



Florida Department of Environmental Protection

Water Quality Restoration Program

Indian River Lagoon (IRL) Basin Management Action Plan (BMAP) Annual Meeting May 16, 2017

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Agenda

- Welcome and Opening Remarks
- Overview of the 2017 IRL BMAP Annual Progress Reports
- Brevard County Muck Flux
- SJRWMD Seagrass Mapping/Water Quality Monitoring
Update
- Water Quality Data Analyses
- Next Steps
- Questions, Comments, and Discussion
- Adjourn



IRL Background Info

- Total maximum daily loads (TMDLs) adopted in 2009
 - Total nitrogen (TN) reductions
 - Total phosphorous (TP) reductions
- BMAPs adopted in 2013
 - Banana River Lagoon
 - Project Zone A: No Allocations to date
 - Project Zone B: Required Allocations
 - Central Indian River Lagoon: No Allocations to date
 - North Indian River Lagoon: Required Allocations
 - Fourth annual Progress Reports compiled
- Reporting period: March 2016–February 2017



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Overview of the IRL BMAPs 2017 Annual Progress Reports





2017 Completed Efforts

Banana River Lagoon (BRL)

7 projects completed

Central Indian River Lagoon (CIRL)

11 projects completed

North Indian River Lagoon (NIRL)

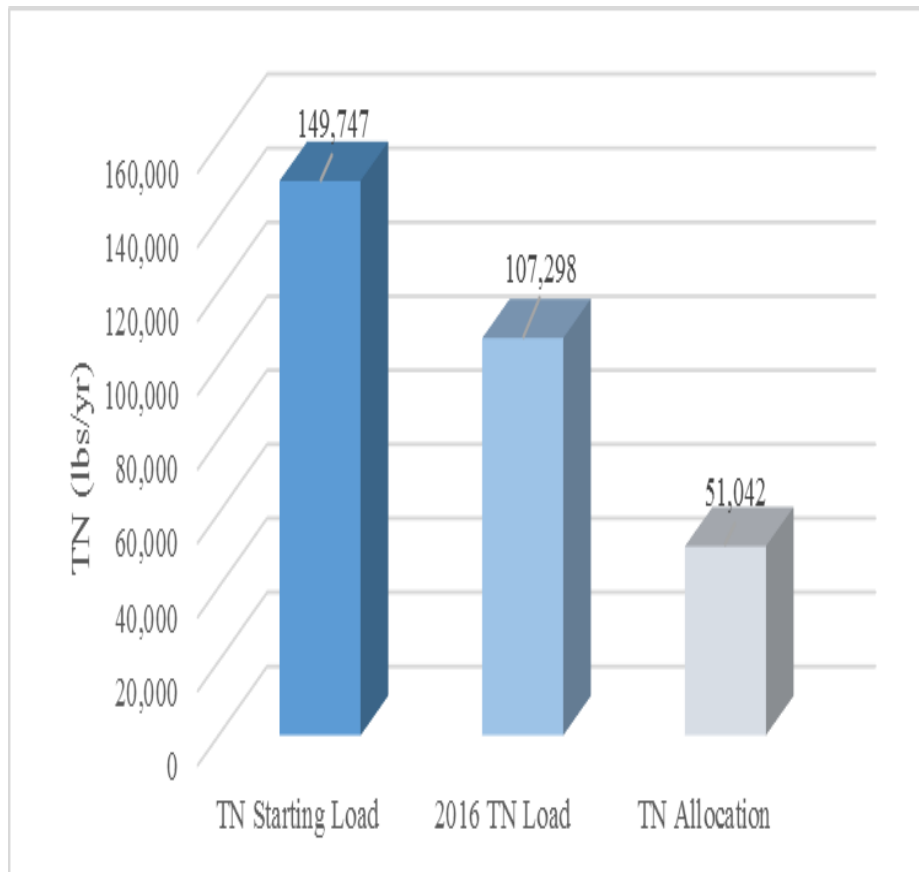
13 projects
completed



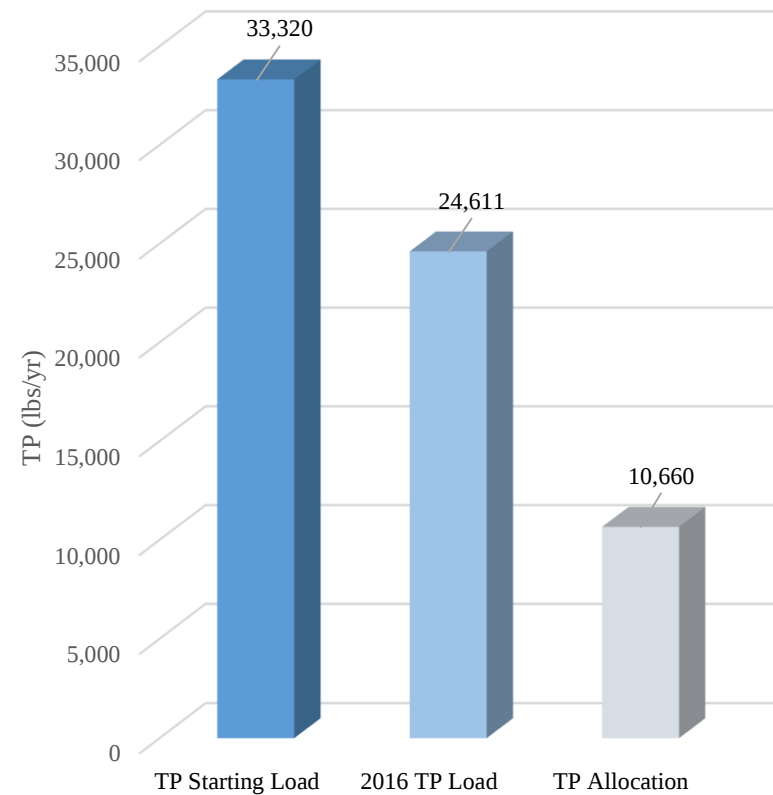


BRL Project Zone B Progress Toward the TN and TP TMDLs

TN



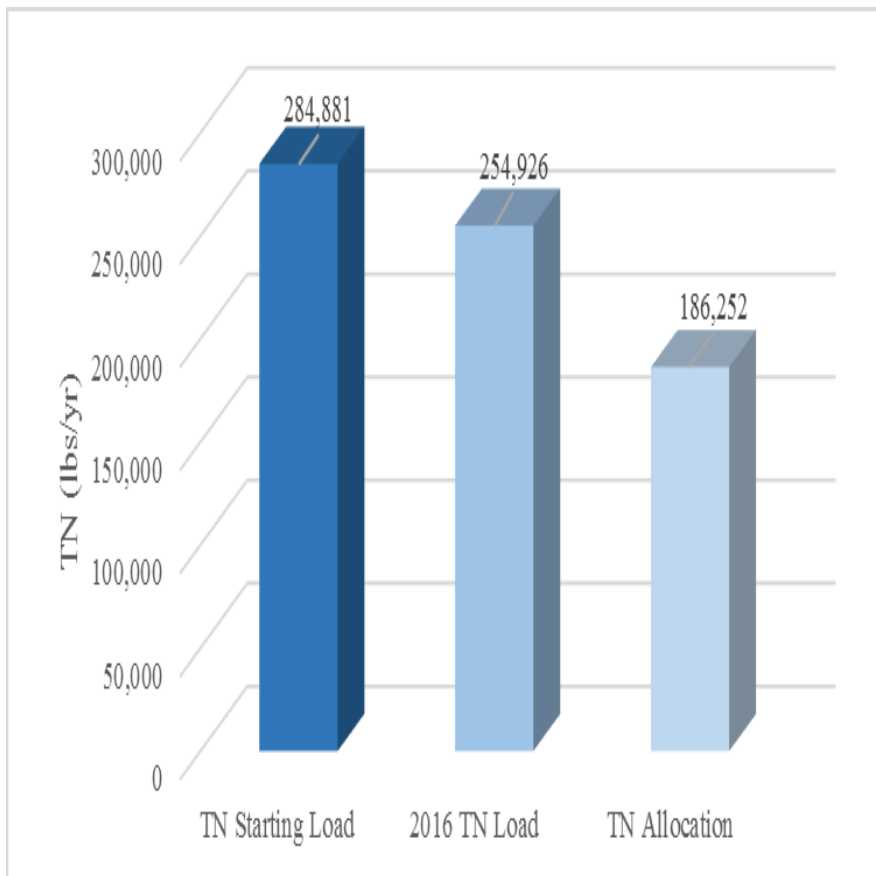
TP



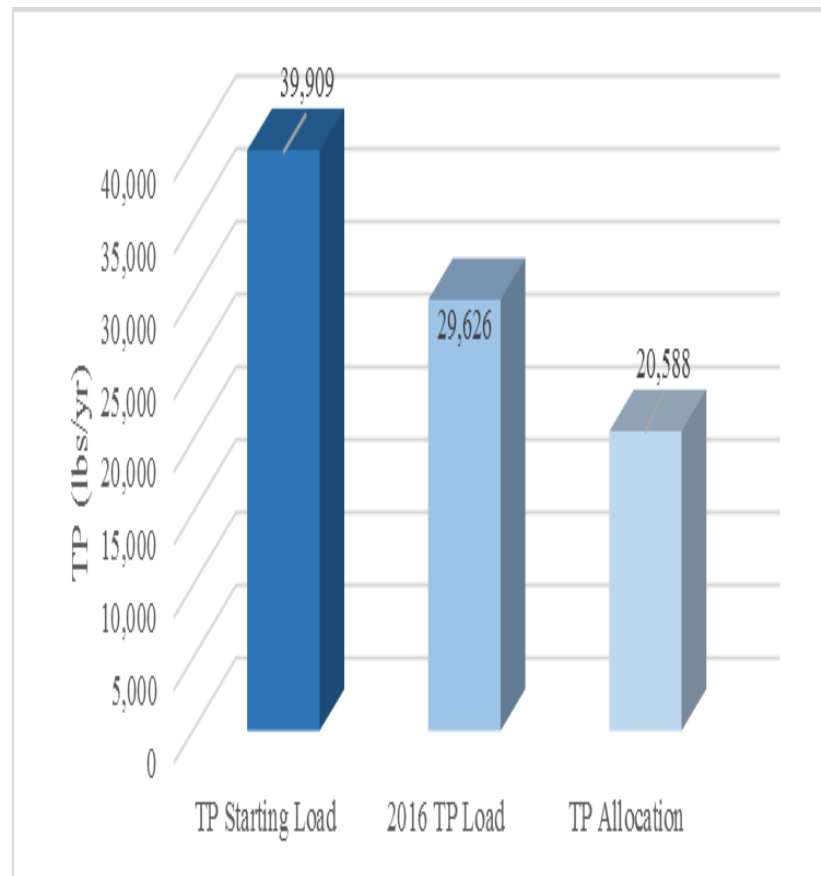


NIRL A Progress Toward the TN and TP TMDLs

TN



TP





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Brevard County Muck Flux Project





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Seagrass Mapping and Water Quality Monitoring Update

Chuck Jacoby
SJRWMD





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Water Quality Monitoring Update

Lance Lumbard
Amec Foster Wheeler



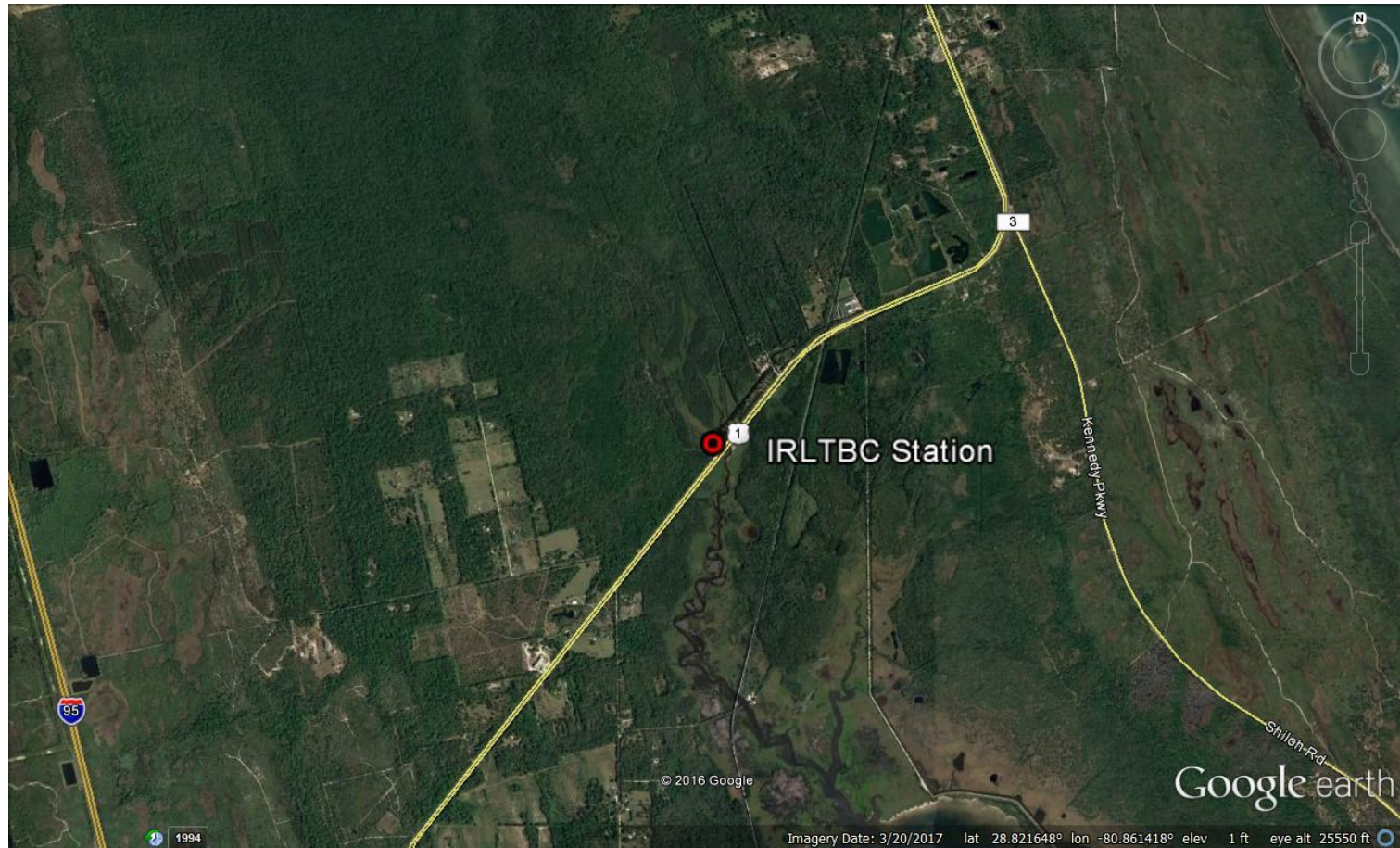


Tributary Station Data Summary

WBID	STATION	ZONE	Parameter	POR Start	POR End	N (# of Samples)	Tau	P-Value	Slope	Trend Test Interpretation
2942B	IRLTBC	NIRL-A	TN	2000	2016	123	0.223	0.002	<0.0001	Significant increasing trend
2942B	IRLTBC	NIRL-A	TP	2000	2016	164	0.308	<0.001	<0.0002	Significant increasing trend
2942A	VC-ODIX	NIRL-A	TN	2000	2016	23				Insufficient data for trend analysis
2942B	VC-TC2	NIRL-A	TN	2000	2016	11				Insufficient data for trend analysis
3163B	C25S50	CIRL-SIRL	TN	2000	2016	590	-0.05	0.085	<-0.0001	No significant trend
3163B	C25S50	CIRL-SIRL	TP	2000	2016	590	-0.003	0.928	0	No significant trend
3163	FPF-SITE 1	CIRL-SIRL	TN	2013	2017	17	0.5	0.047	<0.0004	Significant increasing trend
3163	FPF-SITE 1	CIRL-SIRL	TP	2013	2017	17	0.464	0.063	<0.0004	No significant trend
3163	FPF-SITE 2	CIRL-SIRL	TN	2013	2017	17	0.321	0.215	<0.0003	No significant trend
3163	FPF-SITE 2	CIRL-SIRL	TN	2013	2017	17				Insufficient data for trend analysis
3163A	FPF-SITE 3	CIRL-SIRL	TN	2013	2017	17	0.286	0.284	<0.0003	No significant trend
3163A	FPF-SITE 3	CIRL-SIRL	TP	2013	2017	17	-0.036	1	<-0.0001	No significant trend
3163A	FPF-SITE 4	CIRL-SIRL	TN	2013	2017	17	0	2	<-0.0001	No significant trend
3163A	FPF-SITE 4	CIRL-SIRL	TP	2013	2017	17	0.107	0.757	<0.0001	No significant trend
3163A	FPF-SITE 5	CIRL-SIRL	TN	2013	2017	17	0.429	0.092	<0.0003	No significant trend
3163A	FPF-SITE 5	CIRL-SIRL	TP	2013	2017	17	0.107	0.751	<0.0001	No significant trend
3163B	NSL-SITE 5	CIRL-SIRL	TN	2013	2017	17	0.036	1	<-0.0001	No significant trend
3163B	NSL-SITE 5	CIRL-SIRL	TP	2013	2017	17	0.321	0.204	<-0.0001	No significant trend



IRLTBC Location





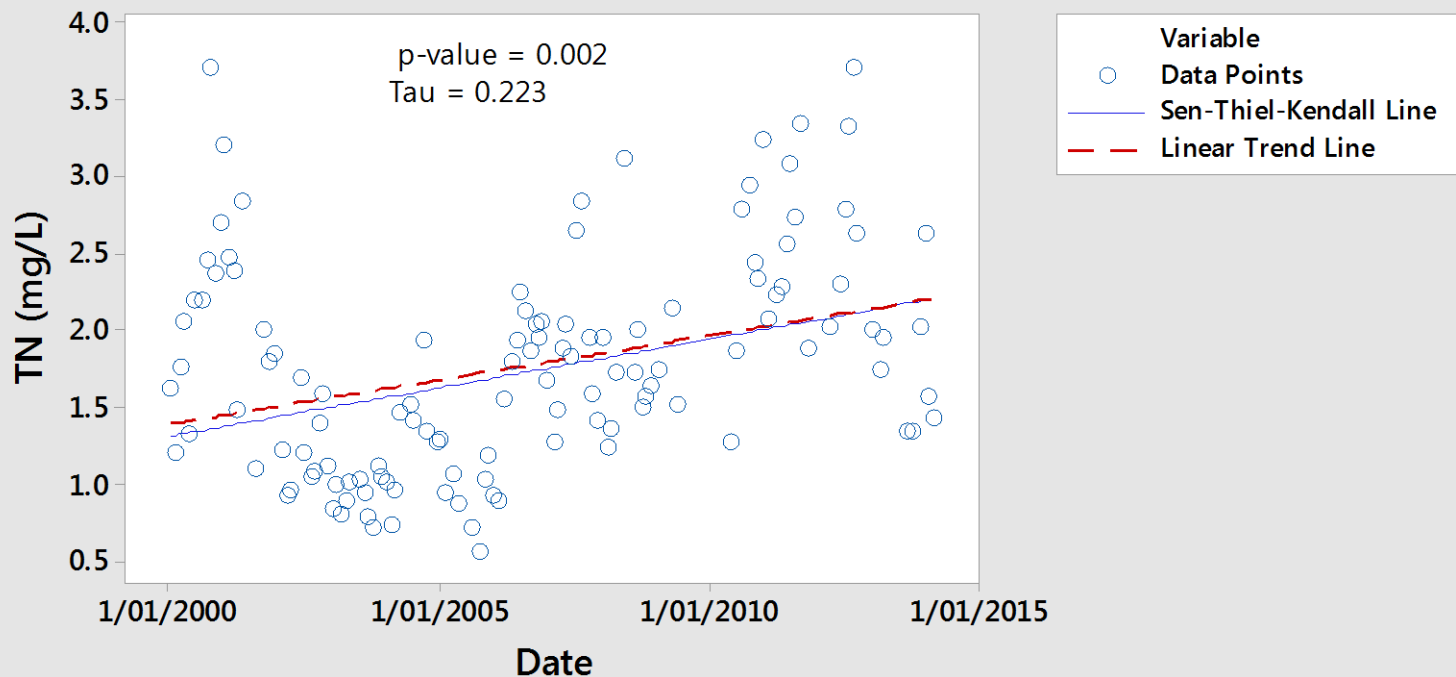
WBID 2942B / Station IRLTBC

Total Nitrogen Trend Analysis

Seasonal Mann-Kendall Analysis

Station IRLTBC

Total Nitrogen (TN)





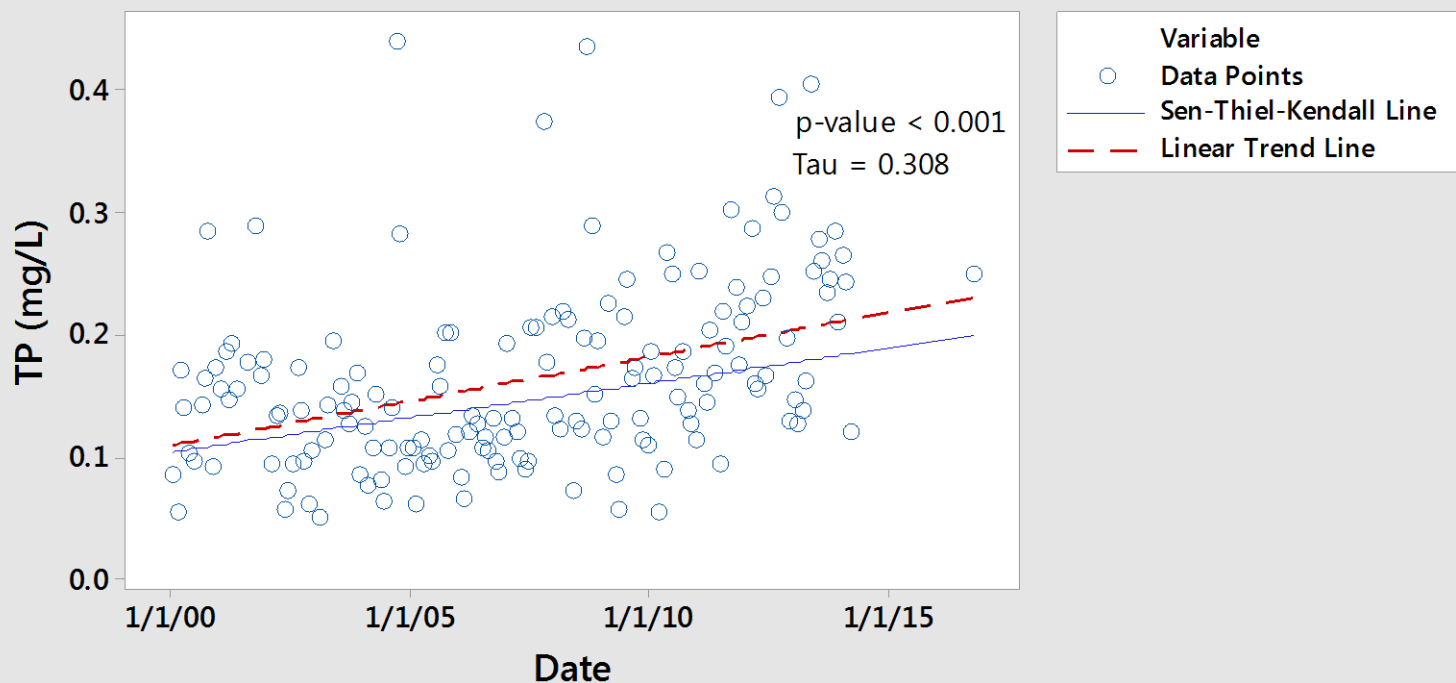
WBID 2942B / Station IRLTBC

Total Phosphorus Trend Analysis

Seasonal Mann-Kendall Trend Analysis

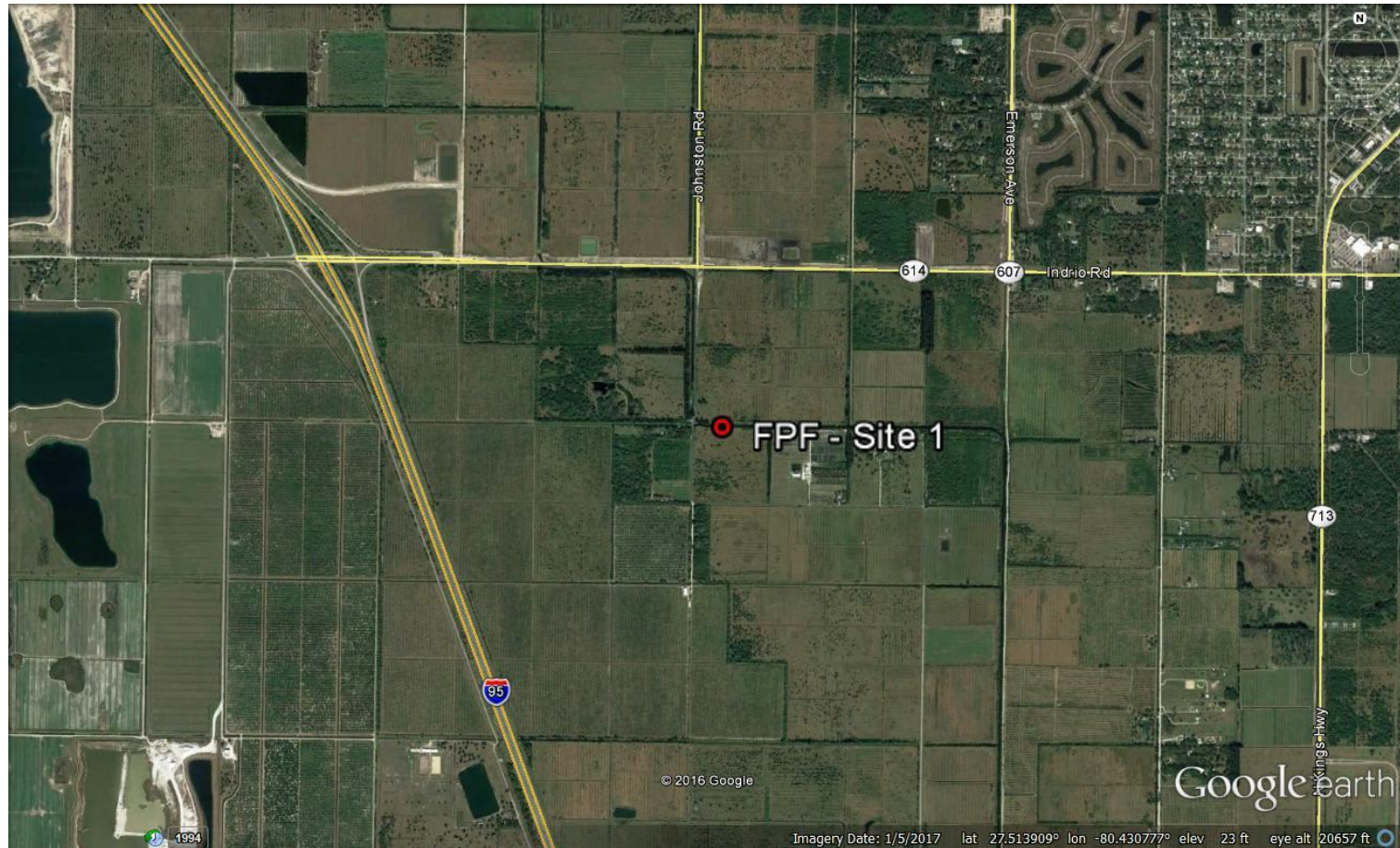
Station IRLTBC

Total Phosphorus (TP)





FPF - Site 1

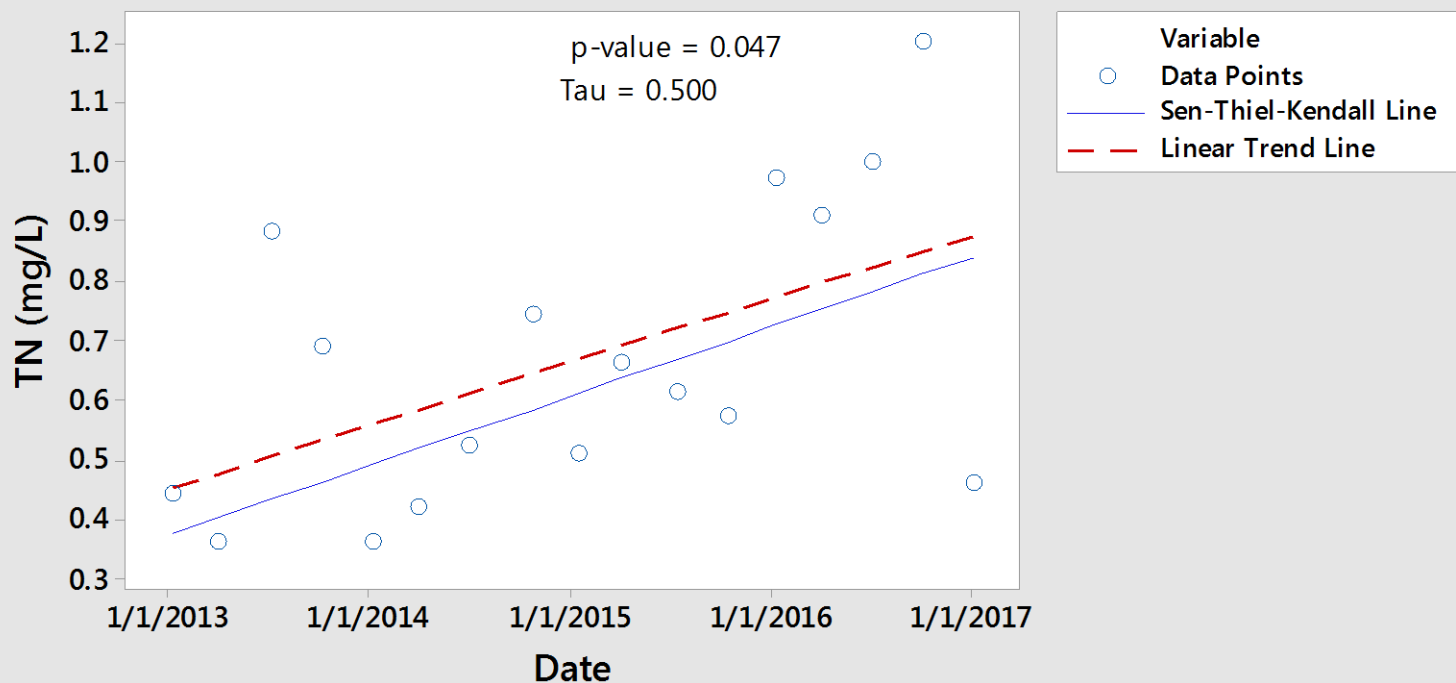




WBID 3163 / Station FPF-Site 1

Total Nitrogen Trend Analysis

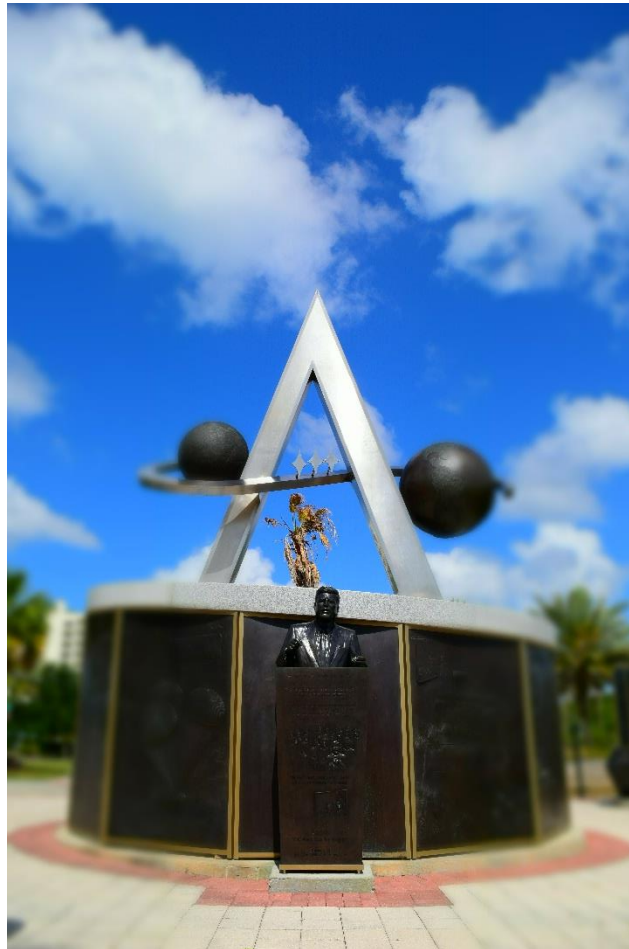
Seasonal Mann-Kendall Trend Analysis Station FPF - Site 1 Total Nitrogen (TN)





Questions

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Watershed Information Network (WIN) Project

**Office of Watershed Services
May 2017**





Getting Ready for WIN

- Information for mapping to WIN is provided at [http://publicfiles.dep.state.fl.us/DEAR/storet/WIN Communication](http://publicfiles.dep.state.fl.us/DEAR/storet/WINCommunication)
- Includes MDQS, Standard Values Lists (SVLs), example data files, FAQs and a flow diagram
- Contact your WIN/STORET Coordinators with questions on WIN implementation



WIN Contacts

- Denise Miller, Environmental Administrator
850-245-8516, denise.miller@dep.state.fl.us
- Julie Zimmerman, Business Lead
850-245-8508, julie.m.zimmerman@dep.state.fl.us
- WIN/STORET Coordinators:

WIN/STORET Coordinator	DEP District/Area of Responsibility	Phone	Email
Tommy Adams	Central & Statewide	850-245-8467	thomas.l.adams@dep.state.fl.us
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Kyle Ferris	South & Southeast	850-245-8049	kyle.ferris@dep.state.fl.us
Lisa Schwenning	Southwest	850-245-8509	lisa.schwenning@dep.state.fl.us



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Next Steps





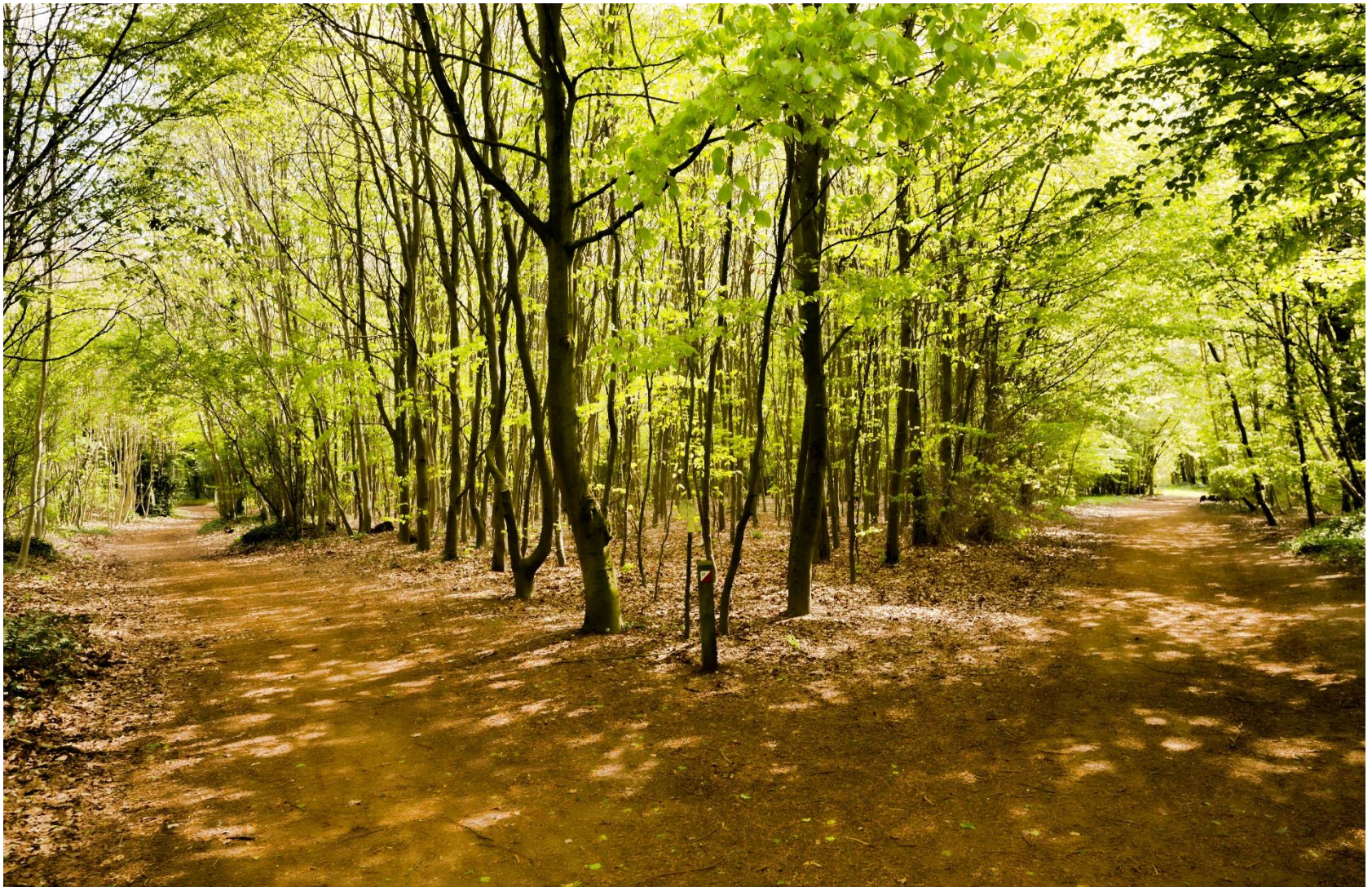
New Requirements

All New or Revised BMAPs: Revisions to Section 403.067, Florida Statutes

- Priority ranking of projects
- Planning-level estimates
 - Costs
 - Completion dates
 - Expected load reduction
- Source and amount of financial assistance
 - From DEP
 - From water management districts (WMDs)
 - From other entities



A Path Diverges





A Path Diverges

Goals for Stakeholders

- 2018 End of First 5-year Phase
 - Opportunity for BMAP Updates
- Allocations
 - Updated for all entities
 - Expansion of allocations to BRL (B) and Central/South
- Progress forward towards restoration



A Path Diverges

- Proposed Brevard TMDL based on SWIL
- Current TMDL with SWIL adapted to current targets
- Continue with current TMDL and PLSM



Action Items

- Comments on the draft annual report(s) due Tuesday, June 6, 2017
- Continue project information collection
- Florida STORET/WIN database uploads completed
- Meetings on path forward
- Next annual meeting planned for Spring 2018



Questions, Comments, Discussion





Contact Information

For additional information please contact:

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