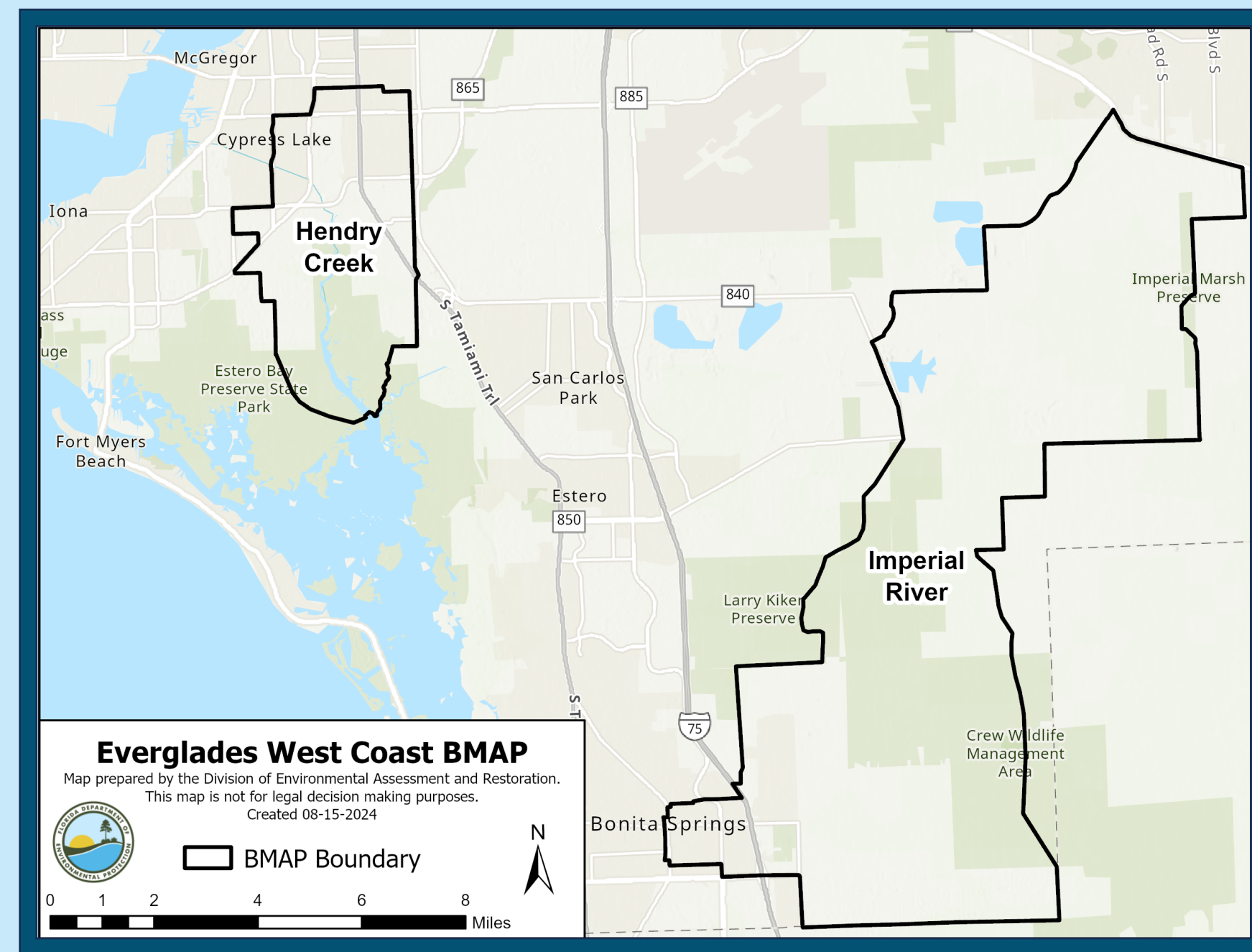


EVERGLADES WEST COAST BASIN MANAGEMENT ACTION PLAN (BMAP) WATER QUALITY ANALYSES

BMAP Background



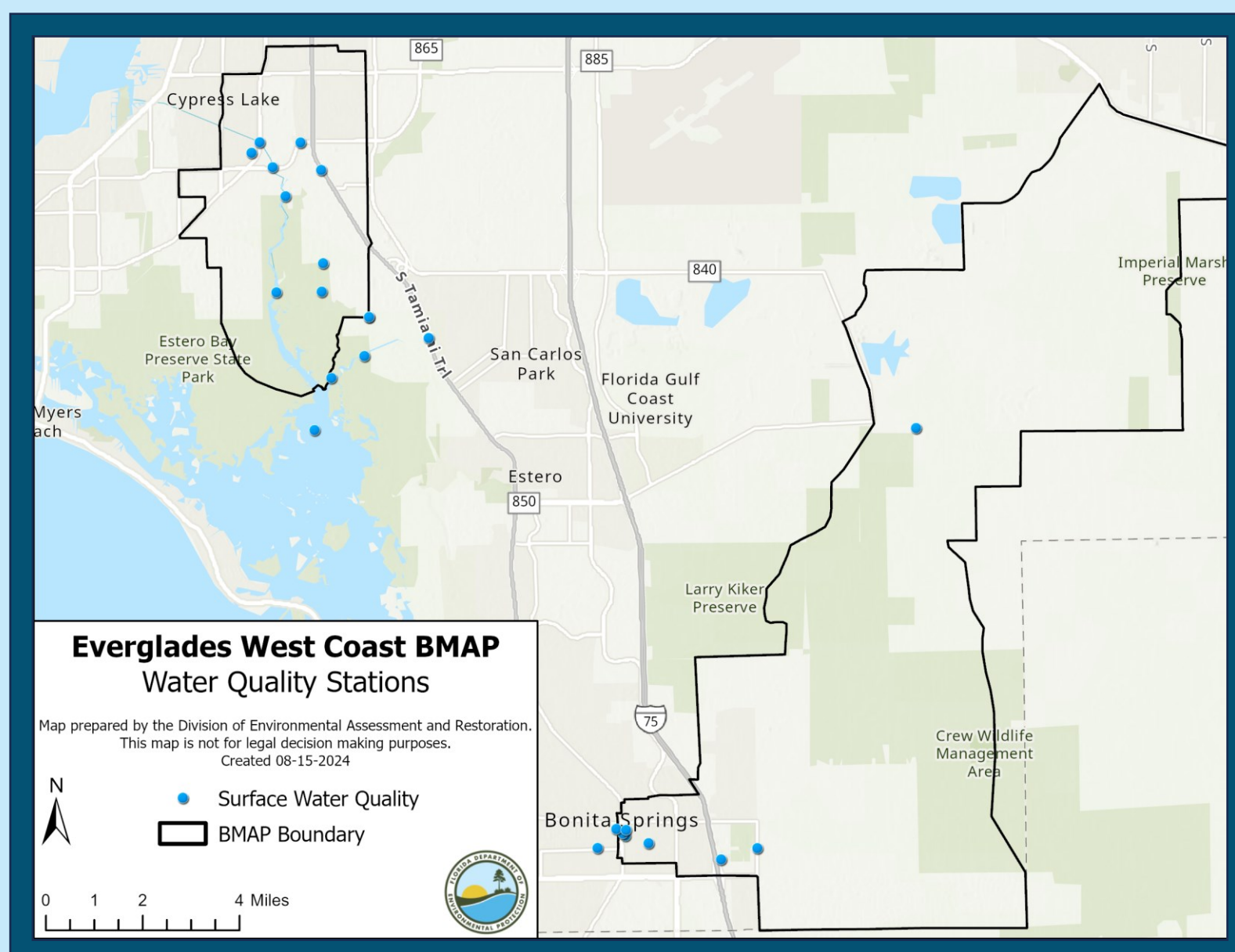
Everglades West Coast
Total Nitrogen (TN) Total
Maximum Daily Load
(TMDL) target was
established in 2008:

TN: 0.74 mg/L.
mg/L = milligrams per
liter.

BMAP adopted in 2012.

Includes the Hendry
Creek and Imperial River
subbasins.

Water Quality Monitoring Network



Water Quality Parameters Monitored		
Analyte	Core Parameter	Supplemental Parameter
Alkalinity		X
Ammonia (N)		X
Biochemical Oxygen Demand (BOD)	X	
Carbon - Organic		X
Carbon - Total		X
Chlorophyll-a (corrected)	X	
Color (only required in river proper stations)	X	
Dissolved Oxygen (DO)	X	
DO Saturation		X
Flow		X
Nitrate-Nitrite (N)	X	
Nitrogen - Total Kjeldahl (TKN)	X	
Nitrogen - Total		X
Orthophosphate (P)		X
pH	X	
Phosphorus - Total	X	
Specific Conductance/Salinity	X	
Temperature, Water	X	
Total Suspended Solids (TSS)		X
Turbidity	X	

Water quality is monitored at 24 stations
throughout the BMAP.

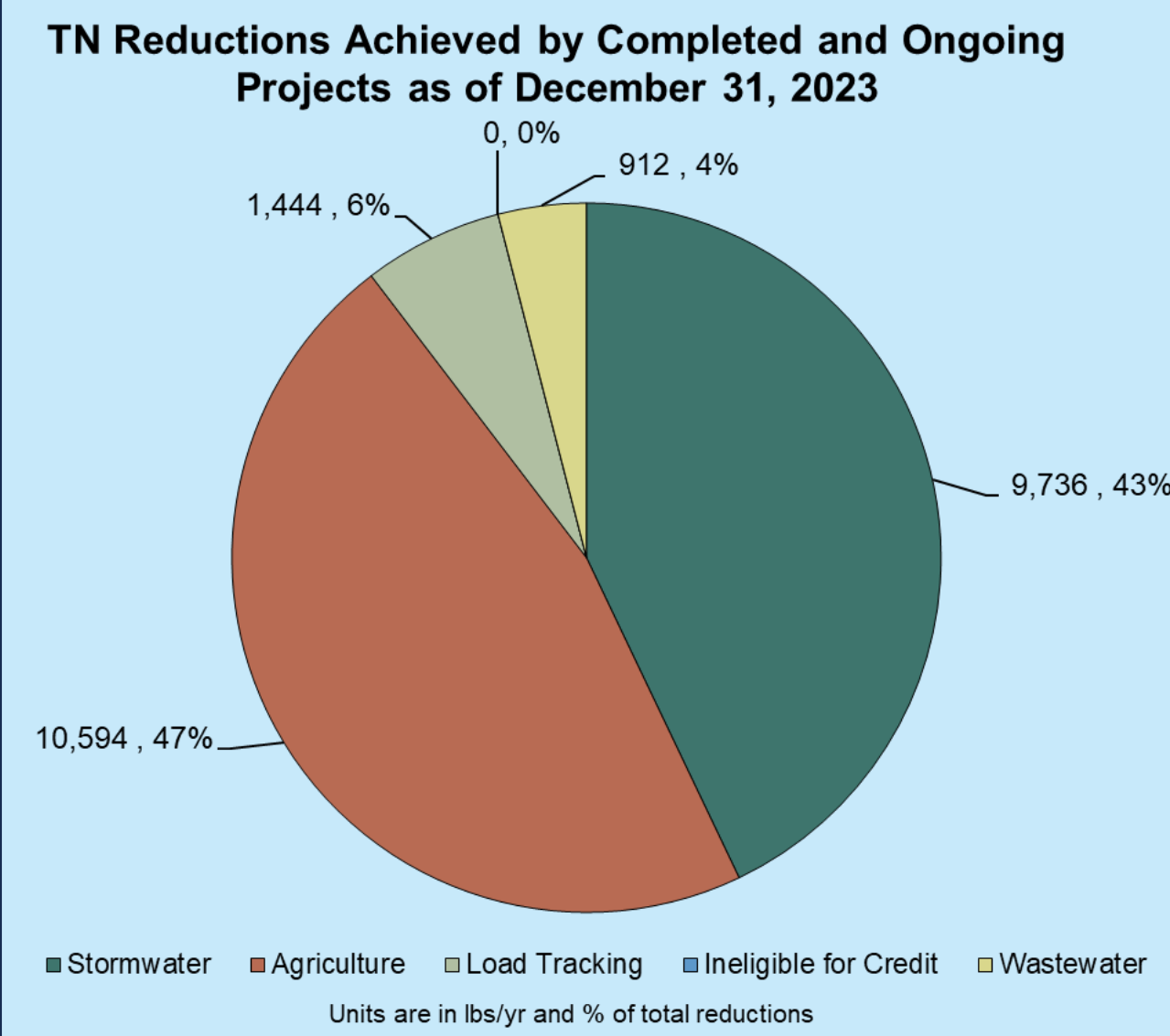
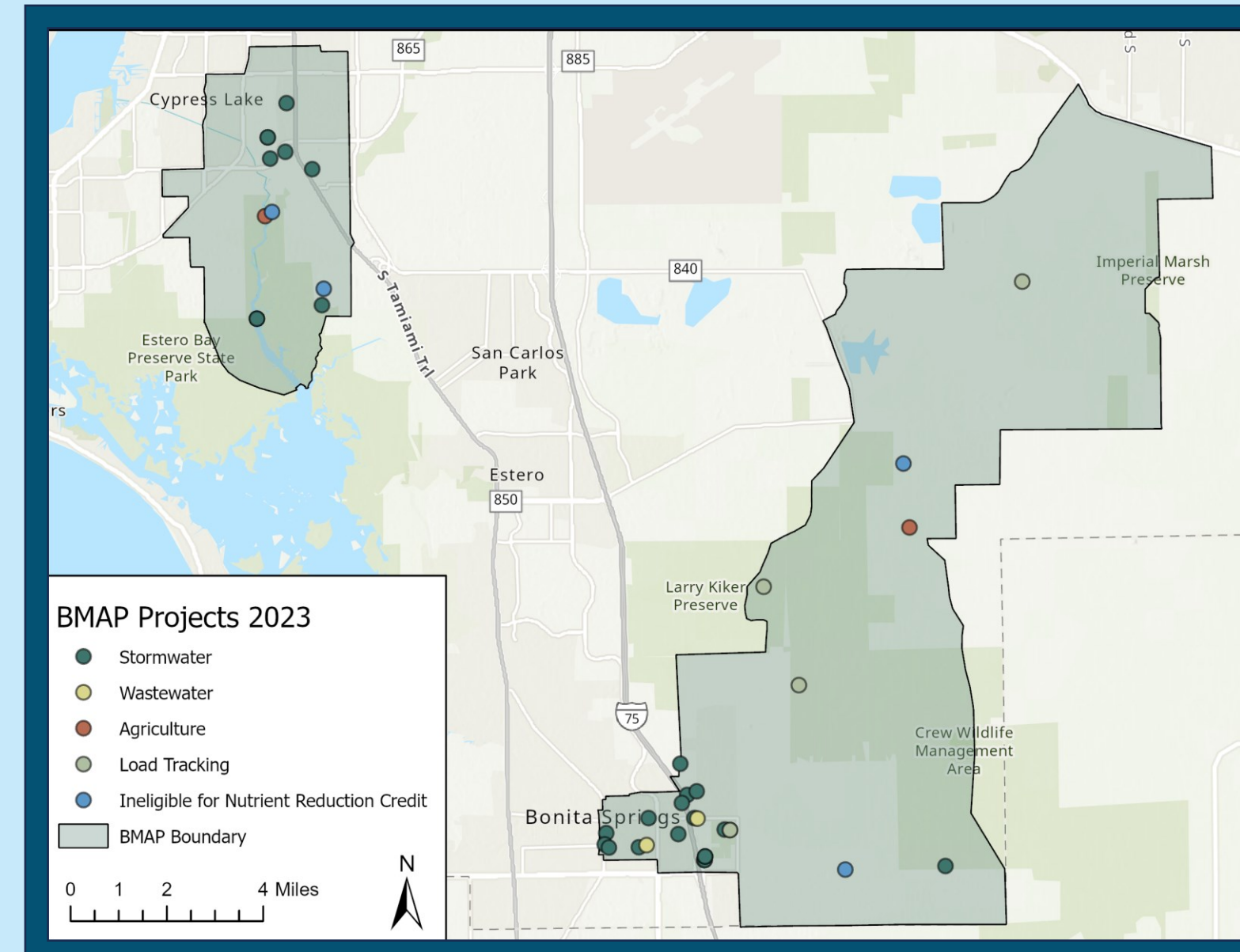


Source: DEP, Hendry Creek



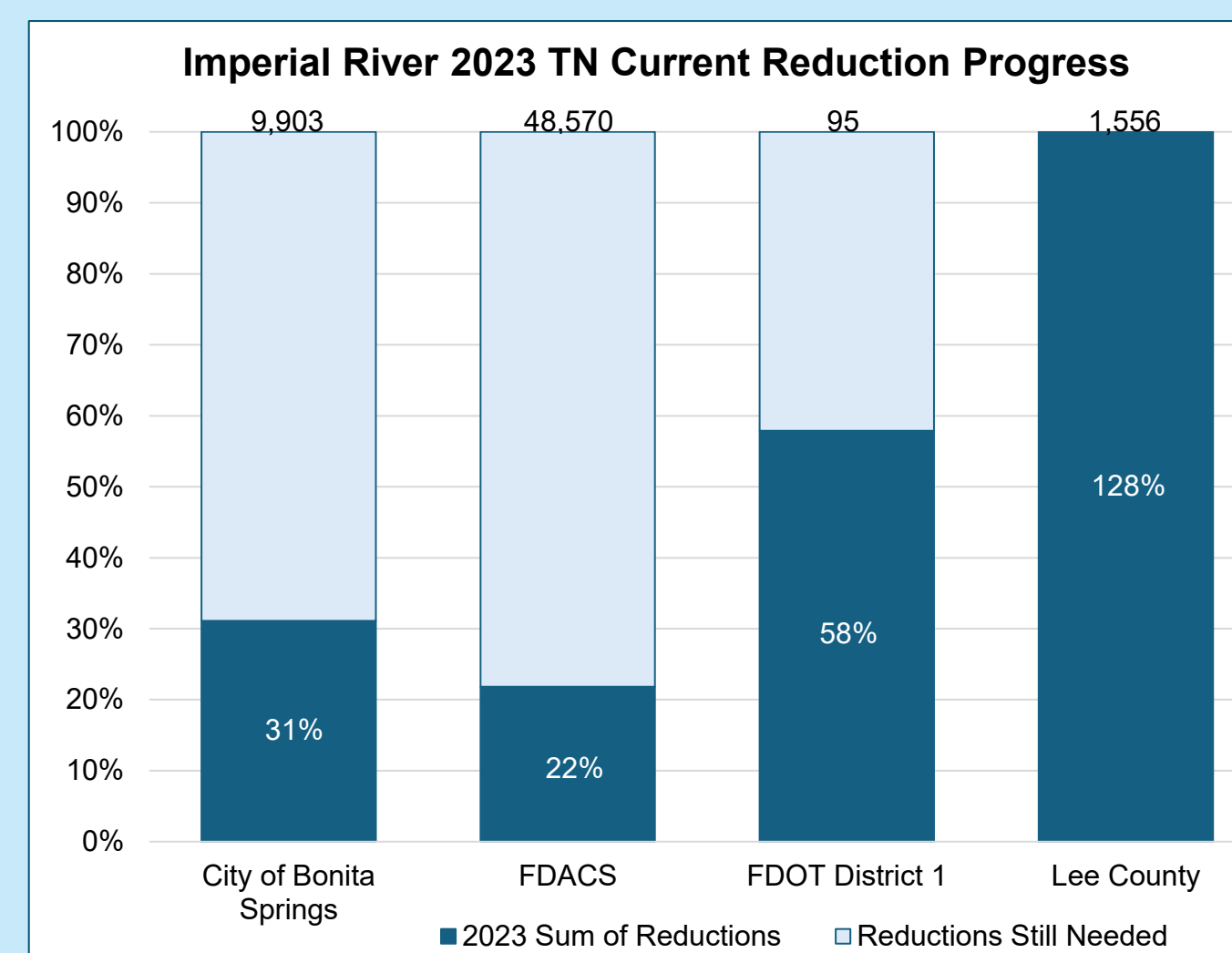
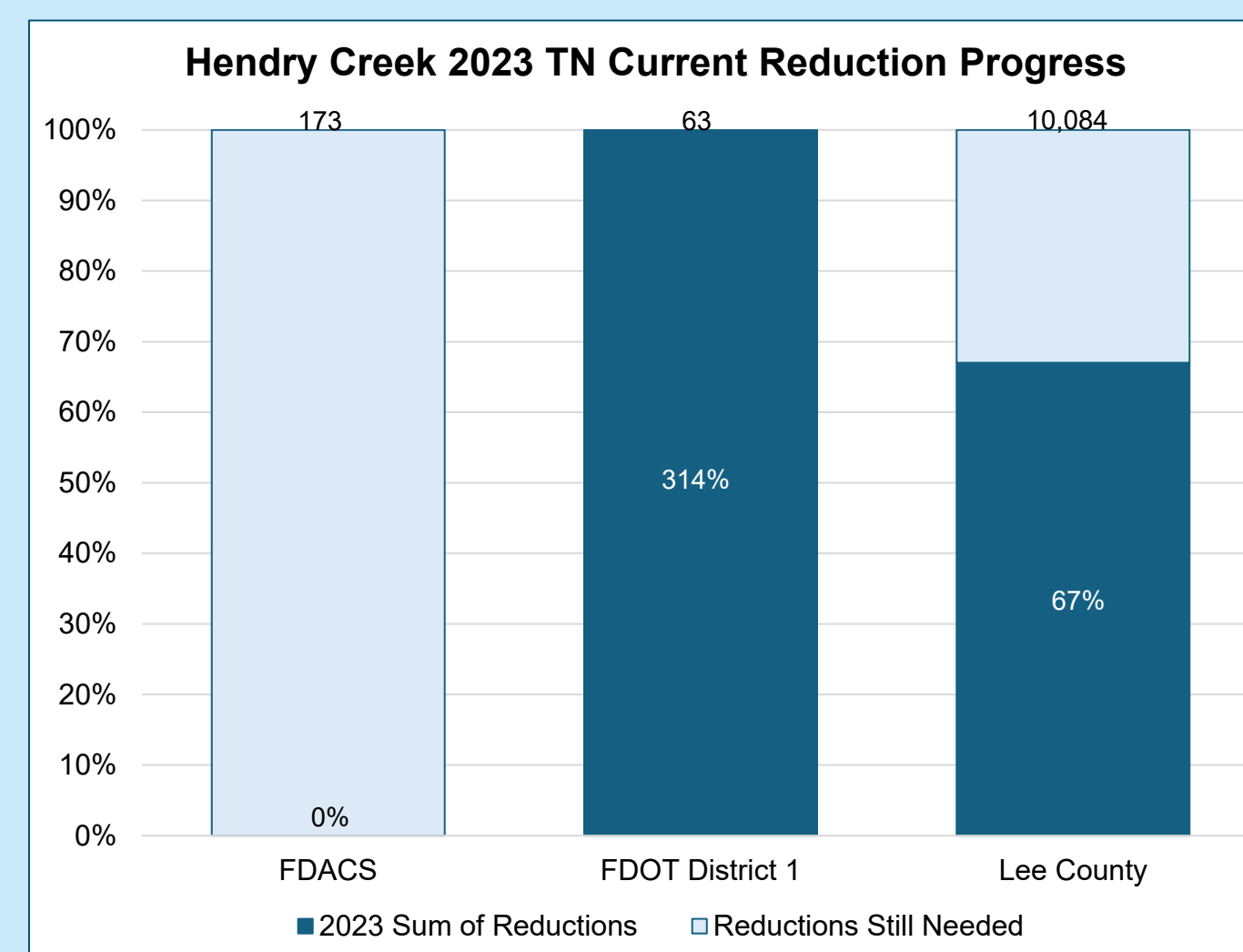
Source: DEP, Estero Bay

Statewide Annual Report (STAR) 2023

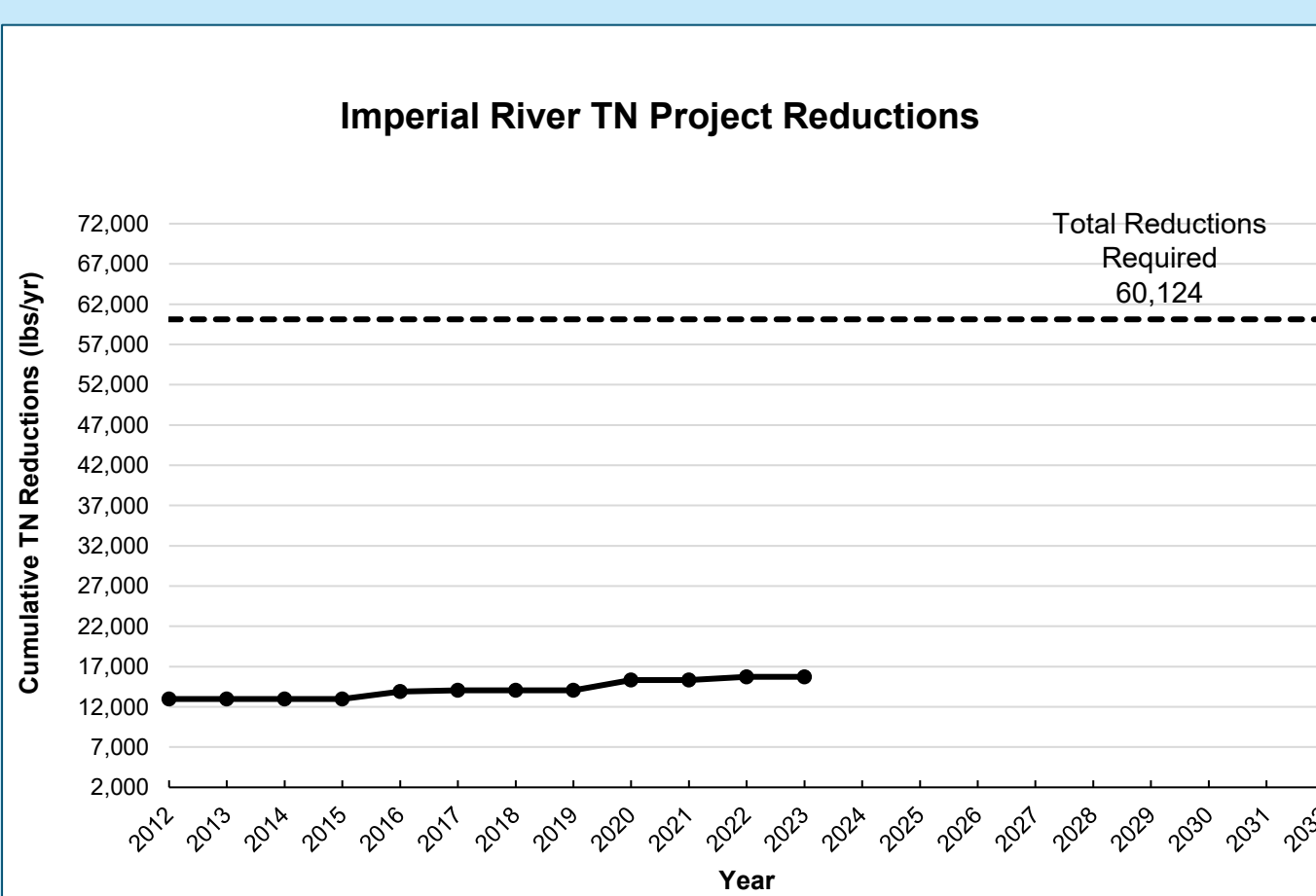
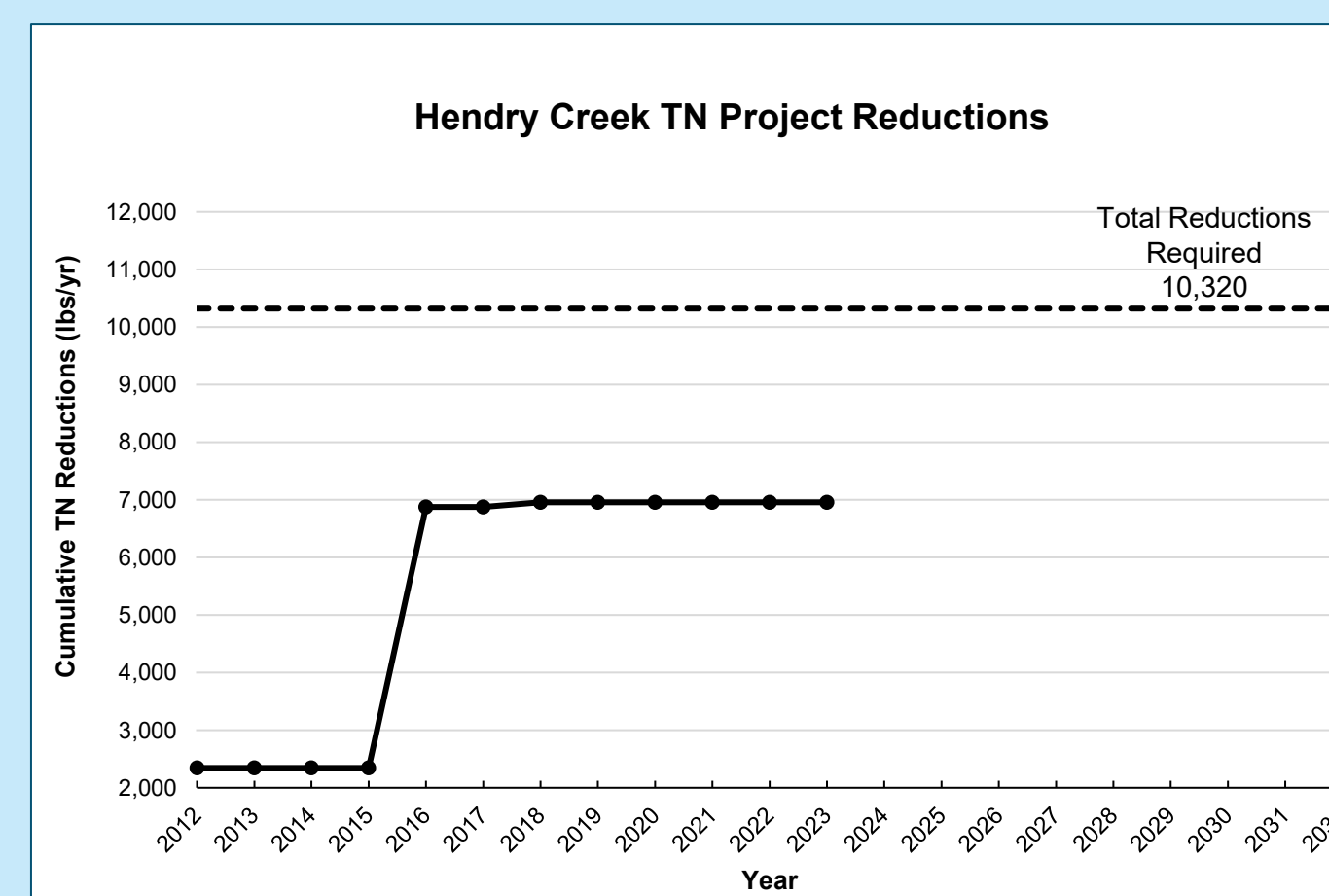


Lead Entity	Completed	Ongoing	Planned	Underway	Total
City of Bonita Springs	8	3	2	2	15
FDACS	0	2	0	0	2
FDOT District 1	8	4	0	0	12
Lee County	11	4	0	1	16
Total	27	13	2	3	45

45 projects in the
BMAP address
stormwater and
wastewater sources of
pollution.



Entity TN reduction progress for completed and ongoing
projects in lbs/yr as of Dec. 31, 2023.



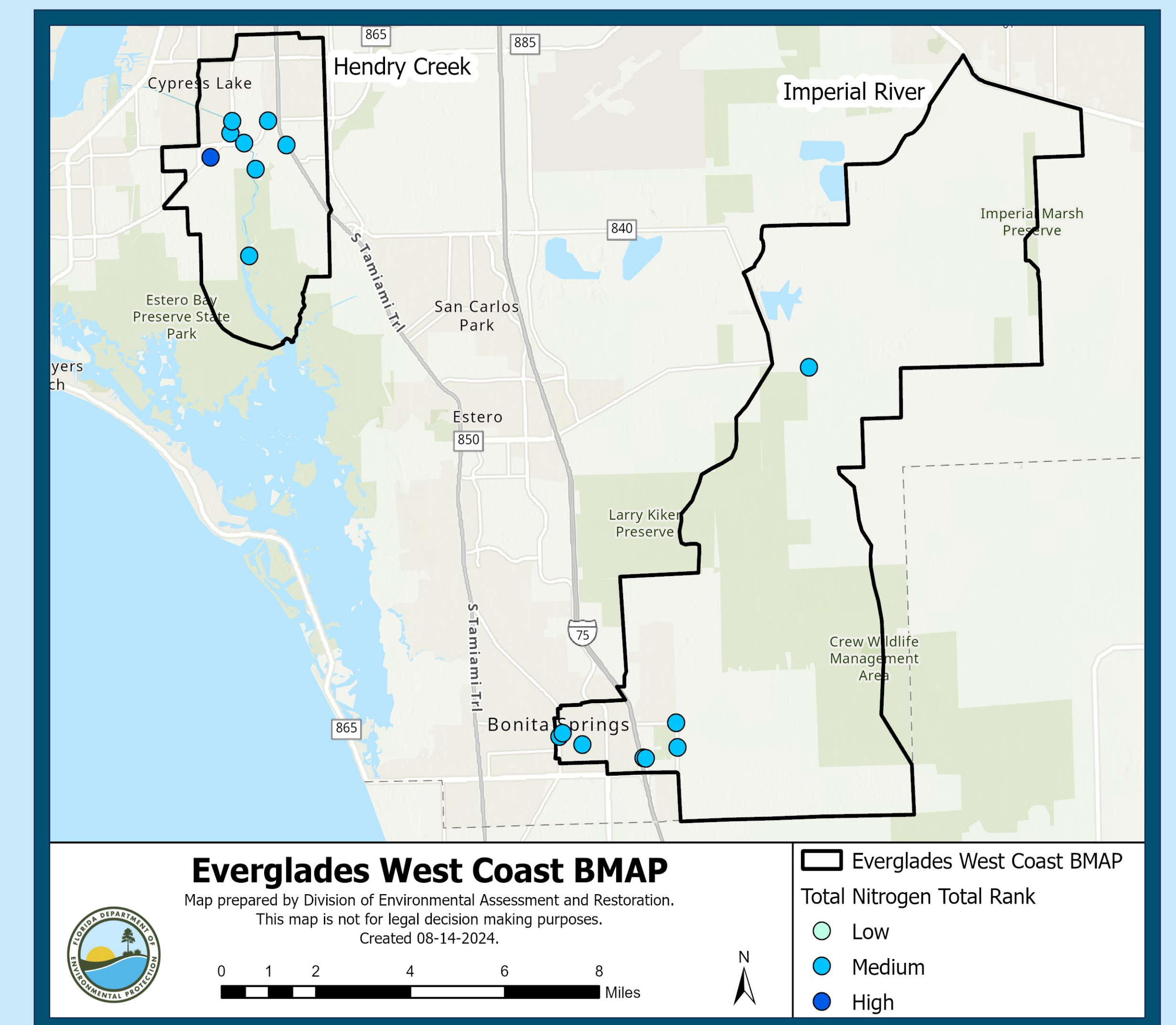
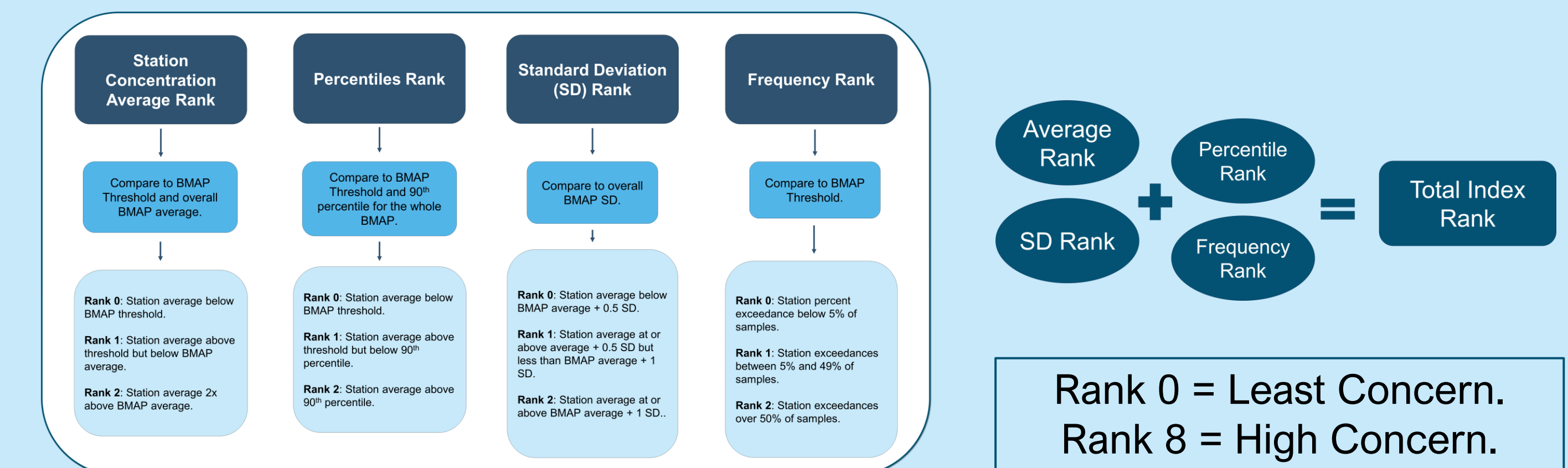
Completed and ongoing projects have achieved TN required
reductions of 67% in Hendry Creek and 26% in Imperial River.

Upcoming BMAP Update

- Load estimation tool update.
- Evaluation of current TN milestones.
- Identification of additional projects.
- Incorporation of legislative requirements identified during the 2020, 2023 and 2024 Legislative Sessions.

Hot Spot Analysis

Analysis method for prioritization at a local scale.

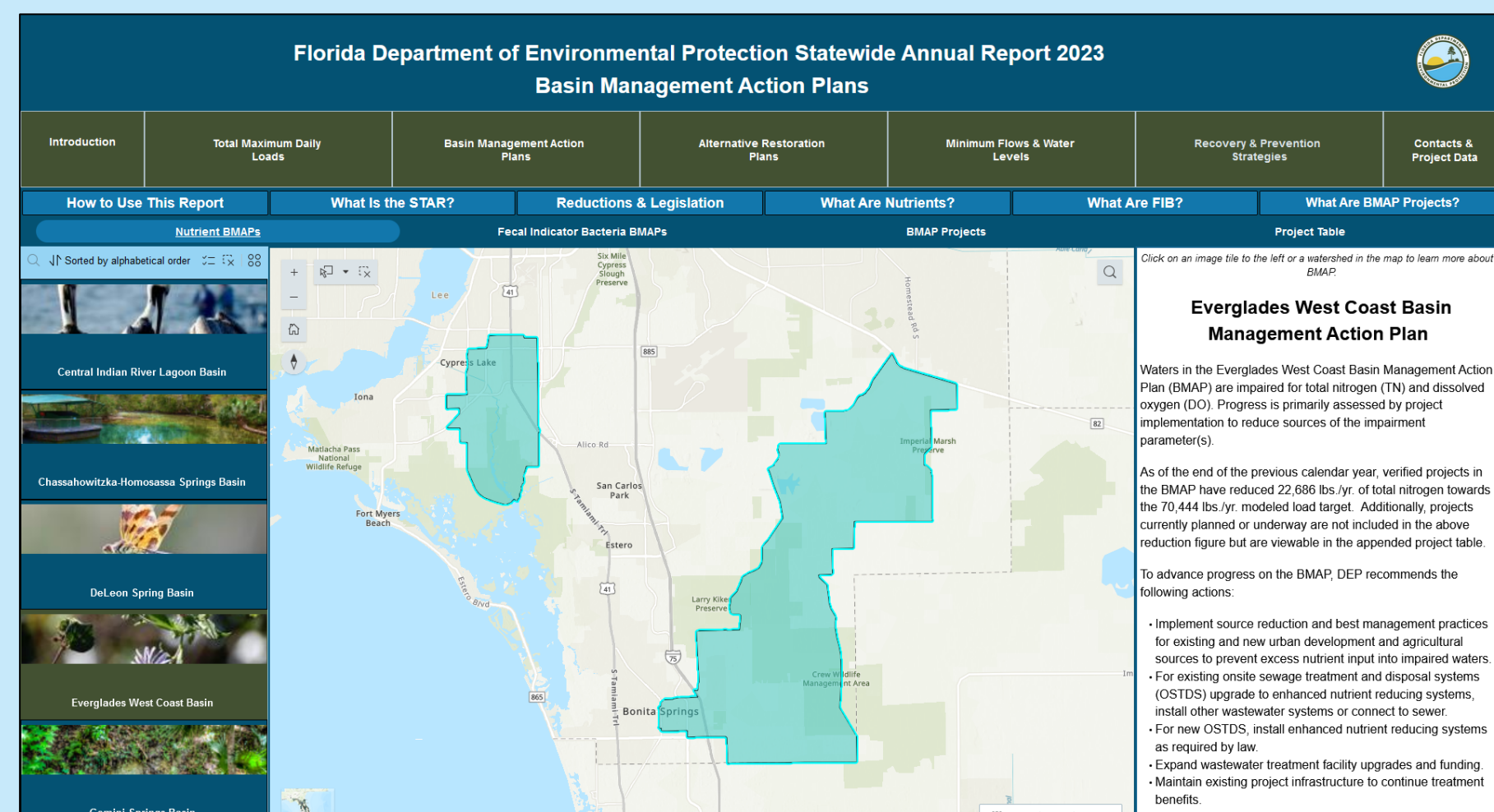


EVERGLADES WEST COAST BASIN MANAGEMENT ACTION PLAN (BMAP) REQUIRED REDUCTIONS AND MILESTONES

Projects

Responsible entities are required to identify, plan, complete and report on projects that reduce the loading of nitrogen from sources.

Project collection and reporting are crucial to the successful implementation and management of BMAPs. Projects are reported to the Florida Department of Environmental Protection (DEP) annually through the BMAP Project Collection Portal. Project lists with associated reductions are published in the Statewide Annual Report (STAR).



The STAR is published July 1 of each year.

BMAP Load Estimation Tool Update

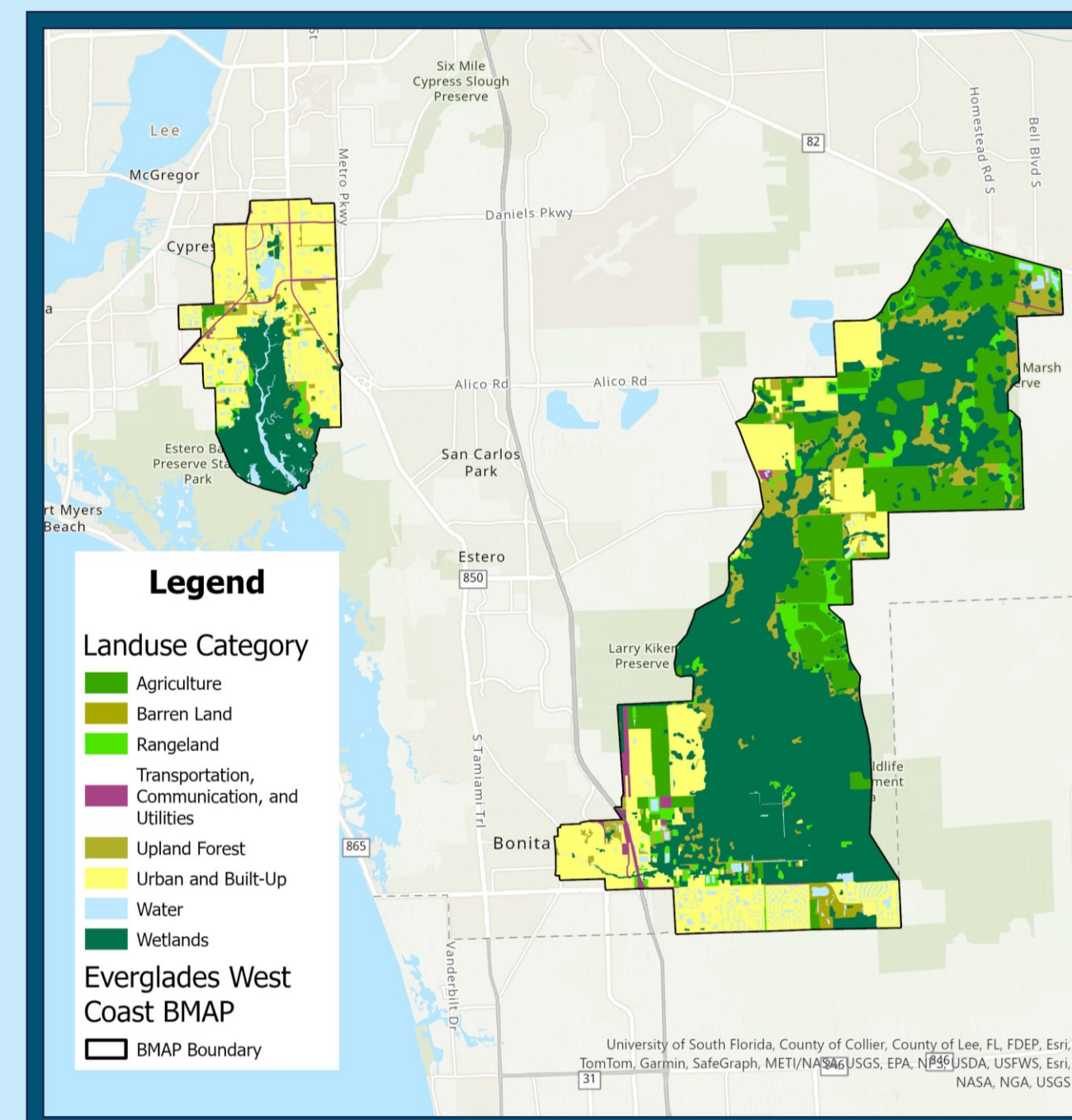
The Load Estimation Tool (LET) is being updated with the South Florida Water Management (SFWMD) Land Cover and Land Use for 2017-2019 dataset for the 2025 BMAP update.

Hendry Creek

Land Use Category	Acres in 2012 BMAP	Acres with Updated Land
Urban	5,184	5,905
Agriculture	98	219
Natural Lands	5,182	4,369

Imperial River

Land Use Category	Acres in 2012 BMAP	Acres with Updated Land
Urban	6,160	8,857
Agriculture	11,597	8,821
Natural Lands	27,203	27,270



BMAP Management Strategies

Nutrient reduction credits can be earned through implementing projects addressing sources of nutrients. Reduction milestones must be met to ensure sufficient progress towards meeting the total maximum daily load (TMDL) target.

Source-Specific Management Strategies:

- Onsite Sewage Treatment and Disposal Systems:** No new installations of conventional septic systems on lots of 1 acre or less.
- Wastewater Treatment Facilities:** Facilities must meet certain effluent limitations.
- Agriculture Best Management Practices (BMP) Enrollment:** This program is mandatory in BMAP areas and assumes certain efficiencies as described in the BMAP.
- Other Agriculture:** Agricultural sources that are not addressed through BMP enrollment and implementation will need to be addressed through activities such as regional projects, cost-share BMPs or innovative technologies.
- Urban Stormwater:** Ordinances, education, street sweeping and structural stormwater improvements.



Updated Entity Required Reductions

The list of responsible entities in the BMAP will be updated. **Laguna Lakes Community Development District (CDD) and Corkscrew Farms CDD** are new entities for the 2025 BMAP update.

Entities will have updated allocations based on the new LET. Projects previously submitted with verified reductions will be recalculated to reflect the new LET.

Below are the entity allocations for the current BMAP versus the 2025 BMAP update.

Hendry Creek

Entity	Current BMAP TN Reductions (lbs/yr)	Proposed TN Reductions (lbs/yr)	Change (Proposed - Current) TN (lbs/yr)
FDACS	173	366	193
FDOT D1	63	135	72
Catalina at Winkler Preserve CDD	-	157	157
Laguna Lakes CDD	N/A	314	N/A
Lee County	10,084	15,182	5,098
Total	10,320	16,154	5,520

Imperial River

Entity	Current BMAP TN Reductions (lbs/yr)	Proposed TN Reductions (lbs/yr)	Change (Proposed - Current) TN (lbs/yr)
FDACS	48,570	27,936	-20,634
FDOT D1	95	94	-1
Corkscrew Farms CDD	N/A	1,110	N/A
City of Bonita Springs	9,903	10,814	911
Lee County	1,556	3,498	1,942
Total	60,124	43,452	-17,782

Upcoming Milestones

Responsible entities are required to provide lists of projects that demonstrate how they plan to achieve their required reductions for the next five-year milestone.

It is important that all projects needed to achieve milestone targets are 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.

The tables below show each entity's 50% and 100% Total Nitrogen (TN) reduction milestone in lbs/yr and the year it must be achieved by.

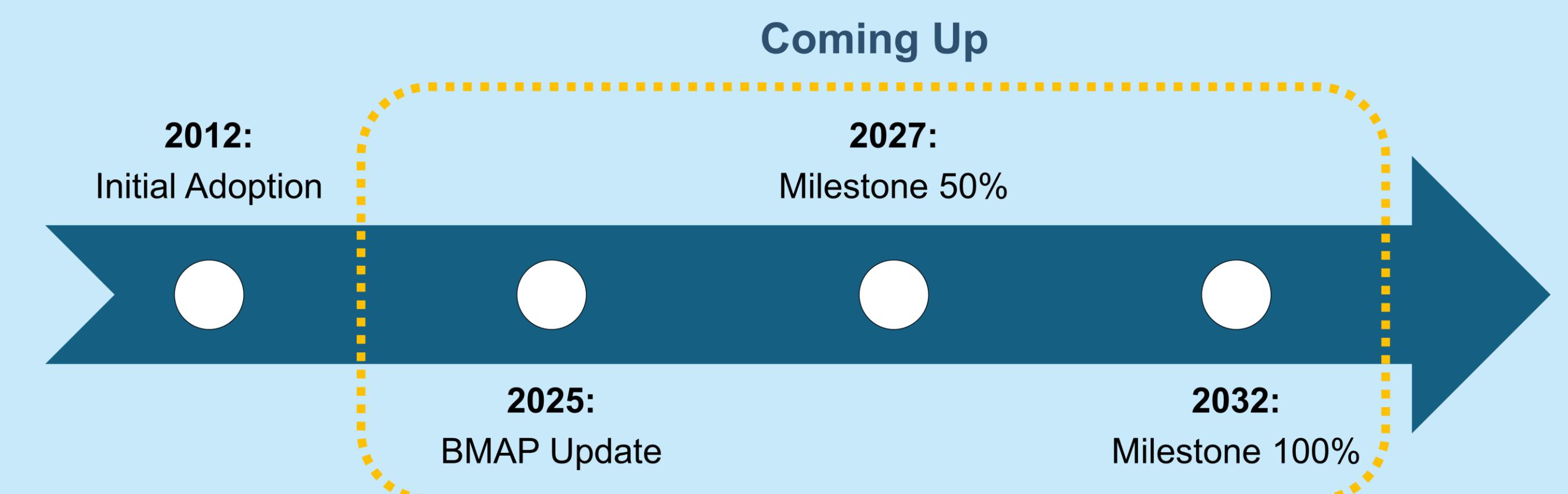
The figure below shows the timeline of the BMAP, beginning with the adoption year and including upcoming important dates.

Hendry Creek

Entity	2027 TN Milestone (lbs/yr)	2032 TN Final Milestone (lbs/yr)
DACS	183	366
DOT D1	68	135
Catalina at Winkler Preserve CDD	79	157
Laguna Lakes CDD	157	314
Lee County	7,591	15,182
Total	8,078	16,154

Imperial River

Entity	2027 TN Milestone (lbs/yr)	2032 TN Final Milestone (lbs/yr)
DACS	13,968	27,968
DOT D1	47	94
Corkscrew Farms CDD	555	1,110
City of Bonita Springs	5,407	10,814
Lee County	1,749	3,498
Total	21,726	43,484



As milestone timelines are reached, DEP will continue to evaluate restoration progress. The BMAP provides for phased implementation under subparagraph 403.067(7)(a)1., Florida Statutes (F.S.). This adaptive management process will continue until the TMDLs are met and maintained.

