



St. Lucie River Watershed Protection Plan

Northern Everglades Interagency Meeting
January 29, 2008

Presentation Topics



- **Introduction**
- **Project Area**
- **Problems, Objectives and Constraints**
- **Performance Measures & Indicators**
- **Management Measure Development**
- **Modeling Plan**
- **Proposed Schedule**
- **Questions?**

Introduction

SEWMD

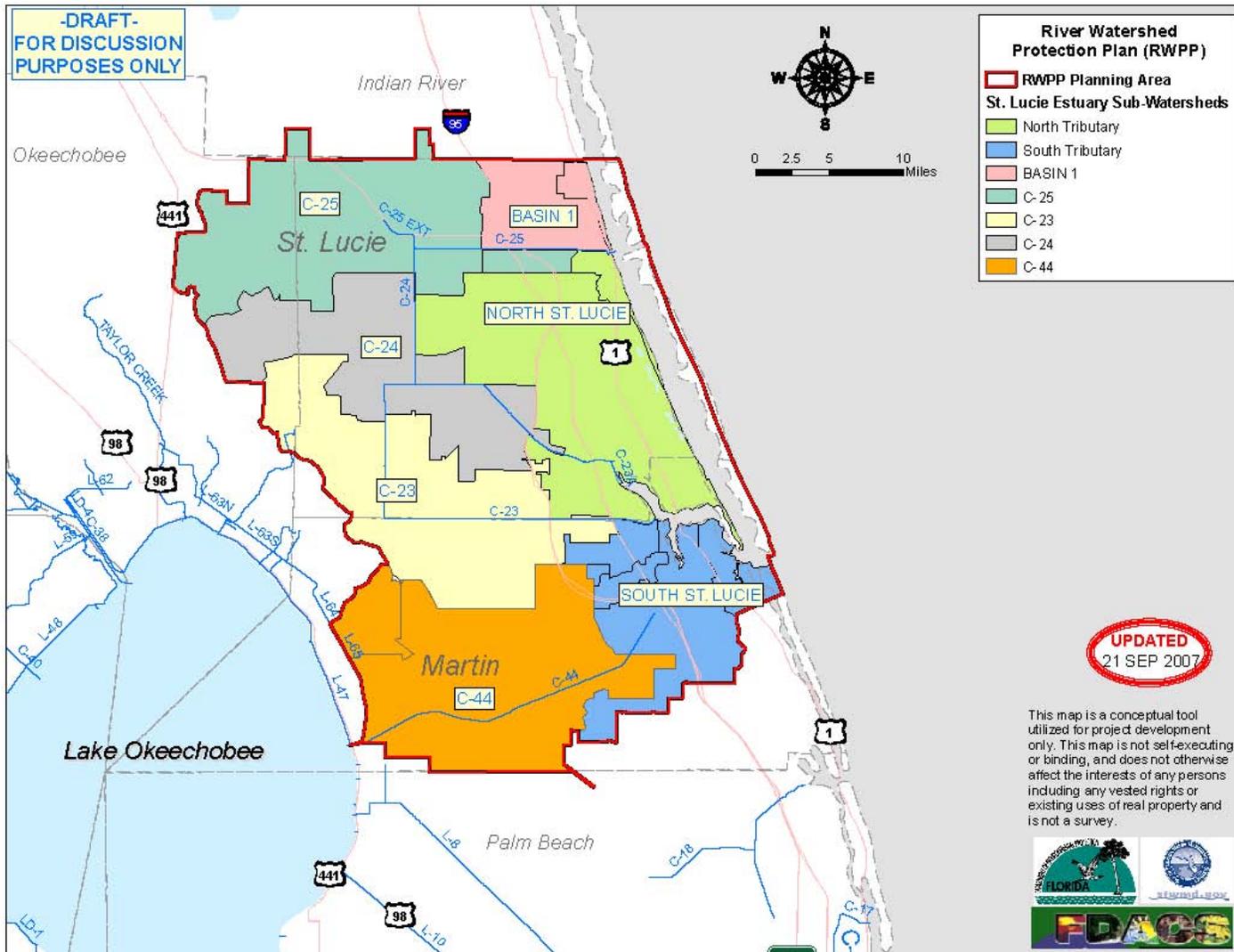


St. Lucie River Watershed Protection Plan

- **Watershed Construction Project**
- **Watershed Pollutant Control Program**
- **Watershed Research and Water Quality Monitoring Program**

**To be submitted to Florida Legislature by
January 1, 2009**

Project Area



Problems, Objectives and Constraints



Problems	Objectives	Constraints
<ul style="list-style-type: none"> ▪ Excess regulatory discharges from Lake Okeechobee ▪ Excess discharges resulting from watershed runoff ▪ Excess nutrient loads to river and estuary ▪ Impacts to aquatic habitats ▪ Muck accumulation ▪ Undesirable salinity in Estuary 	<ul style="list-style-type: none"> ▪ Meet Total Maximum Daily Loads ▪ Manage Lake Okeechobee flows to meet desirable salinity ranges for estuary ▪ Manage watershed discharges to meet desirable salinity ranges for estuary ▪ Reduce pollutant loads by improving management of pollutant sources throughout the watershed ▪ Establish Research and Water Quality Monitoring Program sufficient to implement the program and projects 	<ul style="list-style-type: none"> ▪ Maintain existing levels of flood protection ▪ Maintain water supply for affected water user basins ▪ Minimum flows and levels ▪ Water Reservations

Performance Measures



Problem	Objective	Performance Measure
Excess discharges resulting from watershed run-off	Manage watershed discharges to meet desirable salinity ranges for estuary	Number of times St. Lucie High Discharge Criteria Exceeded - Mean Monthly Flows between 2,000 and 3,000 cfs
		Number of times St. Lucie High Discharge Criteria Exceeded - Mean Monthly Flows greater than 3,000 cfs
Excess Nutrient Loads to river and estuary	Meet Total Maximum Daily Loads (TMDLs)	Maximize load reduction and compare against TMDLs as appropriate

Performance Indicators



Problem	Objective	Performance Indicator
<p>Increased number of undesirable salinity conditions due to little or no flow from local watershed to estuary</p>	<p>Manage watershed discharges to meet desirable salinity ranges for estuary (i.e. supplement groundwater flows as needed with local basin surface water)</p>	<p>Number of times that desired salinity in St. Lucie Estuary (SLE) is not met due to little or no flow from local watershed (i.e. total inflow to SLE including groundwater is less than 350 cfs)</p>

Management Measures

St. Lucie River Watershed Protection Plan
DRAFT Management Measures
1/15/2008

MM #	Project Feature/Activity	Level
1	Harmony Heights Subdivision (Phase II - V)	1
2	White City Canal D	1
3	White City Drainage Improvements (Citrus/Saeger)	1
4	White City Drainage Improvements (canals B, C, E, F, G)	2
5	Paradise Park Stormwater Improvements (Phase III - V construction)	1
6	Indian River Estates/Savannas Ecosystem Management Project	1
7	Platt's Creek Wetland Restoration	2
8	Indian River Drive Stormwater Outfall Retrofits	1
9	Natural Lands in IRL-S CERP Project	2
10	St. Lucie Watershed Natural Area Registry Program	1
11	Creation of suitable oyster substrate in the St. Lucie Estuary	2
12	Increased retention/detention areas within the C-23 and C-24 Basins	5
13	Routine Inspection of Septic Systems	
14	Removal of Accumulated Muck in the St. Lucie River and Estuary	
15	On-site remediation of selected sludge application areas	5
16	Improved management of sludge disposal in St. Lucie County through the use of an innovative technology (Plasma-Arc)	2
17	Identification of water quality "hot-spots" in watershed	
18	Reservoir and/or Stormwater Treatment Area along the south side of the C-44 Canal	5
19	Conversion of existing canals into "linear wetland treatment areas"	3
20	Increased use of Xeriscaping in new residential and commercial construction	
21	Funding Partnership with St. Lucie River Issues Team (SLRIT)	5
22	North River Shores Vacuum Sewer System	
23	CERP - IRL South: PalMar Complex - Natural Storage and Water Quality Area	1
24	CERP - IRL South: C-23/24 Reservoir/STA	1
25	CERP - IRL South: Allapattah Complex - Natural Storage and Water Quality Area	1
26	CERP - IRL South: Northfork Natural Floodplain Restoration	1
27	CERP - IRL South: Muck Remediation and Artificial Habitat	1
28	Tropical Farms Roebuck Creek Stormwater Quality Retrofit	
29	Old Palm City Phase III Stormwater Quality Retrofit	
30	Manatee Pocket Dredging Project	
31	Stormwater Baffle Box Retrofit - City of Stuart	
32	Old Palm City/Danforth Creek Stormwater Quality Retrofit	
33	North St. Lucie River Water Control District Stormwater Retrofit; Structures 81-1-2 and 85-1-2	
34	Indiantown Citrus Growers Water Conservation Project, Phase II	
35	All American Boulevard Ditch Retrofit	
36	Everglades Comprehensive Plan Amendment	
37	Living Shoreline Initiative	

Preliminary DRAFT - January 15, 2008

SLRWPP: Proposed Management Measure Sheets



Management Measures



SLE X

Northern Everglades- Potential Management Measure

Project Feature/Activity:

Level:

General Description/Background:

Purpose:

Location/Size/Capacity:

Initiative Status:

Cost:

Documentation:

Estimate of Water Quality Benefits

- Minimum:
- Maximum:
- Most Likely:
- Level of Certainty:
- Assumptions:

Estimate of Water Quantity Benefits

- Minimum:
- Maximum:
- Most Likely:
- Level of Certainty:
- Assumptions:

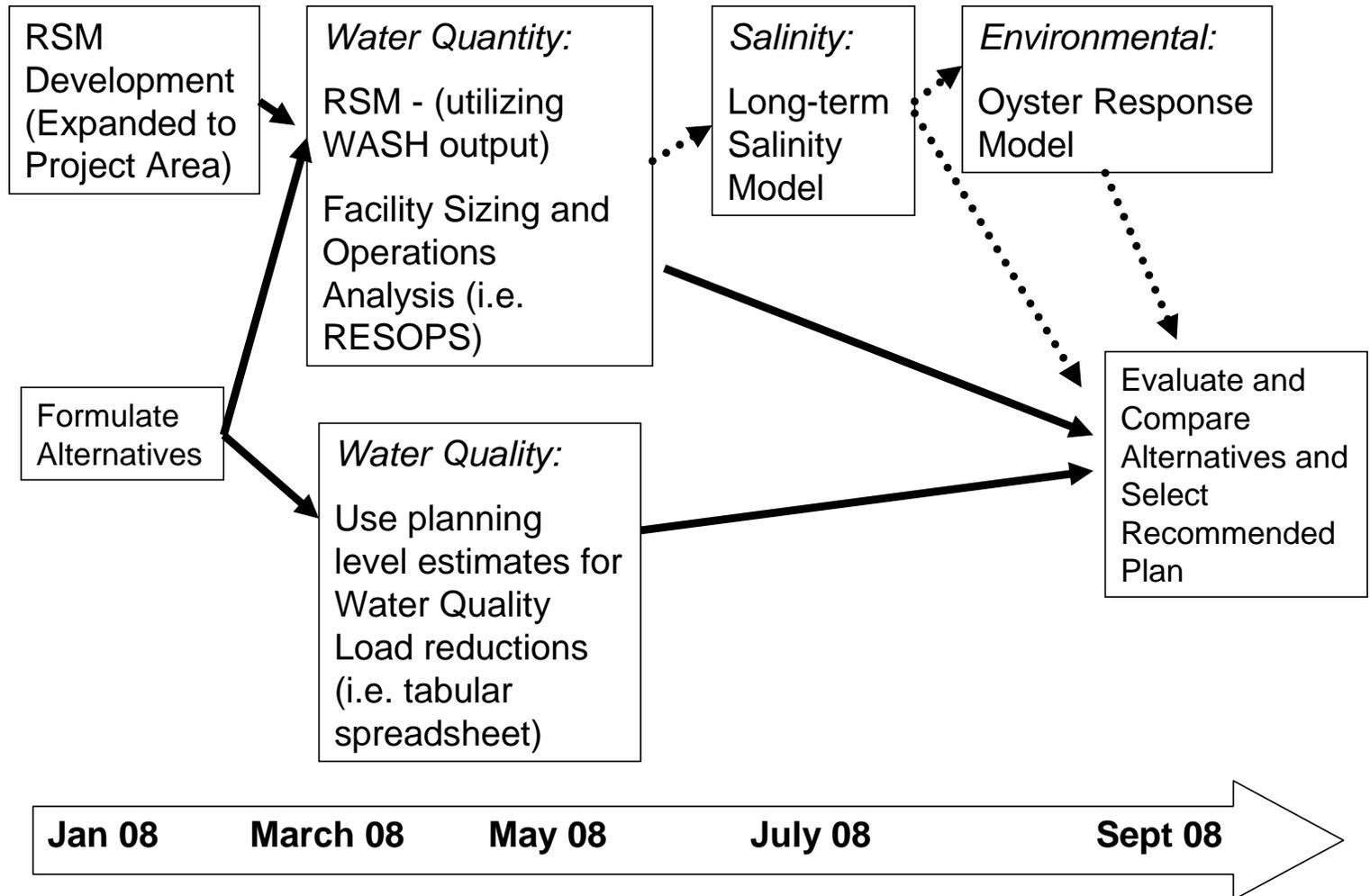
Contact:

Management Measures



- **Levels of management measures**
 - **Level 1- Already constructed/implemented or construction/implementation imminent**
 - **Level 2- Construction/implementation likely; Detailed design/activity development ongoing; Location well defined**
 - **Level 3- Implementation certainty unknown; Conceptual level of design/activity development complete; Location defined**
 - **Level 4- Implementation certainty unknown- Conceptual idea; May have rough order of magnitude cost and/or general basin location**
 - **Level 5- Implementation certainty unknown-Conceptual idea with limited information**

Modeling Plan



Proposed Schedule



- **Formulation of Alternatives** **March 2008**
- **DRAFT Plan for Public review** **October 2008**
- **Final Plan to Governing Board** **Dec. 2008**
- **Submit Plan to Legislature** **Jan. 2009**

Questions?

SFWMD



<http://my.sfwmd.gov/northerneverglades>