SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Nutrient Load Reduction Progress Across the Northern Everglades

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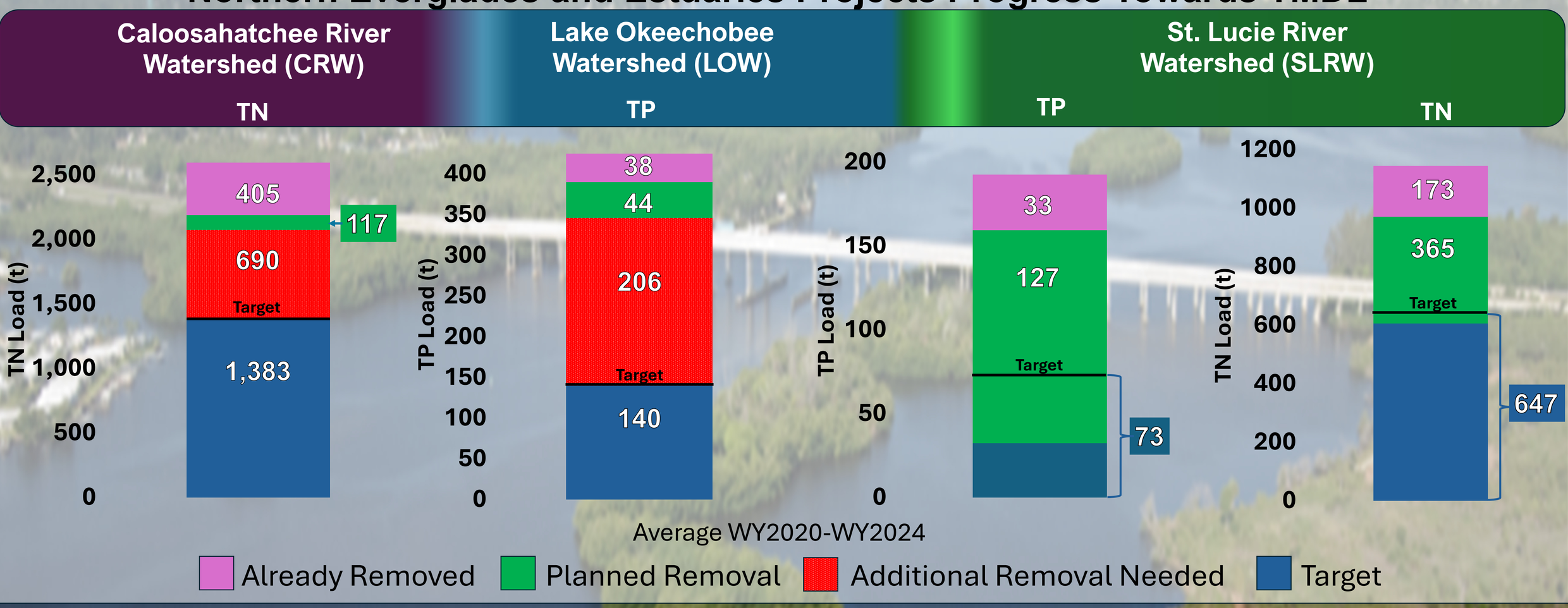
In support of the Northern Everglades TMDLs, planned projects are expected to reduce Total Phosphorus by 171 metric tons and Total Nitrogen by 482 metric tons.

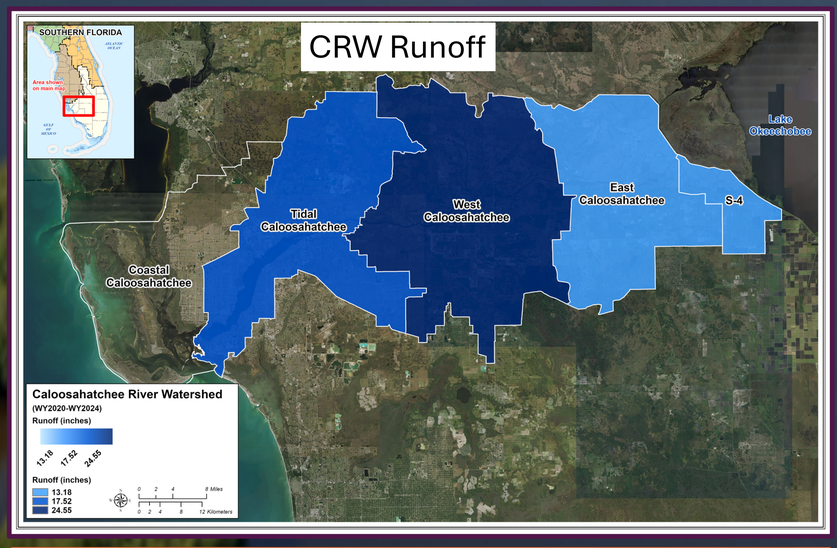
Northern Everglades and Estuaries Projects Progress Towards TMDL

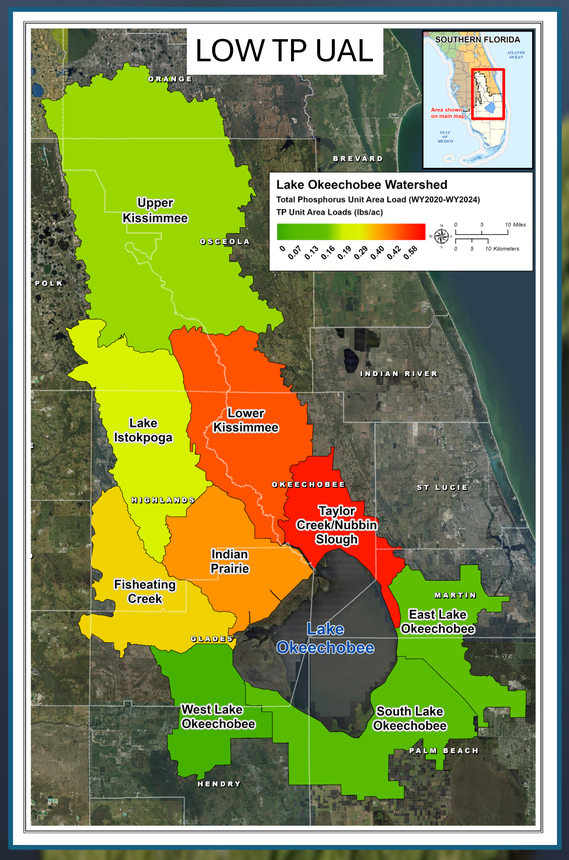


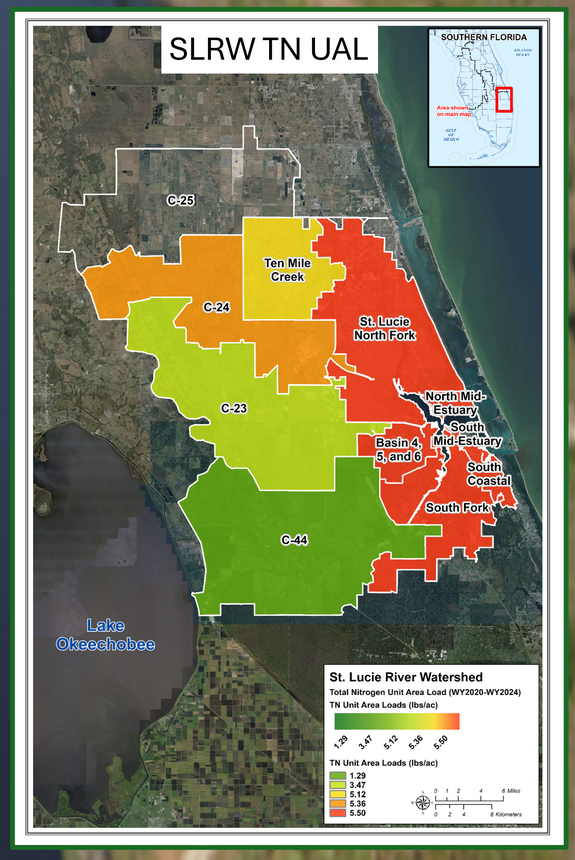
West Caloosahatchee Basin has the highest runoff and TN unit area load, averaging 24.55 inches and 7.09 pounds per acre (lbs/ac) from WY2020 to WY2024.

The Taylor Creek/Nubbin Slough Subwatershed has the highest TP unit area load averaging 0.58 lbs/ac; and Upper Kissimmee has the highest runoff averaging 9.63 inches from WY2020 to WY2024.

The Tidal Basins have the highest TN unit area load and runoff averaging 5.5 lbs/ac and 24.1 inches, while the Ten Mile Creek Basin has the highest TP unit area load averaging 1.3 lbs/ac from WY2020 to WY2024.







Methodology

The WY2020-WY2024 (water year (WY): WY2020 is May 1, 2019, to April 30, 2020) water quality data were compared against planning targets and estimated planned project reductions to determine additional load reductions needed to assist in achieving Total Maximum Daily Loads (TMDLs).

CRW Key Findings

- Planned projects account for only 14% of TN load reductions needed to meet TN TMDLs.
- Most TN is not biologically available, making treatment difficult; storage-focused projects are key.

Milestones and Recommendations

- Achieve 35 t/year TN load reductions by WY2029 from CRWCP projects completed by WY2025.
- Prioritize additional storage in West or East basins to reduce nutrient loads.
- Large storage projects must allow water returns to sustain estuary health.

Note: This analysis focuses on CRW, excluding upstream inputs from Lake Okeechobee, to guide future project planning.

LOW Key Findings

- Planned projects account for only 18% of the TP load reductions needed to meet the TP TMDLs.
- Targeting high unit area loading areas, like S-191 Basin, has proven effective, showing significant TP load decreases from WY2014-WY2023 and WY1991-WY2023.

Milestones and Recommendations

- Achieve ~14 t/year TP load reductions by WY2029 from projects completed in WY2025.
- Over the next 5 years, aim for an additional 40 t reduction by prioritizing high-load, high-runoff subwatersheds.

SLRW Key Findings

- Presently without the planned projects in place, load reductions of 86 (t) TP and 324 (t) TN are still needed.

Milestones and Recommendations

- If all planned projects are implemented and expected performance is met, the TP and TN load reductions would exceed the reductions needed to meet the TP and TN TMDLs.

Note: This analysis focuses on SLRW, excluding upstream inputs from Lake Okeechobee, to guide future project planning.