



Florida Department of Environmental Protection

Water Quality Restoration Program

St. Lucie River and Estuary Basin Management Action Plan (BMAP) 5-Year Review Kickoff Meeting

August 25, 2017

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Agenda

- Overview of the St. Lucie River and Estuary BMAP
- Pertinent Legislation
- Tentative Timeline
- Preview of 5-Year Review Outline
- Next Steps



St. Lucie River and Estuary TMDLs

- Total Maximum Daily Loads (TMDLs) adopted in 2009

St. Lucie Estuary			
Parameter	Annual TMDL Target (Concentration in mg/L)	NPDES Stormwater Reduction* (% Reduction)	Load Allocation (% Reduction)
TN	0.720	21.4%	21.4%
TP	0.081	41.3%	41.3%

*NPDES: National Pollutant Discharge Elimination System

- The St. Lucie Estuary target concentrations were used to calculate TMDL loads at points upstream
- TN and TP concentrations are monitored at Roosevelt Bridge, the compliance point for the TMDLs
 - Sampled monthly by SFWMD



St. Lucie River and Estuary BMAP

- BMAP adopted in June 2013
- Third progress report finalized in January 2017
 - Includes information through June 30, 2016
- In lieu of a fourth annual progress report, information from July 1, 2016 to December 31, 2017 will be collected and included in the 5-Year Review

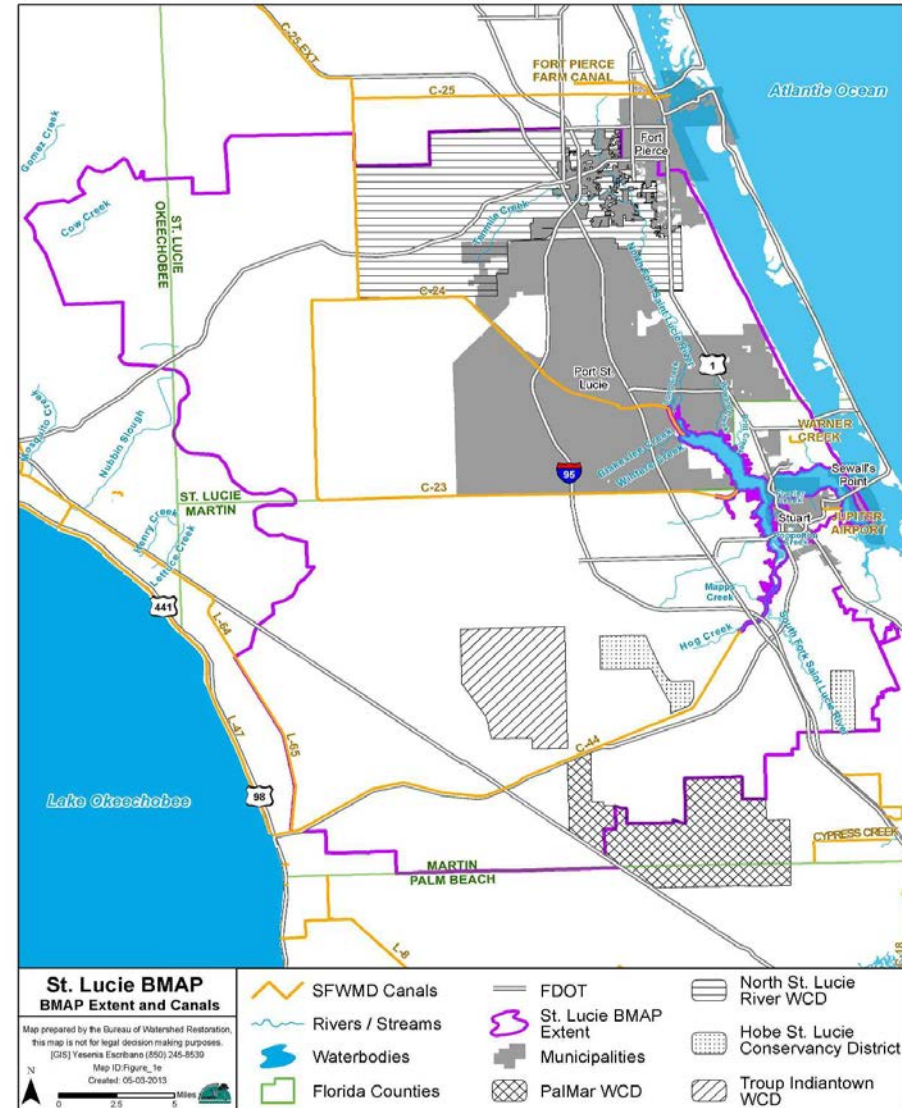




St. Lucie River and Estuary BMAP

Stakeholders

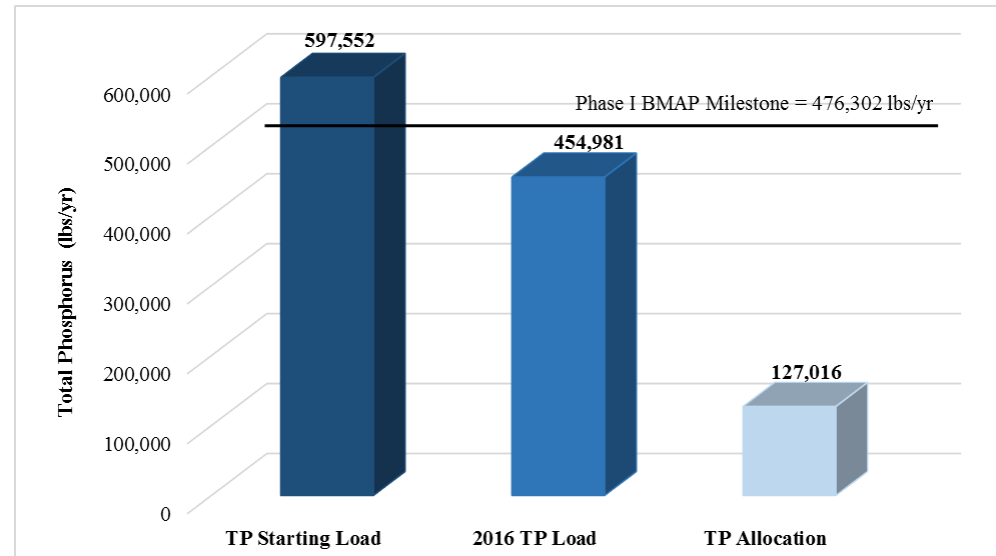
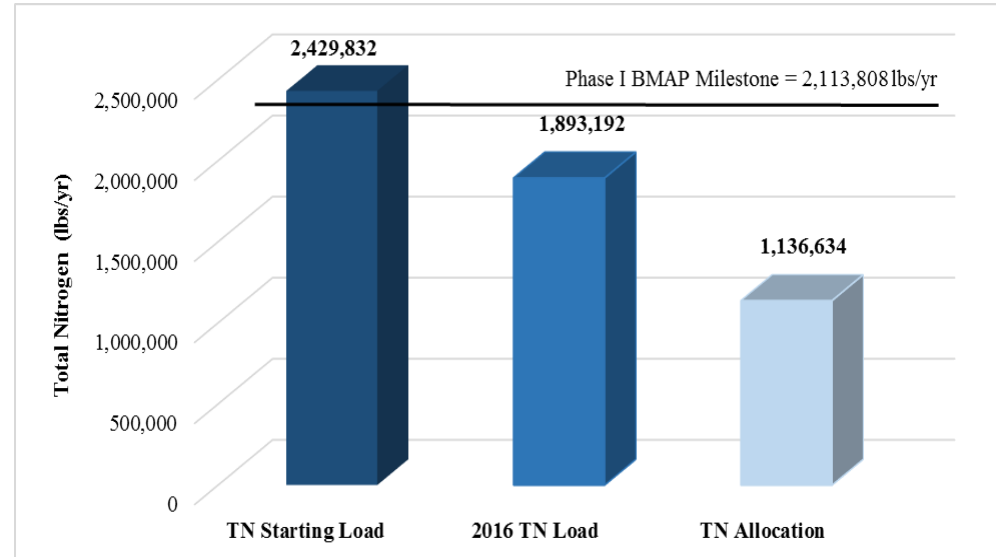
- Agriculture/FDACS
- City of Fort Pierce
- City of Port St. Lucie
- City of Stuart
- Copper Creek CDD
- FDOT District 4
- Florida Turnpike
- Hobe St. Lucie Conservancy District
- Martin County
- North St. Lucie WCD
- Okeechobee County
- Pal Mar WCD
- St. Lucie County
- Town of Sewall's Point
- Tradition CDD
- Troup-Indiantown WCD
- Verano CDD





St. Lucie River and Estuary BMAP

- Total reductions:
 - 1,053,414 lbs-N/yr
 - 404,166 lbs-P/yr
- As of June 30, 2016, project estimates:
 - Total 51% of the necessary reductions for TN
 - Total 35% of the necessary reductions for TP
 - Have exceeded the Phase I BMAP milestone





Pertinent Legislation

Chapter 373.4595(4), F.S.

- Original BMAP adopted in June 2013
 - 5-Year Review finalized by end of June 2018
 - Review provided to the Governor, the President of the Senate, and the Speaker of the House of Representatives
- Review to include:
 - 5-year milestones towards meeting TMDLs 20 years after adoption
 - Assessment of progress towards meeting the milestones
 - Determination of whether TMDLs can be met in 20 years
 - If not, explanation of why
 - Identification of recommended revisions to the BMAP
 - WaSh modeling, allocations, monitoring network, etc.



Tentative Timeline

St. Lucie River and Estuary BMAP 5-Year Review

Timeline for Stakeholder Involvement	Deadline*
1. Stakeholders submit 5-Year Review project updates and new projects to DEP (included updates through 12/31/2017 ¹)	1/31/2018
2. Technical meeting - Review preliminary model results	1/31/2018
3. Public meeting - Discuss draft revised allocations with stakeholders	2/28/2018
3. Stakeholders provide water quality monitoring data via WIN (include data through 12/31/2017 ¹)	3/1/2018
4. Public meeting – Draft 5-Year Review provided for comments	4/30/2018
5. Stakeholders submit comments on Draft 5-Year Review document to DEP	5/15/2018
6. Final BMAP 5-Year Review submitted to Governor/Legislature	6/30/2018

* Dates are approximate

¹First 5-Year Review covers a 4.5-year POR, from the month following BMAP adoption (7/1/2013) through 12/31/2017.



5-Year Review Outline



- Chapter 1: Background Information

- Chapter 2: Assessing Progress



- Chapter 3: Recommendations



Chapter 1: Background Information

1.1 Water Quality Standards and TMDL

1.1.1 St. Lucie Basin TMDL

1.2 The St. Lucie River and Estuary BMAP

1.2.1 St. Lucie BMAP Pollutant Reduction and Discharge Allocations





Chapter 2: Assessing Progress

2.1 Projects to Achieve the TMDLs

- Includes project summaries from stakeholders

2.2 Water Quality Monitoring and Evaluation

2.2.1 Ambient Water Quality Monitoring

2.2.2 Biological Monitoring

2.2.3 Water Quality Analysis





Chapter 3: Recommendations

3.1 Milestones



3.2 Modeling and Allocations

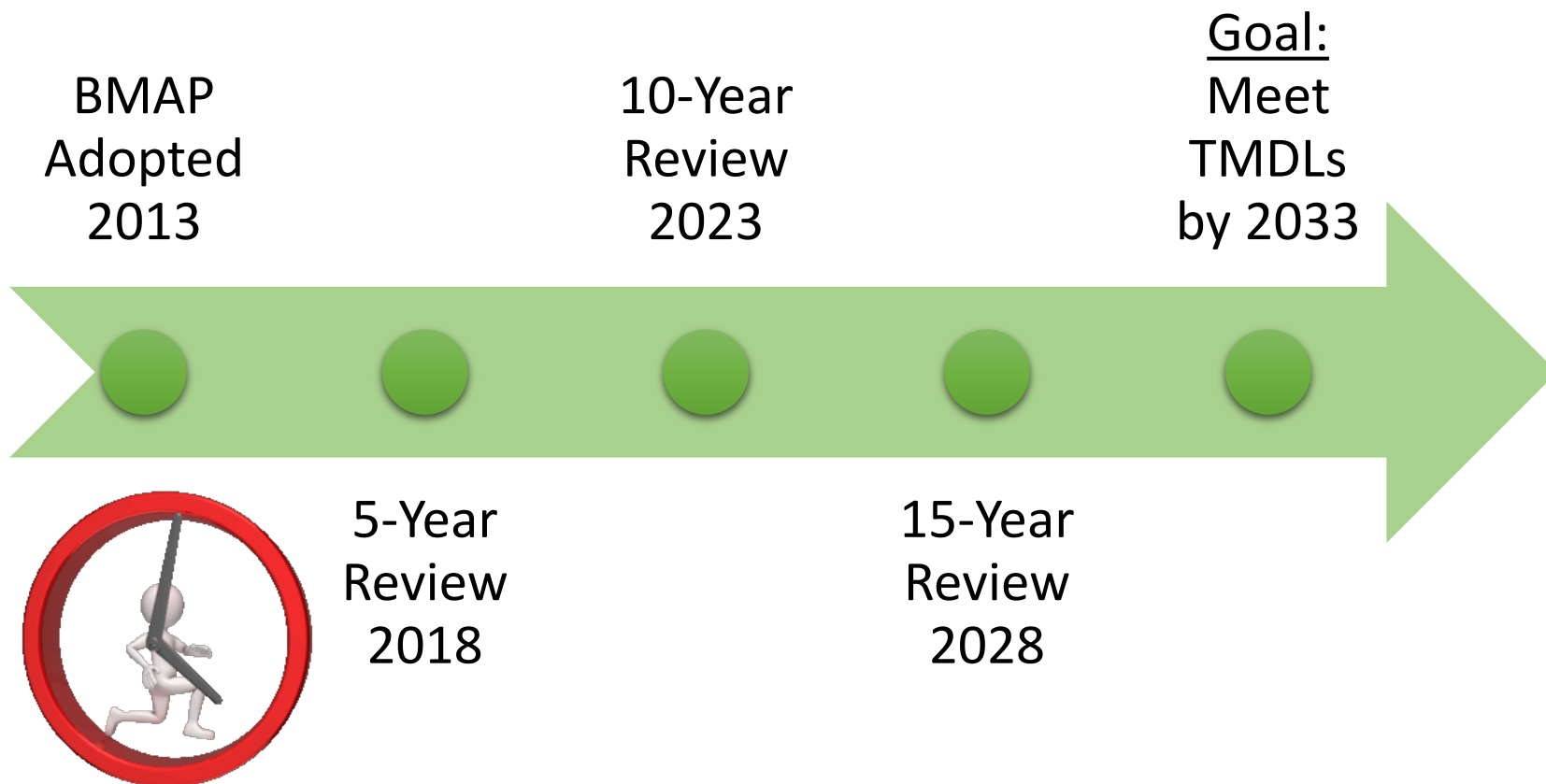


3.3 Water Quality Monitoring





3.1 Milestones





3.2 Modeling and Allocations

- The St. Lucie Estuary Watershed (WaSh) model is being updated, enhanced, and re-calibrated
 - Code enhancement
 - Geographical user interface water quality upgrades
- Modeling is ongoing and results can help guide implementation and potential revised allocations
 - Periods of record:
 - 1998 – 2006 with land use data of 2004
 - 2007- 2011 with land use data of 2009
 - 2012 – 2016 with land use data of 2012
 - Septic loading included
 - Baseline and two alternative scenarios





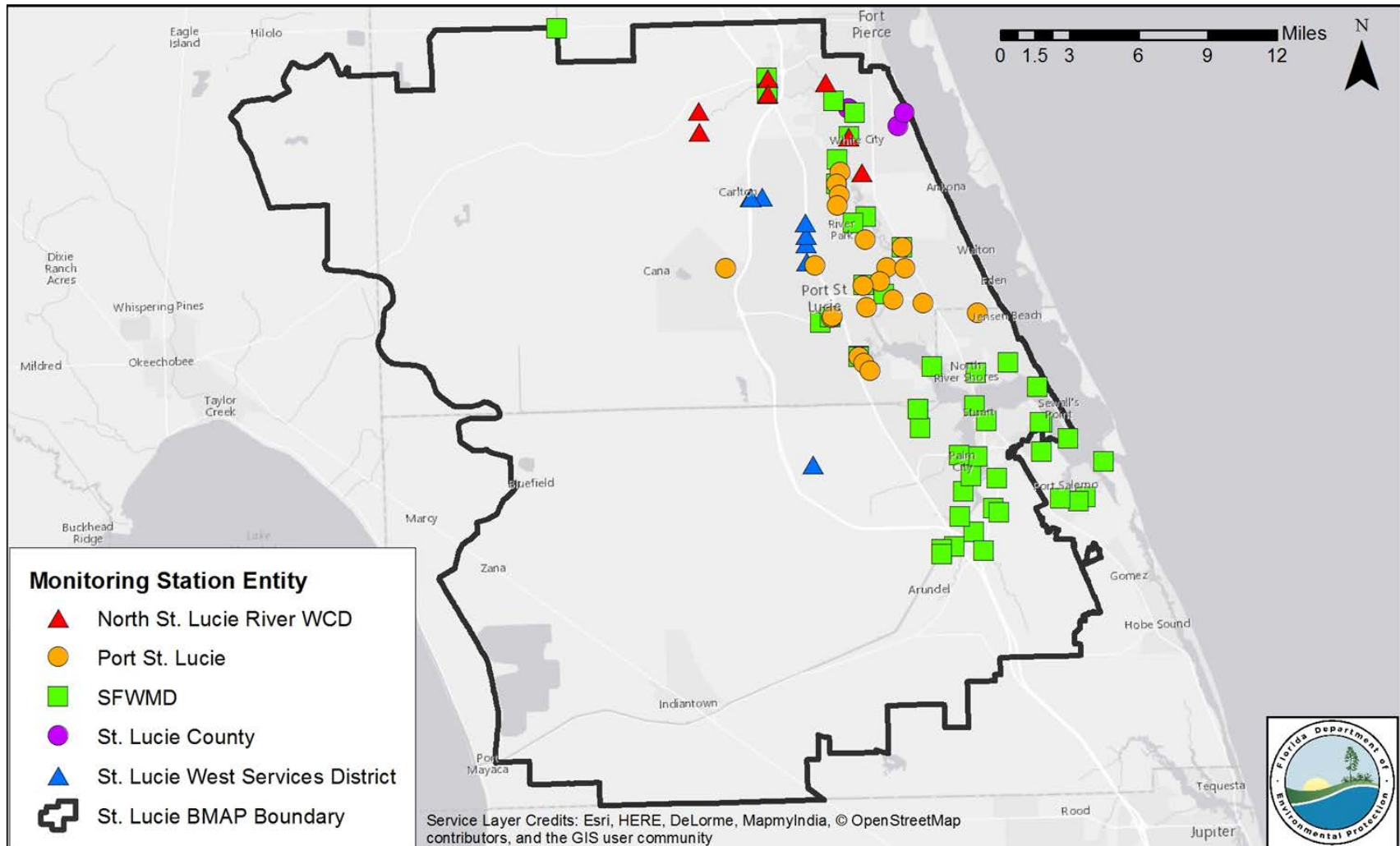
WaSh Modeling Timeline

Task	2017					2018					
	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June
Re-calibration											
Run baseline scenario											
Run Scenario 1 – BMAP Projects											
Discuss preliminary results											
Run Scenario 2 – Septic Removal											
Finalize WaSh model report											
5-Year Review due											



3.3 Water Quality Monitoring

- Potential changes in monitoring network?





Monitoring Data

Watershed Information Network (WIN) is here!

- WIN is the replacement for Florida STORET
- WIN data must meet Minimum Data Quality Standards (MDQS)
- WIN is open for data uploads!
 - Verify station information
 - Test results upload with small dataset

<http://prodenv.dep.state.fl.us/DearWin>





Monitoring Data

Through December 2017:

- Upload data collected prior to July 1, 2017
- Upload existing data that do not meet WIN MDQS
- Corrections for data already in Florida STORET

After December 2017:

- All data will need to come to WIN!



Monitoring Data

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/WIN>

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WIN/STORET Coordinators:

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Next Steps

- Compile draft 5-Year Review
 - Include stakeholder information
- Complete WaSh Model revisions
- Technical Modeling Meeting (December 2017/ January 2018)
- Technical Allocation Meeting (February 2018)
- Complete WIN database uploads (February 2018)
- Conduct water quality evaluation
- Draft 5-Year Review Meeting (April 2018)
 - Stakeholder comments on draft report
- BMAP 5-Year Review submitted (June 2018)



Contact Information

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Questions & Comments

