



Caloosahatchee Estuary BMAP 1st TECHNICAL MEETING

September 24th, 2009 ❖ 9:00 am

South Florida Water Management District
2301 McGregor Boulevard, Ft. Myers Florida 33901

Meeting Overview

- Opening Remarks and Introductions
- Overview of TMDLs
- Basin Working Group
- Approaching Allocations
- Projects
- Next Steps
- Next Meeting

Introductions

Presenters:

Beth Alvi – FDEP Basin Coordinator

Scott McClelland – CDM, Facilitator

Basin Working Group



Groups and Meeting Format

- Technical meetings
- Basin Working Group meetings
- One-on-one meetings



Technical Meetings

■ Purposes:

- ❖ Fact finding

- ❖ Support Decisions by Basin Working Group

■ Open Dialogue Among Attendees

Basin Working Group

- A Basin Working Group (BWG) will be formed as the “voting group” to provide recommendations to FDEP.
- The BWG will consist of management level representatives.
- The BWG may function as the Management Committee
- The BWG is subject to all of the provisions of the Sunshine Law including limits on communications among members.

BWG Member

- Big Picture
- Authority to Make Decisions for Stakeholder
- Attends BWG Meetings
- Professional and Diplomatic Attitude

BMAP General Considerations

- Designation of BWG Members
- Development of Initial Stakeholder Loadings
- Stakeholder Reduction Allocations
- Initial List of Projects and Management Actions List
- Initial Estimate of Standardized Load Reductions
- Draft and Final BMAPs
- Execution of BMAP Commitments

Public Noticing

- Technical Meetings and BWG Meetings
- Before Meeting: FAW and DEP website
- After Meeting: DEP FTP site

- ❖ Draft Agenda
- ❖ Presentations (if available)
- ❖ Other Materials

<ftp://ftp.dep.state.fl.us/pub/water/BMAP/>

Potential Stakeholders

- Charlotte County
- Lee County
- Hendry County
- Glades County
- Fort Myers
- Cape Coral
- Sanibel
- FDOT
- SFWMD
- FDACS/Agriculture
- Environmental Organizations
- CDDs/Special Districts?

Approaching Allocations



BMAP Basics

- Need clear goals and implementation plans so cities/stakeholders can adequately plan for the future
- Transparency in stakeholder decision making process

What Will It Take?

- Translation of TMDL to BMAP
- Can Reductions be Achieved?
- How do We Achieve Reductions?
- What is Our Fair Share - (allocations)?
- How Much Will it Cost?
- Can We Fund It?

Allocations: Defining Fair Share & Responsibilities

- Who Receives an Allocation?
- How is an Allocation to be Derived?
- What is the Role of Cities/Stakeholders?
- Are the baseline conditions clearly defined? (e.g. Land-Use, Jurisdictions, Loading Model)?

Required Reductions – Implementation Obligations

- How is it achieved?
- Phasing?



	Phase 1 (2009-2014)	Phase 2 (2015-2019)	Phase 3 (2020-2024)
Allocations	Meet 1/3 of required reductions	Recalculated; meet 1/3 of recalculated allocation	Meet remainder of recalculated allocation?
TMDL	Refined through BMAP calculations	Recalculated	To be determined
Research & Monitoring Focus	■ Data needed to recalculate TMDL and allocations	■ Remaining critical unknowns ■ Ambient water quality ■ Project benefits	■ Remaining critical unknowns ■ Ambient water quality ■ Project benefits

Sufficiency of Effort: SOE

■ Options For Allocations:

- ❖ Quantitative Detailed Allocations
- ❖ Technology Based or BMP Based (SOE)

■ Wekiva: Insufficient Scientific Basis for Quantitative Allocations

- ❖ Define SOE for each local government – Implementation of selected BMPs
- ❖ Provides certainty – Milestones, Timelines, Obligation, Enforceable

Project Credit

- To achieve the TN reductions, each responsible party will provide projects and programs that reduce nutrient loads
- Pounds reduced will be subtracted from the total allocation for those projects completed by 2005
- Credit only counts for treatment above and beyond any permitted requirements

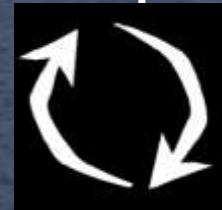
Project Maintenance

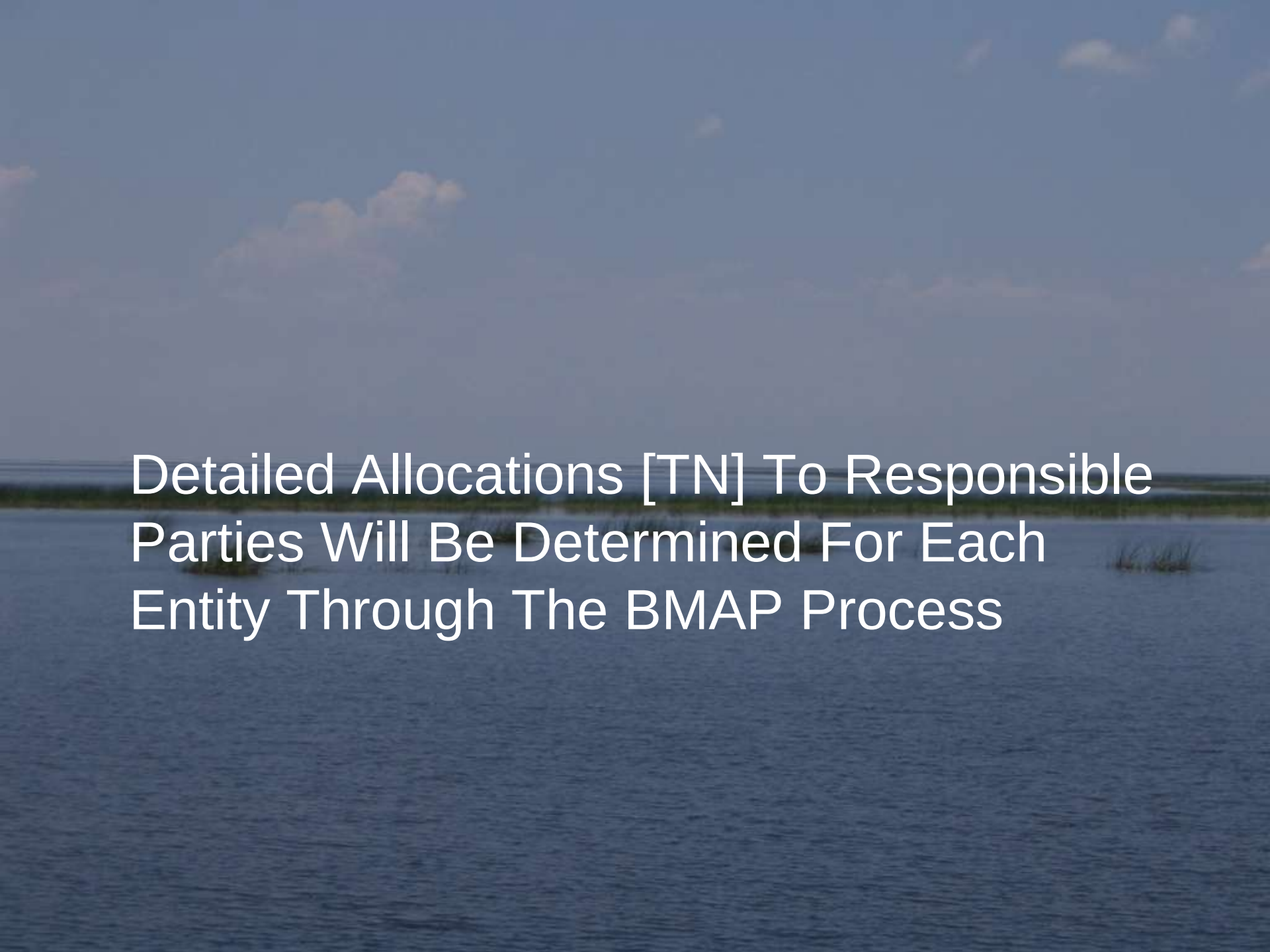
- To receive credit, projects must be operated and properly maintained as permitted
- Operation and maintenance records may be requested as part of the project review process
- Projects not operated as permitted, including older projects not included for specific credit, could result in additional reduction requirements by the responsible entity

If Prescribed Loading Reductions Do Not Meet WQ Goals, What Is Next?

■ Adaptive Management

- ❖ Provides Flexibility In TMDL Implementation
- ❖ Not Addressing Future Growth Can Result In Missed Opportunities As Development And Redevelopment Occurs

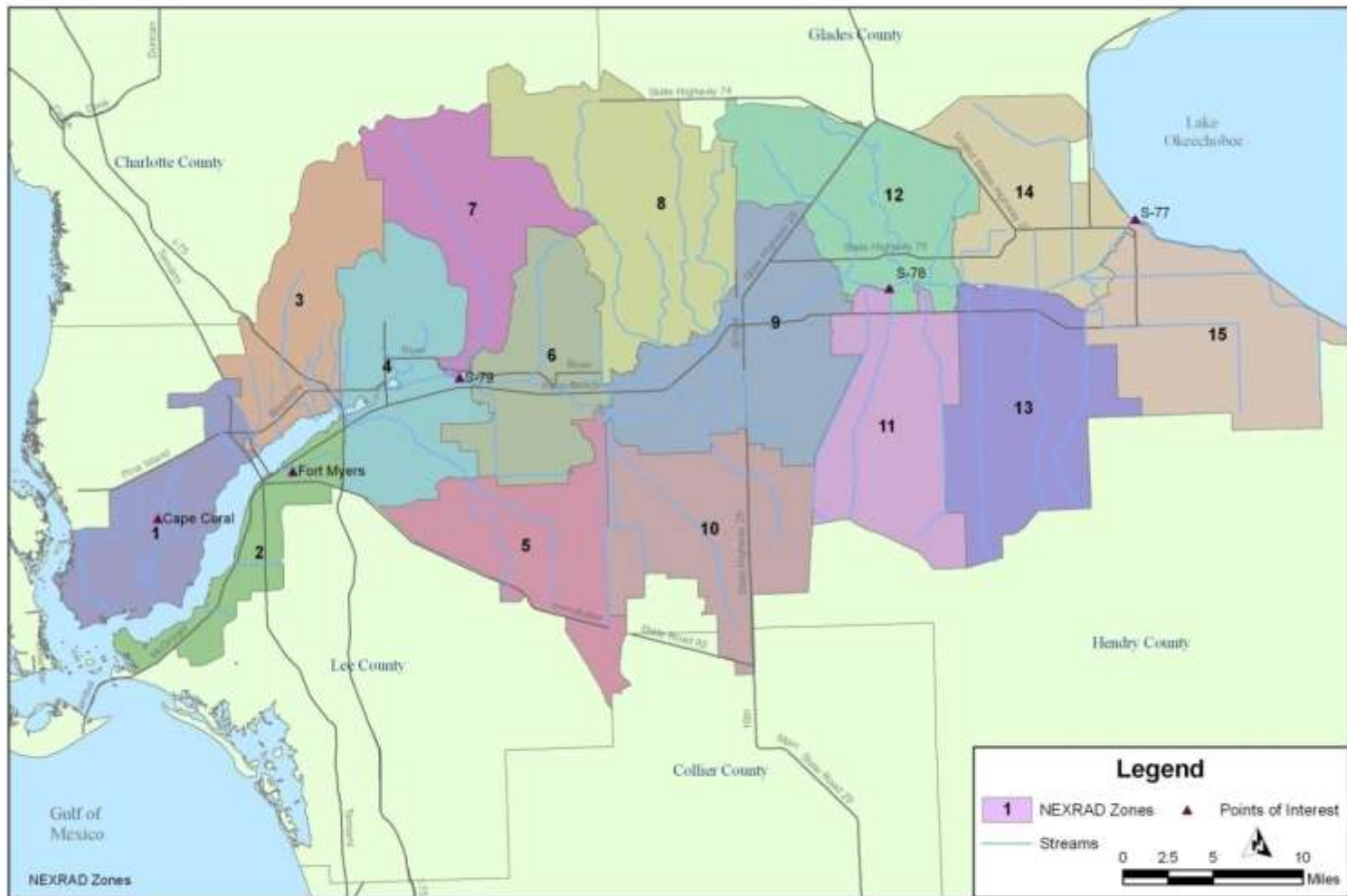


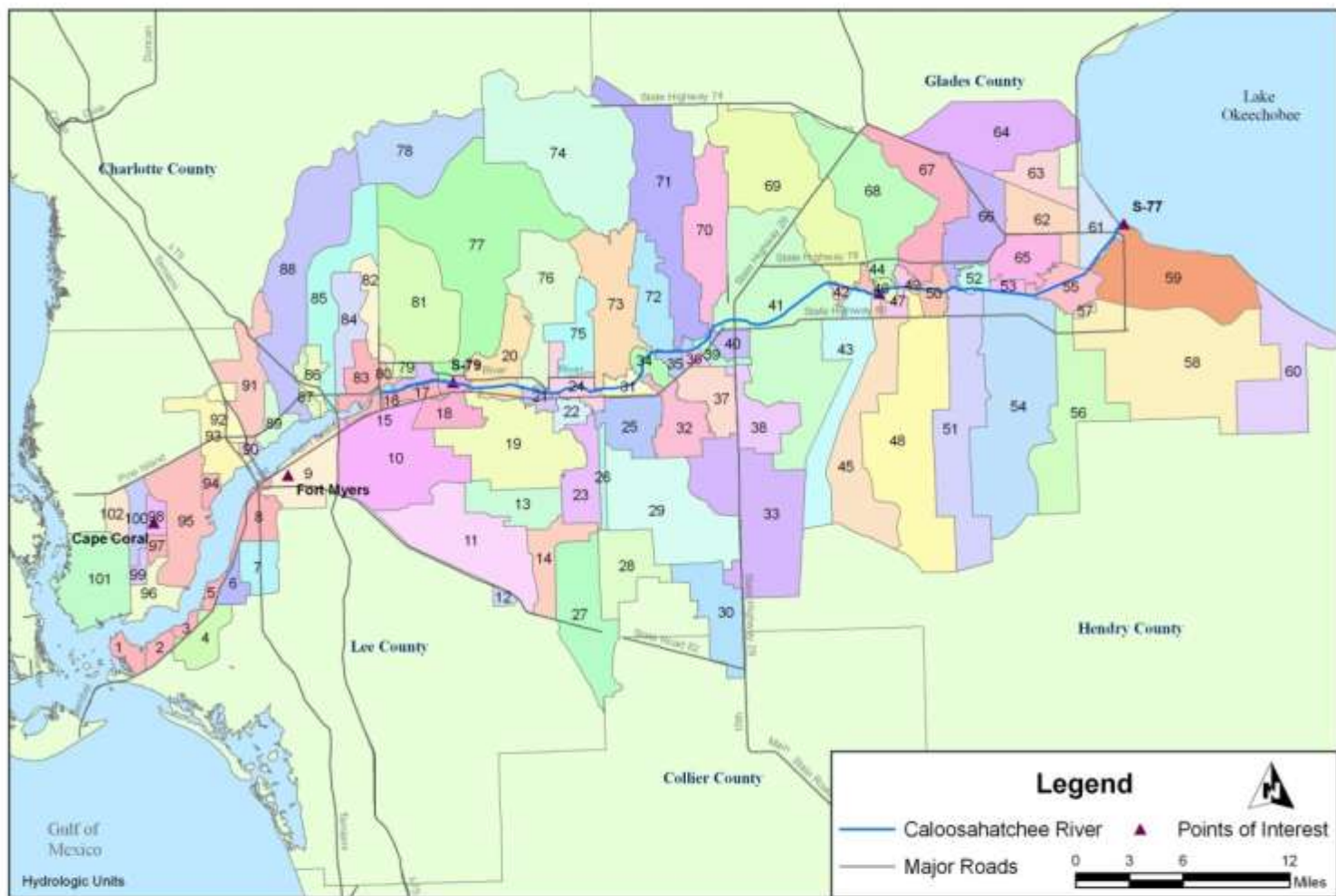


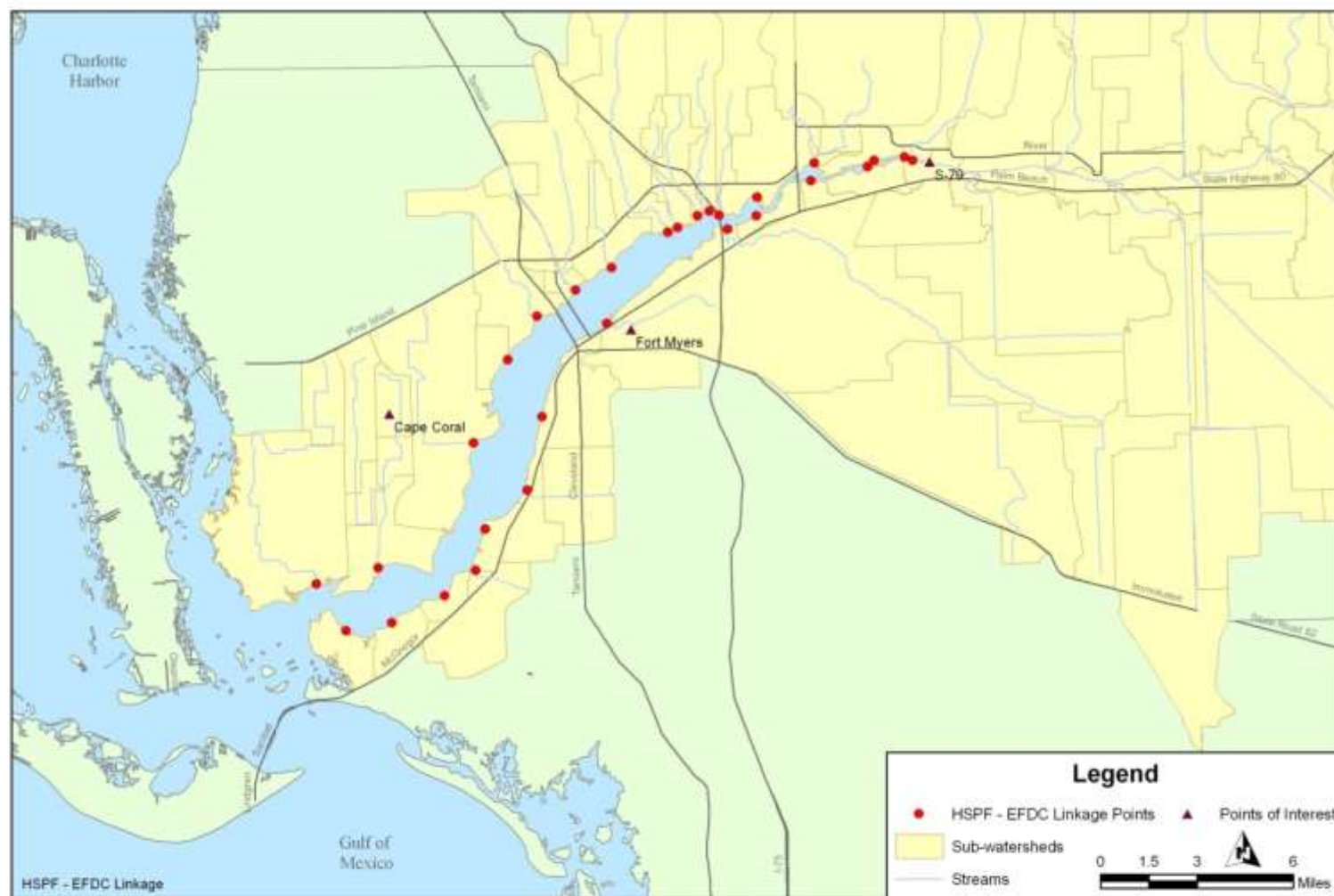
Detailed Allocations [TN] To Responsible
Parties Will Be Determined For Each
Entity Through The BMAP Process

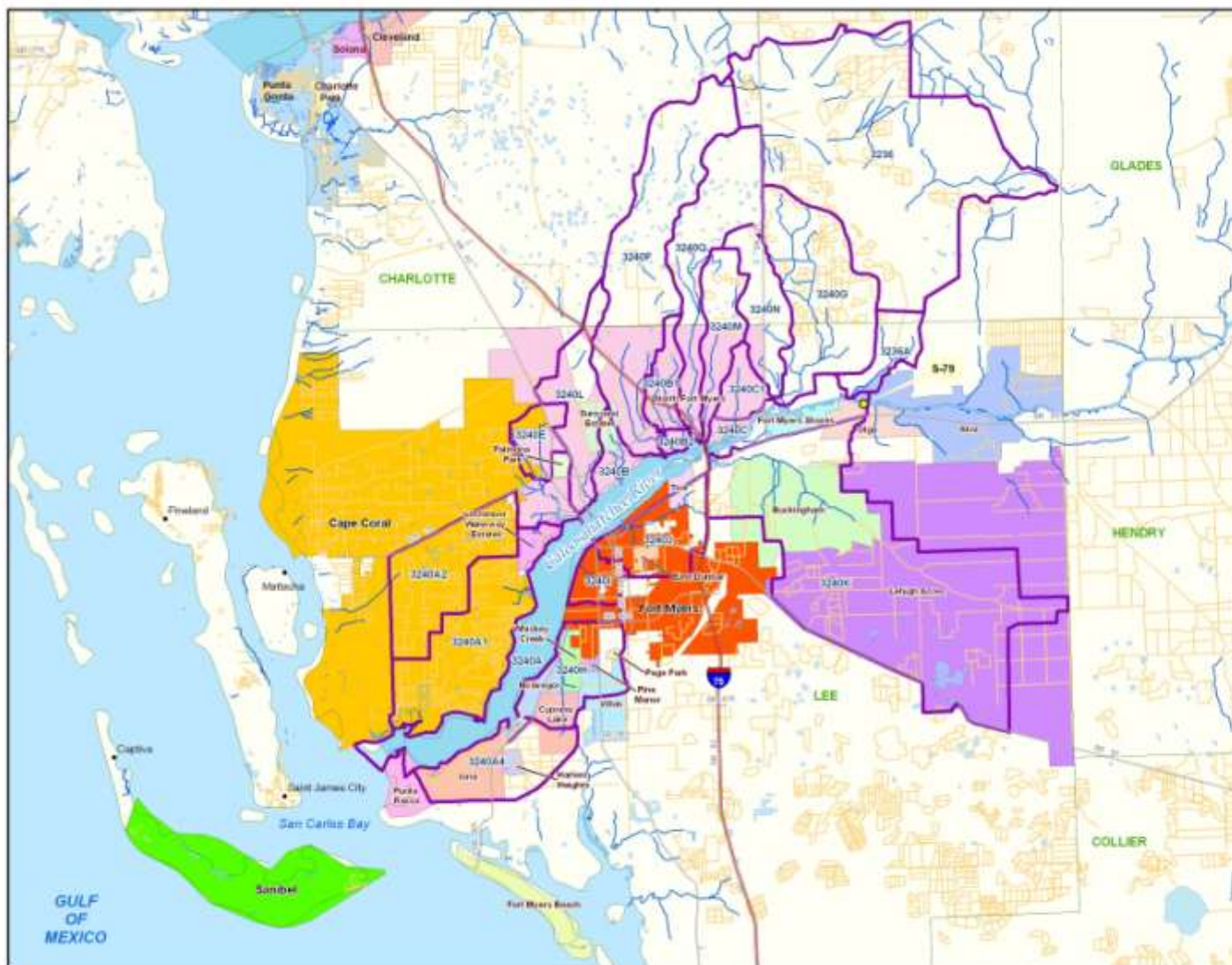
Modeling











Caloosahatchee Estuary BMAP Basin Jurisdictional

This map was prepared in 2008. It is a representation of the current jurisdictional boundaries and is not intended to be a legal document. It is not intended to be a legal document. It is not intended to be a legal document.

MS4 Permits

- ★ FLR04E043 Charlotte County
- ★★ FL5000035 Lee County
- (DOT District 1 is co-permittee on both MS4s)

WBIDs

Unincorporated Places

- Alva
- Buckingham
- Cypress Lake
- East Dunbar
- Fort Myers Beach
- Fort Myers Shores
- Harlem Heights
- Iona
- Lehigh Acres
- Lochmoor Waterway Estates
- McGregor
- North Fort Myers
- Olga
- Page Park
- Palmira Park
- Pine Manor
- Punta Rassa
- Suncoast Estates
- Tice
- Villas
- Whiskey Creek

Cities (Incorporated)

- ★ Cape Coral
- ★ Fort Myers
- ★ Sanibel



N

0 1 2 3 4 5 Miles



Existing TN Loads

Source of Total Nitrogen	Existing Loading	
	Load (lb/yr)	% of Total
Upstream of S-79		
Lake Okeechobee at TMDL	6,222,155	52.7%
Load to be Removed from Lake O	782,224	6.6%
NPS Loading	2,731,660	23.2%
Subtotal From S-79	9,736,039	82.5%
Estuarine (Below S-79)		
WWTP Loads	136,875	1.2%
NPS Loads	1,926,848	16.3%
Subtotal Below S-79	2,063,723	17.5%
Total to Estuary	11,799,762	100.0%
Load at TMDL	9,085,817	77.0%

Example Detailed Allocation

Lake Jesup BMAP Surface Runoff Allocation Table

September 17, 2009

All values are gross loads of total phosphorus in pounds/year.

Column:	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Allocation Entity	TP Loading		Reductions Required						Projects				Projects for 2015-2019 Reductions	Projects for 2020-2024 Reductions	Final 2009-2014 Load Reduction Remaining
			Total			Distributed Across BMAP Implementation Periods			Completed/Funded		Future				
	Total Load from TMDL	Total Load for BMAP Allocation	Total Nonpoint Source Reduction Required	Noncontributing Areas Load	Total Reduction Required	2009-2014 Required Reduction*	2015-2019 Required Reduction*	2020-2024 Required Reduction *	TMDL BMPs	Completed/ Funded Projects	Planned Projects	Interagency Project Participation			
Agriculture	1,185	1,149	772	8	764	254.7	254.7	254.7	32.9		206.0	15.8			0.0
Altamonte Springs	151	116	78	21	57	19.0	19.0	19.0	19.0				19.0	1.2	0.0
Casselberry	1,907	1,557	1,029	1	1,028	342.7	342.7	342.7	0.0	342.7			131.1		0.0
DOT District 5	690	646	434	37	397	132.3	132.3	132.3	36.0	96.3			132.3	40.0	0.0
Eatonville	191	194	130	60	70	23.4	23.4	23.4	9.6		0.3	13.5			0.0
Lake Mary	1,555	1,229	797	4	793	264.3	264.3	264.3	0.0	176.0	70.3	18.0			0.0
Longwood	1,475	1,122	731	115	616	205.3	205.3	205.3	67.1	23.0	45.5	69.7			0.0
Maitland	1,053	906	586	212	374	124.8	124.8	124.8	0.9	49.6	74.3		7.4		0.0
OOCEA	24	23	16	0	16	5.2	5.2	5.2	0.0	5.2			5.2	3.5	0.0
Orange Co (unincorporated)	1,433	2,746	1,708	1	1,707	569.0	569.0	569.0	31.5	160.0	178.4	199.1			0.0
Orlando	1,518	1,570	1,052	73	979	326.3	326.3	326.3	326.3				326.3	304.1	0.0
Oviedo	1,280	1,156	776	0	776	258.7	258.7	258.7	258.7				258.7	274.9	0.0
Sanford	3,662	2,722	1,829	22	1,807	602.2	602.2	602.2	461.4	16.5	112.5	11.8			0.0
Seminole Co (unincorporated)	11,386	10,151	6,650	239	6,411	2137.0	2137.0	2137.0	1803.6	333.4			1122.8		0.0
Turnpike Authority	440	451	303	0	303	101.1	101.1	101.1	0.0	101.1			101.1	71.3	0.0
Winter Park	1,662	1,771	1,183	72	1,111	370.5	370.5	370.5	0.1	346.1	24.3		95.6		0.0
Winter Springs	2,639	2,301	1,545	6	1,539	513.0	513.0	513.0	513.0				513.0	418.1	0.0
Water/Wetland/ Conservation Areas	7,764	7,758	0	164	0	0.0	0.0	0.0	-	-	-	-	-	-	-
TOTAL (lbs)	40,015	37,568	19,620	1,035	18,748	6,249.5	6,249.5	6,249.5	3,560.1	1,649.9	711.6	327.9	2712.5	1113.1	0.2
TOTAL (MT)	18.2	17.0	8.9	0.47	8.5	2.83	2.83	2.83	1.61	0.75	0.32	0.15	1.23	0.50	0.00

Projects



Activities to Achieve Allocations

■ Project Types

- ❖ Structural Projects
- ❖ Non-structural or Source Controls

■ Project Sources

- ❖ Agency Projects – Caloosahatchee River Watershed Protection Plan
- ❖ Local Stakeholder Projects

Types of BMAP Activities

■ Sources:

- ❖ NPDES Sources: permit modifications
- ❖ Non-NPDES Sources: best management practices

- Stormwater retrofits; non-structural stormwater management
- Regional/multi-jurisdictional projects
- Large WMD restoration projects

Types of BMAP Activities (Continued)

- Development regulations (e.g. buffer requirements,
- Septic setbacks, low impact development)
- Education
- On & on...

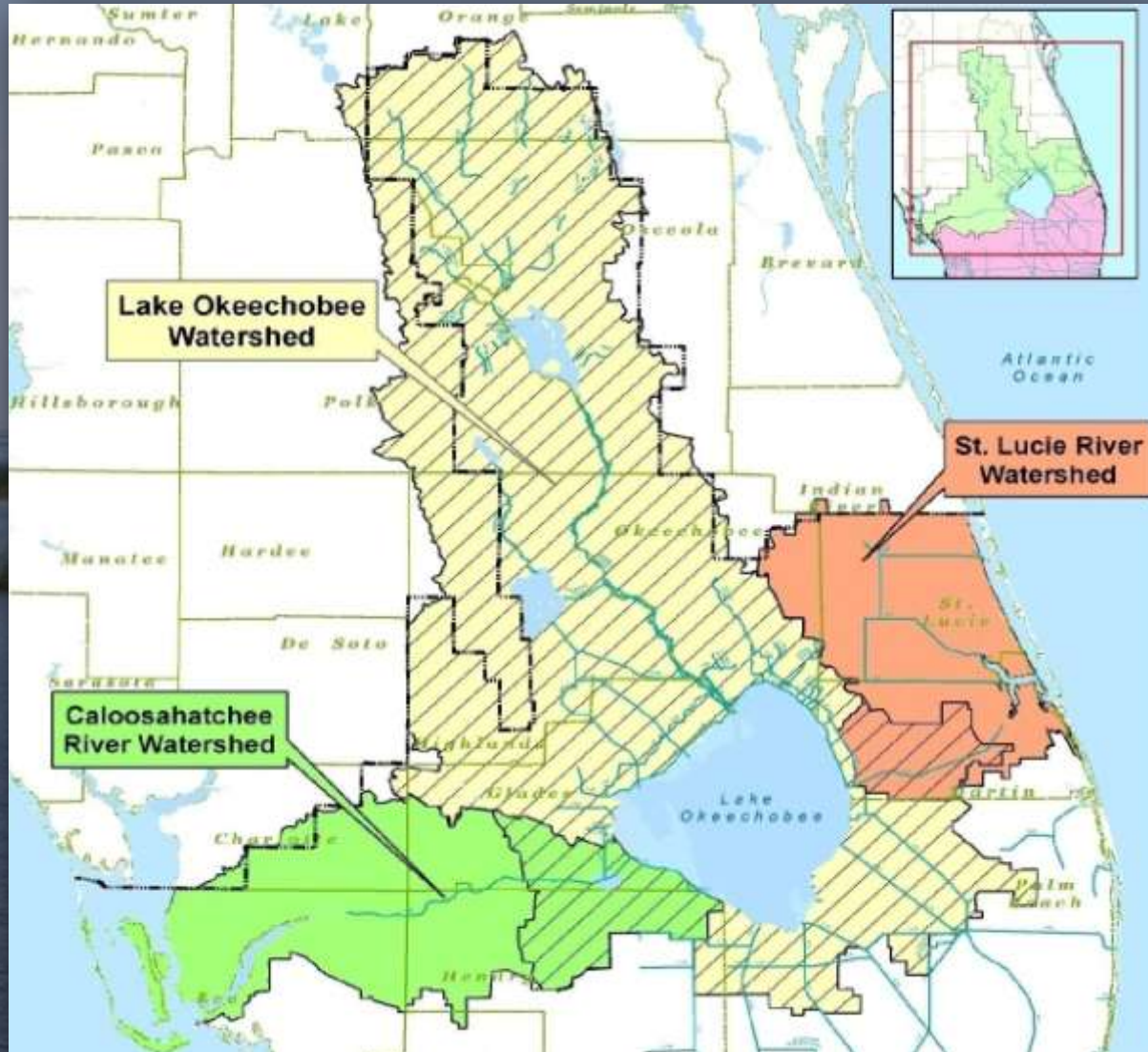
Assessment of BMPs

- Target BMPs Towards the Most Effective and Cost –Efficient BMPs
- Optimize Type & Location of Prescribed BMPs
- Cost Of BMPs In Undeveloped Areas And Redevelopments Vs. Retrofitting In Urbanized Areas

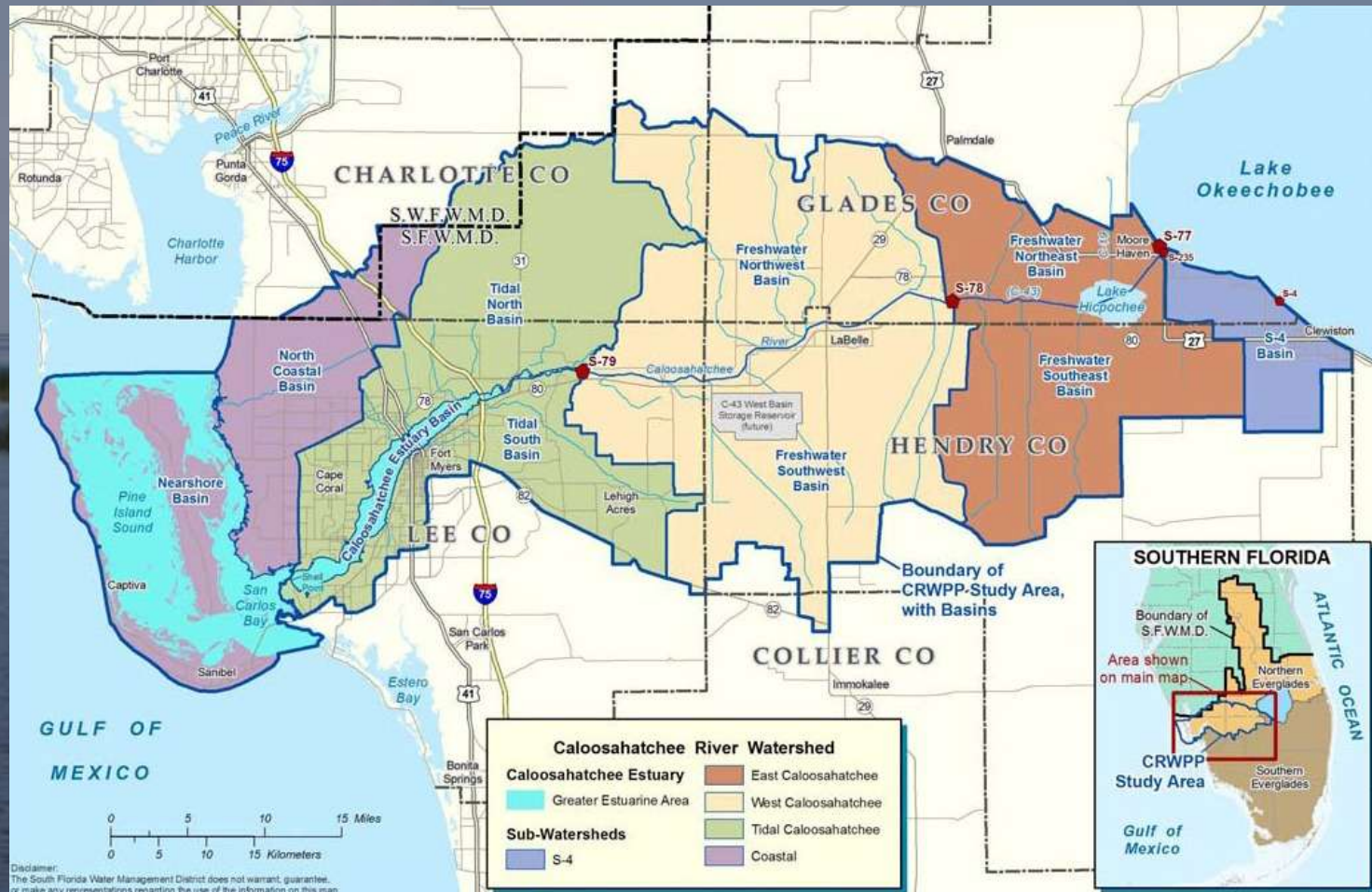
BMAP Project Information

- Responsible Party
- Project Name
- Project Location - WBID Number
- Load Reduction(s) From Project (TN, TP, Maybe TSS)
- Area Drained (GIS Coverage Preferred)
- Implementation Schedule And Completion Dates
- Links To NPDES Permits (If Any)
- Estimated Cost
- Funding Sources And Partners

The Northern Everglades Area



Caloosahatchee River Watershed



From: Caloosahatchee River Watershed Protection Plan, SFWMD, January 2009

Caloosahatchee River Watershed Protection Plan

- Submitted to Legislature on January 1, 2009

- ❖ No Action → Plan Deemed Approved

- Overall Plan

- ❖ Watershed Construction Project
 - ❖ Watershed Pollution Control Program
 - ❖ Watershed Research & WQ Monitoring Program (Program Assessment – Not Discussed Here)

CRWPP

■ Construction Project

- ❖ Identify WQ Projects
- ❖ Alternatives Analysis
- ❖ Preferred Alternatives

■ Pollutant Control Program

- ❖ Regulations
- ❖ BMPs
- ❖ Restoration of Hydrology
- ❖ Alternative Technologies

Caloosahatchee River WPP

Major Projects

- C-43 Water Quality Treatment & Testing Facility (WQTA)
- C-43 West Basin Storage Reservoir
 - ❖ Improve Timing and Quantity of Freshwater Flows to Estuary
 - ❖ 170,000 ac-ft



Additional WPP Information To Be Obtained

■ Project Priorities

- ❖ Funded & Unfunded

- ❖ High Priorities, Medium Priorities and Pie-in-the-Sky

■ Project Location and Drainage Areas

Data Gaps



Information on Stakeholders

- Identify Missing Stakeholders
- Changes in Jurisdictional Boundaries - GIS preferable
- Jurisdictional Annexation Policies
- CDDs, 298 Districts, MS4s

BMP Information

- Projects Implemented After The Period Of Record In Area Of Responsibility - GIS Preferable
 - ❖ Footprint And Drainage Area Of Project
 - ❖ BMP Type
 - ❖ Estimated (Or Actual) N Reduction For Project

Additional Information Needed Later

- Additional information needed later
 - ❖ Other projects that may/will be implemented
 - ❖ Cost
 - ❖ Contact person
 - ❖ Status of project
- Areas within jurisdictions that are NOT controlled by jurisdiction (GIS preferable)
 - ❖ Name and contact person for area
 - ❖ Map of area (if GIS not available)

Next Steps



Next Meetings

Tentative!

- Technical Meeting - October 28th
- 1st Basin Working Group – TBD

Questions & Comments?

