies?

Answer (A): Responsible entities, also known as “Lead Entities,” are tasked with load reductions and compliance with BMAP provisions. They may reduce loads through their activities or play key roles in BMAP implementation, including regulation, monitoring, and research. In nutrient BMAPs, the Florida Department of Health (FDOH) permits onsite sewage treatment and disposal systems (OSTDS) to protect public health. Nutrient loads from OSTDS are assigned to the local government responsible for permitting development with onsite sewage systems. Under the 2023 statutory changes (House Bill 1379), new conventional septic systems on parcels of one acre or less are prohibited in BMAP areas. However, reducing nutrient loads from existing OSTDS contributes to nitrogen reduction efforts.

Comments

There were no verbal or written comments on the draft BMAP submitted during the meeting.

Adjournment

The meeting ended at 2:07 pm EDT.