



**Wekiwa and Rock Springs and
Wekiva River, Rock Springs Run, and Little Wekiva Canal
Basin Management Action Plans (BMAPs)
Update Meeting**

Via Webinar

Webinar Registration Link:

<https://register.gotowebinar.com/register/6202889795777032795>

April 17, 2025

2:00 PM EDT

Agenda

- Wekiwa and Rock Springs and Wekiva River, Rock Springs Run, and Little Wekiva Canal BMAPs Background.
- Overview of Draft Wekiwa and Rock Springs and Wekiva River, Rock Springs Run, and Little Wekiva Canal BMAPs.
- Next Steps.
- Questions/Comments.

Please note the site for documents pertaining to Wekiwa and Rock Springs and Wekiva River, Rock Springs Run, and Little Wekiva Canal BMAPs: [BMAP Public Meetings | Florida Department of Environmental Protection](#)
For more information on the Wekiwa and Rock Springs and Wekiva River, Rock Springs Run, and Little Wekiva Canal BMAPs, contact: Moira Homann, 850-245-8460.
Moira.Homann@FloridaDEP.gov



WEKIVA RIVER AND WEKIWA/ROCK SPRINGS BASIN MANAGEMENT ACTION PLANS DOCUMENT UPDATES

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Division of Environmental Assessment and Restoration

Florida Department of Environmental Protection

GoToWebinar | April 17, 2025



WEBINAR TIPS

Audience Participation

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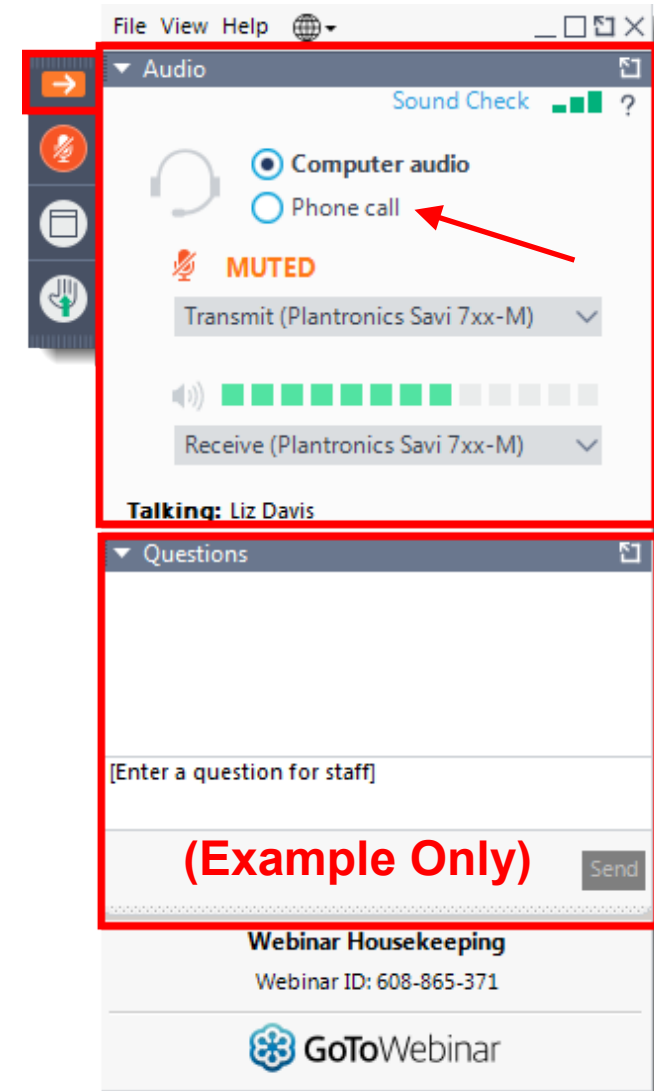
- Choose Computer Audio or
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Attendee audio will automatically be muted.

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

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





AGENDA

- Basin management plan (BMAP) background.
- Review of previous meetings.
- Wekiwa/Rock Springs 2025 BMAP update draft document walk-through.
- Wekiva River 2025 BMAP update draft document walk-through.
- Next steps.





KEY BMAP COMPONENTS

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

Projects to meet the TMDL:

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

Process to assess progress toward achieving the TMDL:

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



BACKGROUND

WEKIVA/WEKIWA BMAPs



Source: USFWS

2015 BMAP

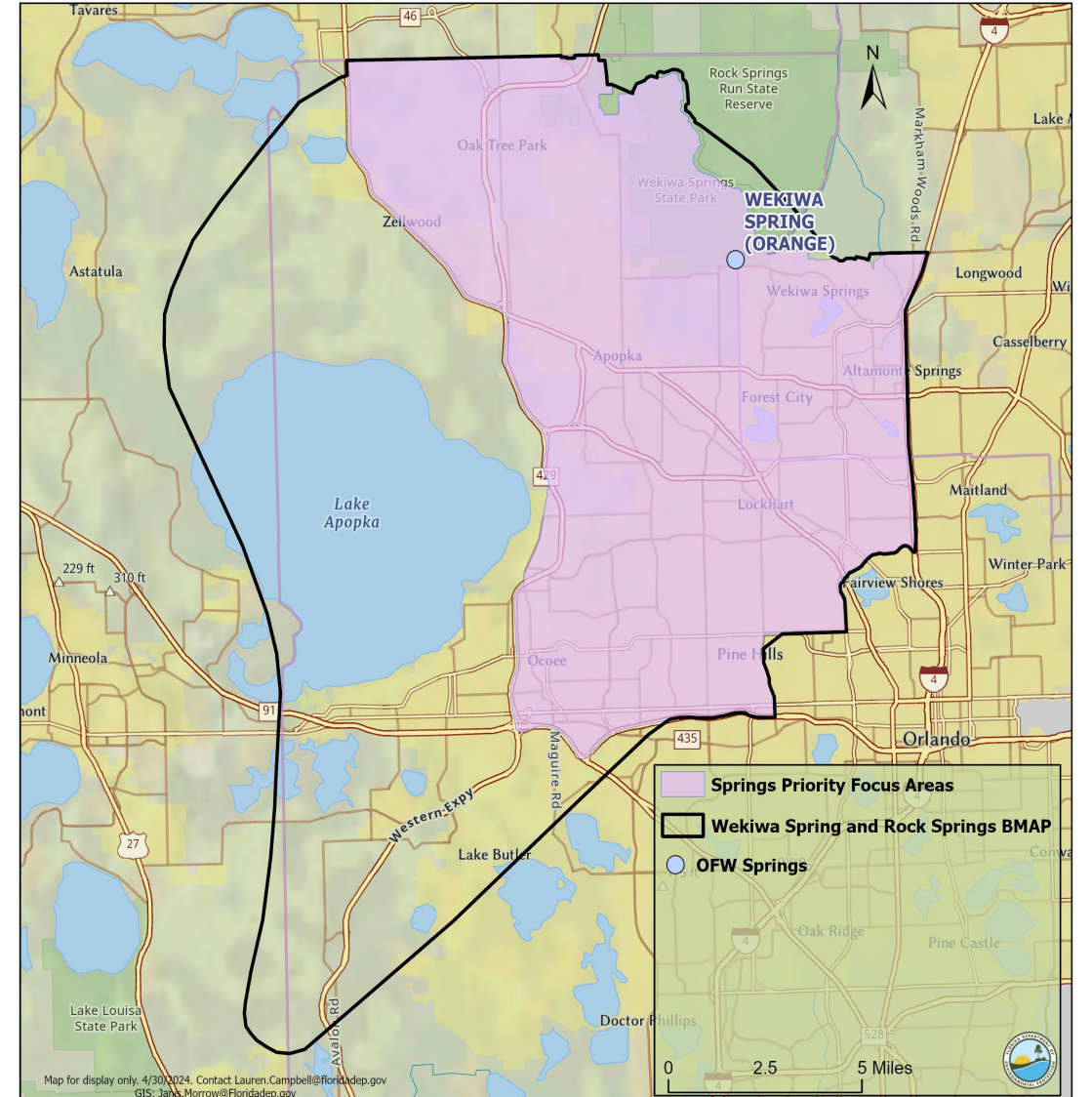
- Adopted to implement the river, canal and springs TMDLs.

2018 BMAP

- Adopted for Wekiwa Springs and Rock Spring.
- Focused on reductions in the springshed area for Wekiwa Spring and Rock Springs.

2025 BMAPs: Two updated BMAPs

- Wekiva River and Little Wekiva Canal BMAP.
- Wekiwa Spring and Rock Springs BMAP.





BMAP UPDATE COMPONENTS

ADOPT BY JULY 1, 2025

Springs and Surface Waters

- Incorporate the 2020 Clean Waterways Act, 2023 House Bill (HB) 1379, and 2024 HB 1557 requirements.
- Incorporate regional projects.
- Assess future growth.
- Evaluate further onsite sewage treatment and disposal systems (OSTDS) provisions.
- Evaluate the need for advanced waste treatment (AWT) or other more stringent effluent limits for domestic wastewater treatment facilities (WWTFs).

Springs

- Nitrogen Source Inventory Loading Tool (NSILT) updates.
- Spring vent load analyses updates.
- Entity allocation development.
 - Establish five-year milestones for project implementation.
- Water quality data evaluation:
 - Evaluation of the monitoring network (spring vent and groundwater).
 - Groundwater analyses.

Surface Waters

- Management strategies update.
- Water quality data evaluation:
 - Evaluation of the monitoring networks.
 - Hotspot Analysis.






PREVIOUS MEETINGS

Summary of 2024 BMAP update meetings:

- **January Public Meeting.**
 - Virtual.
 - Overview of NSILT methodology updates (all springs basins).
- **May Public Meeting.**
 - Virtual.
 - Legislative requirements and basin specific analyses.
- **September Public Meeting.**
 - In person.
 - Basin and entity allocated reductions, poster session.
- **Entity Specific Meetings.**
 - Throughout summer and fall 2024.
 - Seven one-on-one meetings to discuss reduction allocations and project lists.



Source: [Crystal River and Kings Bay | WaterMatters.org](https://www.watermatters.org/)



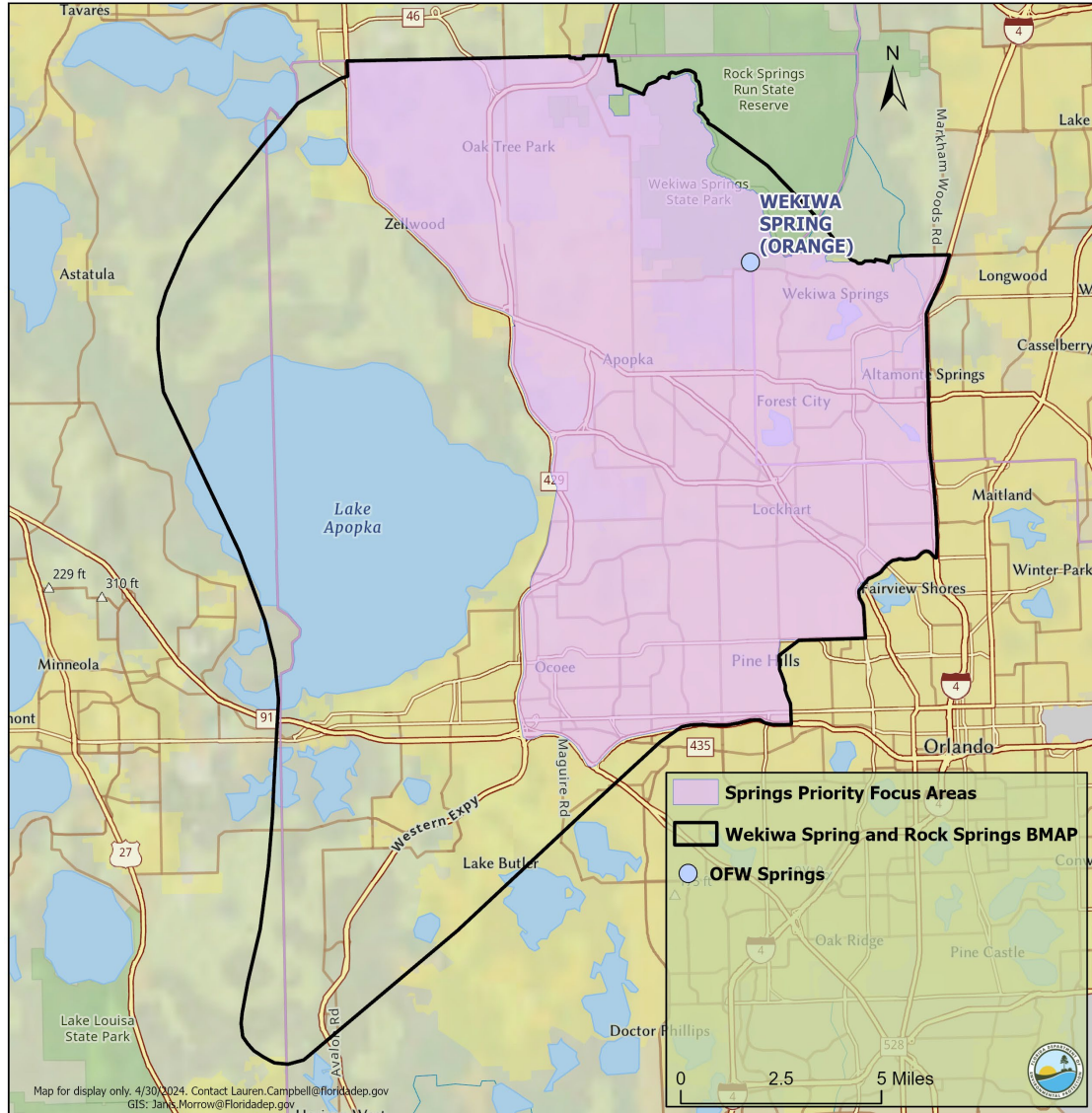
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WEKIWA SPRINGS AND ROCK SPRING BMAP



BACKGROUND

WEKIWA SPRINGS AND ROCK SPRINGS BMAP



Wekiwa Spring and Rock Springs TMDL (2008):

- Monthly average target of 0.286 milligrams per liter (mg/L) of nitrate and 0.065 mg/L of Total Phosphorus (TP).
- Overlaps some surface water BMAP areas:
 - Wekiva River.
 - Upper Ocklawaha.
 - Lake Okeechobee.



BACKGROUND

WEKIWA/ROCK SPRINGS STAKEHOLDERS

Type of Entity	Name	
Responsible Entities	Agriculture City of Altamonte Springs City of Apopka City of Eustis City of Maitland City of Mount Dora City of Ocoee City of Orlando City of Winter Garden	Lake County Orange County Orange County Utilities Seminole County Town of Eatonville Town of Montverde Town of Oakland Town of Windermere Private Wastewater Treatment Facilities Private Golf Courses
Responsible Agencies	Florida Department of Agriculture and Consumer Services (DACS) Florida Department of Environmental Protection (DEP) County Health Departments	Florida Department of Transportation (DOT) St. Johns River Water Management District Turnpike Enterprises Wekiwa Springs State Park
Other Interested Stakeholders	Environmental Interests Florida Fish and Wildlife Conservation Commission Florida Native Plant Society Florida Onsite Wastewater Association Friends of Wekiva River	Residents/Homeowners Save the Manatee Club Septic System Contractors Wekiva Hunt Club Wekiva River Aquatic Preserve



DRAFT DOCUMENT

Section 1: Background

Section 2: Implementation

Section 3: Monitoring and Reporting

Section 4: Commitment to Plan Implementation

Section 5: References

Appendices

Legislation

TMDLs

BMAP Requirements

BMAP Area

Priority Focus Area
(PFA)

Other Scientific and Historical Information

Stakeholder
Involvement

Best Management
Practices (BMPs)
Adopted by Rule



DRAFT DOCUMENT

Section 1: Background

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Appendices

Pollutant Loads

Load Reduction Strategy

Allocated Reductions

**Management
Strategies**

OSTDS

WWTF

**Urban Turfgrass
Fertilizer (UTF)**

**Sports Turfgrass
Fertilizer (STF)**

Agriculture

Atmospheric Deposition

Future Growth

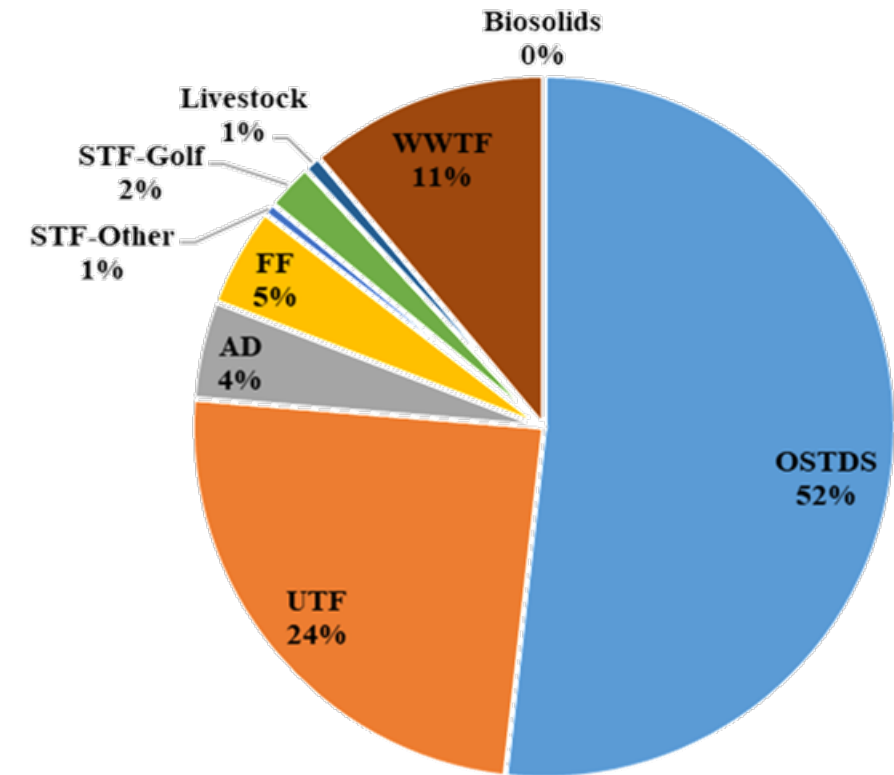
Funding Opportunities



POLLUTANT LOADS

SECTION 2: IMPLEMENTATION TO ACHIEVE THE TMDL

Nitrogen Source	Total Nitrogen (TN) Load to Groundwater (lbs/yr)	% Contribution
OSTDS	628,072	52%
UTF	297,425	25%
Atmospheric Deposition (AD)	55,034	5%
Farm Fertilizer (FF)	55,592	5%
STF	6,810	1%
STF — Golf	26,227	2%
Livestock Waste (LW)	9,477	1%
WWTFs	134,595	11%
Total	1,213,232	100%



lbs/yr = pounds/year



LOADING ALLOCATION

SECTION 2: IMPLEMENTATION TO ACHIEVE THE TMDL

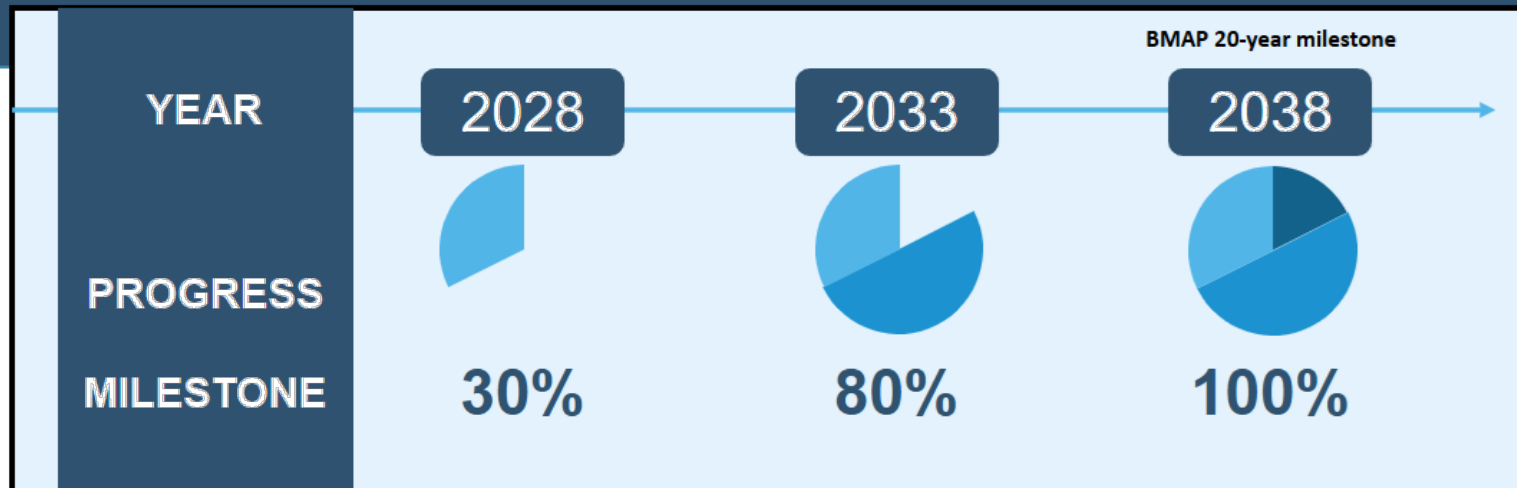
Description	Nitrogen Loads (lbs/yr)	Notes Regarding Data Used
Total Load at Spring Vent	286,567	Upper 95% confidence interval — nitrate data and flow data from 2012 to 2022 (1.12 mg/L and 63.67 cubic feet per second [cfs] and 1.32 mg/L and 56.74 cfs).
TMDL Load	67,705	TMDL target is 0.286 mg/L and using the spring vent flow data from 2012 to 2022.
Percent Reduction	76%	Calculated reduction needed based on the total load at the spring vent and the TMDL load.
NSILT Load	1,213,232	Total load to groundwater from the updated NSILT.
Required Reduction	926,589	Percent reduction multiplied by the NSILT load.



MILESTONES/REDUCTION SCHEDULE

SECTION 2: IMPLEMENTATION TO ACHIEVE THE TMDL

- 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/REDUCTION SCHEDULE

SECTION 2: IMPLEMENTATION TO ACHIEVE THE TMDL

- 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.



ENTITY ALLOCATIONS

SECTION 2: IMPLEMENTATION TO ACHIEVE THE TMDL

Timeline

- 2028: 30%
- 2033: (+50%) 80%
- 2038: (+20%) 100%

Entity	2028 Milestone Assigned Reductions (30%) TN (lbs/yr)	Total Assigned Reductions TN (lbs/yr)
Agriculture	14,909	49,695
Lake County	671	2,236
Town of Montverde	1	4
Orange County	155,672	518,907
City of Apopka	16,842	56,141
Town of Oakland	2,447	8,158
City of Ocoee	22,240	74,135
City of Orlando	1,737	5,790
City of Winter Garden	4,412	14,708



ENTITY ALLOCATIONS

SECTION 2: IMPLEMENTATION TO ACHIEVE THE TMDL

Timeline

- 2028: 30%
- 2033: (+50%) 80%
- 2038: (+20%) 100%

Entity	2028 Milestone Assigned Reductions (30%) TN (lbs/yr)	Total Assigned Reductions TN (lbs/yr)
Town of Eatonville	254	848
Town of Windermere	1,091	3,636
City of Maitland	669	2,229
Seminole County	21,998	73,327
City of Altamonte Springs	4,641	15,470
Private WWTFs*	1,572	5,241
Private Golf Courses*	6,009	20,031
Regional Projects	10,201	34,003
Totals	265,367	884,557

*List of facilities and golf courses is included in the BMAP document.



PROGRESS

SECTION 2: IMPLEMENTATION TO ACHIEVE THE TMDL

Entity	2028 Milestone Assigned Reductions (30%)(lbs/yr)	TN Completed and Ongoing Project Credits (lbs/yr)	TN Reductions from Planned and Underway Projects* (Not Verified) (lbs/yr)	Total Projected** Project TN Reductions by Entity Through 2028 (lbs/yr)
Agriculture	14,909	10,143	37	10,180
Lake County	671	77	0	77
Town of Montverde	1	0	0	0
Orange County	155,672	8,936	32,303	41,239
City of Apopka	16,842	3,198	144	3,342
Town of Oakland	2,447	160	0	160
City of Ocoee	22,240	3,463	391	3,854
City of Orlando	1,737	410	611	1,021
City of Winter Garden	4,412	1,261	0	1,261

* Planned and underway project reduction estimates are not verified by DEP.

** Projected reductions include projects with a project status of completed, ongoing, planned and underway.



PROGRESS

SECTION 2: IMPLEMENTATION TO ACHIEVE THE TMDL

Entity	2028 Milestone Assigned Reductions (30%)(lbs/yr)	TN Completed and Ongoing Project Credits (lbs/yr)	TN Reductions from Planned and Underway Projects* (Not Verified) (lbs/yr)	Total Projected** Project TN Reductions by Entity Through 2028 (lbs/yr)
Town of Eatonville	254	0	0	0
Town of Windermere	1,091	0	0	0
City of Maitland	669	175	0	175
Seminole County	21,998	2,849	0	2,849
City of Altamonte Springs	4,641	1,089	0	1,089
Private WWTFs	1,572	0	0	0
Private Golf Courses	6,009	0	0	0
Regional Projects	10,201	306	0	306
Total, All Reductions	265,367	32,067	33,486	65,247

* Planned and underway project reduction estimates are not verified by DEP.

** Projected reductions include projects with a project status of completed, ongoing, planned and underway.



WASTEWATER

SECTION 2: IMPLEMENTATION TO ACHIEVE THE TMDL

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 Senate Bill (SB) 64 (2021)

- Subsection 403.064(16), Florida Statutes (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 2: IMPLEMENTATION TO ACHIEVE THE TMDL

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 G have 10 years from BMAP adoption to meet the applicable AWT standards.



WASTEWATER

SECTION 2: IMPLEMENTATION TO ACHIEVE THE TMDL

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 these BMAPs.

Nitrogen effluent limits for wastewater facilities

Facility Capacity (gpd)	Surface Water Discharges (mg/L)	WWTFs Not Listed in Appendix G — Rapid Rate Land Application Effluent Disposal System (mg/L)	WWTFs Not Listed in Appendix G — All Other Disposal Methods, Including Reuse (mg/L)
Greater than 100,000	3	3	3
100,000 to 20,000	3	3	6
Less than 20,000	3	6	6

Phosphorus effluent limits for wastewater facilities

Facility Capacity (gpd)	Surface Water Discharges (mg/L)	WWTFs Not Listed in Appendix G — Rapid Rate Land Application Effluent Disposal System (mg/L)	WWTFs Not Listed in Appendix G — All Other Disposal Methods, Including Reuse (mg/L)
Greater than 100,000	1	1	6
100,000 to 20,000	1	3	6
Less than 20,000	1	6	6

gpd = gallons per day.



OSTDS REMEDIATION

SECTION 2: IMPLEMENTATION TO ACHIEVE THE TMDL

Section 373.807, F.S.

- Requires BMAPs to include an OSTDS remediation plan if OSTDS contribute at least 20% of nonpoint source nitrogen pollution, or if DEP determines OSTDS remediation is needed to achieve the TMDL.
- This remediation plan establishes a remediation policy (**Appendix E**) applicable to **all existing OSTDS** within **the PFA on lots of one acre or less**.
- This remediation plan was included in the 2018 BMAP and has not been modified for this update.

Subsection 403.067(7)(a)9., F.S.

- Requires local governments to develop an OSTDS remediation plan if DEP identifies OSTDS as contributors of at least 20% of point source or nonpoint source nutrient pollution or if DEP determines remediation is necessary to achieve the TMDL.
- This BMAP contains a remediation plan for OSTDS consisting of management actions, including those described in **Appendix B** in the draft BMAP document.



WASTEWATER

SECTION 2: IMPLEMENTATION TO ACHIEVE THE TMDL

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.





URBAN TURFGRASS

SECTION 2: IMPLEMENTATION TO ACHIEVE THE TMDL

Fertilizer Ordinance

- Subsection 373.807(2), F.S., requires local governments with jurisdictional boundaries within an OFS to develop, enact and implement a fertilizer ordinance by July 1, 2017.

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 a Municipal Separate Storm Sewer System (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 Total Phosphorous (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.



SPORTS TURFGRASS

SECTION 2: IMPLEMENTATION TO ACHIEVE THE TMDL

Sports Turfgrass and Golf Courses

- Sporting facilities are required to follow the "2025 Sports Turf BMP Manual."
 - DEP and University of Florida are collaborating to develop this manual.
- Superintendents of 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).
 - A draft NMP must be submitted to DEP within one year of BMAP adoption and a final document is due two years after adoption.



AGRICULTURE

SECTION 2: IMPLEMENTATION TO ACHIEVE THE TMDL

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 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 2: IMPLEMENTATION TO ACHIEVE THE TMDL

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 2: IMPLEMENTATION TO ACHIEVE THE TMDL

- Atmospheric sources of nutrients are local, national and international.
- Recent data indicate that the emissions of nitrogen has been generally decreasing in Florida with an up to 55% decrease in emissions by 2028 possibly as result of the following:
 - Power plant fuel source changes.
 - Air treatment upgrades.
 - Increased use of electric vehicles.
 - Decreasing mobile sources.
- Nitrogen reductions from this source category were not assigned to responsible entities.
- Atmospheric deposition sources and trends will be re-evaluated periodically.



FUTURE GROWTH

SECTION 2: IMPLEMENTATION TO ACHIEVE THE TMDL

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 sewerage 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 turfgrass loading based on percentage of available acres developed using low and high intensity landscaping, based on a general percent turf cover and turfgrass species fertilization rates.
- Ran three management scenarios to look at loading by entity, source and overall basin.



FUTURE GROWTH

SECTION 2: IMPLEMENTATION TO ACHIEVE THE TMDL

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 available land** developed using **low intensity** landscaping (10% turf cover using centipede grass).

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 available land** developed using **low intensity** landscaping (10% turf cover using centipede grass).

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 available land** developed using **high intensity** landscaping (25% turf cover using St. Augustine grass).



FUTURE GROWTH ANALYSIS

SECTION 2: IMPLEMENTATION TO ACHIEVE THE TMDL

Entity	2040 People	Scenario 1 TN (lbs/yr)	Scenario 2 TN (lbs/yr)	Scenario 3 TN (lbs/yr)
City of Altamonte Springs	1,240	323	530	4,441
City of Apopka	15,397	7,375	8,636	37,841
City of Maitland	723	169	228	1,421
City of Mount Dora	0	0	0	0
City of Ocoee	7,473	1,746	2,012	14,008
City of Orlando	1,538	377	503	3,061
City of Winter Garden	7,626	1,909	2,534	15,256
City of Winter Park	1	0	0	3

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

SECTION 2: IMPLEMENTATION TO ACHIEVE THE TMDL

Entity	2040 People	Scenario 1 TN (lbs/yr)	Scenario 2 TN (lbs/yr)	Scenario 3 TN (lbs/yr)
Lake County	1,816	763	2,433	10,073
Orange County	44,472	21,730	43,082	145,573
Seminole County	3,301	796	1,268	11,538
Town of Eatonville	269	69	91	541
Town of Montverde	6	2	9	33
Town of Oakland	1,016	237	103	1,563
Town of Windermere	327	76	30	497

2040 Loading — Basin Totals

Scenario 1 Total	Scenario 2 Total	Scenario 3 Total
35,573	61,459	245,850

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.



DRAFT DOCUMENT

Section 1: Background

Section 2: Implementation

Section 3: Monitoring and Reporting

Section 4: Commitment to Plan Implementation

Section 5: References

Appendices

Methods for Evaluating Progress

Adaptive Management

Water Quality and Biological Monitoring

Groundwater Analysis



WATER QUALITY MONITORING

SECTION 3: MONITORING AND REPORTING

Primary objectives:

- Measure the water quality and biological response in the impaired springs and groundwater at the beginning of the BMAP period and during implementation.
- Document nutrient trends in the springshed.

Secondary objectives:

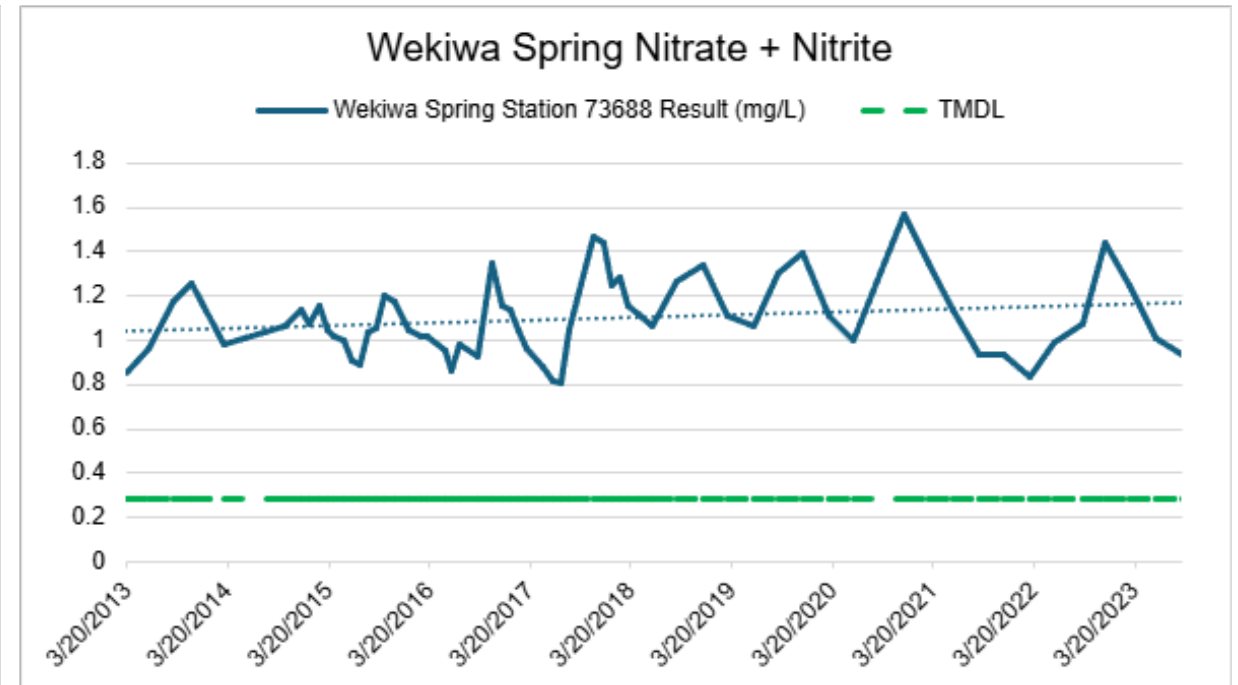
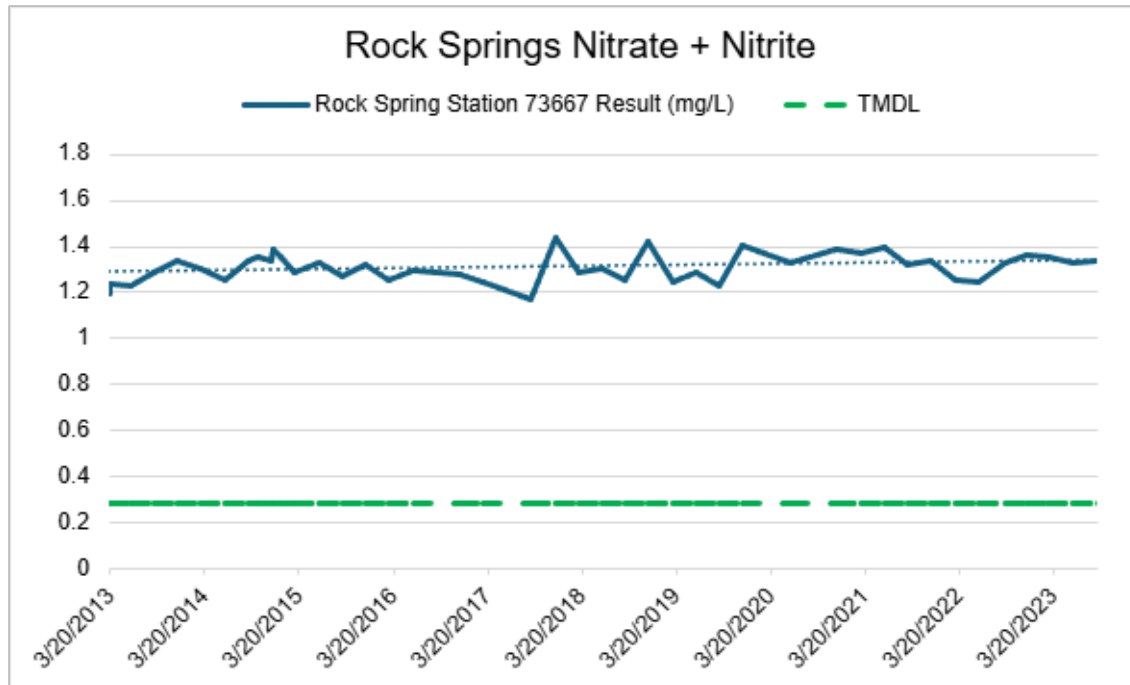
- Identify areas where groundwater data and modeling might help in understanding the hydrodynamics of the system.
- Evaluate groundwater quality trends and nutrient loading to the aquifer across the basin.
- Confirm and refine nutrient removal efficiencies of agricultural and/or urban BMPs, projects and other management efforts.



WATER QUALITY MONITORING

SECTION 3: MONITORING AND REPORTING

- Available water quality data will be analyzed during BMAP implementation to determine trends in water quality and the health of the biological community.
- A wide variety of statistical methods are available for the water quality trend analyses.
 - The selection of an appropriate data analysis method will depend on the frequency, spatial distribution and period of record available from existing data. Specific statistical analyses were not identified during BMAP development.





GROUNDWATER MONITORING

SECTION 3: MONITORING AND REPORTING

Groundwater monitoring gives us a look at the health of the aquifer before water discharges at spring vent.

- There are insufficient data to perform an analysis of groundwater within this BMAP area.
- DEP is working to develop a groundwater monitoring network within this basin so that future changes in groundwater nutrient concentrations can be evaluated.
- Future considerations:
 - Stratifying data by land use, distance to spring vent, other factors.
 - Trends analysis to see changes over time.
- Looked at measured data (nitrate — total and dissolved) from groundwater monitoring wells from DEP's Water Information Network (WIN) and the water management districts to do a visual analysis using the annual median as boxplots.
- Wells that were sampled regularly through the period of record were considered “fixed.” Wells with inconsistent sampling (i.e., less than four samples over the period of record) were considered “sporadic.”
- Data from the fixed wells are preferred for analyses because comparisons between time periods represent changes in the same set of wells. If there was insufficient data from fixed wells, sporadic well data was also considered.



DRAFT DOCUMENT

Section 1: Background

Section 2: Implementation

Section 3: Monitoring and Reporting

Section 4: Commitment to Plan Implementation

Section 5: References

Appendices

Adoption Process

Tracking Reductions

Revisions to the BMAP



ADAPTIVE MANAGEMENT

SECTION 4: COMMITMENT TO PLAN IMPLEMENTATION

Tracking Reductions:

- Required loading reductions are expected to be met by 2038.
- Each entity is responsible for implementing management actions to meet their upcoming 5-year milestone.
- The statewide annual report will provide an annual update of progress made in implementing load reductions tracking the implementation status of the management actions listed in the BMAP.

Revisions to the BMAP:

- Section 403.067, F.S., requires that the plan be revised, as appropriate.
 - Assessment of progress toward milestones must be conducted every five years and revisions to the plan must be made as appropriate.
 - BMAPs use an adaptive management approach that allows for incremental load reductions through the implementation of projects and management strategies; however, the restoration target, the TMDL, remains the same.



DRAFT DOCUMENT

Section 1: Background

Section 2: Implementation

Section 3: Monitoring and Reporting

Section 4: Commitment to Plan Implementation

Section 5: References


Appendices



BMAP UPDATE DOCUMENT

APPENDICES

- **Updated:** Important links.
 - **Updated:** Projects to Reduce Nitrogen Sources.
 - Projects submitted by responsible entities through the BMAP portal through November 2024.
 - Includes projects from the 2020 Clean Waterways Act WWTF and OSTDS plans submitted by local governments August 2024.
 - **NEW:** Planning for Additional Management Strategies.
 - Examples of project efforts entities can identify to meet their milestone reduction requirements.
 - PFA Report.
 - **Updated:** OSTDS Remediation Plan.
- **NEW:** Technical Support Information
 - NSILT methodology.
 - **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).
 - **NEW:** Private Wastewater Treatment Facilities and Private Golf Courses with Allocations.

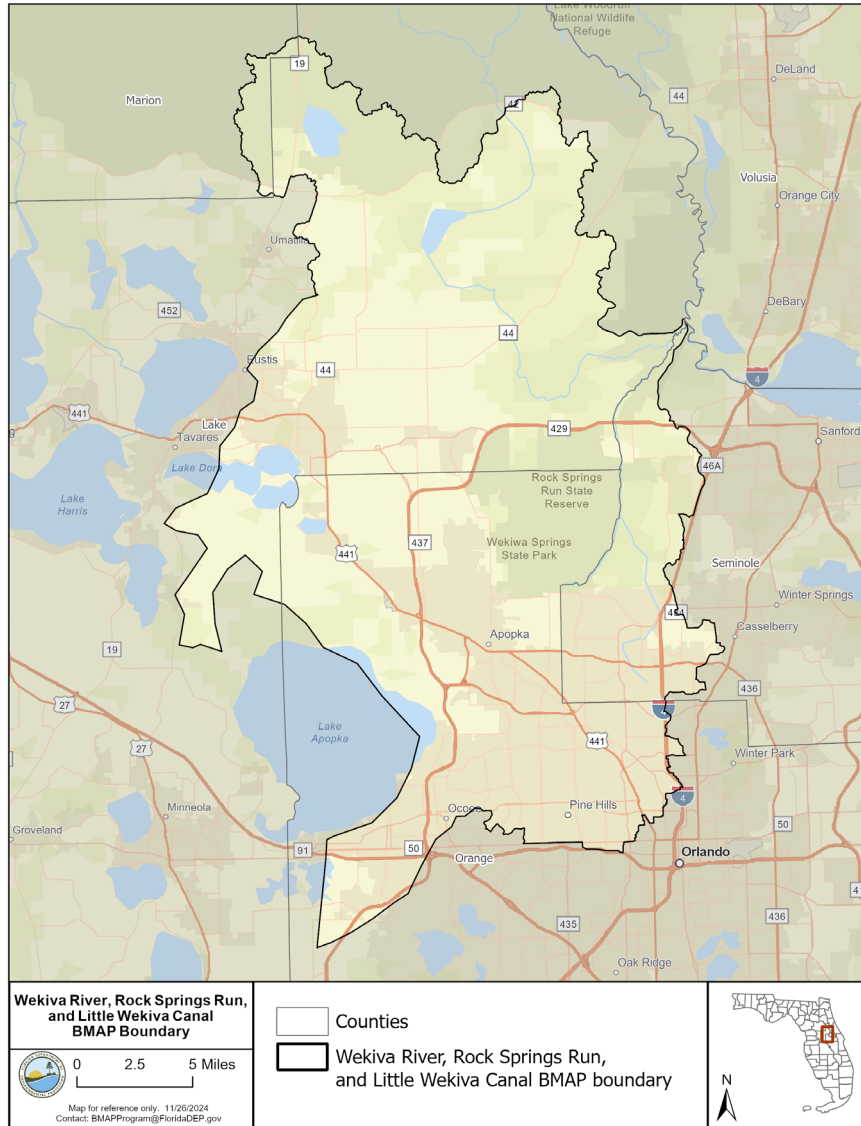


Wekiva River, Rock Springs Run, and Little Wekiva Canal BMAP



BOUNDARY

WEKIVA RIVER AND LITTLE WEKIVA CANAL BMAP



Wekiva River and Little Wekiva Canal TMDLs (2008)

- Wekiva River monthly average nitrate target of 0.286 mg/L and 0.065 mg/L of TP.
- Little Wekiva Canal TMDL includes a TN reduction of 45.2% and a BOD reduction of 11.0%.
- Overlaps some of Wekiwa Springs, Gemini and Upper Ocklawaha BMAP areas.



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.



BACKGROUND

WEKIVA/LITTLE WEKIVA RIVER STAKEHOLDERS

Type of Entity	Name	
Responsible Entities	Agriculture City of Altamonte Springs City of Apopka City of Eustis City of Maitland City of Mount Dora	City of Ocoee City of Orlando Lake County Orange County Seminole County
Responsible Agencies	County Health Departments DEP DACS DOT District 5	St. Johns River Water Management District Sunshine Water Services Turnpike Enterprise
Other Interested Stakeholders	Environmental Interests Florida Fish and Wildlife Conservation Commission Florida Native Plant Society Florida Onsite Wastewater Association Friends of Wekiva River	Private Wastewater Treatment Facilities Residents/Homeowners Save the Manatee Club Septic System Contractors Wekiva River Aquatic Preserve



SURFACE WATER 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 2015 BMAP.
- Modeling from previous adopted documents will remain the same.
- Loading estimates and allocations detailed in the 2015 BMAP will remain in effect.
- Discussion on upcoming St. Johns River Basin Model.

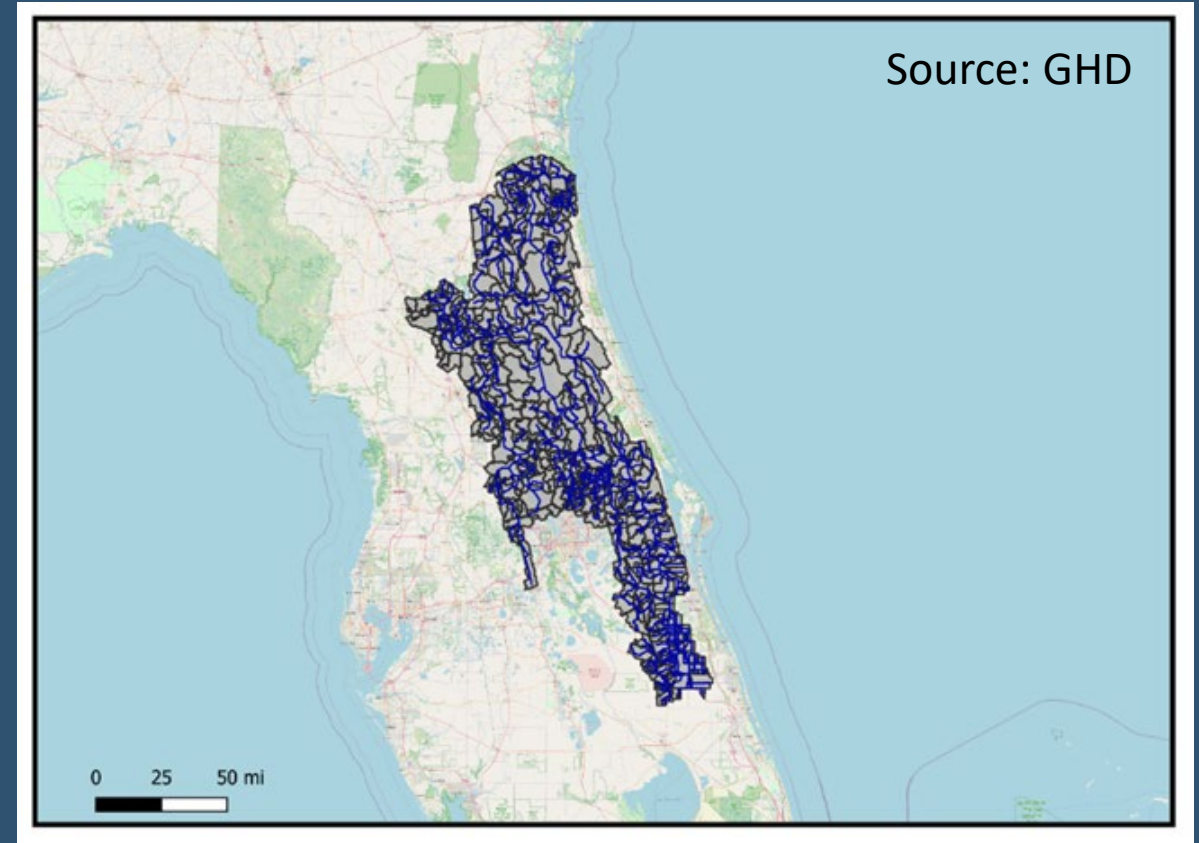


ST. JOHNS RIVER MODELING

SECTION 2: MODELING

Modeling Updates Underway.

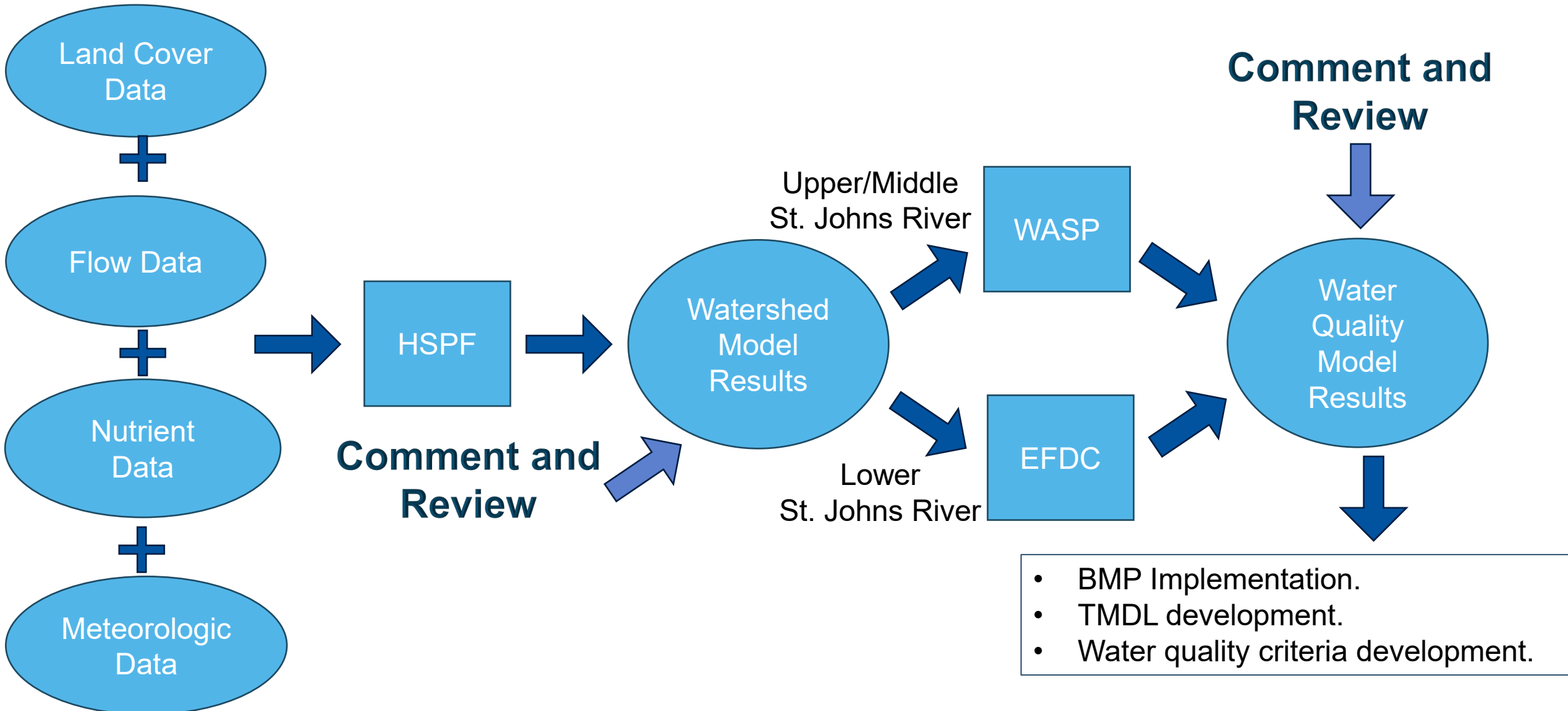
- Entire St. Johns River Basin.
- Updated input data.
- Watershed Model: Hydrological Simulation Program – FORTRAN (HSPF).
- Receiving Waterbody Model: Water Quality Analysis Simulation Program (WASP).
- Hydrodynamic Model: Environmental Fluid Dynamics Code (EFDC).





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: Tracking Implementation

- Review of approaches in the 2015 BMAP.
- Future allocations will be based on the updated St. Johns River Model.
- **Five Year Milestones**
 - Requirement under section 403.067, 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 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

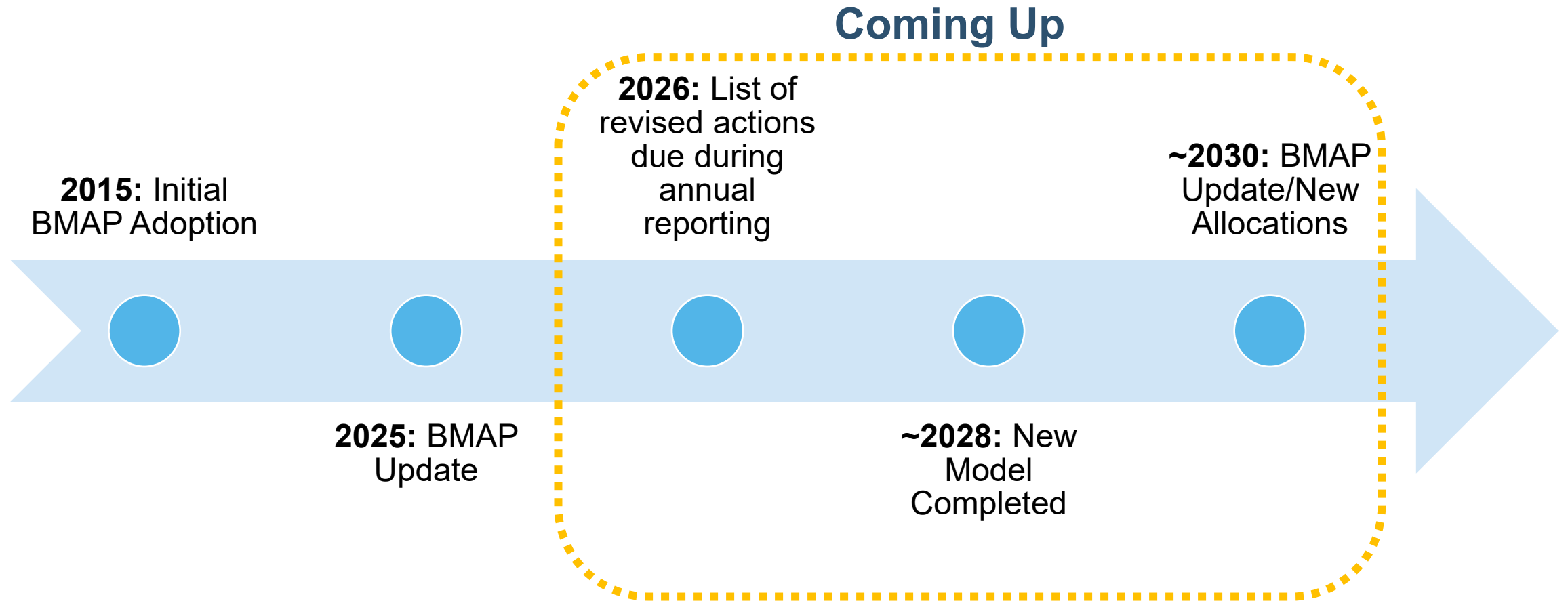
SECTION 3: CALCULATING AND ALLOCATING LOAD REDUCTIONS

- Responsible entities must submit a **sufficient list** of projects and management strategies to DEP by **Jan. 14, 2026**, to demonstrate they are implementing nutrient reduction projects and/or actively planning projects and evaluating areas of high loading; if these efforts are not demonstrated, the entity will be subject to further department enforcement.
- Each lead entity's management strategies list must demonstrate active planning efforts to identify projects to achieve reductions in the Wekiva River Basin, pending new loading estimates and allocations based on the St. Johns River Model updates. Sufficient projects and management strategies to implement reductions and/or project identification efforts are required, as evaluated by DEP.
- Responsible entities must identify adequate management strategies **by Jan. 14, 2026**. DEP will notify any entities with project lists deemed inadequate **by March 31, 2026**.
- Examples of management strategies are listed in the document.



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 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
$< 0.5, \geq 0.01$	3	3	6	10
< 0.01	3	N/A	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
$< 0.5, \geq 0.01$	1	1	3	6
< 0.01	1	N/A	6	6

mgd = million gallons per day.



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

SECTION 2: IMPLEMENTATION TO ACHIEVE TMDL

Stormwater

- The 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 a MS4 permit and designate eligible entities as regulated MS4s, in accordance with Chapter 62-624, F.A.C.
- Chapter 62-330 F.A.C. (2024).
 - Updated Florida's stormwater rule for design criteria and to strengthen the operation and maintenance requirements.
 - Applicants must demonstrate a level of treatment sufficient to accomplish the greater of the following nutrient load reduction criteria through calculations or modeling that the future stormwater management systems would provide additional treatment to meet new Environmental Resource Permits stormwater treatment performance standards of 80% reduction for TP and 55% reduction for TN, or post-development condition average annual loading of nutrients does not exceed the predevelopment condition nutrient loading, along with additional requirements that would apply where a project discharges to Outstanding Florida Waters or impaired waters.



STORMWATER AND SPORTING FACILITIES

SECTION 4: MANAGEMENT ACTIONS

Sports Turfgrass and Golf Courses

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



AGRICULTURE

SECTION 4: MANAGEMENT ACTIONS

Dairy Operations with 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 nitrogen emissions have been generally decreasing in Florida with an up to 55% decrease in emissions 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 sewerage based on Florida Water Management Inventory parcel to point data.
- Applied per person loading values for portions of future population on centralized sewer or OSTDS.
- Assumed increase in urban stormwater loading based on percentage of undeveloped acres converted to low density residential land use, using statewide event mean concentrations and runoff coefficients.
- Ran three management scenarios to look at loading by entity, source and overall basin.



FUTURE GROWTH

SECTION 4: MANAGEMENT ACTIONS

Scenario 1

By 2040:

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

Scenario 2

By 2040:

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

Scenario 3

By 2040:

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



FUTURE GROWTH

SECTION 4: MANAGEMENT ACTIONS

Entity	2040 Additional Population	Scenario 1 TN (lbs/yr)	Scenario 2 TN (lbs/yr)	Scenario 3 TN (lbs/yr)
City of Altamonte Springs	1,961	1,092	1,681	3,141
City of Apopka	15,397	9,140	11,406	21,962
City of Eustis	1,003	642	1,168	2,217
City of Maitland	782	468	584	1,126
City of Mount Dora	1,820	1,165	2,051	3,886
City of Ocoee	7,473	4,469	7,003	13,594
City of Orlando	3,818	2,101	2,663	5,115
Lake County	26,872	17,203	38,730	74,277
Orange County	46,522	27,820	43,072	83,578
Seminole County	7,331	4,665	7,606	14,387

2040 Loading — Basin Totals

Scenario 1 Total	Scenario 2 Total	Scenario 3 Total
68,765	115,964	223,283

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



BMAP UPDATE DOCUMENT

Section 5: Monitoring Strategies

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

Section 6: Commitment to Plan Implementation

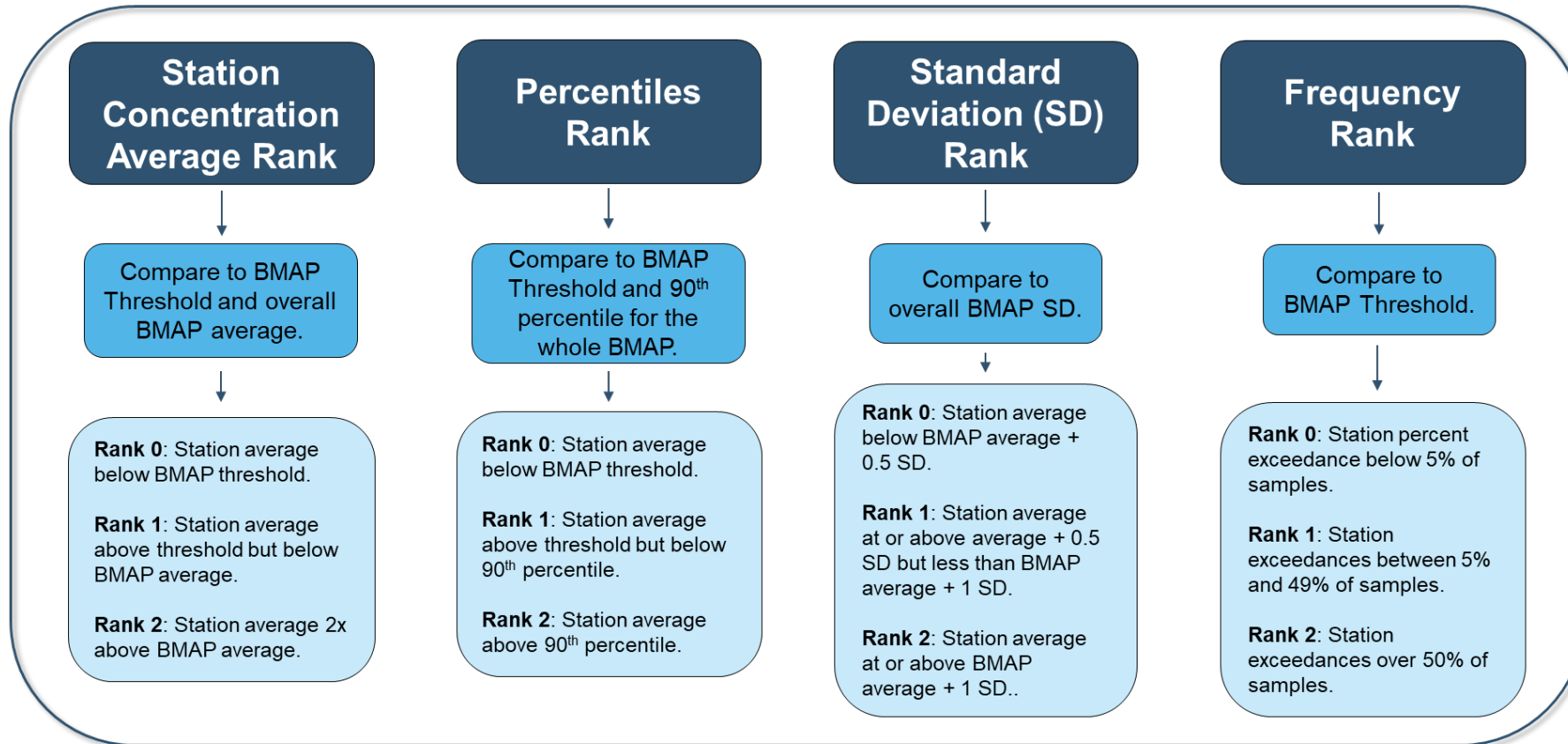
- Review of process for BMAP adoption, tracking and adaptive management.



HOT SPOT ANALYSIS

SECTION 5: MONITORING STRATEGIES

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

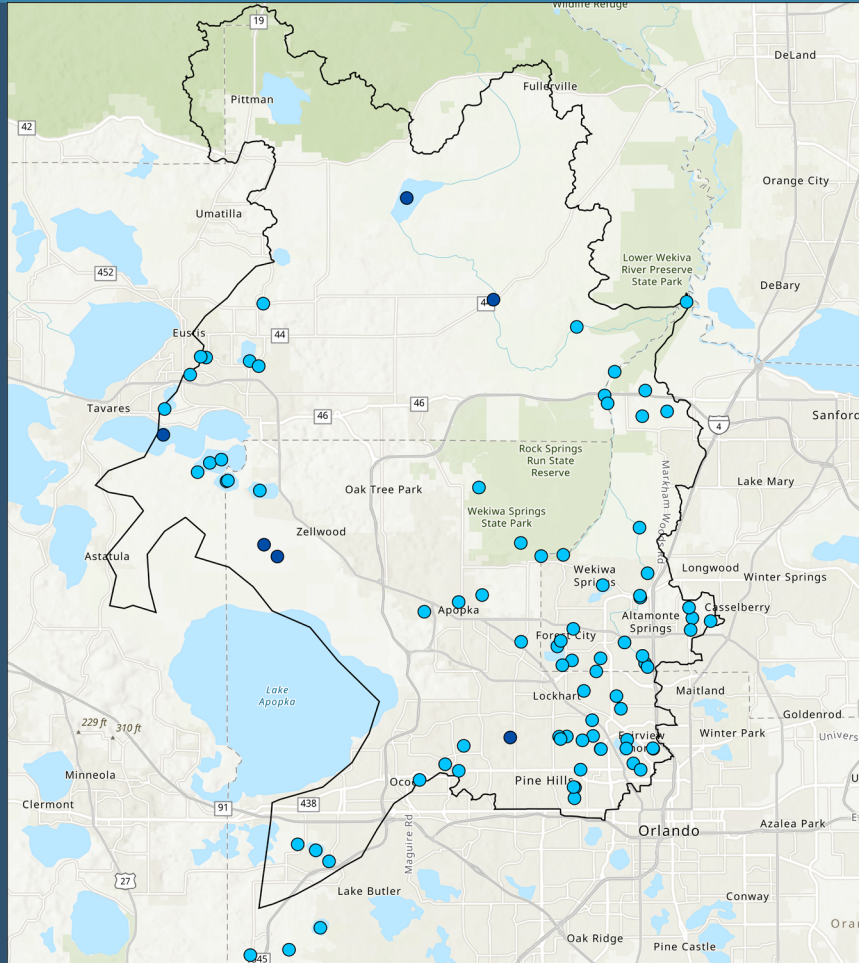




HOT SPOT ANALYSIS

SECTION 5: MONITORING STRATEGIES

TN:



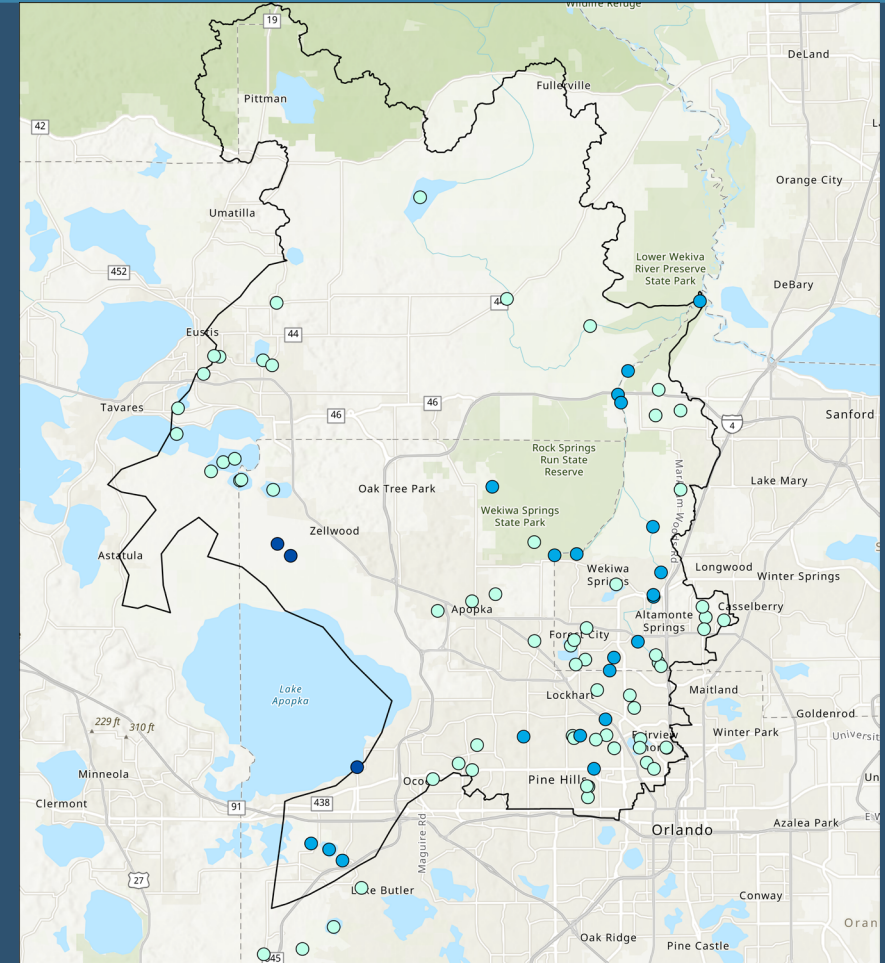
Wekiva River BMAP Hot Spot Analysis

Map prepared by the Division of Environmental Assessment and Restoration.
This map is not for legal decisions making purposes.
Created: 01-27-2025



Total Nitrogen Total Rank
● Medium
● High
— Wekiva BMAP Boundary

TP:



Wekiva River BMAP Hot Spot Analysis

Map prepared by the Division of Environmental Assessment and Restoration.
This map is not for legal decisions making purposes.
Created: 01-27-2025



Total Phosphorus Total Rank
● Low
● Medium
● High
— Wekiva BMAP Boundary



BMAP UPDATE DOCUMENT

APPENDICES

- **Updated:** Important links.
- **Updated:** Project tables.
 - Projects submitted by responsible entities through the BMAP portal through November 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).



UPCOMING SCHEDULE

September
2024, Technical
BMAP update
public meeting.

April 2025,
Draft BMAP
document
available for
review.

April 2025,
Draft BMAP
update public
meeting.

April-May
2025, Draft
BMAP update
comment
period.

July 1, 2025,
Statutory
deadline for
updated
nutrient
BMAPs.



NEXT STEPS

BMAP update document draft review:

- Draft documents sent out via GovDelivery April 10, 2025.
- Stakeholder review comments due **May 2, 2025.**

Submit comments to:
Moira.Homann@FloridaDEP.gov



Source: DEP



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 wastewater and stormwater infrastructure, regional projects and conservation programs designed to reduce nonpoint source pollution. 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 allow for incremental load reductions through the implementation of projects and management practices, monitoring and conducting studies to better understand the water quality and hydrologic dynamics of the basin. BMAPs are necessary for project implementation and water quality analyses. DEP continues to work with local and regional stakeholders on 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 the updates, including 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



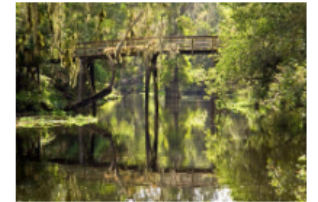
Nutrient BMAPs contain a comprehensive set of solutions, such as permit limits on wastewater facilities, urban and agricultural best management practices, and conservation programs designed to achieve pollutant reductions established by a total maximum daily load

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 \(BMAPs\) | Florida Department of Environmental Protection](#)



BMAP MEETING

PUBLIC COMMENT PERIOD

Verbal Comments

- We ask that 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.

A large, white, digital-style timer showing "2:00" is centered on a black background. The timer is enclosed within a circular frame made of small white dashes, with a vertical line acting as a hand pointing to the top of the circle.



THANK YOU

Moira Rojas Homann
BMAP Program Administrator

Contact Information:
850-245-8460
BMAPProgram@FloridaDEP.gov

Florida Department of Environmental Protection (DEP)
Wekiwa-Rock Springs and Wekiva River-Little Wekiva River
Basin Management Action Plans (BMAPs)
Virtual Public Meeting via GoToWebinar
April 17, 2025
2:00 pm – 4:02 pm EDT

Attendees

Leah Aidif, Halff	Carmen Lamothe, Citizen
Lisa Bally, ATM	Sue Lamothe, Citizen
Sean Beaudet, Lake County	Heather Lindell, Orange County
Cora Berchem, Save the Manatee Club	Lisa Lotti, City of Orlando
Jennifer Bolling, City of Ocoee	Daniel Magro, Aclus Engineering
Julie Bortles, Orange County	Gabrielle Milch, Citizen
Kellie Bracht, City of Altamonte Springs	Val Mobley, Citizen
Tiffany Busby, Wildwood Consulting	Elizabeth Nackman, SJRWMD
Thomas Calhoun, Seminole County	Kim Ornberg, Seminole County
Keeli Carlton, Seminole County	Joe Parish, Seminole County
Cathie Catasus, Lake County	Don Philpott, Citizen
Michael Cliburn, Citizen	Wendy Poag, Lake County
Dan Conlon, Citizen	Nancy Prine, Citizen
Marsha DeBroske, Citizen	Rod Reardon, Citizen
Roberto Denis, Liquid Solutions Group	Beth Robertson, DEP
Lauren Dorval, FDACS	Raymond Roe, FDOH
Molly Duerig, Central Florida Public Media	SJ Setzco, Citizen
Kim Duffek, DEP	Stacey Simmons, FDACS
Jessica Fetgatter, DEP	Tiffany Simpson, DEP
Agustin Francisco, FDACS	Victoria Steinnecker, Carollo Engineering
Roxanne Groover, FOWA	The Florida Channel, WFSU-TV
Sam Hankinson, DEP	Anthony Tomalewski, DEP
Kenny Hayman, DEP	Diana Turner, DEP
Rob Heaviside, City of Winter Garden	Lisa Van Houdt, DEP
Maira Homann, DEP	Ricardo Vazquez, FDOH
Sheri Huelster, Stantec	Majorie Watson, Citizen
Da Huo, City of Apopka	Ken Weaver, DEP
Jason Icerman, City of Tallahassee	Shannon Wetzel, Seminole County
Jae Jackson, Brevard County	Jesse Wineberg, Orange County
Chandler Keenan, DEP	Nick Zurasky, FDACS

Overall

The draft BMAP documents can be downloaded here <https://floridadep.gov/dear/water-quality-restoration/documents/april-09-2025-weks-draft-bmap-dcocument> and <https://floridadep.gov/dear/water-quality-restoration/documents/april-09-2025-wekr-draft-bmap>. Comments on the draft BMAP document are due by May 2, 2025. Verbal comments at this meeting were welcome. Written comments submitted at the meeting were invited. Comments after the meeting should be sent to BMAPPprogram@FloridaDEP.gov by May 2, 2025.

Questions and Answers

Question (Q): Can the powerpoint be shared after the presentation?

Answer (A): Yes, an email will be sent to participants via the GovDelivery system once the materials are posted online. To manage your DEP GovDelivery notifications, please visit <https://floridadep.gov/dear/dear/content/subscribe>.

Q: (1) In the draft BMAP document, Table 7 shows that all entities need to reduce loads by 265,367 lbs/yr by 2028, but Table 8 shows that current plans will only achieve 65,267 lbs/yr. What happens if the load reductions aren't achieved by 2028? (2) The 2018 BMAP included a list of projects that entities planned to implement in the years following 2018. Does DEP track how many of those projects implemented during the last 6 years? Those projects don't appear to have been effective in reducing total nitrogen (TN) because the TN has increased since 2018 in Wekiwa & Rock Springs. So how can we have any confidence that currently proposed projects will reduce TN?

A: The first table shows the 5-year milestone for the required TN reductions. The second table shows the projects that were submitted through mid-November 2024 (which was the cutoff date for submitting projects to be listed in the 2025 BMAPs) and their total reductions. Additional projects were submitted for the Statewide Annual Report (STAR) 2024 process, so the total reductions listed in the BMAP compared to the most recent entries are incomplete. Some responsible entities may be short of meeting their 2028 milestone(s) but have larger, more extensive projects that will meet the following milestone. Some entities may have project shortfall right now to meet the 2028 milestone. Those entities must provide additional projects or list specific planning efforts to identify additional projects as described in BMAP document to demonstrate how they will comply with the BMAP milestones or be out of compliance.

Q: Do the entities have a detailed breakdown of the sources and the TN loads that they are required to reduce, e.g., OSTDS, UTF, etc.?

A: For the springs (e.g., Wekiwa and Rock Springs), last year DEP provided the lead entities with a breakdown of the loading estimates from each source type during one-on-one meetings

with them. They have been provided the Nitrogen Source Inventory Loading Tool (NSILT) estimates for their jurisdiction. However, DEP encourages the responsible entities to focus on meeting their total reductions and not necessarily to address each loading estimate independently. It may be that some loads are more practical to address more aggressively than others and DEP allows flexibility in how each entity meets their overall assignment. For surface waters (e.g., the Wekiva River) that level of detail in the loading estimates is not currently available. When the St. Johns River Model updates are completed, more information will be available on stormwater loads, wastewater loads, and internal loads. However, it is important to understand that the loading categories used in the NSILT are different than those used in surface water models, so the loading estimates in each evaluation will not use all the same loading categories.

Q: Where is Wekiva Island in the entities?

A: If you are referring to a private outfitter, the kinds of entities that are designated as responsible entities are specific to their function in managing stormwater or wastewater. For example, private entities that are wastewater utilities or golf courses are named in the BMAP as responsible entities. Sources that may be located on private property that contribute to urban stormwater are assigned to the applicable local government or special district who is responsible for managing stormwater.

Q: Will a list of the "sufficient projects proposed" lists of projects and completed project list have credits counted towards the percent reduction?

A: Planned projects are attributed to a specific milestone based on their estimated completion date.

Q: Can the project lists be viewed by the public?

A: Yes. In Appendix B, the draft BMAP documents include the list of projects through mid-November 2024. Online, the 2023 STAR has a downloadable list of projects reported through December 31, 2023. The 2024 STAR project list will include the draft 2025 BMAP project list and some additional projects reported through December 31, 2024. The STAR 2024 report will be posted by July 1, 2025; this report is currently in production.

Comments

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

Adjournment

The meeting ended at 4:02 pm EDT.