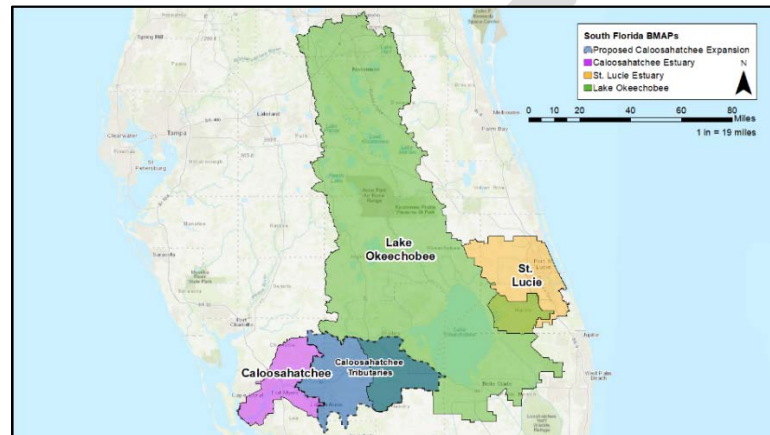


ACHIEVING MORE, NOW

- New, more data-driven approach
- Focusing on smaller subdivisions called “**targeted restoration areas**” (e.g., basins, sub-basins, or tributaries) in each BMAP
- Evaluating TN, TP¹, and flow in all BMAPs
- Comparing water quality to appropriate benchmarks
- Using the latest information from SFWMD² evaluations, identify projects tailored to each targeted restoration area
- Soliciting stakeholders, local governments, and the public through an RFI³ for additional projects



APPROACH

1. Identify smaller areas (e.g., basins, sub-basins, or tributaries) for focused restoration
2. Delineate each area and locate relevant water quality stations
 - a. Obtain existing data for TN, TP, and flow
 - b. Recommend additional monitoring where data are lacking
 - c. Supplement with information from water quality models where appropriate
3. Determine benchmarks for evaluating water quality and water storage
 - a. Lake Okeechobee— applicable numeric nutrient criteria (e.g., peninsular for streams), and consult LOWCP⁴ for indications of water quality and/or flow issues
 - b. Caloosahatchee—applicable numeric nutrient criteria
 - c. St. Lucie— applicable numeric nutrient criteria, TMDL⁵ target concentrations
 - d. Rely on existing SFWMD information for water storage needs for each BMAP
4. Review measured data
 - a. Calculate most recent 5-year average TN and TP concentrations (WY14-WY18)
 - b. Compare concentrations to established benchmarks
 - c. Consult flow-weighted mean (FWM) concentrations and unit area loads, where appropriate to better understand conditions.

¹ Total Nitrogen, Total Phosphorus

² South Florida Water Management District

³ Request for Information

⁴ Lake Okeechobee Watershed Construction Project

⁵ Total Maximum Daily Load, a water quality restoration target



5. Identify criteria for implementation and funding, and describe restoration types (e.g., water quality, flow) recommended for each targeted restoration area
 - a. Calculate expected reductions from existing and recommended projects using measured data wherever possible
 - b. Identify where additional projects are necessary
6. Prioritize areas where new projects would be most impactful to overall restoration
 - a. Use water quality (TN and TP) and flow data
 - b. Compare to benchmarks for each basin
7. Publish an RFI for each BMAP to solicit for additional projects and evaluate responses based on criteria established for each targeted restoration area
8. Evaluate progress in targeted restoration areas annually by comparing measured data to:
 - a. Benchmarks
 - b. TMDL targets for subwatersheds or basin as defined in BMAP
9. Use responses from RFIs and existing project lists, combined with the prioritized areas and recommended restoration need to inform future budget requests for the agency
10. Update existing water quality models based on expanded monitoring efforts

OUTCOMES

- Identify data needs and revised monitoring plans for TN, TP, and flow
- Establish benchmarks and comparison metrics
- Prioritize targeted restoration areas and selection criteria
- List projects and project types needed by targeted restoration area
- Establish timeline for implementation to assist with meeting milestones
- Provide recommendations to inform the department's regulatory efforts
 - o Where to prioritize inspections
 - o When to conduct detailed permit reviews

SCHEDULE FOR UPDATING THE BMAPs

- Present approach to stakeholders:
 - o Lake Okeechobee—July 30 meeting
 - o St. Lucie—September 10 meeting
 - o **Caloosahatchee—August 27 meeting**
- Present status and results to date of Steps 1-6:
 - o Lake Okeechobee—July 30 meeting
 - o St. Lucie—late September/early October meeting
 - o **Caloosahatchee— late September/early October meeting**
- Publish RFI (Step 7):
 - o Lake Okeechobee—late August/early September
 - o St. Lucie and **Caloosahatchee—late October**
- Release draft BMAPs to stakeholders for comment:
 - o Lake Okeechobee—early November
 - o St. Lucie—late November/early December
 - o **Caloosahatchee— late November/early December**
- Updated **all BMAPs by end of January 2020**

Prioritized and Data-Driven

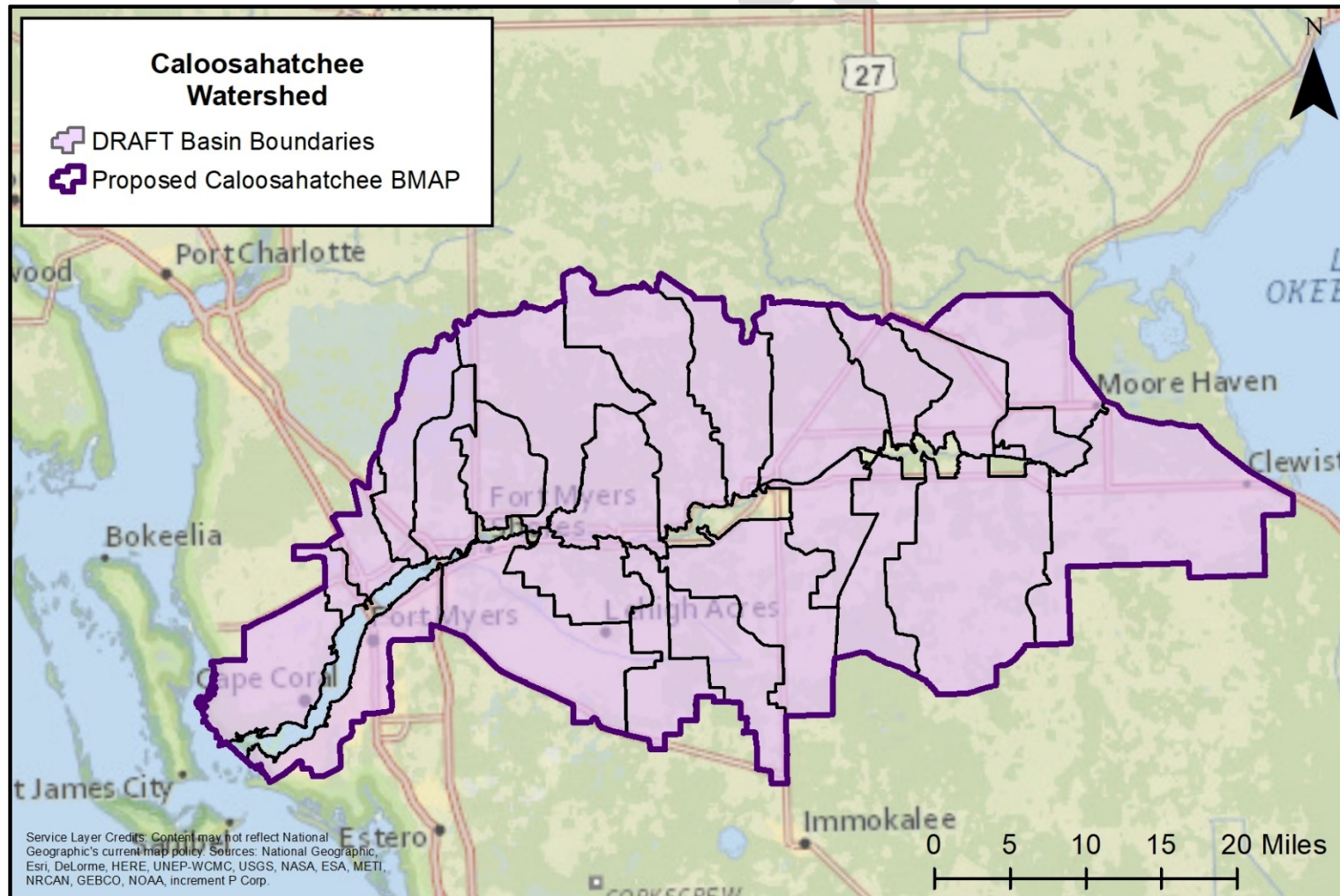
DEP's Approach to Updating the Northern Everglades BMAPs



DRAFT status August 26, 2019

APPROACH

1. Identify smaller areas (e.g., basins, sub-basins, or tributaries) for focused restoration.
 - a. Basins are being delineated. Draft basins are based on model delineations, and additional information on drainage from SFWMD is under review.

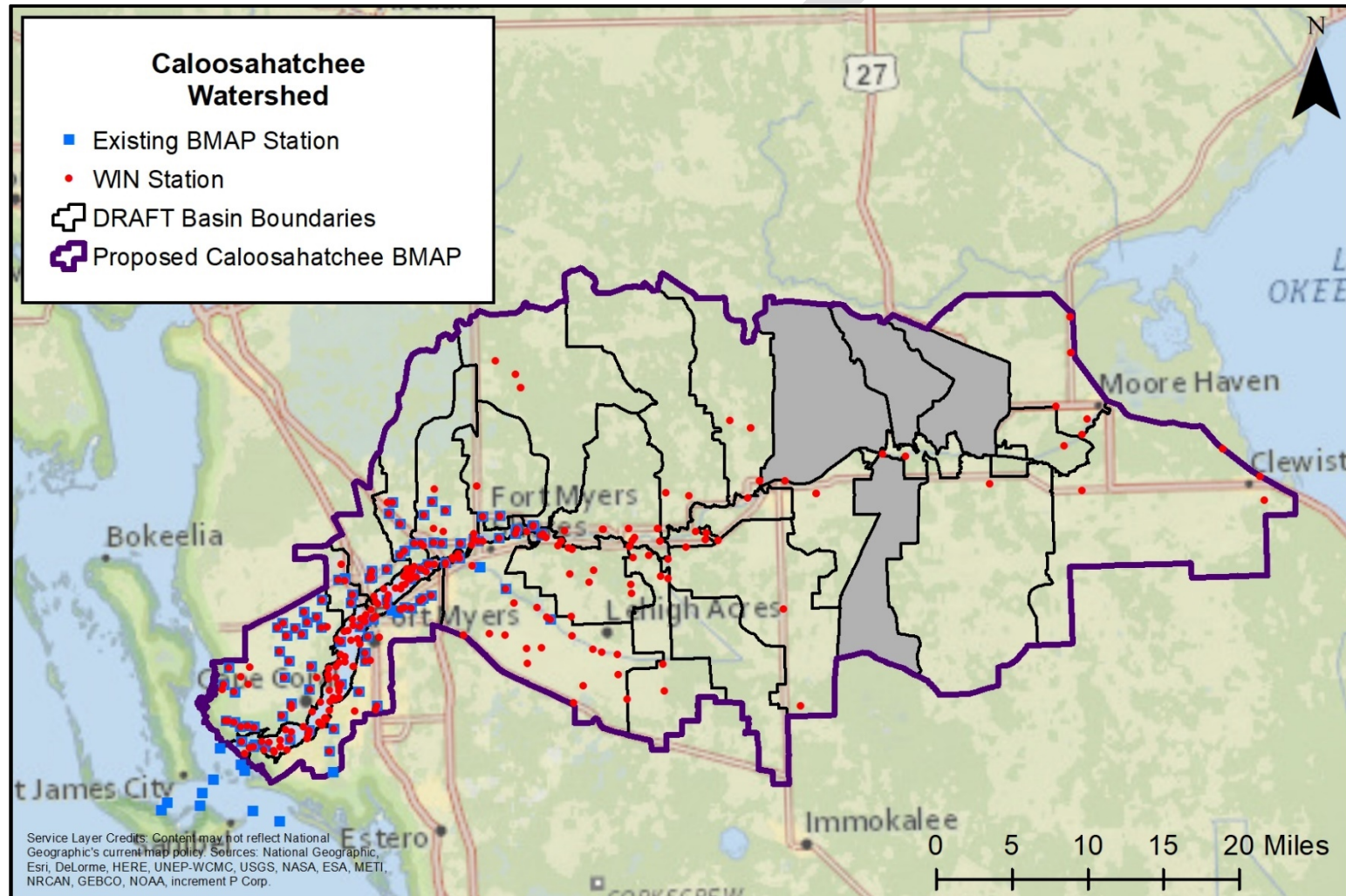


Prioritized and Data-Driven

DEP's Approach to Updating the Northern Everglades BMAPs

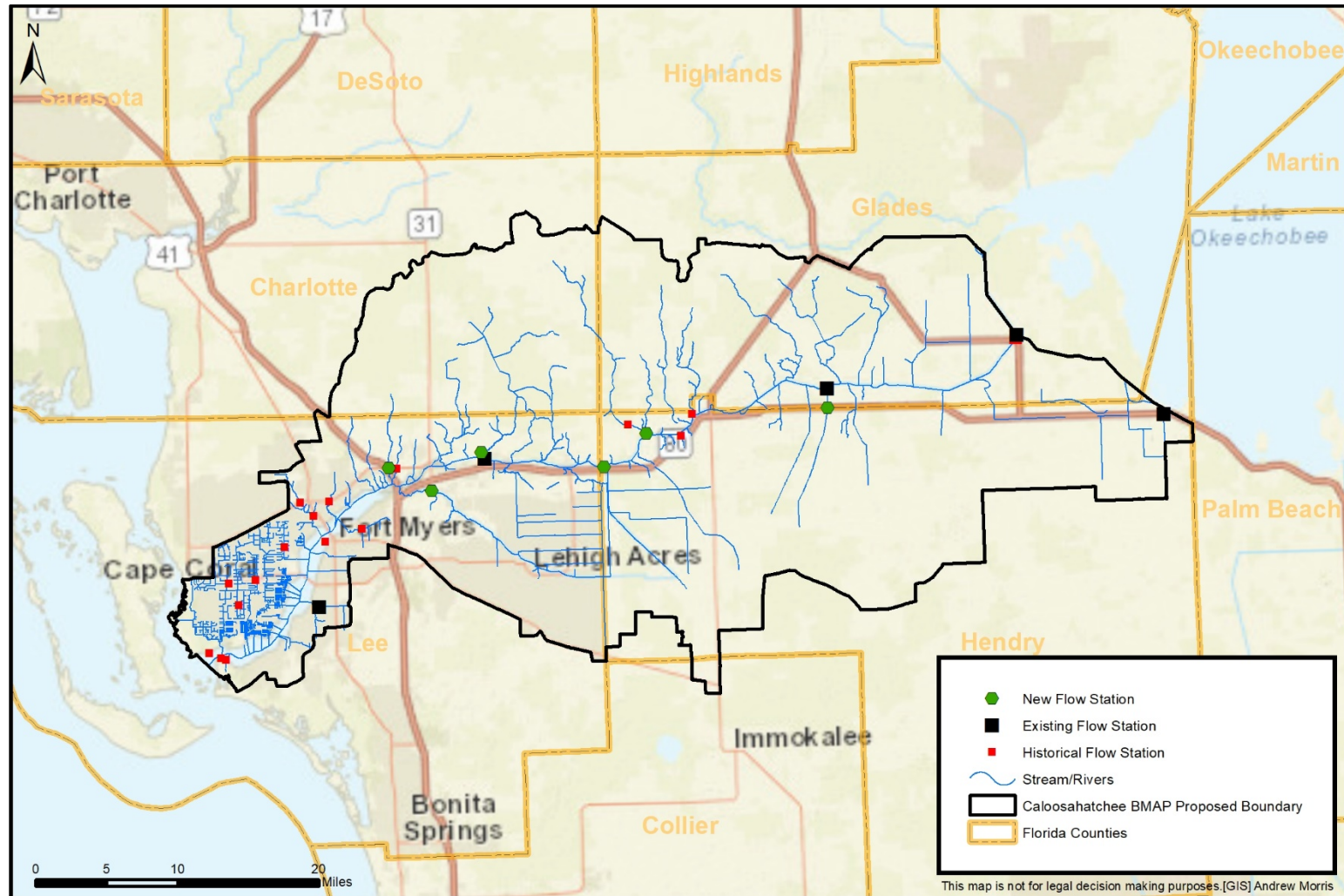


2. Delineate each area and locate relevant water quality stations
 - a. Obtain existing data for TN, TP, and flow
 - b. Recommend additional monitoring where data are lacking
 - c. Supplement with information from water quality models where appropriate



Prioritized and Data-Driven

DEP's Approach to Updating the Northern Everglades BMAPs



Prioritized and Data-Driven

DEP's Approach to Updating the Northern Everglades BMAPs



3. Determine benchmarks for evaluating water quality and water storage
 - a. Caloosahatchee— applicable numeric nutrient criteria (e.g., peninsular for streams)
 - b. Rely on existing SFWMD information for water storage needs for each BMAP

Nutrient Watershed Region	Total Phosphorus Nutrient Threshold ¹	Total Nitrogen Nutrient Threshold ¹
Panhandle West	0.06 mg/L	0.67 mg/L
Panhandle East	0.18 mg/L	1.03 mg/L
North Central	0.30 mg/L	1.87 mg/L
Peninsular	0.12 mg/L	1.54 mg/L
West Central	0.49 mg/L	1.65 mg/L
South Florida	No numeric nutrient threshold. The narrative criterion in paragraph 62-302.530(47)(b), F.A.C., applies.	No numeric nutrient threshold. The narrative criterion in paragraph 62-302.530(47)(b), F.A.C., applies.

Source: 62-302.531, F.A.C. Numeric Interpretations of Narrative Nutrient Criteria

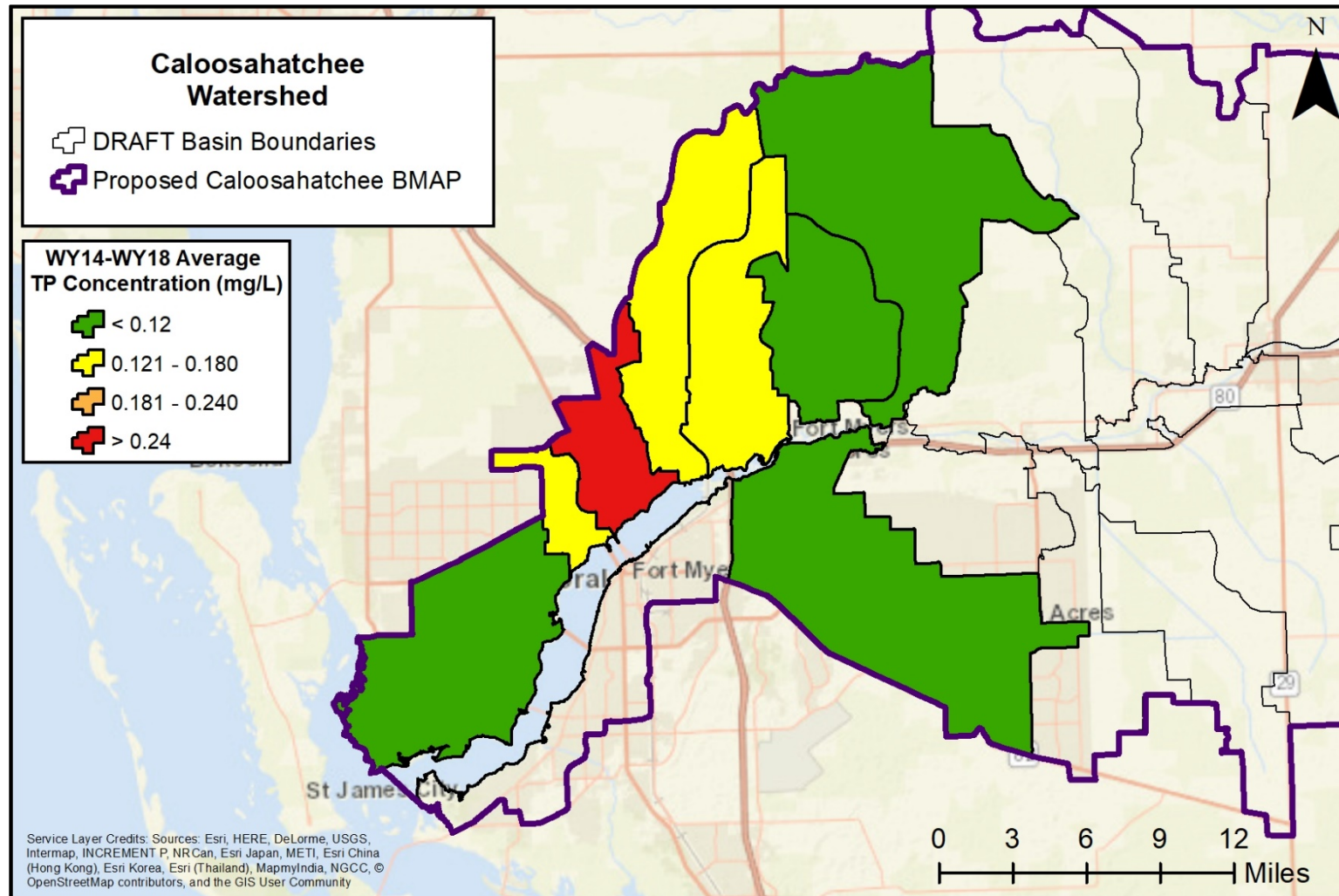
4. Review measured data
 - a. Calculate most recent 5-year average TN and TP concentrations (WY14-WY18)
 - b. Compare concentrations to established benchmarks
 - i. *Data are currently being compiled and averaged, assigned to basins, and compared to the benchmarks.*
 - c. Consult flow-weighted mean (FWM) concentrations and unit area loads, where appropriate to better understand conditions.
 - i. *Long-term flows and loads available in limited locations. Once final basins are delineated, any FWM concentrations and unit area loads will be identified and reviewed.*

Prioritized and Data-Driven

DEP's Approach to Updating the Northern Everglades BMAPs



DRAFT results of steps 4a and 4b:

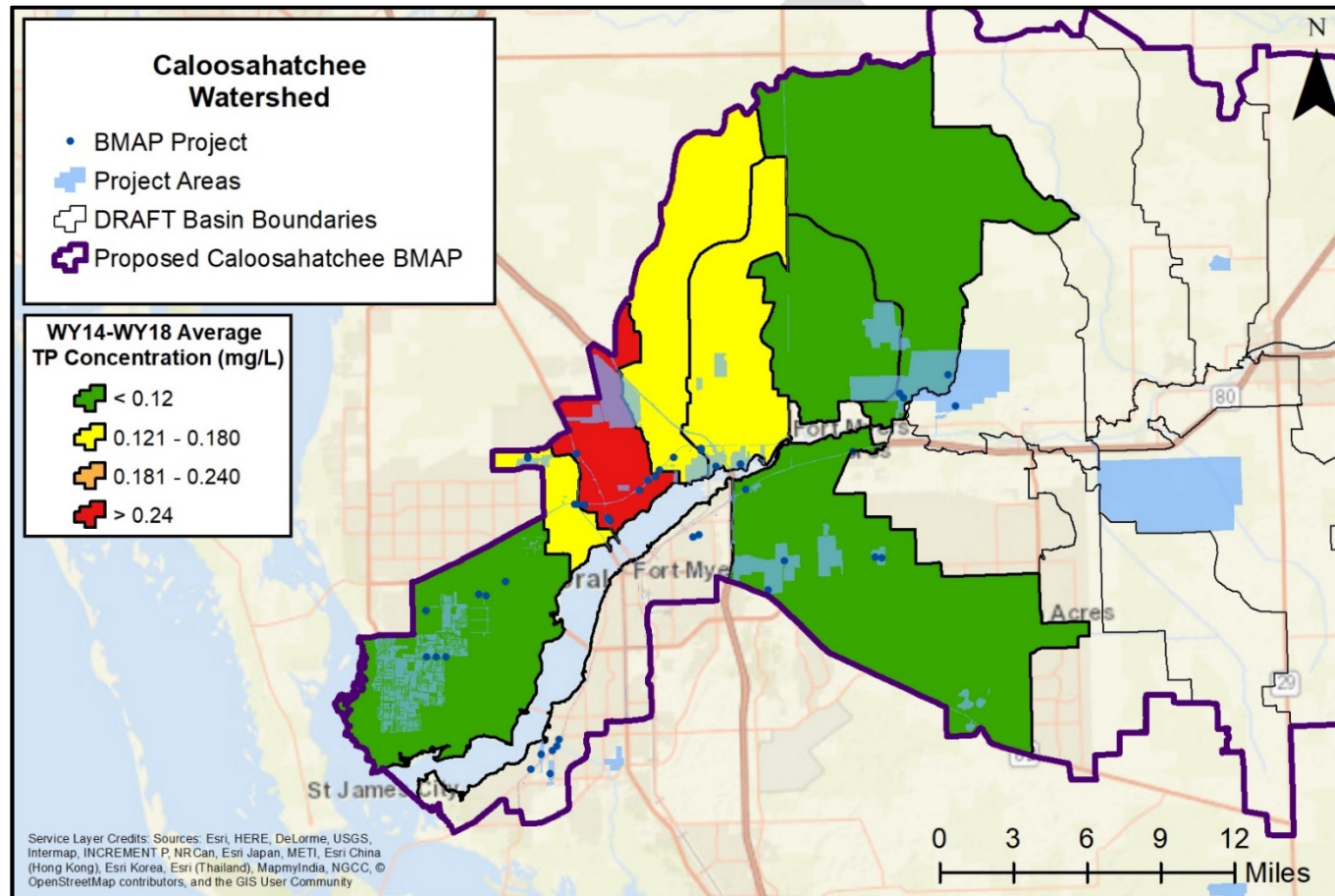


Prioritized and Data-Driven

DEP's Approach to Updating the Northern Everglades BMAPs



5. Identify criteria for implementation and funding, and describe restoration types (e.g., water quality, flow) recommended for each targeted restoration area
 - a. Calculate expected reductions from existing and recommended projects using measured data wherever possible
 - b. Identify where additional projects are necessary to achieve benchmarks



6. Prioritize areas where new projects would be most impactful to overall restoration
 - a. Use water quality (TN and TP) and flow data
 - b. Compare to benchmarks for each basin