



Florida Department of Environmental Protection

Water Quality Restoration Program

Caloosahatchee Estuary Basin Management Action Plan Annual Meeting

February 21, 2017

Sara Davis, Basin Coordinator





Agenda

- Overview of the Caloosahatchee BMAP 2016 Annual Progress Report.
- Activities during the reporting period.
- Monitoring program update.
- Modeling update.
- Next steps.
- Comments.



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Overview of the Caloosahatchee BMAP 2016 Annual Progress Report



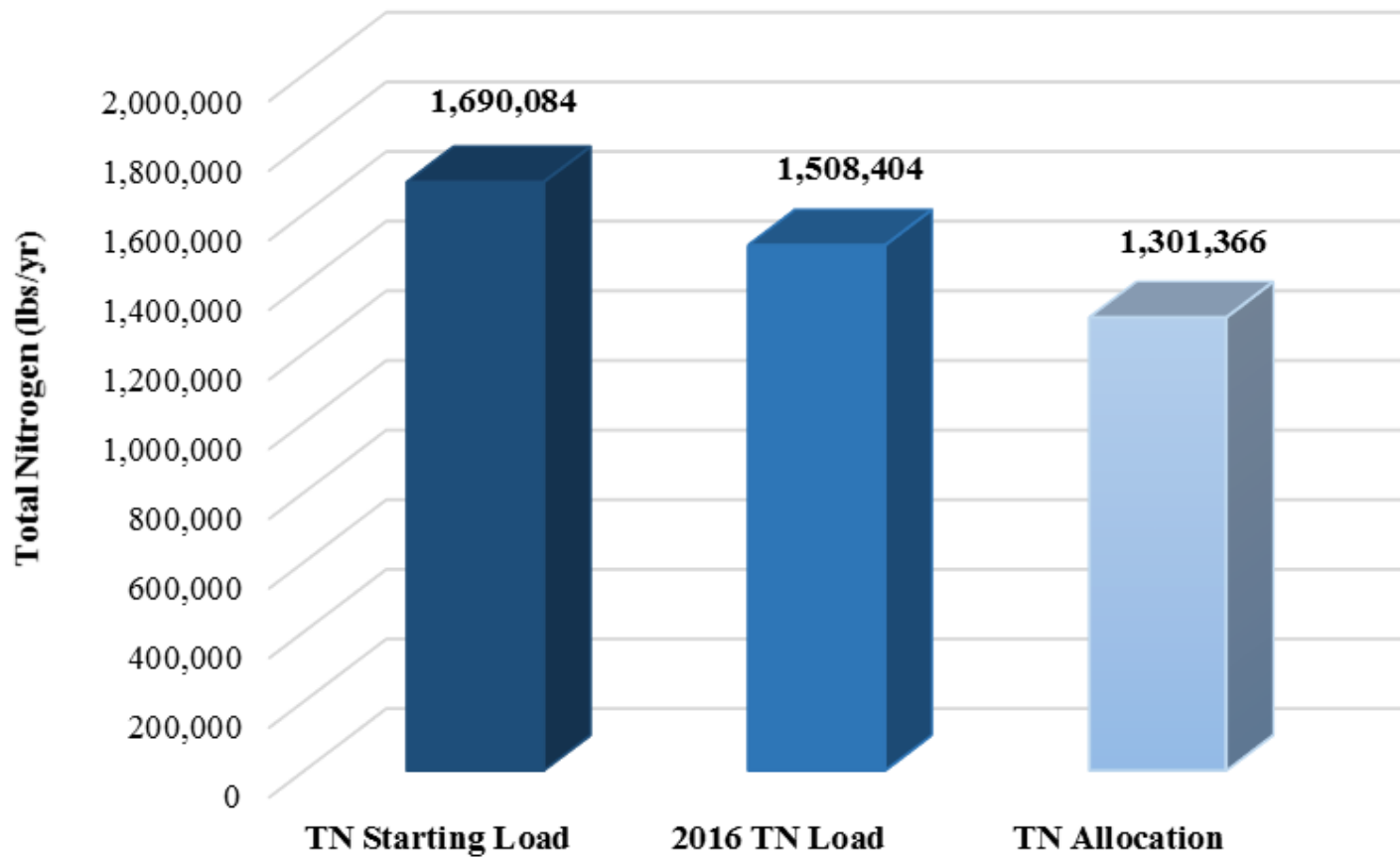


2016 Caloosahatchee Estuary Report

- Total Maximum Daily Load (TMDL) adopted in 2009.
- Basin management action plan (BMAP) adopted in 2012.
- Fourth annual progress report compiled.
- Reporting period: December 2015 – November 2016.



Progress Toward the TN TMDL





Progress (continued)

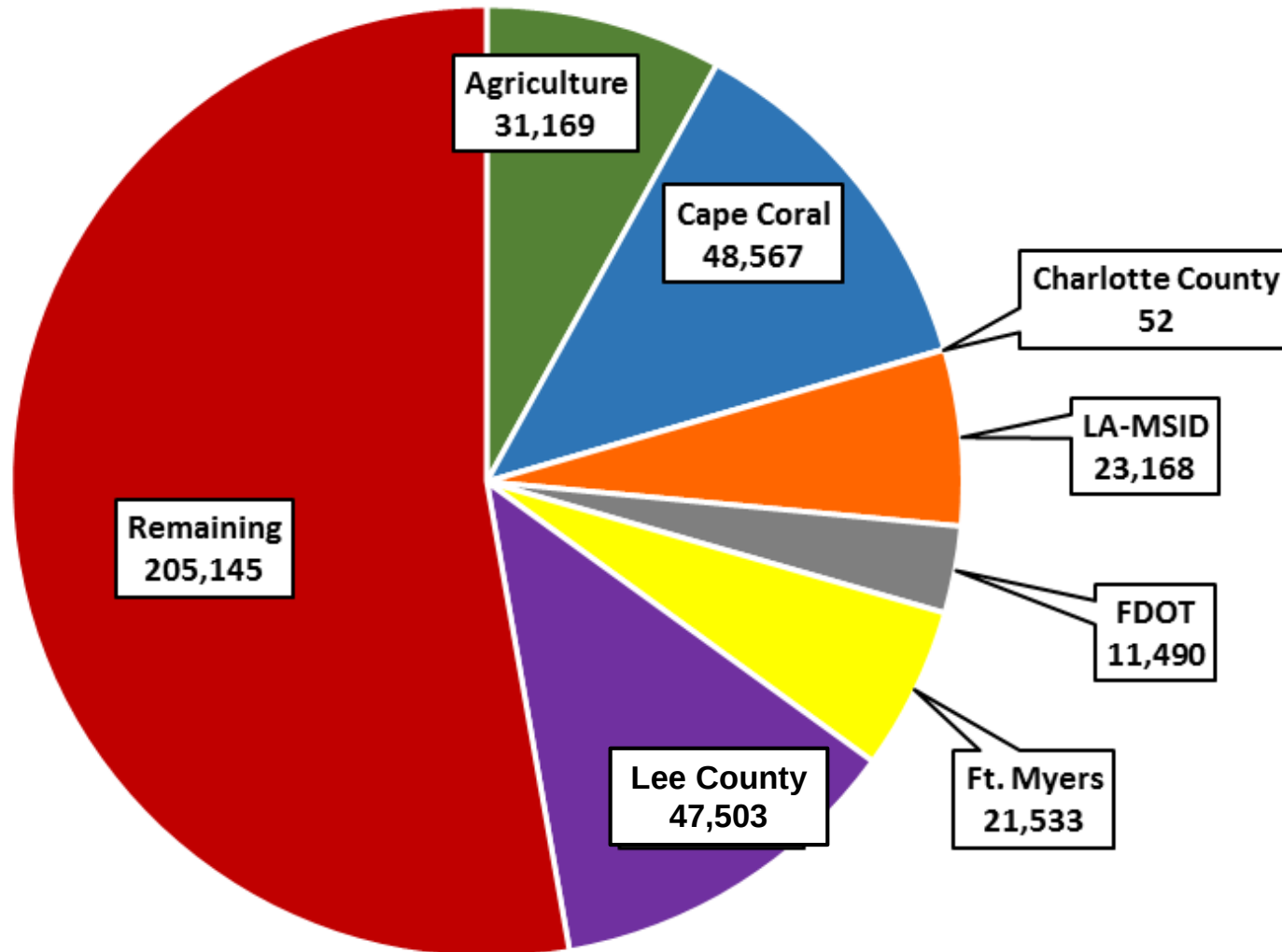
Entity	TN Reduction to date* (lbs/yr)	Total TN Required Reduction (lbs/yr)	Total TN Required Reductions Achieved (%)
Agriculture	31,169	55,597	56 %
City of Cape Coral	48,567	103,414	47 %
City of Fort Myers	21,533	40,924	53 %
Charlotte County	52	943	6 %
FDOT	11,490	9,119	126 %
LA-MSID (formerly ECWCD)	23,168	37,736	61 %
Lee County	47,503	140,853	34 %
Lucaya CDD	0	132	0 %
Grand Total	183,482	388,718	47 %

*TN reductions (lbs/yr) include completed and submitted projects.



Progress (continued)

TN reductions
(lbs/yr)
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and
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Activities During the Reporting Period





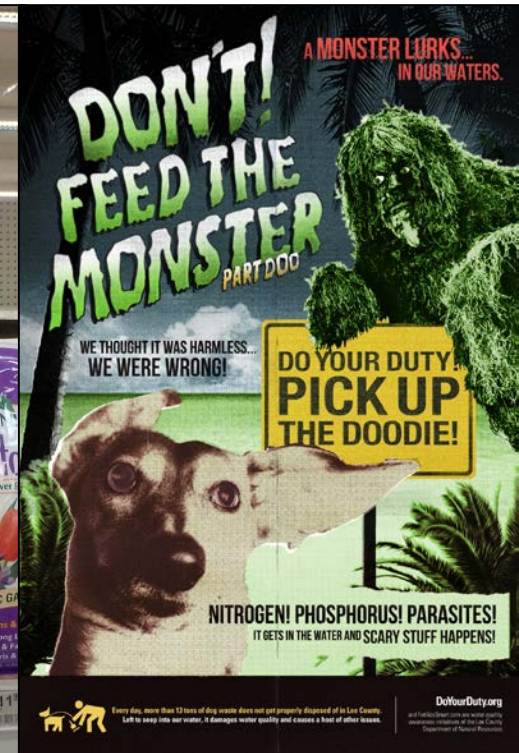
2016 Activities

- Cape Coral: Catch basin cleanout (CC-16).
- Lee County: Basin-wide study, Caloosahatchee Creeks Preserve Restoration (LC-25).
- LA-MSID: ABSORB Project (EC-7).
- Various ongoing efforts continue and improve:
 - Public education.
 - Street sweeping and maintenance.
 - Local ordinances for source control.



Examples of Ongoing Efforts

Lee County Public Education “Don’t Feed the Monster” and “Don’t Feed the Monster – Part Doo”





Ongoing Efforts (continued)

LA-MSID Wings Over Water Festival



LA-MSID Environmental Education Program March 16, 2016



South Florida Water Management District (SFWMD) Projects

SFWMD C-43 Water Quality Treatment and Testing Facility



Submerged



Emergent



Vegetation grow-in during start-up phase of the mesocosm study (photo by SFWMD, September 2016).



SFWMD Projects (continued)

C-43 West Basin Storage Reservoir Project



**Construction activities underway for the S-476 pump station
(photo by SFWMD, September 2016).**



SFWMD Projects (continued)

SFWMD Tape Grass Restoration Pilot Study

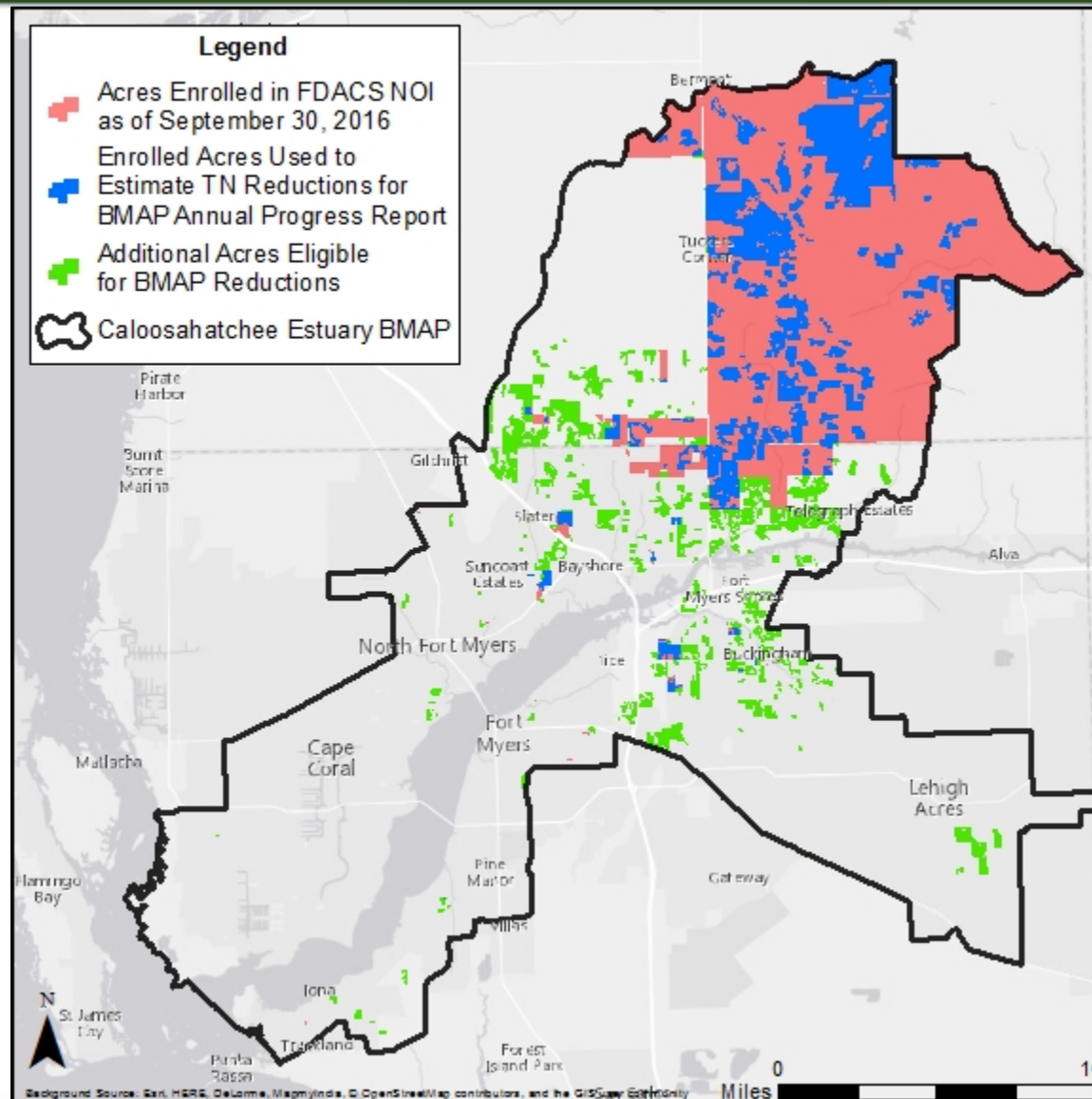


Photos from Johnson Engineering, Inc., 2016.

Enclosures planted with tape grass (*Vallisneria americana*).



Agricultural Lands Enrollment





Agricultural Enrollment (continued)

Category	Acres
Total Agricultural Acres in BMAP	30,049
Enrolled Acres Used for TN Reduction Estimates	18,937
BMAP Phase I FDACS Enrollment Goal (50% of FDACS-adjusted acres)	18,091
BMAP Phase I remaining acres to enroll	0
Total Remaining Acres in BMAP Basin to Enroll	11,112

Estimated TN Reduction: 31,169 lbs/yr



Summary of Reductions in Reporting Period

December 2015 to November 2016

Entity	Project Number	Project Name	TN Reduction (lbs/yr)
Cape Coral	CC-16	Catch Basin Cleanout	590
Lee County	LC-25	Caloosahatchee Creeks Preserve Restoration	TBD
Total	N/A	Total Reductions in Reporting Period	590



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A.B.S.O.R.B Project Presentation - LA-MSID





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Monitoring Program Update





Monitoring

Water quality monitoring is conducted by:

- City of Cape Coral.
- City of Fort Myers.
- DEP-South Regional Operations Center.
- Lee County.
- SFWMD.



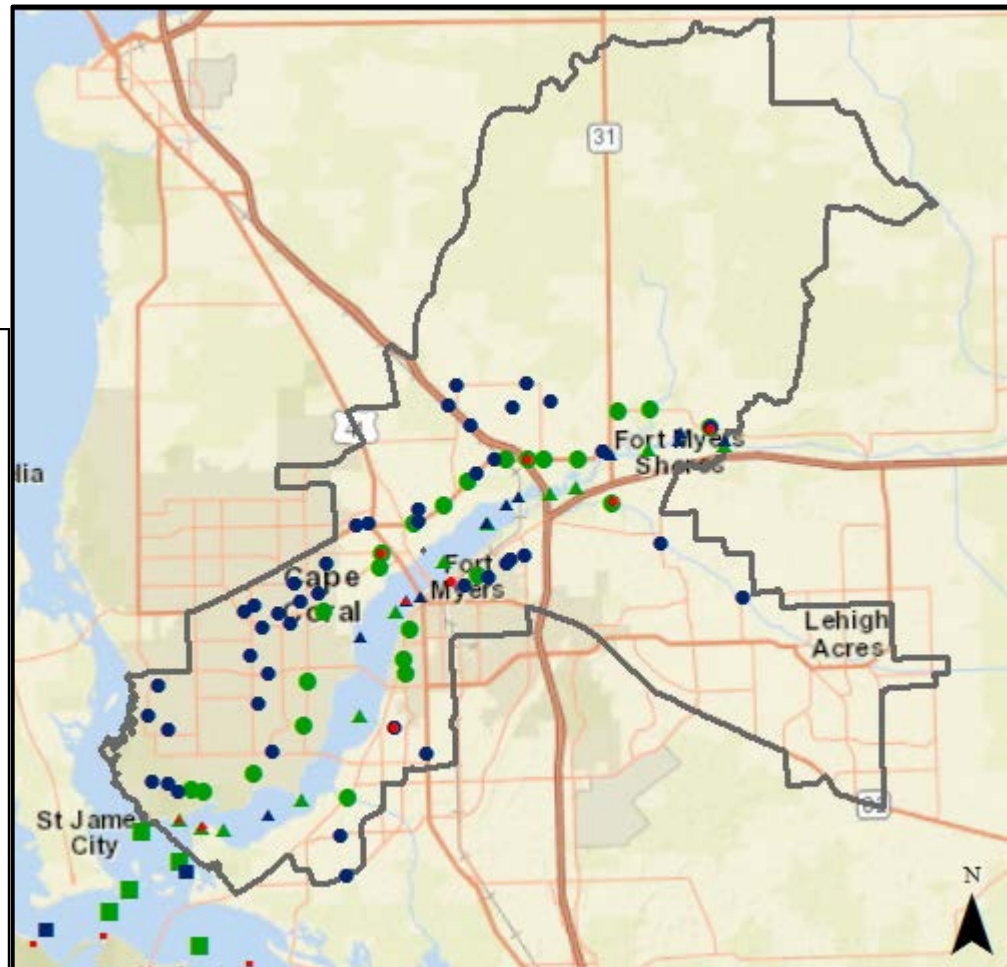
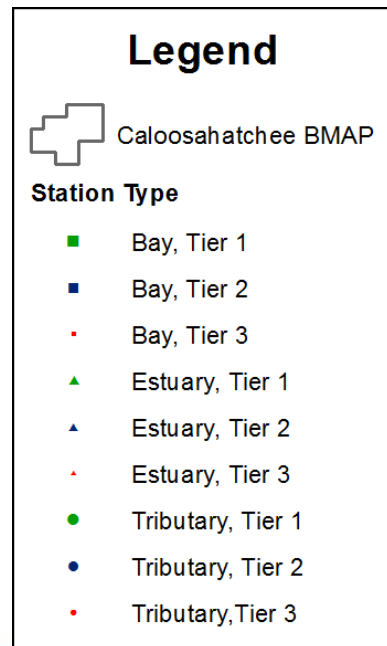
Lee County sample collection.



Monitoring

Proposed Revisions to the BMAP Monitoring Network

- Tier system.
- Bay, estuary, tributary.
- Station changes, additions.





Monitoring

Watershed Information Network (WIN) is almost here!

- WIN is the replacement for Florida STORET.
- WIN data must meet minimum quality standards.
- WIN will be open for data uploads in spring 2017.





Monitoring

Through **December 2017:**

- Upload data collected prior to July 2017.
- Upload existing data that do not meet WIN Minimum Data Quality Standards (MDQS).
- Corrections for data already in Florida STORET.

After **December 2017:**

- All data will need to come to WIN!



Monitoring

We need to work together to get all pertinent data uploaded for use in future analyses.

More information at

<http://publicfiles.dep.state.fl.us/DEAR/storet/WIN> Communication

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STORET/WIN Coordinators:

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Monitoring

Biological monitoring conducted by SFWMD

- Oysters.
- Seagrass (also monitored by DEP).



DEP monitoring



SFWMD monitoring



SFWMD - 2017 SFER

- 2017 South Florida Environmental Report (SFER) available March 2017.
- Volume I, Chapters 8A and 8C include information on the Caloosahatchee Basin.

Draft report available at:
<https://www.sfwmd.gov/science-data/sfer>





Questions About Monitoring?





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Modeling Update



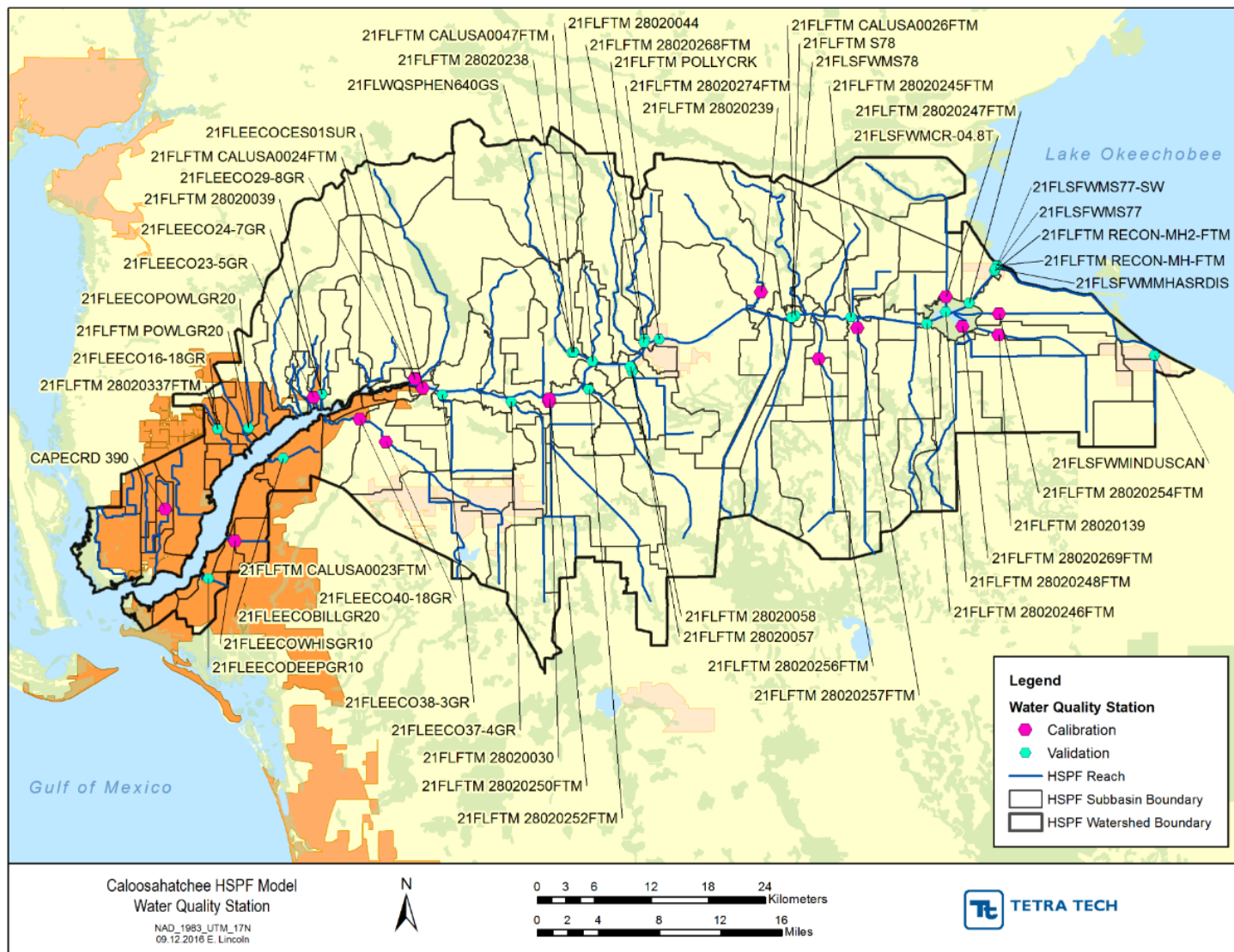


Background

- During BMAP development, stakeholders expressed concerns about the models used for the TMDLs.
- Tetra Tech and AMEC were contracted by DEP to evaluate and revise the existing models.
- Public workshop held earlier today.
- Currently reviewing stakeholder comments on final report.

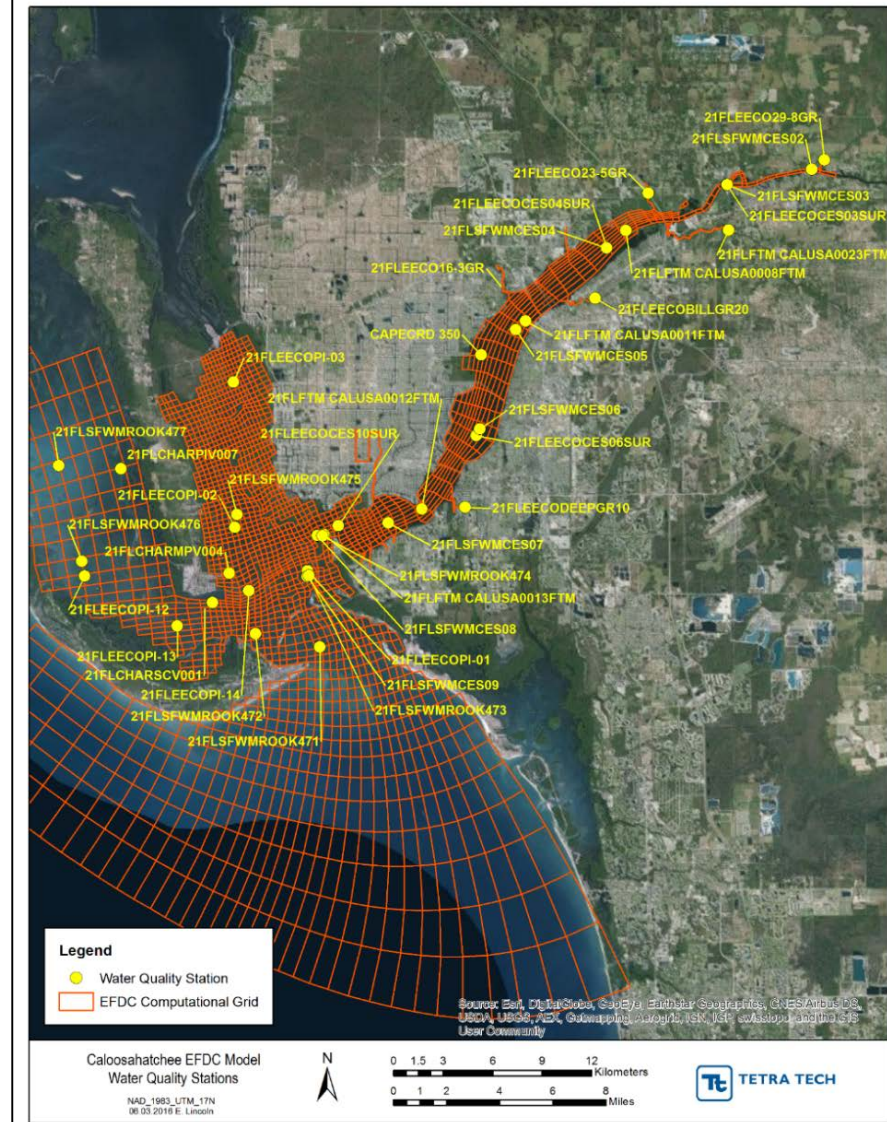
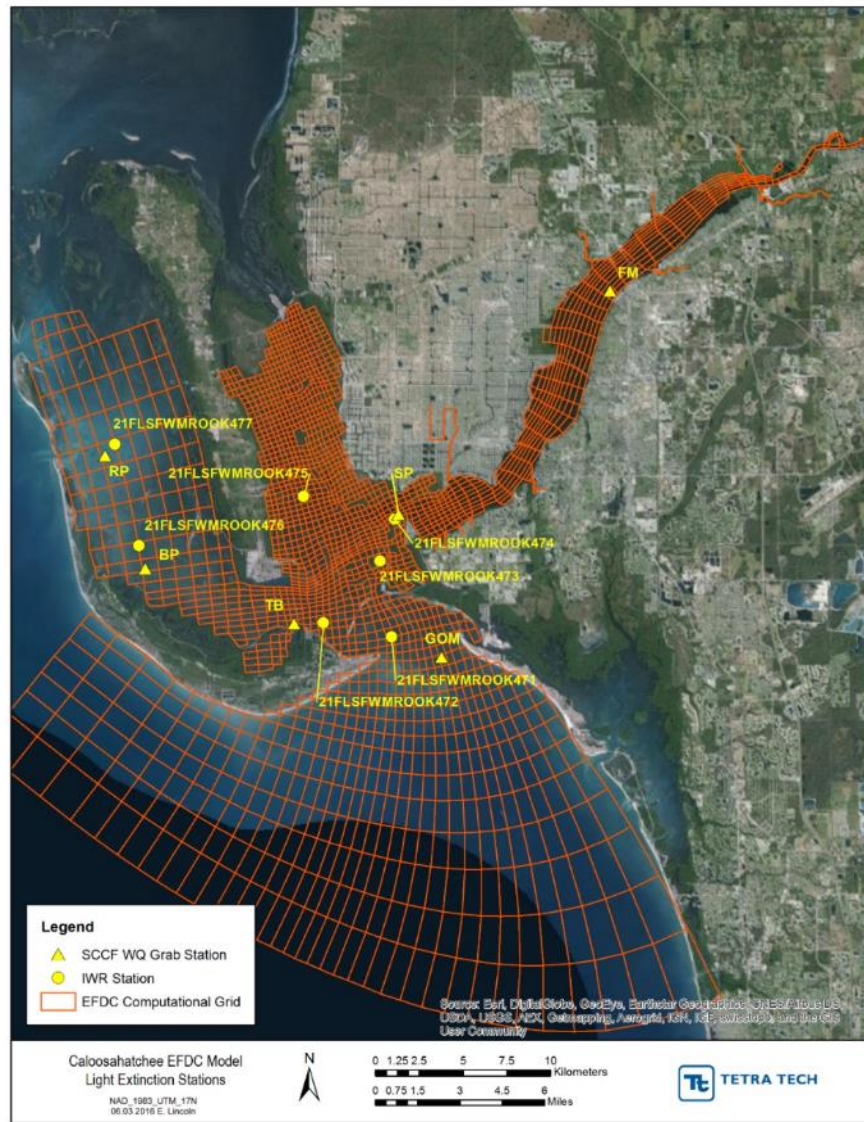


Hydrologic Simulation Program – FORTRAN (HSPF)





Environmental Fluid Dynamics Code (EFDC)





DEP TMDL Contacts

Florida Department of Environmental Protection
Division of Environmental Assessment and
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Water Quality Evaluation and TMDL Program
(WQETP)

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Next Steps





New Requirements

- Revisions to Section 373.4595, Florida Statutes (F.S.) during 2016 legislative session.
- Enhanced integration of water management district (WMD) protection plans and BMAPs.
- Additional reporting.
- New requirements for Northern Everglades and Estuaries Protection Program (NEEPP) watersheds
 - Lake Okeechobee.
 - Caloosahatchee.
 - St. Lucie.



New Requirements

New elements for NEEPP BMAPs

- Projects to achieve the TMDL in 20 years.
- 5-year milestones to measure progress.
- 5-year review.

New elements for all new or revised BMAPs

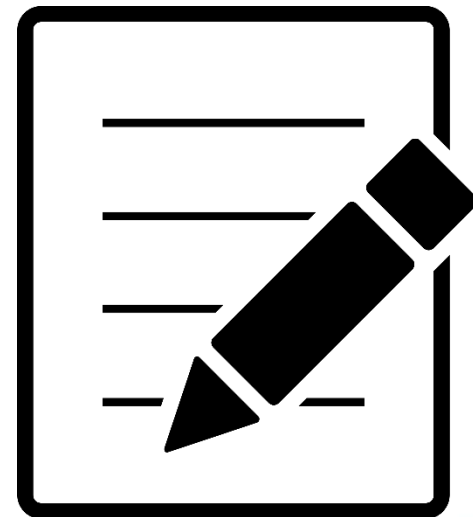
- Priority ranking of projects.
- Planning-level estimates
 - Costs.
 - Completion dates.
 - Expected load reduction.
- Source and amount of financial assistance
 - From DEP, WMDs, other entities.





Five-year Review

- **Complete by the end of 2017.**
- **Potential components to include:**
 - 5-year milestones to measure progress.
 - Include projects (existing and future) to achieve the TMDL in 20 years.
 - Water quality.
 - Recommendations for future BMAP revisions.





Five-year Review



WE WANT YOU...
...to tell us about your projects!



Action Items

- Comments on the draft annual report are due Tuesday, March 7, 2017.
- Final model report due in March 2017.
- Complete STORET database uploads.
- Compile information for BMAP 5-year review.
 - Water quality analyses.
 - Future project information for milestones.
 - Detailed allocations.
- BMAP 5-year review by November 2017.



Contact Information

For additional information please contact:

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