

Manatee River Basin Management Action Plan (BMAP) Update Meeting

Via Webinar

Webinar Registration Link: https://register.gotowebinar.com/register/7962216152513922911

April 2, 2025 2:00 PM EDT

Agenda

- Manatee River BMAP Background.
- Overview of Draft Manatee River BMAP Update.
- Questions/Comments.

Please note the site for documents pertaining to the BMAP: BMAP Public Meetings | Florida Department of Environmental Protection

For more information on the Manatee River BMAP, contact: Anita Stine, (850) 245-8545,

Anita.Stine@FloridaDep.gov





WEBINAR HOUSEKEEPING

Attendee Participation

Open your control panel

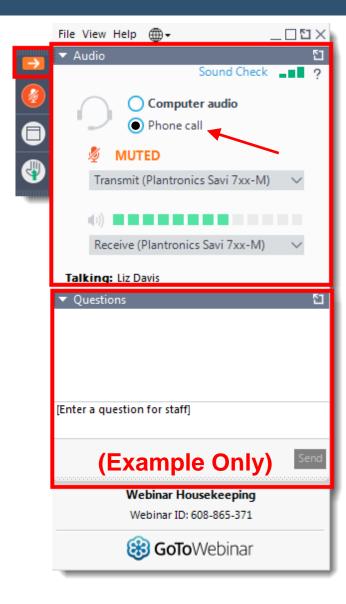
Join audio:

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- Or choose Computer Audio to use your computer's speakers for audio
- Attendee audio will 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 FTP after the webinar.





- 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:

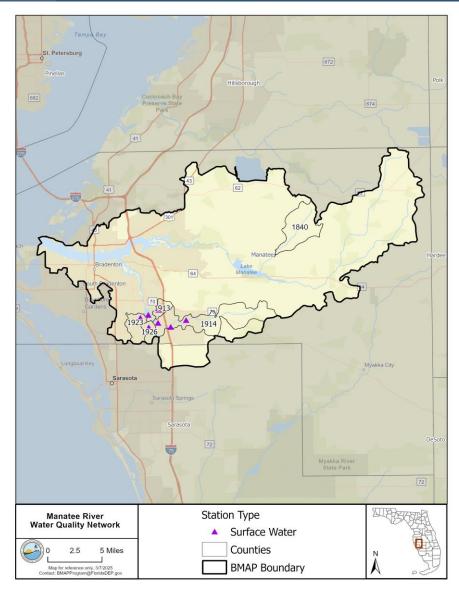
- Implementation timeline.
- Commitment to projects.
- Expected water quality improvement from projects and management strategies.

Process to assess progress toward achieving the TMDL:

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



BACKGROUND



- 2014: Initial adoption.
- 2025: BMAP update.



BACKGROUND

MANATEE BMAP's TMDL COMPONENTS

Waterbody	TMDL Components		
1923 Rattlesnake Slough	TP (% load reduction) WLA (NPDES stormwater) = 21% LA = 21% TN (% load reduction) WLA (NPDES stormwater) = 30% reduction LA = 30% reduction BOD5 (% load reduction) WLA (NPDES stormwater) = 31% reduction LA = 31% reduction Fecal coliform concentration (% reduction) WLA (NPDES stormwater) = 43% reduction LA = 43% reduction		
1926 Cedar Creek	Fecal coliform concentration (% reduction) WLA (NPDES stormwater) = 61% reduction LA = 61% reduction		
1913 Nonsense Creek	Fecal coliform concentration (% reduction) WLA (NPDES stormwater) = 57% reduction LA = 57% reduction TN (% load reduction) WLA (NPDES stormwater) = 27% reduction LA = 27% reduction BOD5 (% load reduction) WLA (NPDES stormwater) = 36 % reduction LA = 36% reduction		
1914 Braden River above Evers Reservoir	Fecal coliform concentration (% reduction) WLA (NPDES stormwater) = 43% reduction LA = 43% reduction		
1840 Gilly Creek Fecal coliform concentration (% reduction) LA = 56% reduction			

LA = Load Allocation

mg/L = milligrams/Liter

NPDES=National Pollutant

Discharge Elimination System

TN=Total Nitrogen

TP=Total Phosphorous

WLA = Waste Load Allocation



BACKGROUND MANATEE RIVER BMAP STAKEHOLDERS

Type of Governmental or Private Entity	Participant	Type of Governmental or Private Entity	Participant
	Agriculture City of Bradenton City of Palmetto Manatee County Sarasota County	Responsible Agencies	County Health Departments Florida Department of Agriculture and Consumer Services (DACS) Florida Department of Environmental Protection (DEP) Florida Department of Health Florida Department of Transportation Southwest Florida Water Management District
Responsible Entities		Other Interested Stakeholders	Residents/Homeowners Florida Onsite Wastewater Association Septic System Contractors Tampa Bay Estuary Program



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.
- Evaluate expansion of the BMAP boundary.
- 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: Data Evaluation and Analyses.

Section 3: Tracking Implementation.

Section 4: Management Actions.

Section 5: Monitoring Strategy.

Section 6: Commitment to Plan Implementation.

Appendices.



MANATEE RIVER BMAP BASIN EXPANSION SECTION 1: CONTEXT, PURPOSE AND SCOPE OF THE PLAN

- Review of the TMDLs, BMAP process and stakeholder involvement.
- Manatee River BMAP basin will now expand to match the Tampa Bay Estuary Program (TBEP) Reasonable Assurance Plan (RAP) for Manatee.
- Continue protections of existing water quality progress achieved through RAP.
- Applies future growth protections to the whole watershed.
- Fair and equitable consideration of all land uses, including agricultural land uses, in the process of addressing loading which were addressed by the RAP through voluntary participation.
 - Now Best Management Practices (BMP) program participation will be required, as applicable.
- Adds prioritization and opens funding opportunities for additional stakeholders, including producers and additional communities.

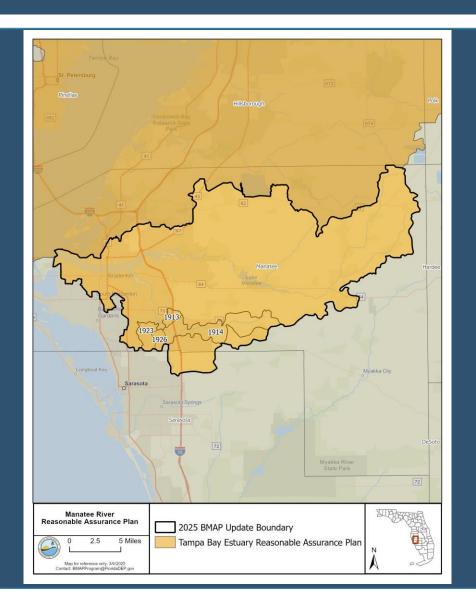


MANATEE RIVER BMAP BASIN EXPANSION

SECTION 1: CONTEXT, PURPOSE AND SCOPE OF THE PLAN

Map showing:

- Manatee River TMDL Waterbodies.
- Tampa Bay Estuary RAP.
- Updated BMAP Basin Boundary.





BMAP UPDATE DOCUMENT SECTION 2: DATA EVALUATION AND ANALYSES

- Review of the 2014 BMAP.
- Data evaluation and analyses.
- Evaluation of attainment of water quality standards.



Source: Little Manatee River State Park | Florida State Parks



BMAP UPDATE DOCUMENT

Section 3: Tracking Implementation

- Five Year Milestones
 - Requirement under section 403.067, Florida Statutes (F.S.) (amended in 2023 HB 1379).





MILESTONES

SECTION 3: TRACKING IMPLEMENTATION

- Allocations for the Tampa Bay region are set by the RAP.
- Milestones of the BMAP are to implement measures to meet statutory requirements in a timely manner.
- Consistent with statutes, in basins where entities have BMAP allocations, 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: TRACKING IMPLEMENTATION

- Responsible entities must submit a **sufficient list** of 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 catalog their efforts to identify management strategies as required under recent legislation as described in the BMAP.
 - 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: TRACKING IMPLEMENTATION



Source: Little Manatee River State Park | Florida State Parks

Timeline

- 2009 Detailed accounting of the process to develop allocations is detailed in the <u>Reasonable</u> Assurance <u>Plan Addendum</u>
- **2010** Final Order adopting WQBELs for each bay segment, by entity.
- 2014 adoption of the original BMAP
- 2025 BMAP update
- 2026 list of actions to meet milestones in STAR.



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.



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.



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.



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.



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, Florida Administrative Code (F.A.C.), apply to newly-permitted application sites and existing application sites upon permit renewal.





Stormwater

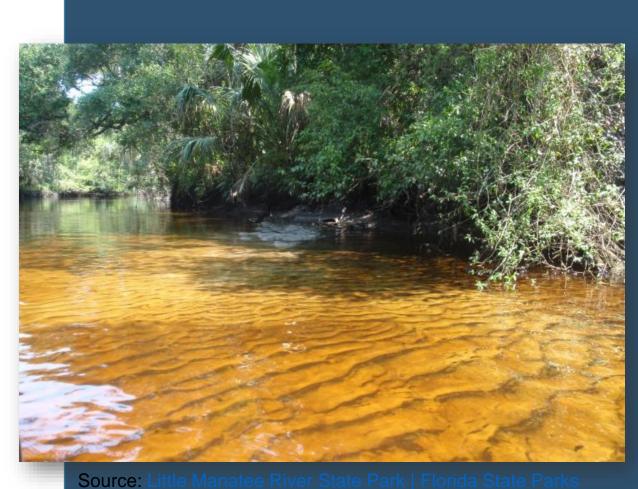
- The National Pollutant Discharge Elimination System (NPDES) Stormwater Program will, within
 five years of BMAP adoption, evaluate any entity located in the BMAP area that serves a minimum
 resident population of at least 1,000 individuals that is not currently covered by an MS4 permit and
 designate 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.



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).





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 <u>OR</u>
- 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.



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 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.
- 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)
Manatee County	55,851	30,419	31,084	60,505
Bradenton	2,517	1,420	1,569	3,063
Palmetto	583	302	309	601
Sarasota County	2,177	1,025	1,042	2,040

2040 Loading — Basin Totals

Scenario 1 Total	Scenario 2 Total	Scenario 3 Total
33,166	34,005	66,209

In every scenario, additional loading is expected in the basin by 2040 due to increasing populations. However, 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.

Section 6: Commitment to Plan Implementation

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



BMAP UPDATE DOCUMENT APPENDICES

- **Updated:** Important links.
- Updated: Project tables.
 - Projects submitted by responsible entities through the BMAP portal through Jan. 15, 2025.
 - 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 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 (provided by DACS).



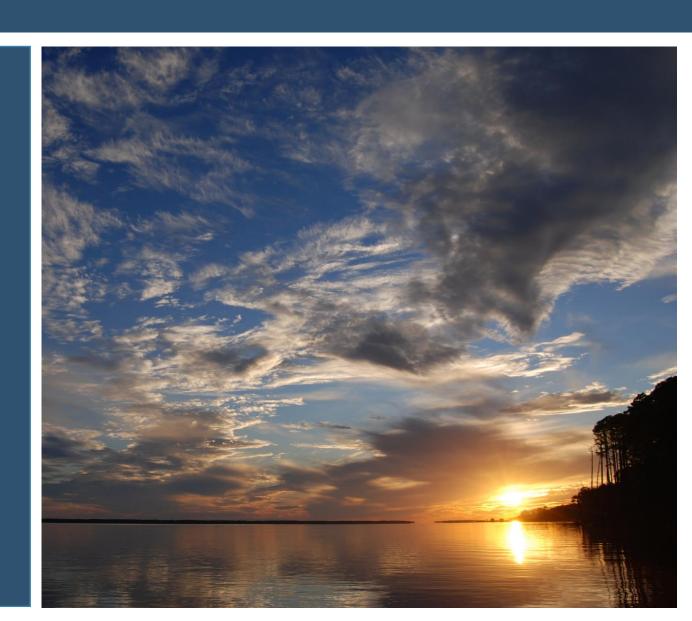
NEXT STEPS

BMAP update document draft review:

- Draft document sent to members of the public on March 26, 2025.
- Stakeholder review comments due on April 16, 2025.

Submit comments to:

Anita.Stine@FloridaDEP.gov





UPCOMING SCHEDULE

November 2024 was the Technical BMAP update public meeting. March 26, 2025 the Draft BMAP document is available for review.

Early April, 2025 is the Draft BMAP update public meeting. End of April, 2025 the Draft BMAP update comment period. 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

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 agric wastewater and stormwater infrastructure, regional projects and conservation programs desi established by a TMDL. A BMAP is developed with local stakeholders and relies on local input implementation. BMAPs are adopted by Secretarial Order and are legally enforceable. BMAPs that allows for incremental load reductions through the implementation of projects and man monitoring and conducting studies to better understand the water quality and hydrologic dy project implementation and water quality analyses. DEP continues to work with local and reg projects necessary to meet reduction milestones to achieve the TMDLs and inform funding pr

What's New: Upcoming Meetings and BMAP P

July 1, 2025 BMAP Update Progress

As required by the Clean Waterways Act, DEP must prepare updates to its nutrient BMAPs by . <u>Update Progress</u> dashboard provides a visual representation of progress towards the completed sub-tasks leading up to the July 1, 2025 updates. Please visit the <u>BMAP Public Meeting</u> meetings and subscribe to meeting notices.

Basin Management Action Plans (BMAPs) | DEP

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.



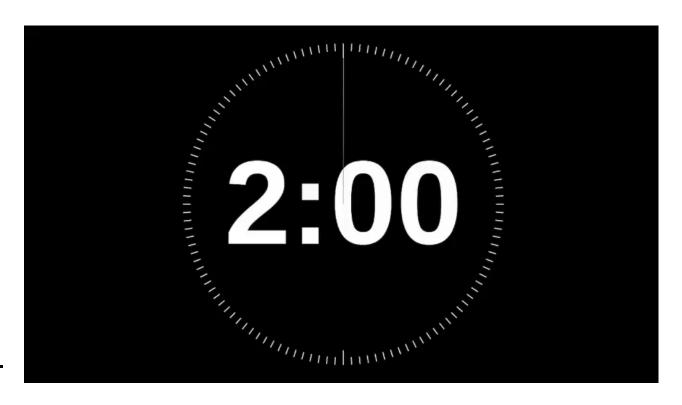


Verbal Questions

 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) Manatee River Basin Management Action Plan (BMAP) Virtual Public Meeting via GoToWebinar April 2, 2025 2:00 pm – 2:36 pm EDT

Attendees

Suzee Bailey, Citizen
Lisa Bally, Applied Technology & Management
Vanessa Bauzo, FDACS
Julianna Belitz, DEP

Greg Blanchard, Manatee County
Dalton Bodie, Sarasota County
Beth Brady, Save The Manatee Club
Heather Bryen, Sarasota County
Tiffany Busby, Wildwood Consulting
Ryan Countess, Pale Blue Dot Consulting

yan Countess, Pale Blue Dot Consulting Services

Sara Driggers, Wildwood Consulting

Jessica Fetgatter, DEP

Cathy Foerster, Drummond Carpenter

Roxanne Groover, FOWA Moira Homann, DEP Laila Hudda, EPA Steven Kelly, DOT Celeste Lyon, RES Jessica Mostyn, DEP

Brian Norman, City of Bradenton

Kevin O'Donnell, DEP

Nicolas Pisarello, Applied Technology &

Management

Alissa Powers, Manatee County Ray Pribble, Janicki Environmental Ashok Raichoudhury, Broward County

Anita Stine, DEP Diana Turner, DEP Bianca Velasco, Citizen Taren Wadley, Citizen Ken Weaver, DEP David Whiting, DEP Diana Turner, DEP

Overall

The draft BMAP document can be downloaded here: https://floridadep.gov/dear/water-quality-restoration/documents/march-25-2025-mana-draft-bmap. Comments on the draft BMAP document are due by April 16, 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 16, 2025.

Questions and Answers

Question (Q): How do cities or counties become included in the Manatee River BMAP?

Answer (A): The revised Manatee River BMAP boundary follows the Tampa Bay Reasonable Assurance Plan (RAP) subbasin for the Manatee River.

Q: Are there areas in South Florida that are within a BMAP?

A: There are four BMAPs in South Florida; the Lake Okeechobee Basin, the St. Lucie River and Estuary Basin, the Everglades West Coast Basin, and the Caloosahatchee Basin.

Q: Is there a BMAP in Broward County?

A: No.

Q: What is the difference between a responsible entity and a responsible agency?

A: Responsible entities are those organizations who are assigned load reductions and must comply with the BMAP provisions; these organizations are sometimes referred to as "Lead Entities." Responsible agencies may be accountable for reducing loads from their own activities or have an important public sector role in BMAP implementation such as regulatory oversight, monitoring, research, or other related duties.

Comments

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

Adjournment

The meeting ended at 2:36 pm EDT.