St. Lucie River and Estuary Basin Management Action Plan (BMAP) Update Meeting

Via Webinar
Webinar Registration Link:
https://attendee.gotowebinar.com/register/2628257647109493086

April 8, 2025
2 PM EDT

Agenda

- St. Lucie River and Estuary Basin Management Action Plan (BMAP) Background.
- Overview of Draft St. Lucie River and Estuary BMAP Update
- Questions/Comments.

Please note the site for documents pertaining to the St. Lucie River and Estuary:

BMAP Public Meetings | Florida Department of Environmental Protection
For more information on the St. Lucie River and Estuary BMAP, contact: Tony Tomalewski, 850-245-8683.
Anthony.Tomalewski@FloridaDEP.gov

ST. LUCIE RIVER AND ESTUARY BASIN MANAGEMENT ACTION PLAN DOCUMENT UPDATE

Tony Tomalewski
Division of Environmental Assessment and Restoration
Florida Department of Environmental Protection

GoTo Webinar | April 8, 2025

Photo Credit: SFWMD

WEBINAR TIPS

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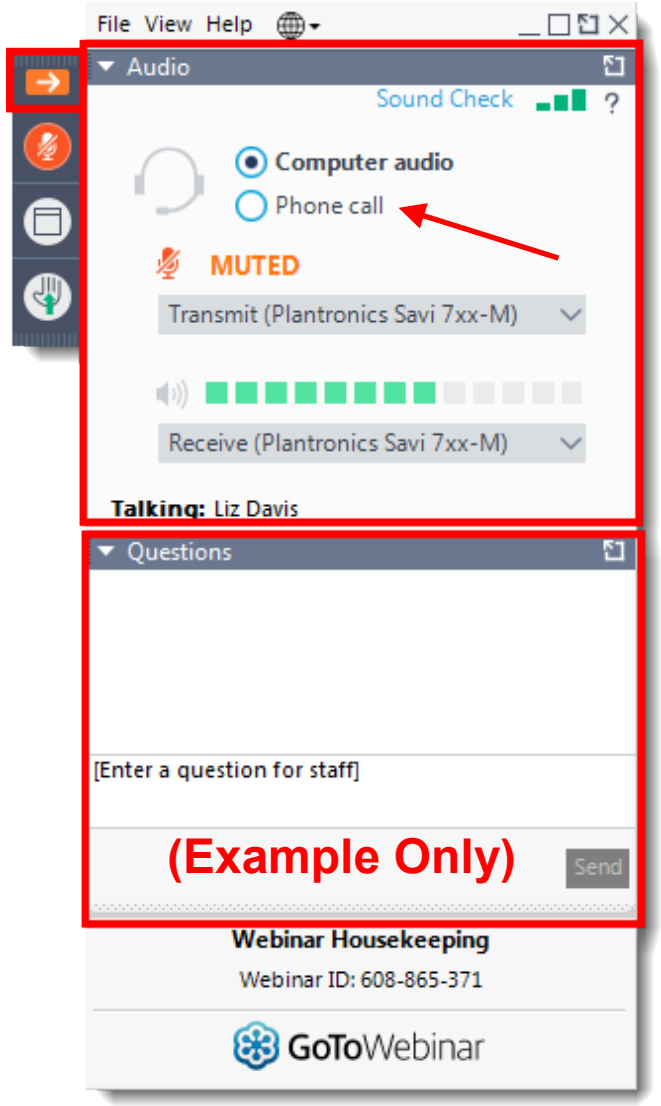
Note: Today's presentation is being recorded and will be provided on the website after the webinar.



AGENDA

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

Source: DEP

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.

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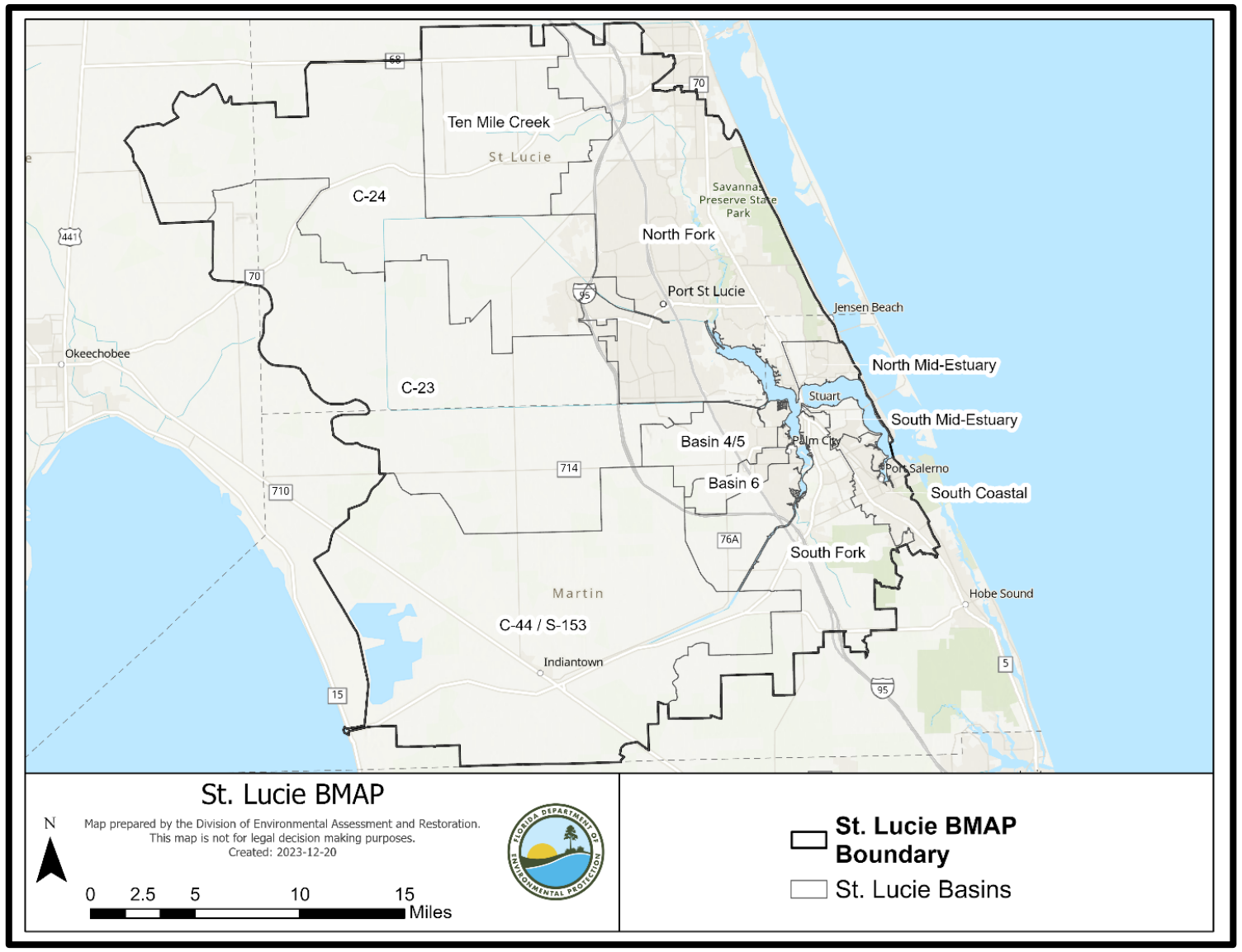
BACKGROUND



TMDL:

- Developed in 2009 to address total nitrogen (TN) and total phosphorus (TP) in the estuary.

BMAP:

- Adopted in 2013, then updated in 2020 as required by Executive Order 19-12.

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STAKEHOLDERS

Type of Organization/Entity	Name
Responsible Entities	Agriculture Martin County Okeechobee County St. Lucie County City of Fort Pierce City of Port St. Lucie City of Stuart Town of Sewall's Point Village of Indiantown Copper Creek Community Development District (CDD) Creekside CDD Portofino Isles CDD River Place CDD Southern Grove CDD St. Lucie West Service District Tesoro CDD Tradition CDD Veranda CDD Verano CDD Hobe St. Lucie Conservancy District North St. Lucie River Water Control District St. Lucie West Service District Pal Mar Water Control District Troup-Indiantown Water Control District
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 4 Florida DOT District 1 Florida Turnpike Enterprise South Florida Water Management District (SFWMD)

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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.
  - Hot Spot 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).

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DRAFT BMAP UPDATE

Chapter 1 – Context, Purpose and Scope of the Plan.

Chapter 2 – Modeling, Load Estimates and Restoration Approach.

Chapter 3 – Subwatershed Results.

Chapter 4 – Summary.

Appendices.

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CHAPTER 1 – CONTEXT, PURPOSE, AND SCOPE OF PLAN

- Water Quality Standards and TMDLs.
- St. Lucie River and Estuary BMAP:
  - 5-Year review.
  - Pollutant sources.
  - Assumptions.
  - Consideration.

Source: SFWMD

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CHAPTER 1 – CONTEXT, PURPOSE, AND SCOPE OF PLAN

Basin	Land Use Category	TN Load (% Basin Total)	TP Load (% Basin Total)
Basin 4/5	Urban	62	60
Basin 4/5	Agriculture	19	23
Basin 4/5	Natural	19	17
Basin 6	Urban	73	72
Basin 6	Agriculture	12	14
Basin 6	Natural	15	14
C-23	Urban	5	4
C-23	Agriculture	79	80
C-23	Natural	16	16
C-24	Urban	11	9
C-24	Agriculture	75	78
C-24	Natural	14	13
C-44/S-153	Urban	6	5
C-44/S-153	Agriculture	74	75
C-44/S-153	Natural	21	20
North Fork	Urban	75	75
North Fork	Agriculture	6	7
North Fork	Natural	19	18

Basin	Land Use Category	TN Load (% Basin Total)	TP Load (% Basin Total)
North Mid-Estuary	Urban	82	81
North Mid-Estuary	Agriculture	0	0
North Mid-Estuary	Natural	18	19
South Coastal	Urban	87	87
South Coastal	Agriculture	0	0
South Coastal	Natural	13	13
South Mid-Estuary	Urban	92	93
South Mid-Estuary	Agriculture	0	0
South Mid-Estuary	Natural	8	7
South Fork	Urban	35	32
South Fork	Agriculture	38	44
South Fork	Natural	26	24
Ten Mile Creek	Urban	16	15
Ten Mile Creek	Agriculture	76	78
Ten Mile Creek	Natural	8	7

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CHAPTER 1 – ASSUMPTIONS AND CONSIDERATIONS

Assumptions

- Certain Best Management Practices (BMPs) were assigned provisional nutrient reduction benefits for load reductions in this BMAP iteration while additional monitoring and research are conducted to quantify their effectiveness. These estimated reductions may change in future BMAP iterations as additional information becomes available.

- Nutrient reduction benefits of the stakeholders' projects were calculated using the best available methodologies. Project-specific monitoring, where available, will be used to verify calculations and reduction benefits may be adjusted as necessary.

- The allocations do not include required load reductions from areas identified as natural land use areas in the Hydrological Simulation Program – FORTRAN (HSPF) model land use coverage. These loads are considered uncontrollable, background sources and the stakeholders are not required to make reductions on natural lands. The focus of the BMAP allocations is on urban and agricultural stormwater, OSTDS and wastewater sources in the watershed.

- Achieving the St. Lucie Estuary TMDL is contingent on reductions from the Lake Okeechobee watershed and in the St. Lucie River and Estuary allocations, it was assumed that the Lake Okeechobee TMDL had been met. A separate BMAP is adopted for the Lake Okeechobee Watershed.

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CHAPTER 1 – ASSUMPTIONS AND CONSIDERATIONS

Considerations

- Land Uses: The loading estimates in the BMAP are based on land uses at a point in time, allowing the model to be validated and calibrated. The loading estimates for this BMAP iteration were based on 2012 land use data.

- Complexity of Problem: DEP acknowledges the complexity of the dynamics that affect the water quality of the St. Lucie River and Estuary Watershed; therefore, this BMAP is designed to encompass a wide variety of projects that will cumulatively act to significantly reduce nutrient loads.

- Lake Okeechobee BMAP Overlap: Portions of the Lake Okeechobee Watershed overlap with the St. Lucie River and Estuary Watershed. The projects in these overlap areas are included in both this BMAP and the Lake Okeechobee BMAP. The benefits of these projects will vary by BMAP as the reductions are calculated for the waterbody that is the focus of the BMAP.

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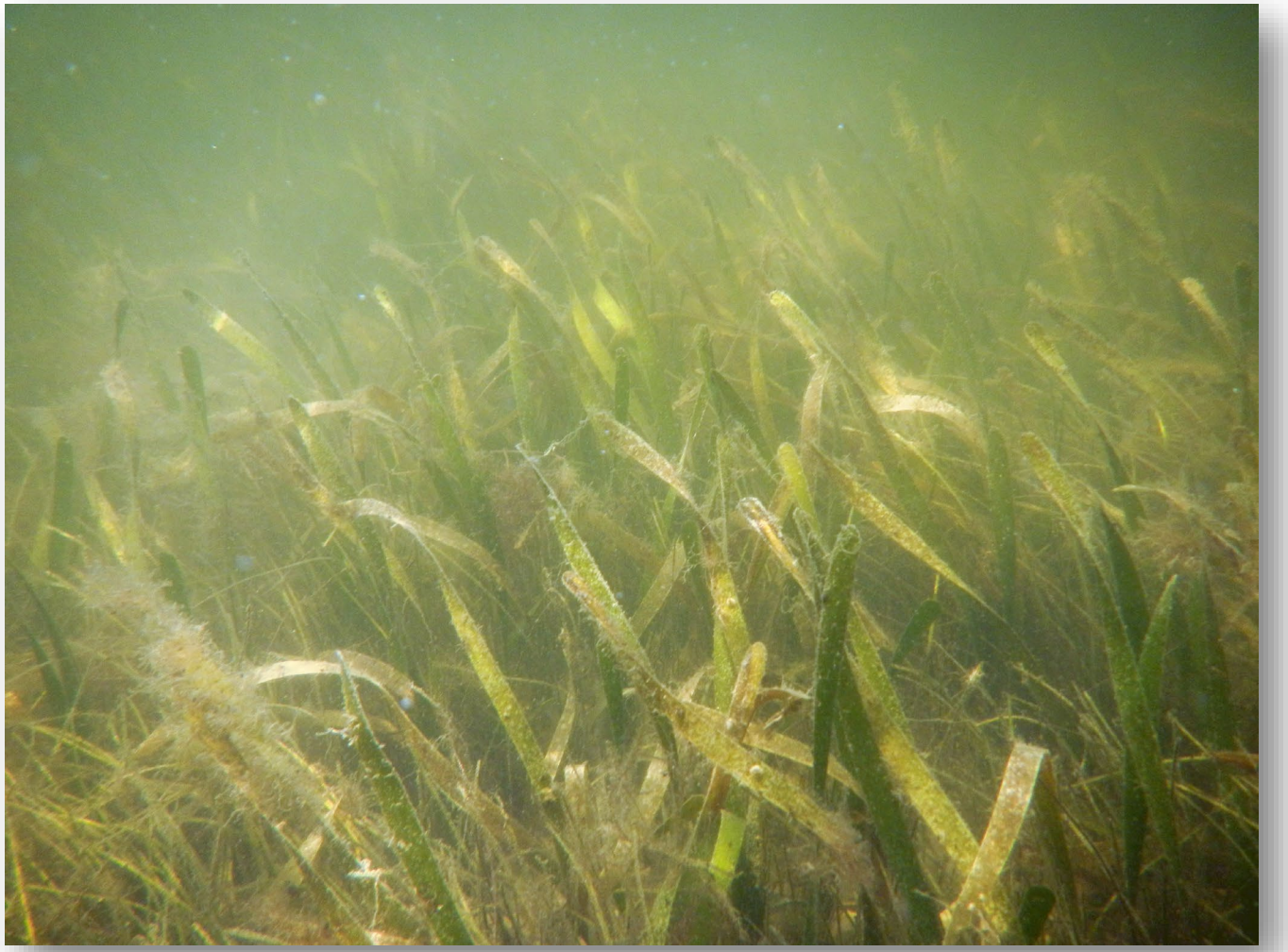
CHAPTER 2 – MODELING, LOAD ESTIMATION, AND RESTORATION APPROACH

- Watershed Model.
- BMAP Loads and Milestones.
- Basinwide Sources Approach.
  - Agriculture.
  - Stormwater.
  - WWTFs.
  - OSTDS.
- Targeted Restoration Area (TRA) Evaluation.
- Hot Spot Analysis.
- Water Quality Monitoring Plan.



Source: DEP

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CHAPTER 2 – WATERSHED MODEL

Source: DEP

- The St. Lucie Estuary Watershed Water Quality Simulation (WaSh) model was updated in 2020.
- DEP is in the process of updating the HSPF model with more current land uses and data to reflect the changes in the watershed conditions.
- **Future BMAP updates will use this revised model**.

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CHAPTER 2 - MILESTONES

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

Source: DEP

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CHAPTER 2 – ENTITY-SPECIFIC MILESTONES

Entity	15-year (2028) TN Reduction Milestone (lbs/yr)	15-year (2028) TP Reduction Milestone (lbs/yr)
Agriculture/ Coordinating Agencies	884,700	284,285
City of Fort Pierce	16,205	5,266
City of Port St. Lucie	138,187	44,277
City of Stuart	6,003	2,700
Copper Creek	1,500	306
Creekside CDD	475	175
DOT District 1	594	218
DOT District 4	15,907	4,801
DOT Turnpike	4,163	1,402
Martin County	75,231	31,786
Okeechobee County	7,950	1,966
Portofino Isles CDD	1,271	285
River Place CDD	389	127
Southern Grove CDD	1,226	310
St. Lucie County	67,679	21,398
St. Lucie West Services District	13,469	4,545
Tesoro CDD	2,585	829
Town of Sewall's Point	417	174
Tradition CDD	8,396	1,815
Veranda CDD	1,012	266
Verano CDD	1,030	260
Village of Indiantown	3600	751
Villa Vizcaya CDD	119	39
Total	**1,252,108**	**407,981**

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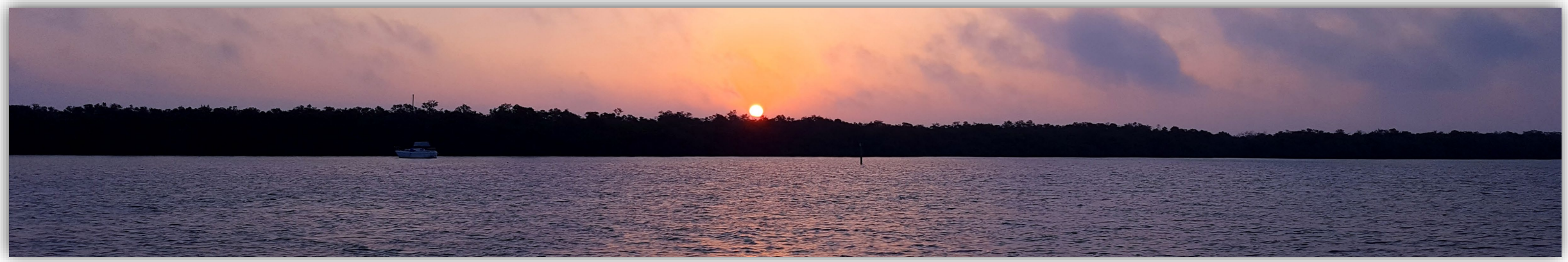
CHAPTER 2 — MILESTONES

- 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.



Source: DEP

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CHAPTER 2 — MILESTONES

- 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.

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CHAPTER 2 – BASINWIDE SOURCES APPROACH

Bills and legislation updates.

- 2020 Clean Waterways Act, 2021 Senate Bill (SB) 64, 2023 HB 1379 and 2024 HB 1557.

Management actions by source.

- Agriculture (BMPs and agricultural cooperative regional elements).
- Stormwater.
- Sports turfgrass.
- Wastewater — OSTDS, WWTFs and biosolids.

Source: DEP Staff Photo – Estero Bay Aquatic Preserve

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CHAPTER 2 — AGRICULTURE

Dairy Operations with Confined Animal Feeding Operations (CAFO) Permits, Chapter 62-670 Florida Administrative Code (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 an NPDES CAFO permit must enroll in and implement the applicable DACS BMP program **OR**
- Conduct a monitoring program approved by DEP or the 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 encourages both private and public forest landowners across the state to comply with BMPs and the rule.

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CHAPTER 2 — AGRICULTURE

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.

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CHAPTER 2 – STORMWATER FACILITIES

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 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.

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CHAPTER 2 – SPORTING FACILITIES

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 publicly owned golf courses located within a BMAP are required to submit a Nutrient Management Plan (NMP).

Source: South Florida Water Management District

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CHAPTER 2 – WWTFS AND OSTDS

Source: Florida Geological Survey (FGS)

Clean Waterways Act (2020)

- Required 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), 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.

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CHAPTER 2 – WWTFS AND OSTDS

Environmental Protection HB 1379 (2023)

- Requires facilities discharging to a waterbody impaired for nutrients or subject to a BMAP to upgrade to advanced waste treatment (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 E have 10 years from BMAP adoption to meet the applicable AWT standards.

Source: DEP

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CHAPTER 2 – WWTFS

The nitrogen effluent limits will be applied as an annual average, taken at end of pipe before any land disposal (or other authorized compliance point), to all new and existing WWTFs with a DEP-permitted discharge or disposal area within this BMAP.

Nitrogen effluent limits for wastewater facilities.

Facility Capacity (mgd)	Surface Water Discharges (mg/L)	WWTFs Listed in Appendix E (mg/L)	WWTFs Not Listed in Appendix E – Rapid Rate Land Application Effluent Disposal System (mg/L)	WWTFs Not Listed in Appendix E – All Other Disposal Methods, Including Reuse (mg/L)
Greater than or equal to 0.5	3	3	3	10
Less than 0.5 and greater than 0.1	3	3	6	10
Less than or equal to 0.1	3	N/A	10	10

mgd = million gallons per day. mg/L = milligrams per liter.
N/A = Not applicable.

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CHAPTER 2 – WWTFS

The phosphorus effluent limits will be applied as an annual average, taken at end of pipe before any land disposal (or other authorized compliance point), to all new and existing WWTFs with a DEP-permitted discharge or disposal area within this BMAP.

Phosphorus effluent limits for wastewater facilities.

Facility Capacity (mgd)	Surface Water Discharges (mg/L)	WWTFs Listed in Appendix E (mg/L)	WWTFs Not Listed in Appendix E – Rapid Rate Land Application Effluent Disposal System (mg/L)	WWTFs Not Listed in Appendix E – All Other Disposal Methods, Including Reuse (mg/L)
Greater than or equal to 0.5	1	1	1	6
Less than 0.5 and greater than 0.1	1	1	3	6
Less than or equal to 0.1	1	N/A	6	6

mgd = million gallons per day. mg/L = milligrams per liter.
N/A = Not applicable.

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CHAPTER 3 – BASINS

- Each basin section in the document includes water quality monitoring, basin evaluation results and project lists.
- Basin evaluation results will be presented for the whole BMAP area in Chapter 4.

Source: DEP

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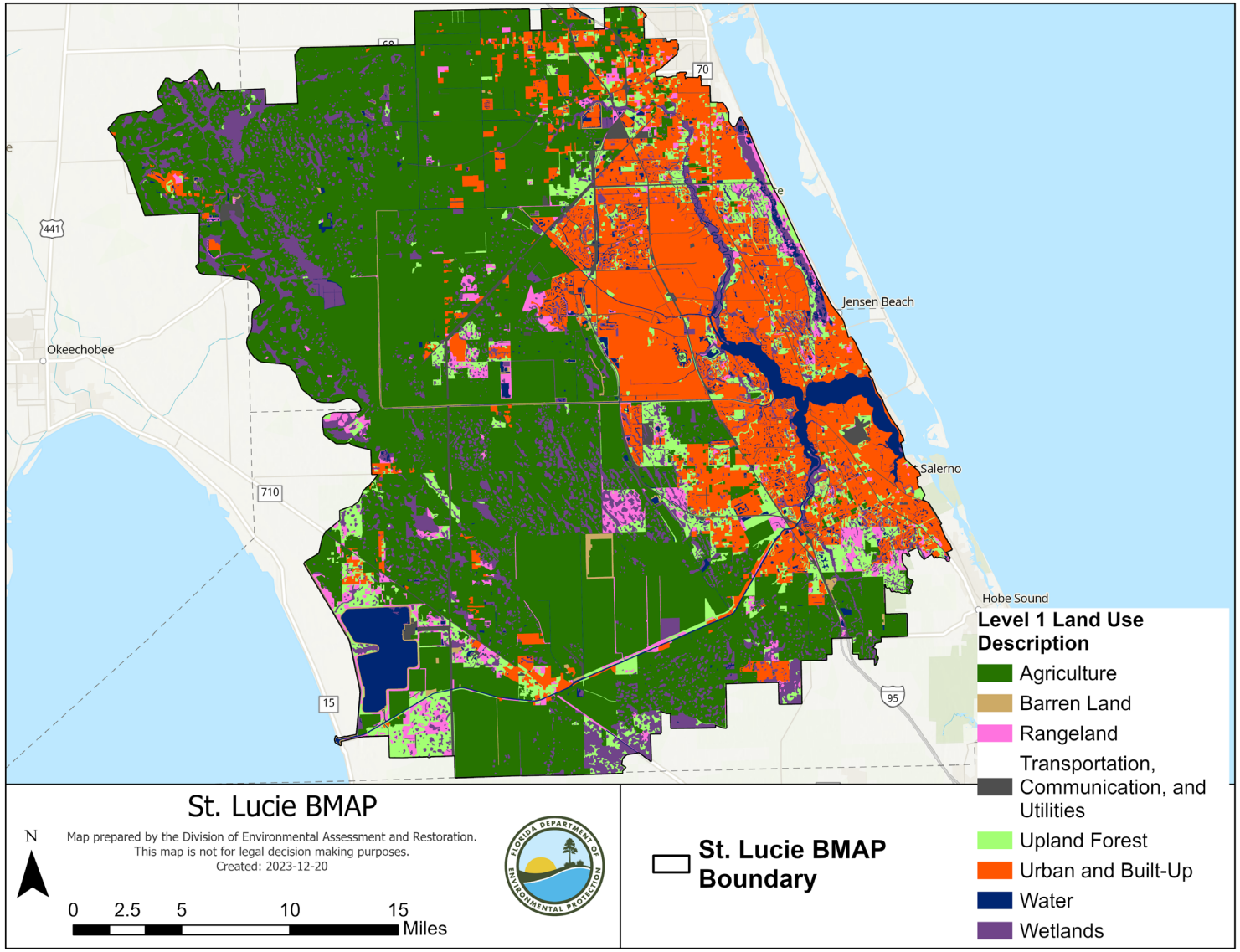
CHAPTER 3 – LAND USE



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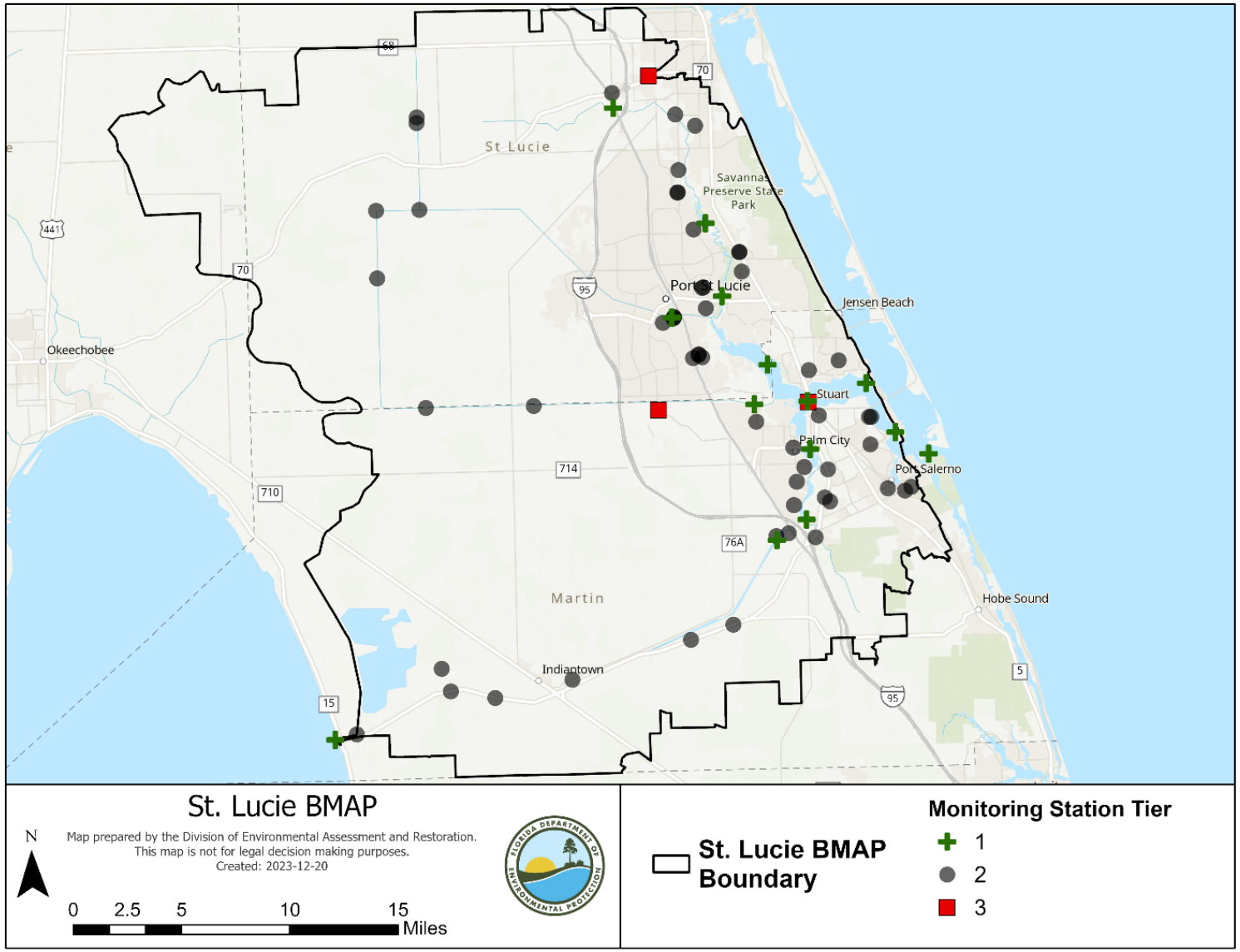
CHAPTER 3 – BASIN MONITORING NETWORK



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CHAPTER 4

- Basin Evaluation Results.
  - Targeted Restoration Area (TRA) Evaluation.
  - Trend Analysis.
  - Hot Spot Analysis.
- Future Growth.
- Compliance.

Source: DEP

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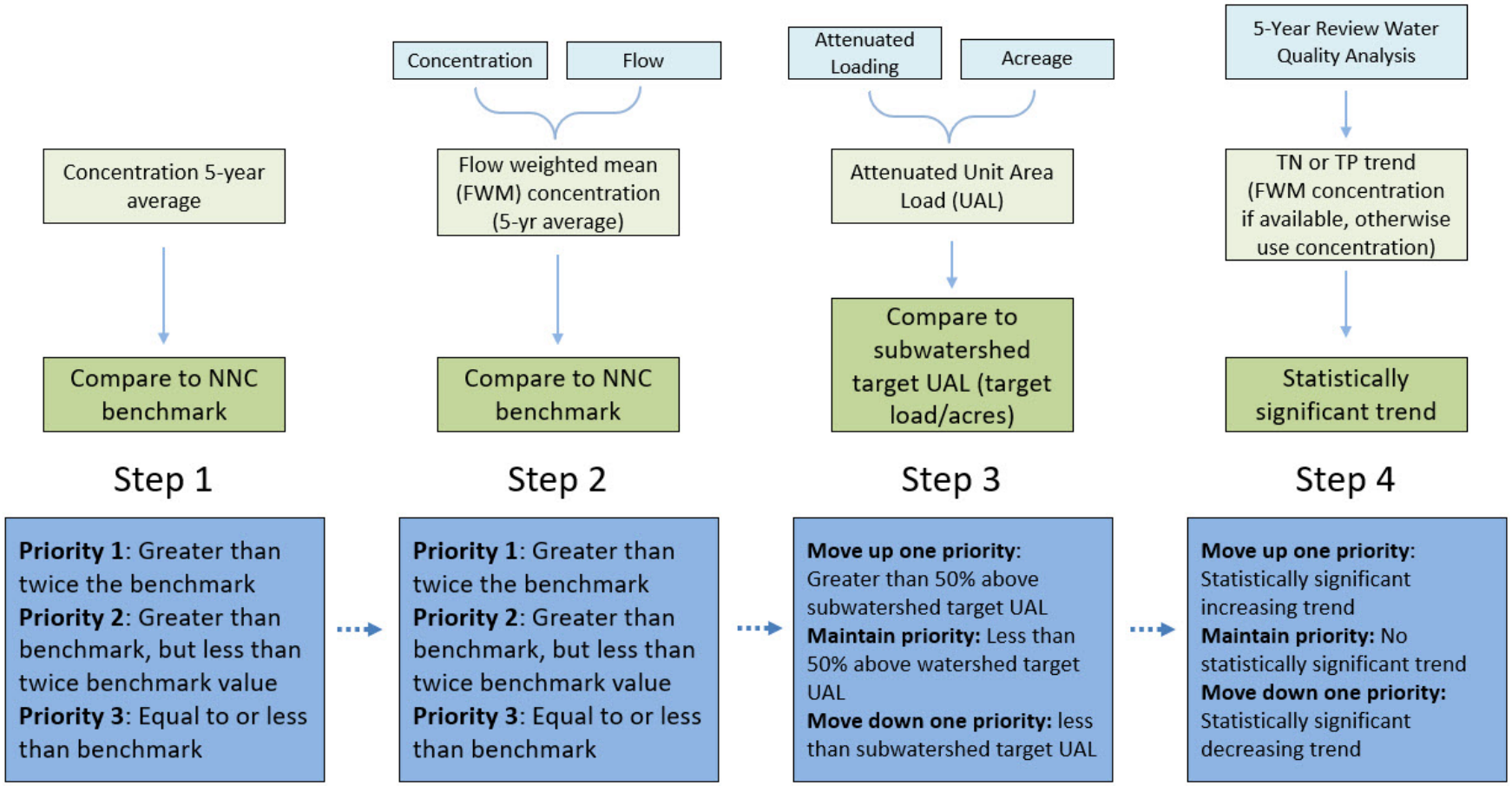
CHAPTER 4 – TRA APPROACH

Developed to help prioritize certain basins and focus resources on most efficient restoration using measured data throughout the watershed.



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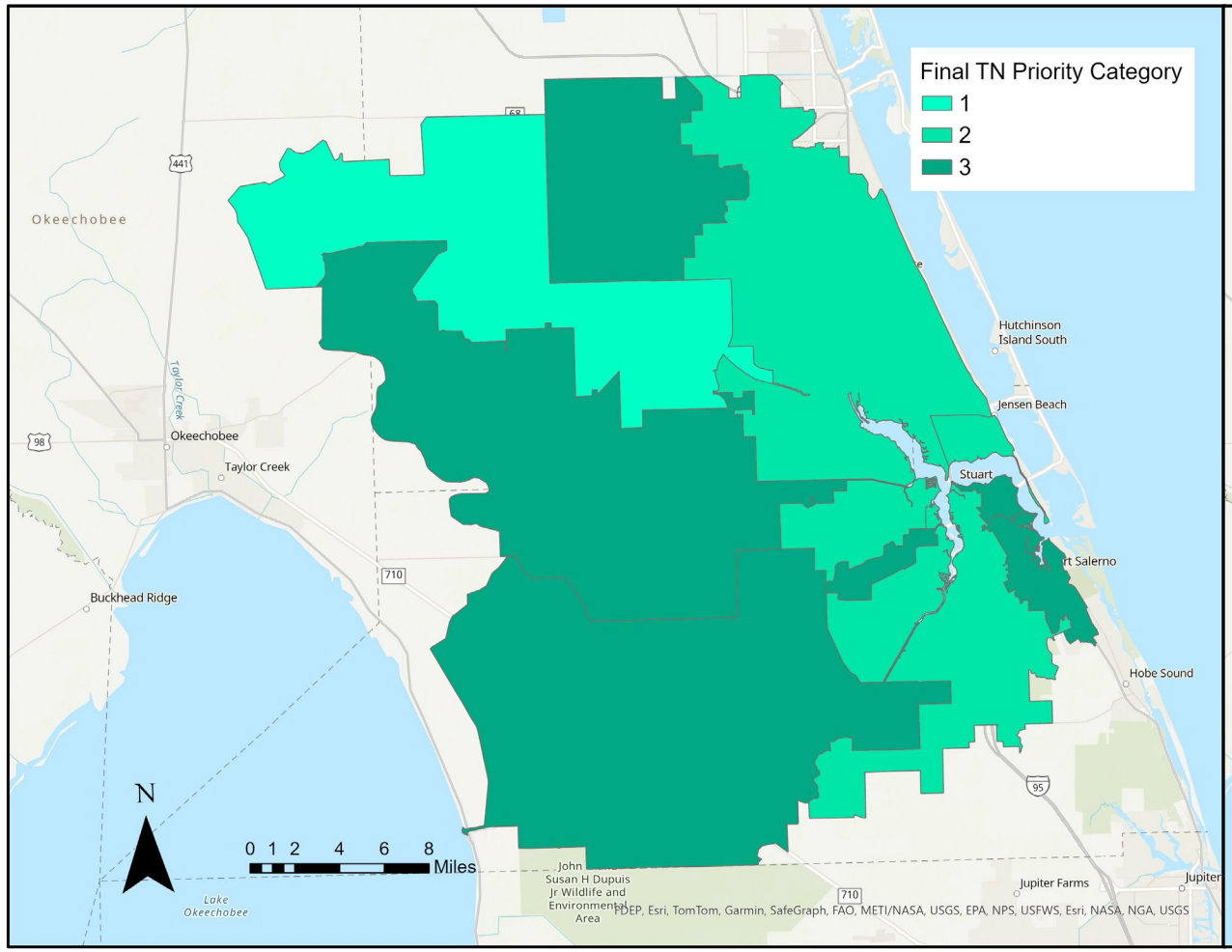
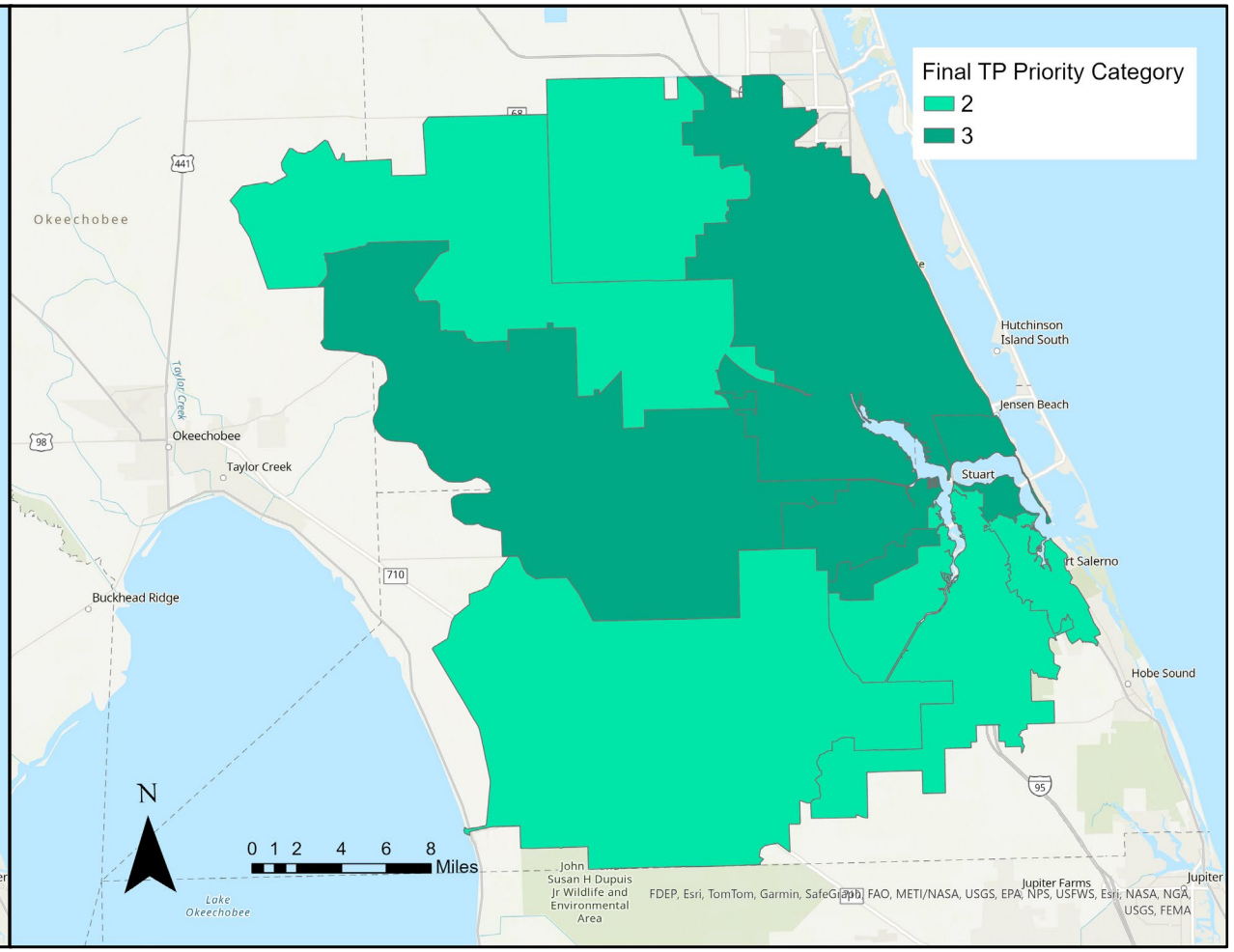
CHAPTER 4 – TRA RESULTS

TN



TP



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CHAPTER 4 – TREND ANALYSIS APPROACH

- The trend analysis from the second 5-Year Review was updated to add data through Water Year 2024 (WY2024).
- The latest analysis uses data from five water years before BMAP adoption and 12 years after adoption for a period of record extending from May 1, 2008, through April 30, 2024.

Basin Name	TN Trend Analysis	TP Trend Analysis
Basin 4/5	No Significant Trend	Significant Decreasing Trend
Basin 6	Significant Decreasing Trend	Significant Decreasing Trend
C-23	No Significant Trend	Significant Decreasing Trend
C-24	No Significant Trend	Significant Decreasing Trend
C-44	Significant Decreasing Trend	No Significant Trend
Compliance Station	No Significant Trend	No Significant Trend
North Fork	No Significant Trend	Significant Increasing Trend
North Mid-Estuary	No Significant Trend	No Significant Trend
South Coastal	Significant Decreasing Trend	No Significant Trend
South Fork	No Significant Trend	No Significant Trend
South Mid-Estuary	Significant Decreasing Trend	Significant Decreasing Trend
Ten Mile Creek	Significant Decreasing Trend	Significant Decreasing Trend

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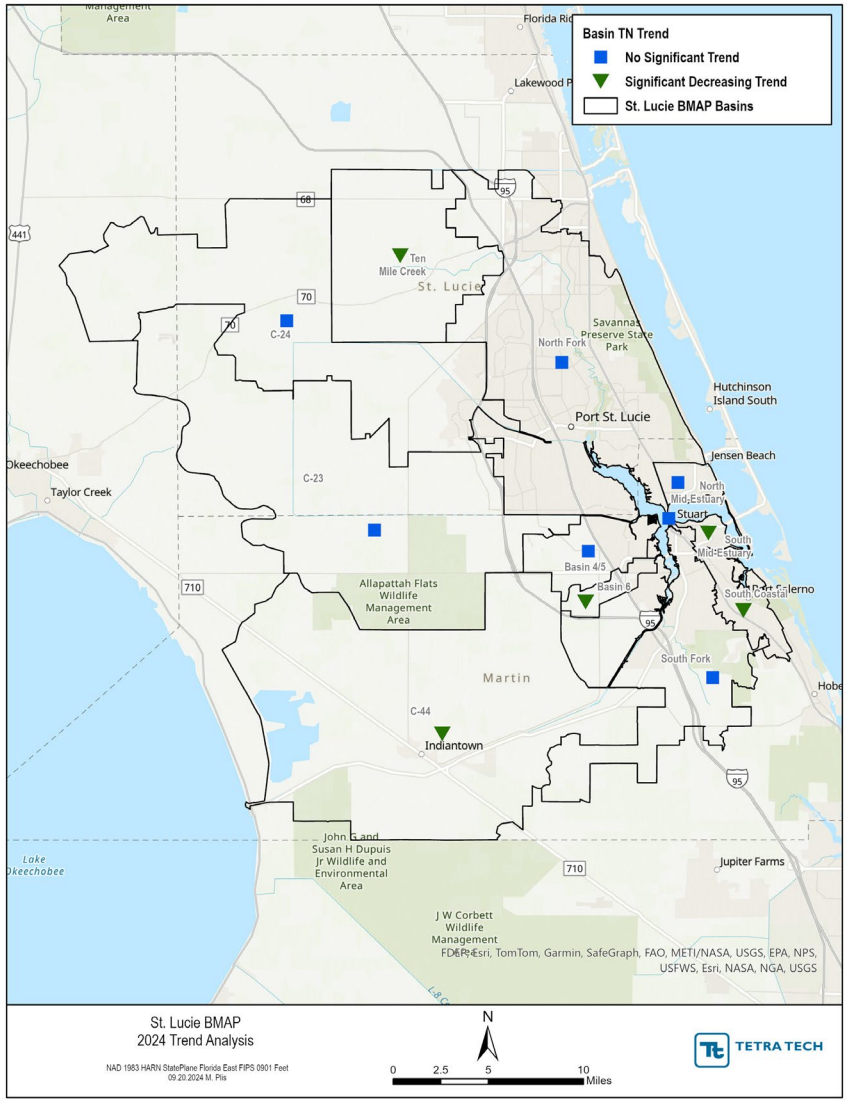
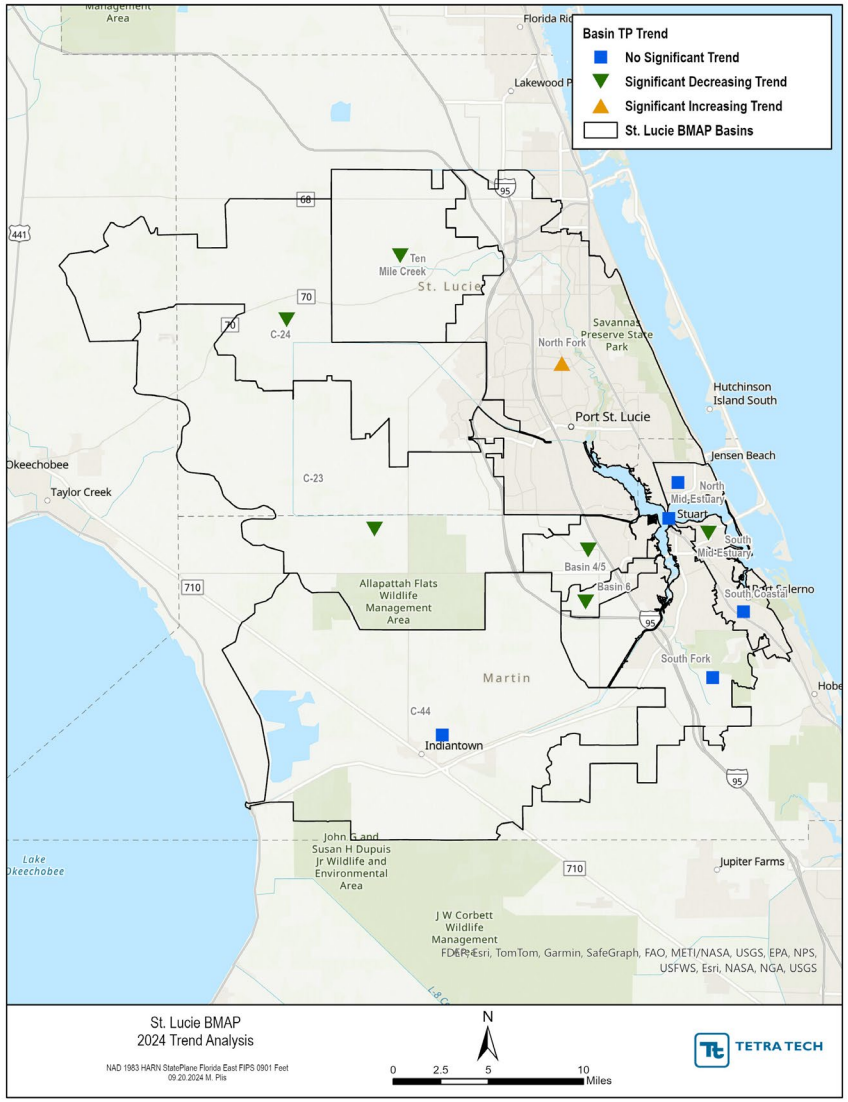
CHAPTER 4 – TREND RESULTS

TN



TP



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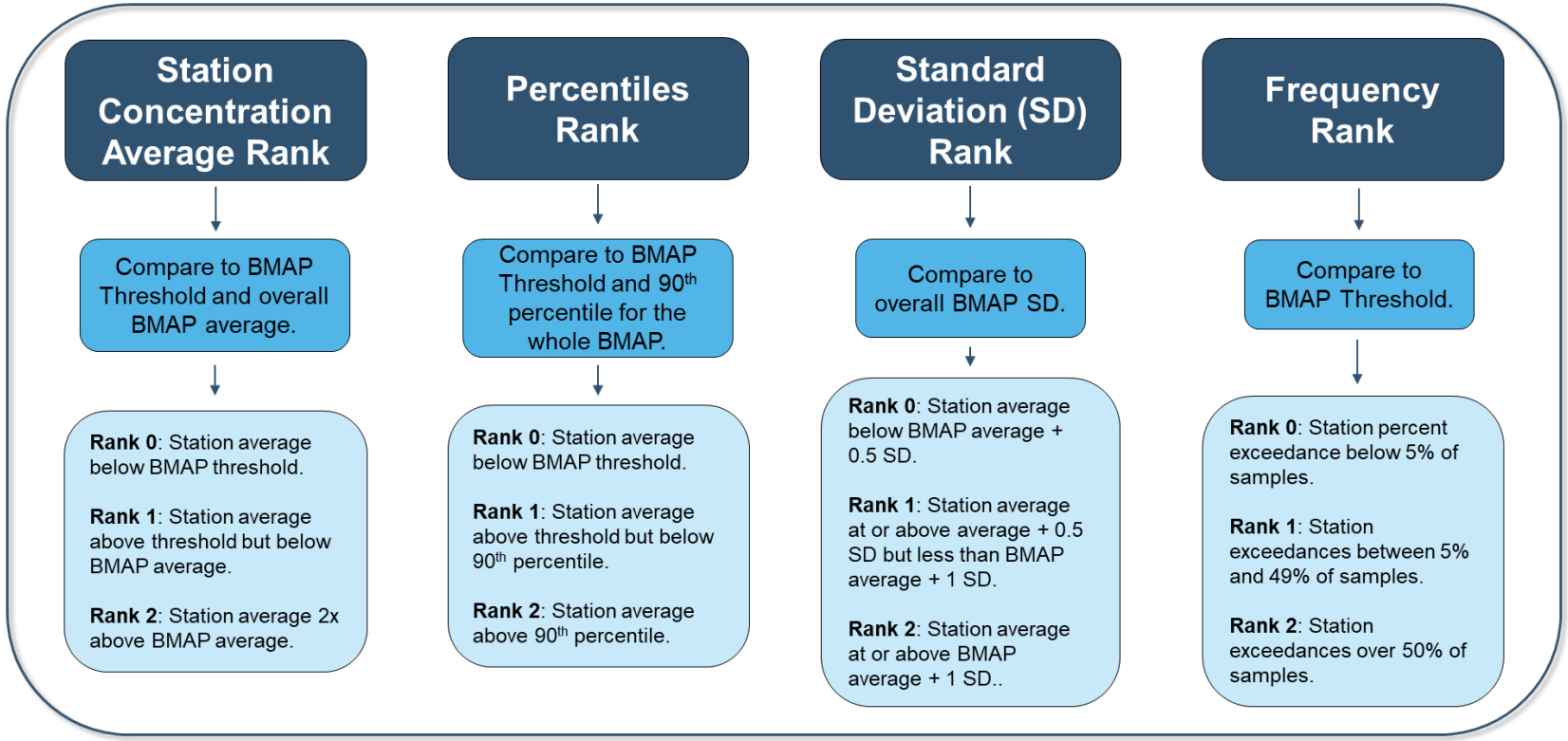
CHAPTER 4 – HOT SPOT APPROACH

- 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.



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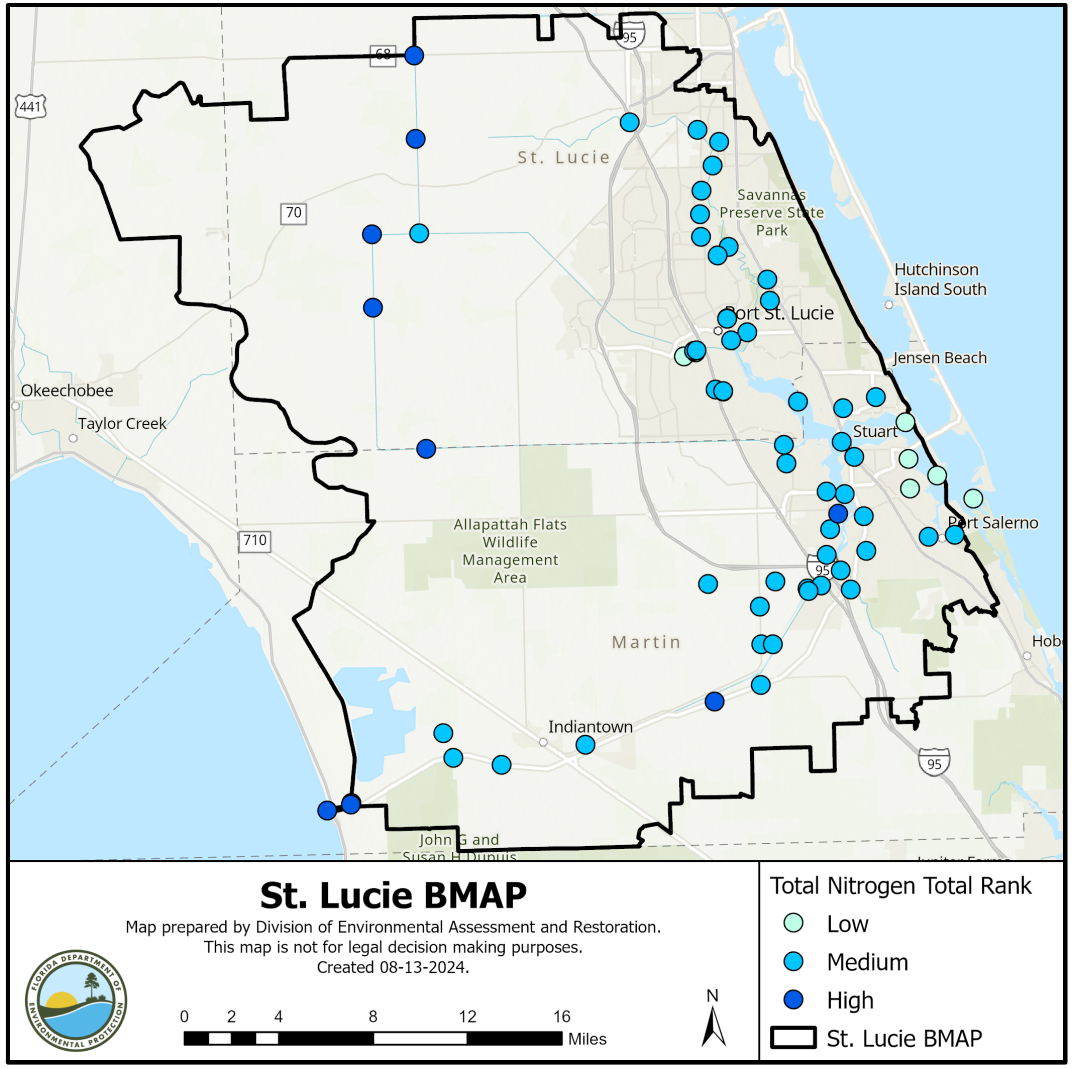
CHAPTER 4 – HOT SPOT ANALYSIS RESULTS

TN



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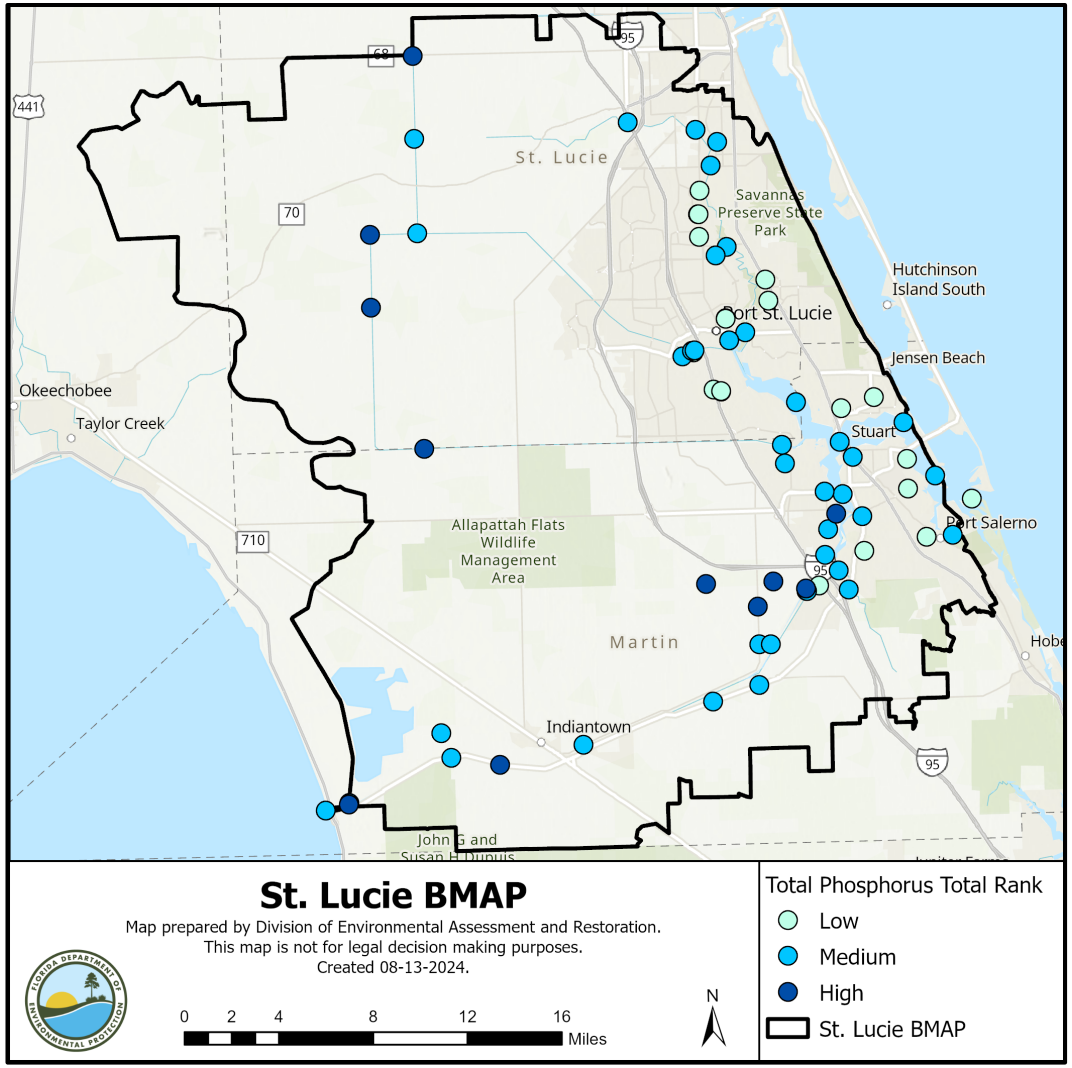

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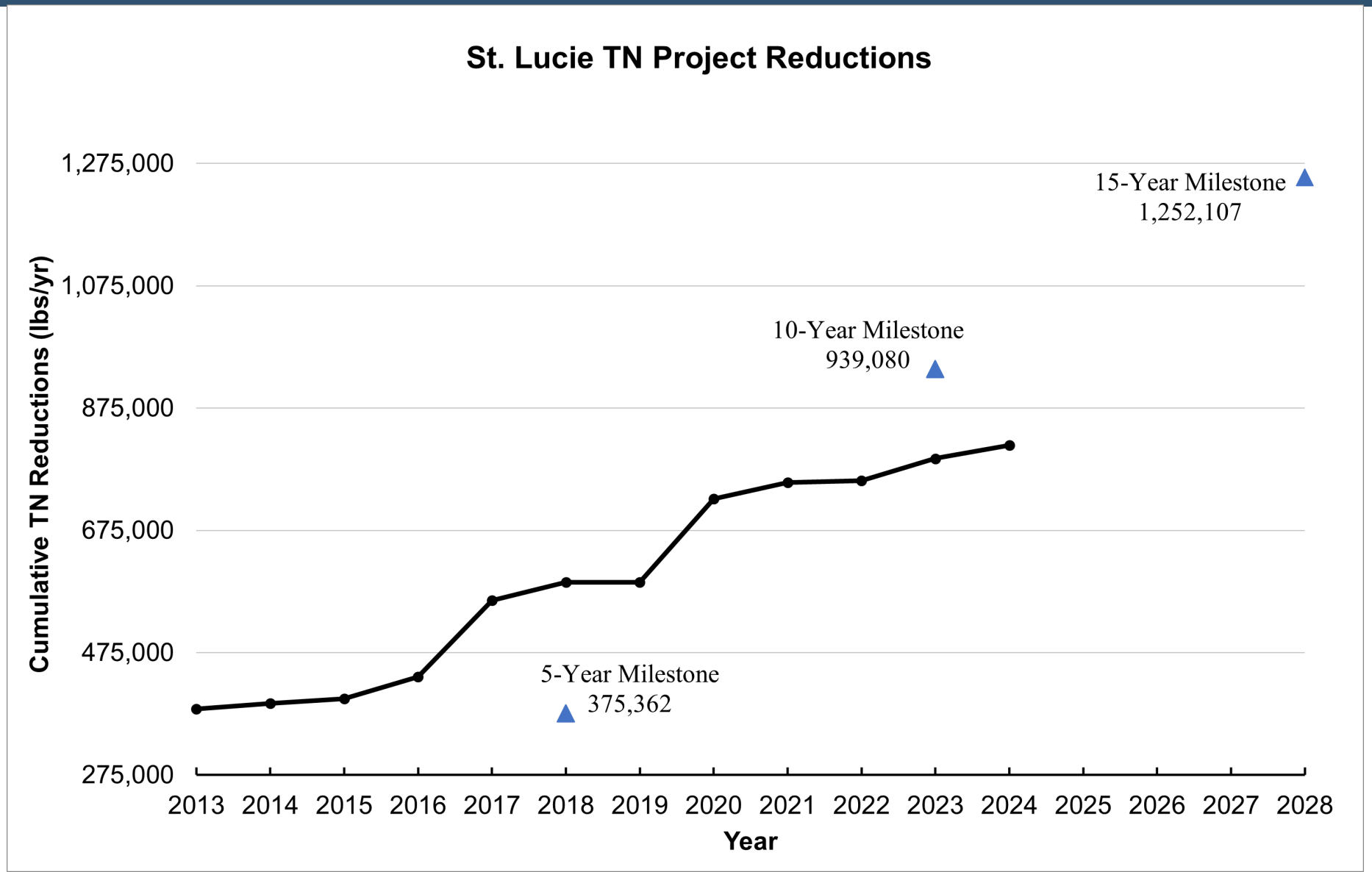
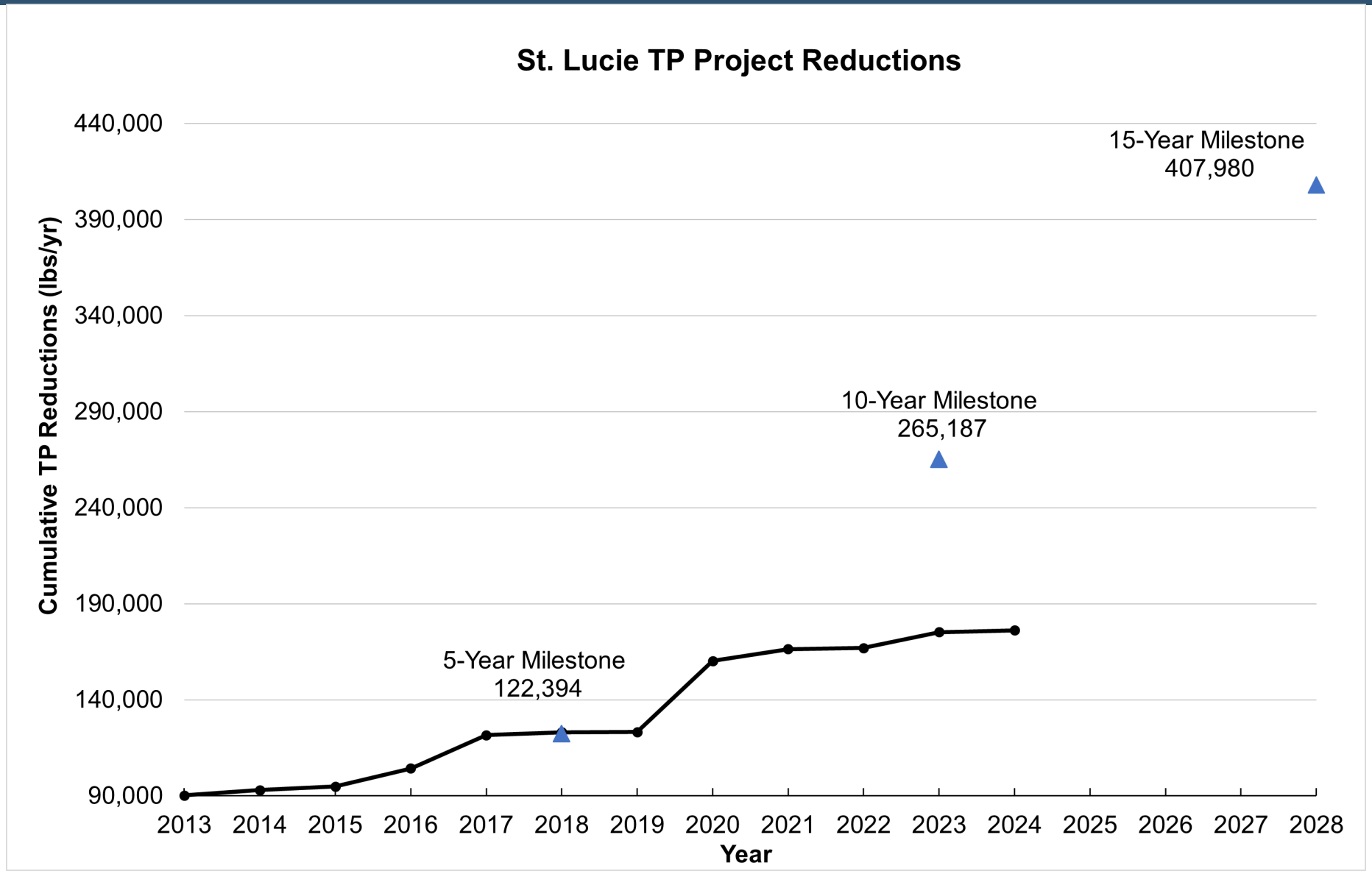
CHAPTER 4 – TN PROGRESS CHART



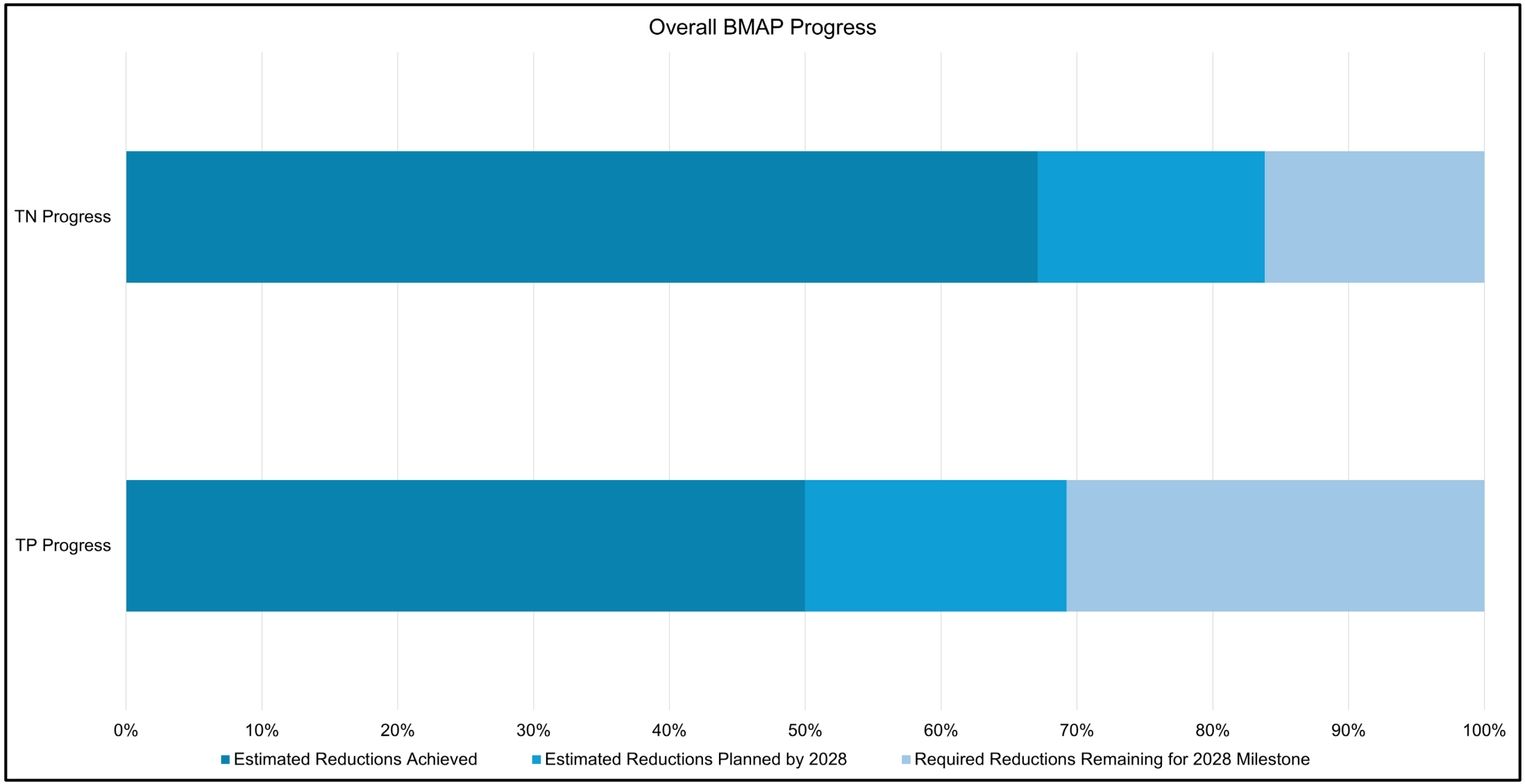
ST. LUCIE RIVER AND ESTUARY BMAP

CHAPTER 4 – TP PROGRESS CHART



ST. LUCIE RIVER AND ESTUARY BMAP

CHAPTER 4 – OVERALL PROGRESS CHART



ST. LUCIE RIVER AND ESTUARY BMAP

CHAPTER 4 – FUTURE GROWTH

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 by county.
- Growth distributed to jurisdictional boundaries based on available land area.
- Determined percentage of population sewered based on Florida Water Management Inventory (FLWMI) parcel-to-point data.
- Applied per person loading values for portions of future population on centralized sewer or OSTDS.
- Assumed increase in urban stormwater loading based on percentage of undeveloped acres converted to low density residential land use, using statewide event mean concentrations (EMCs) and runoff coefficients (ROCs).
- Ran three management scenarios to look at loading by entity, source and overall basin.

ST. LUCIE RIVER AND ESTUARY BMAP

CHAPTER 4 – FUTURE GROWTH

Scenario 1	Scenario 2	Scenario 3
By 2040:	By 2040:	By 2040:
• **90%** or more of **new population** is connected to central sewer.	• **New population** is connected to central sewer at **same rate as today.**	• **New population** is connected to central sewer at **same rate as today**.
• All wastewater treating to **3 mg/L TN.**	• All wastewater treating to **3 mg/L TN.**	• All wastewater treating to **6 mg/L TN.**
• Remainder of new population has **enhanced OSTDS.**	• Remainder of new population has **enhanced OSTDS.**	• Remainder of new population has **conventional OSTDS.**
• **2% of undeveloped land** converted to low density development	• **10% of undeveloped land** converted to low density development	• **17% of undeveloped land** converted to low density development

ST. LUCIE RIVER AND ESTUARY BMAP

CHAPTER 4 – FUTURE GROWTH

Entity	Developable Land (acres)	2040 Additional TN loading under Scenario 1 (2%)	2040 Additional TN loading under Scenario 2 (10%)	2040 Additional TN loading under Scenario 3 (17%)
Martin County	168,968	178	890	1512
Indiantown	8,825	9	46	79
Sewall's Point	788	1	4	7
Stuart	4,232	4	22	38
Okeechobee County	14,165	15	75	127
St. Lucie County	133,916	141	705	1199
Fort Pierce	8,368	9	44	75
Port St. Lucie	71,931	76	379	644

2040 Loading — Basin Totals

Scenario 1 Total	Scenario 2 Total	Scenario 3 Total
433	**2,165**	**3,680**

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.

ST. LUCIE RIVER AND ESTUARY BMAP

APPENDICES

- **Updated:** Important links.
- **Updated:** Agricultural Enrollment and Reductions.
  - Provided by DACS.
- **NEW:** Planning for Additional Management Strategies.
  - Examples of project efforts entities can identify to meet their milestone reduction requirements.
- **NEW:** Golf Course Nutrient Management Plans.
- **NEW:** Wastewater Facilities.
  - List of facilities with reclaimed water that are causing or contributing to nutrient impairments.

UPCOMING SCHEDULE

November 2024, Technical BMAP update public meeting.

March 2025, Draft BMAP document available for review.

April 2025, Draft BMAP update public meetings.

April 2025, Draft BMAP update comment period.

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

NEXT STEPS

BMAP update document draft review:

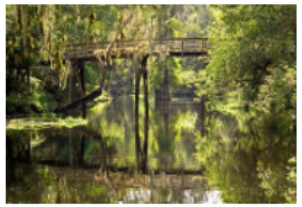
- Draft document sent out via GovDelivery **April 2, 2025**.
- Stakeholder review comments due **April 30, 2025**.

Submit comments to:
Anthony.Tomalewski@FloridaDEP.gov


Source: DEP

RESOURCES
BMAP WEBSITE AND STORYMAPS

[Basin Management Action Plans (BMAPs) | Florida Department of Environmental Protection]

Nutrient BMAPs	Springs BMAPs	Fecal Bacteria Impaired BMAPs
		
Nutrient BMAPs contain a comprehensive set of solutions, such as permit limits on wastewater facilities, urban and agricultural best management practices, and conservation programs designed to achieve pollutant reductions established by a total maximum daily load	Springs BMAPs identify the sources of nutrient pollution, list the specific projects and programs necessary to reduce nutrient pollution, and establish priority focus areas where statutory prohibitions on certain activities apply (such as installation of new conventional septic systems).	Bacteria basin management action plans (BMAPs) include management strategies or projects, to be implemented by local stakeholders, that aim to eliminate and prevent the release of waste, containing pathogens, to natural waterbodies.

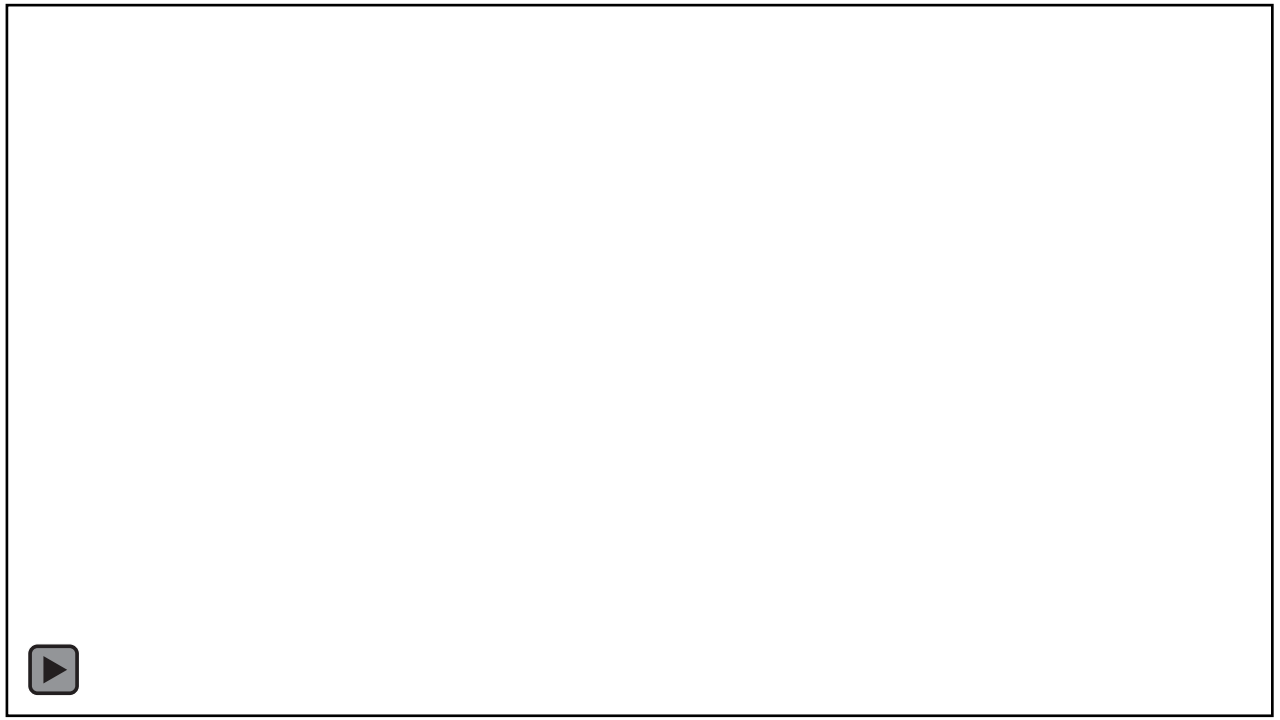
BMAP MEETING
PUBLIC QUESTIONS PERIOD

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: Anthony.Tomalewski@floridaDEP.gov.



THANK YOU

Tony Tomalewski
Environmental Consultant

Contact Information:
850-245-8683
Anthony.Tomalewski@FloridaDEP.gov

Photo Credit: SFWMD

St. Lucie River and Estuary Basin Management Action Plan (BMAP) Update Webinar Summary

Tuesday April 8, 2025
2:00 pm – 2:36 pm

Participants

Santiago Acevedo, SFWMD
Silvia Alderman, Akerman
Taufiqul Aziz, DEP
Bill Baker, MacVicar Consulting
Lisa Bally, ATM
Venetia Barnes, Fort Pierce
Evelyn Becerra, DEP
Matt Biondolillo, SFWMD
Lindsey Brewer, Palm Beach County
Patricia Burke, SFWMD
Joe Capra, Captec
Stacey Cecil, SJRWMD
Brian Cook, ATM
William Cornelius, St. Lucie County
Kelly Cranford, Keith Engineering
Sara Davis, DEP
Rebecca Dougherty, SFWMD
Amy Eason, Martin County
Bill Eggers, Evans
Stacy Flood, SFWMD
Cathy Foerster, Drummond Carpenter
Jake Fojtik, Florida Farm Bureau
Marcy Frick, Tetra Tech
Aubrey Frye, SFWMD
Stan Ganthier, DEP
Lawrence Glenn, DEP
Diane Goldberg, Citizen
Jan Gricar, Citizen
Rebecca Groover, FOWA
Patricia Grunwald, Tetra Tech
Raichel Gulde, RES
Emily Hartdegen, Drummond Carpenter
Kenny Hayman, DEP
Moira Homann, DEP
Seyed Abbas Hosseini, FAA
Laila Hudda, EPA
Nenad Iricanin, SFWMD
Megan Jacoby, SFWMD
Bret Kaiser, Port St. Lucie
Chandler Keenan, DEP
Elizabeth Kelly, Martin County
Jacob Landfield, SFWMD
Jim Lappert, St. Lucie County
Mitchell Latzman, Friends of the Everglades
Milton Leggett, City of Stuart
Chris Lestrange, St. Lucie County
Drew Liddick, DEP
Nicholas Linehan, St. Lucie County
Eduardo Lopez, Stantec
Andrew Luering, DEP
Celeste Lyon, RES
Sherry McCorkle, SFWMD
Sarah Menz, DEP
James Moir, Citizen
Jessica Mostyn, DEP
Stephanie Nevadunsky, SFWMD
Kevin O'Donnell, DEP
Stacey Ollis, SFWMD
Steffany Olson, SFWMD
Jose Otero, SFWMD
Sara Ouly, SFWMD
Mark Perry, Florida Oceanographic Society
Irene Quincey, Pavese Law
Jennifer Reynolds, SFWMD
Rhonda Roff, Citizen
Elianni Ruiz, Higgins Engineering
Carrie Scarola, Ecological Associates
Eric Simpson, DEP
Jordan Skaggs, DEP
Philip Sliger, Gunster
Gil Smart, Friends of the Everglades
Mailin Sotolongo-Lopez, DEP
Vanessa Stephen, US Sugar
Rachel Tennant, Fort Pierce Utilities
Jennifer Thera, FDACS
Raychel Thomas, Pavese Law
Todd Thurlow, Thurlow & Thurlow
Tony Tomalewski, DEP
Diana Turner, DEP
David Tyler, DEP
Rachel Vitek, RES
Youchao Wang, SFWMD

Ken Weaver, DEP
Tanya Welborn, DEP
Kaylene Wheeler, Dewberry
Brook Wolfe, Stantec

The full webinar recording and supporting materials are posted to the Florida Department of Environmental Protection (DEP) website at https://floridadep.gov/dear/water-quality-restoration/content/bmap-public-meetings.

Questions and Answers

Question: Please confirm adoption date. I thought you told me that you were doing adoption in December 2025.
Answer: The legislative requirement (Clean Waterways Act) is for DEP to have these BMAPs updated and adopted by July 1, 2025.

Question: I thought the land use used in the BMAP was 2008?
Answer: The Watershed Water Quality Simulation (WaSh) model was run for 2004, 2008, and 2012. The BMAP used the results from the years with the 2012 land use coverage.

Question: When will the HSPF model be finished? Prior to adoption?
Answer: The model revision/update will be completed in the next couple of years. It will not be completed prior to this BMAP update. Upon model completion, DEP will reevaluate and, if necessary, adopt another iteration of the BMAP, most likely before 2030. The next iteration may include updated required reductions, timelines, and 5-year milestones.

Question: Please elaborate on the sports turf regulations?
Answer: It is a new requirement in this BMAP update. Sporting facilities will be required to follow the 2025 Sports Turf Best Management Practice (BMP) Manual to protect water resources. DEP is in the process of developing this BMP manual with the University of Florida.

Question: Can you further explain what tier 1 and 2 stations mean.
Answer: Tier 1 stations are the primary/priority stations used in periodic water quality analysis to track BMAP progress and water quality trends over the long-term. If at any point it is necessary to reduce efforts in the basin, these stations should be the last stations impacted. Tier 2 stations provide secondary information that can be used to help focus and adaptively manage implementation efforts. These tiers were established in the 2020 BMAP Update.

Question: What was the assumption about the Lake Okeechobee BMAP with respect to the St. Lucie BMAP mentioned earlier?
Answer: Achieving the St. Lucie River and Estuary total maximum daily loads (TMDLs) is contingent on reductions from the Lake Okeechobee Watershed, and in the St. Lucie River and Estuary allocations it was assumed that the Lake Okeechobee TMDL had been met. A separate BMAP is adopted for the Lake Okeechobee Watershed.

Question: What are the "larger projects" coming online? Do you anticipate they will get us back on track with milestones?
Answer: There are Comprehensive Everglades Restoration Plan projects under construction in the watershed.

Question: How will this update coordinate with the Northern Everglades and Estuaries Protection Program (NEEPP)?
Answer: The Coordinating Agencies (DEP, Florida Department of Agriculture and Consumer Services [FDACS], and South Florida Water Management District [SFWMD]) are working together to meet the requirements of NEEPP through the BMAP, updates to the watershed protection plans, and project implementation.