



Homosassa River SWIM Plan

Steering Committee Draft

January 11, 2017



Southwest Florida
Water Management District



Homosassa River SWIM Plan

- Executive Summary
- Introduction
- Issues and Drivers
- Management Actions
- Projects and Initiatives
- References
- Appendices

SCSC DRAFT 1-Homosassa River Surface
Water Improvement and Management
(SWIM) Plan

A Comprehensive Conservation and Management Plan

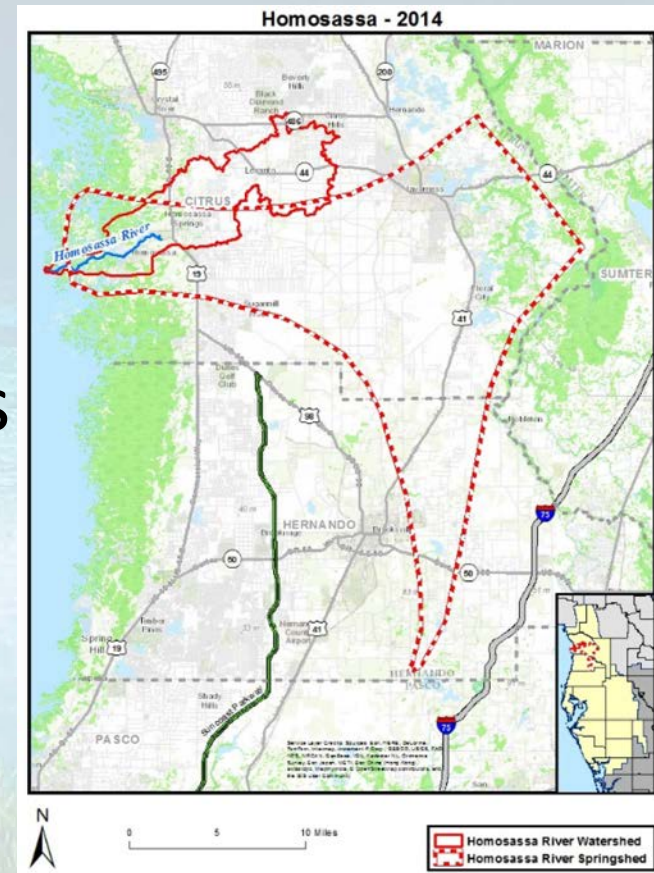


Version 12.1

12/23/2016

Introduction

- The Springs Coast
- SCSC & SCMC
- SCSC Technical Working Group
- SWIM Act Priority Water Bodies
- What Makes a Healthy Spring?
- System Description
- Historical Context
- Land Use



Homosassa SWIM Plan Summary

	Water Quality	Water Quantity	Natural Systems
PRIMARY ISSUE	<ul style="list-style-type: none">Nitrate EnrichmentChanging Salinity	<ul style="list-style-type: none">Potential Decrease in Historical Flows	<ul style="list-style-type: none">Altered Aquatic Vegetation
QUANTIFIABLE OBJECTIVE	<ul style="list-style-type: none">Water ClarityNitrate Concentration	<ul style="list-style-type: none">Minimum Flow and Levels for the River System	<ul style="list-style-type: none">Coverage of desirable benthic habitat in the riverCoverage of invasive aquatic vegetation (including filamentous algae) in the riverNo net loss of shoreline in natural condition along the river
PRIORITY MANAGEMENT ACTION	<ul style="list-style-type: none">Septic TanksUrban/Residential FertilizerAgriculture Operations	<ul style="list-style-type: none">ConservationMinimum Flow and Levels (re-evaluation)	<ul style="list-style-type: none">Monitoring and ResearchHabitat Restoration
PROJECTS	<ul style="list-style-type: none">Ongoing (14)Proposed Priority(6)	<ul style="list-style-type: none">Ongoing (26)Proposed Priority (7)	<ul style="list-style-type: none">Ongoing (8)Proposed Priority (8)

Focus Areas

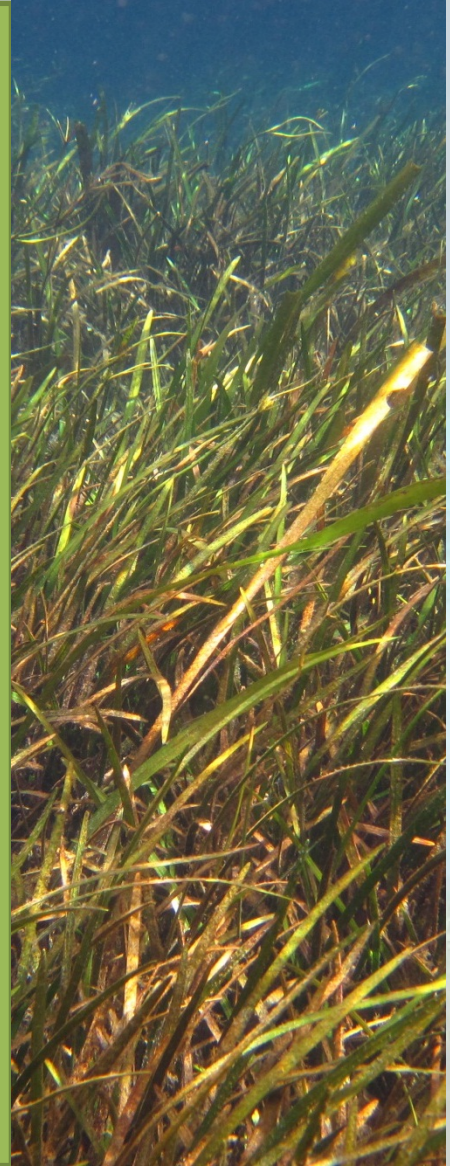
WATER QUALITY



WATER QUANTITY



NATURAL SYSTEMS

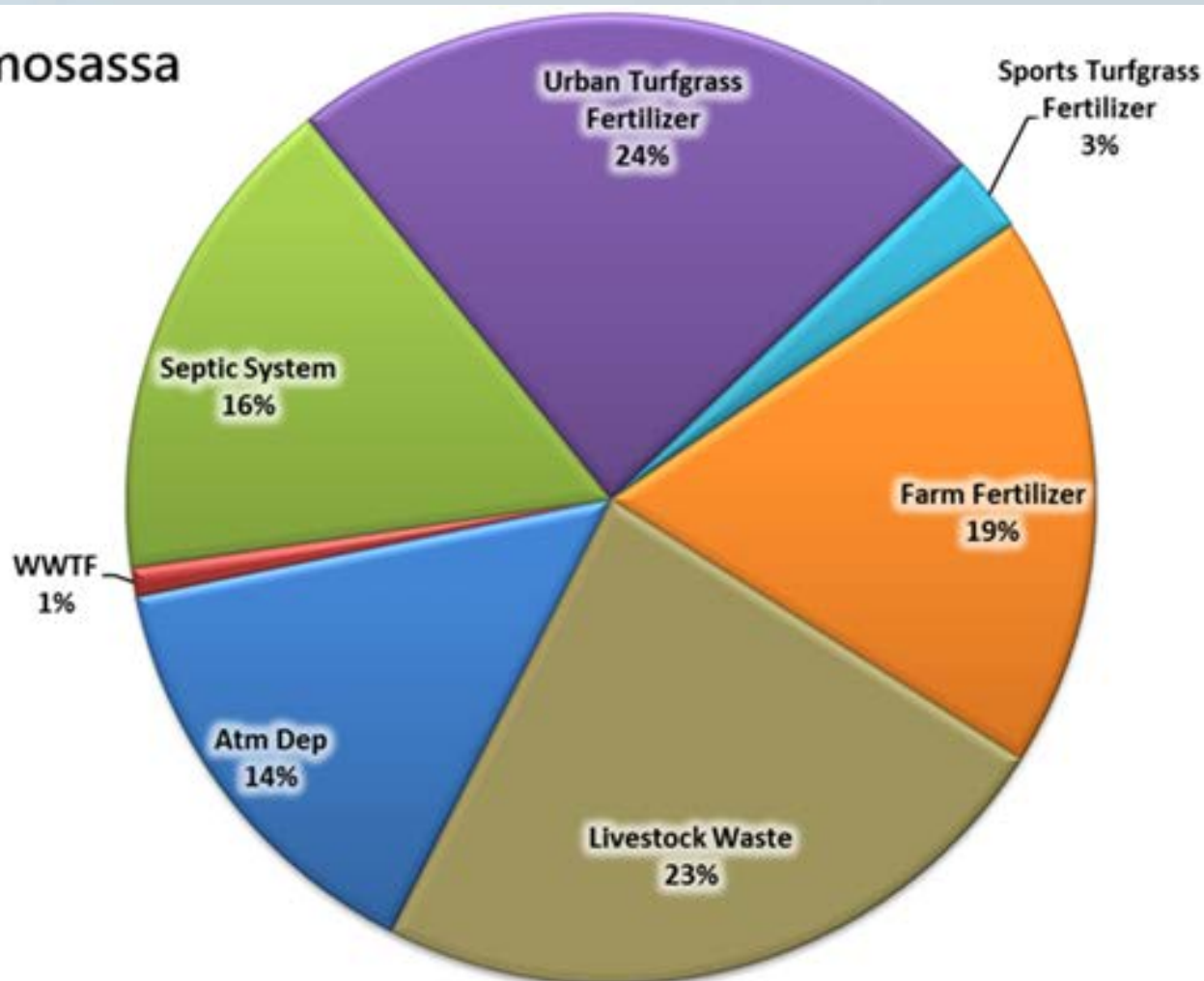


Primary Issues

	Homosassa	Chassahowitzka	Weeki Wachee
Water Quality	<ul style="list-style-type: none">• Nitrate Enrichment• Changing Salinity	<ul style="list-style-type: none">• Nitrate Enrichment• Changing Salinity	<ul style="list-style-type: none">• Nitrate Enrichment
Water Quantity	<ul style="list-style-type: none">• Potential Decrease in Historical Flows	<ul style="list-style-type: none">• Potential Decrease in Historical Flows	<ul style="list-style-type: none">• Potential Decrease in Historical Flows
Natural Systems	<ul style="list-style-type: none">• Altered Aquatic Vegetation	<ul style="list-style-type: none">• Altered Aquatic Vegetation	<ul style="list-style-type: none">• Altered Aquatic Vegetation• Sedimentation

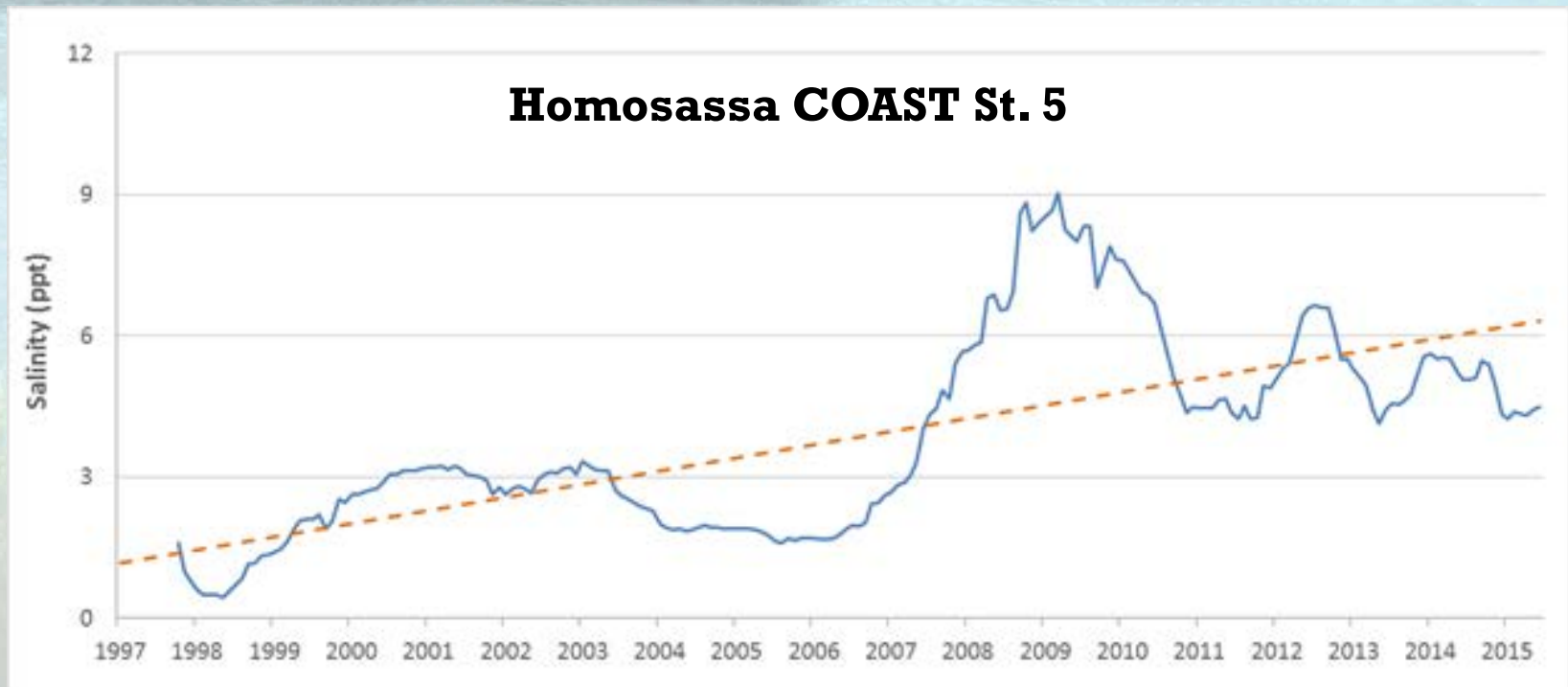
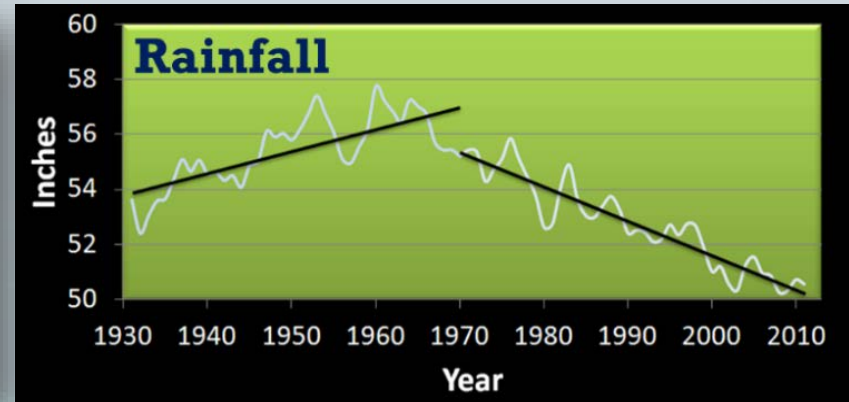
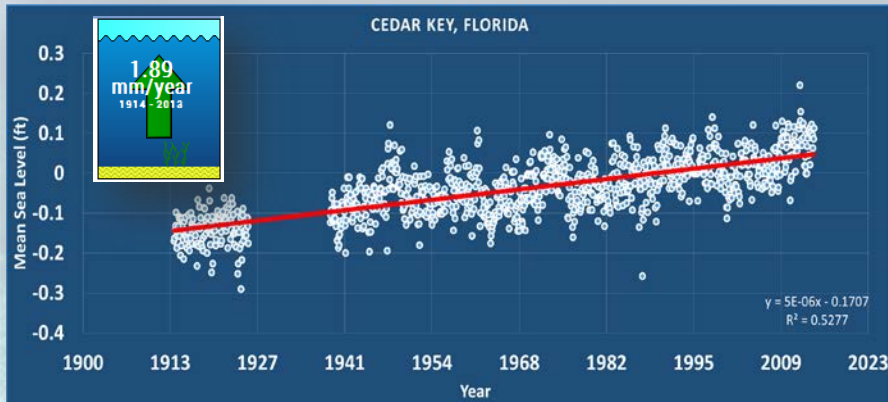
Primary Issue: Nitrate Enrichment

Homosassa

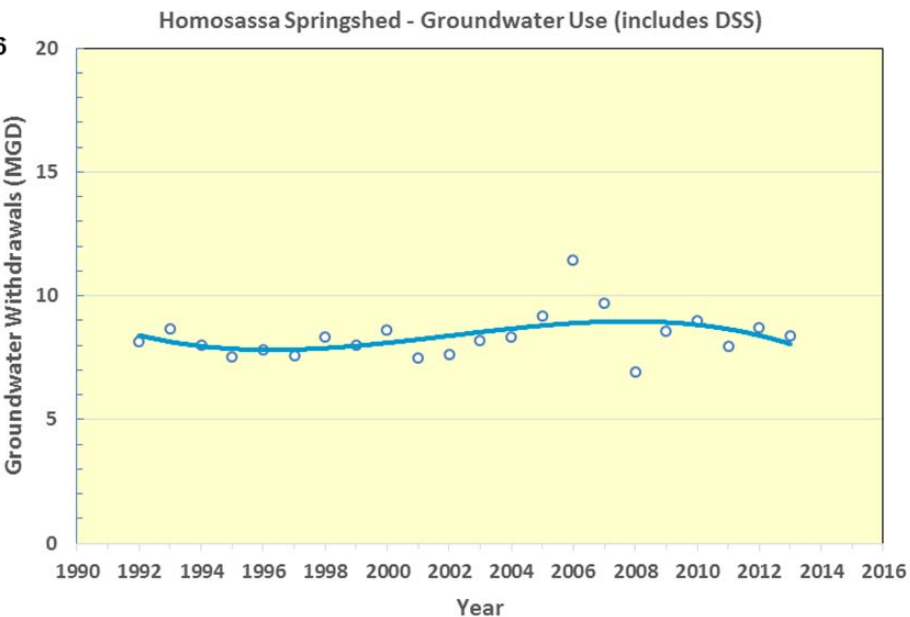
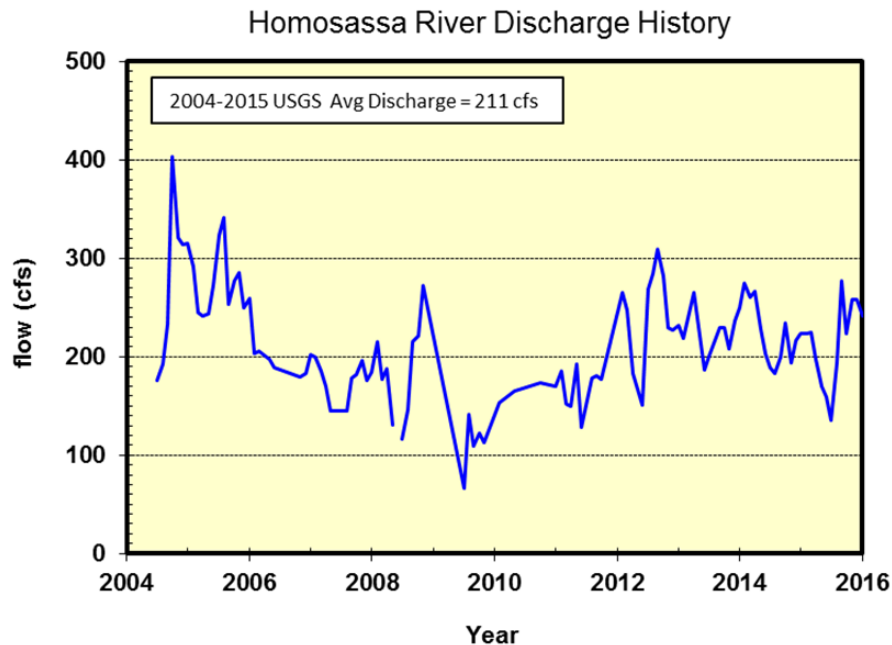


Nitrogen Sources to Groundwater (FDEP draft)

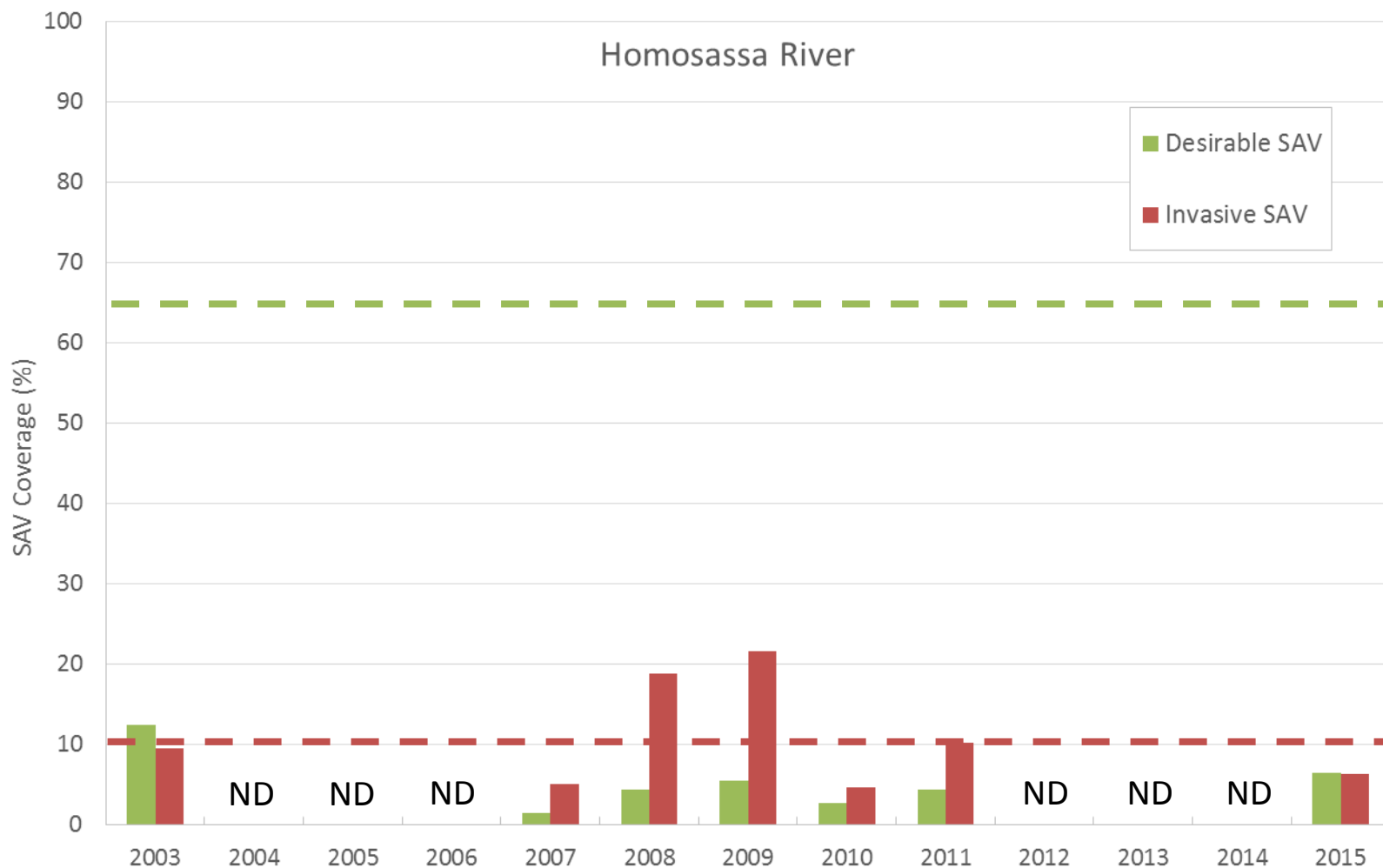
Primary Issue: Salinity Changes



Primary Issue: Potential Decrease in Historical Flows



Primary Issue: Altered Aquatic Vegetation



Submerged Aquatic Vegetation Coverage

Homosassa Quantifiable Objectives

Water Quality	Target
Water clarity – river average	>20 feet
Water clarity – near the headspring	>40 feet
Nitrate concentration in the springs	<0.23 mg/L
Water Quantity	
Minimum flow for the river system	>97% of natural flows
Natural Systems	
Coverage of desirable benthic habitat (SAV, oysters, etc.) in the river	>65%
Coverage of invasive aquatic vegetation (including filamentous algae) in the river	<10%
No net loss of shoreline in natural condition along the river	No net loss

Homosassa River SWIM Plan

MANAGEMENT ACTIONS

Monitoring and Research

Agricultural Operations (Cattle Farms, Horse Farms, Row Crops)

Septic Tanks

Urban/Residential Fertilizer (includes Golf Courses)

Wastewater Treatment Facilities

Stormwater

Septic/Sewage Solids Disposal

Atmospheric Deposition

“The SCSC recognizes that **Septic Tanks, Urban/Residential Fertilizer, and Agricultural Operations** are the priority Water Quality management action categories for Homosassa River.”

Homosassa River SWIM Plan

MANAGEMENT ACTIONS

Monitoring and Research

Conservation

Alternative Water Supply

Regional Water Supply Planning

Regulatory*

Minimum Flows and Levels

“The SCSC recognizes that **Conservation** and **Minimum Flows and Levels** (re-evaluation) are the priority Water Quantity management action categories for Homosassa River.”

Regulatory

Evaluate springs-specific Water Use Permitting criteria ~~(Weeki-Wachee only)~~

Evaluate the need for Water Use Caution Areas ~~(Weeki-Wachee only)~~

Evaluate potential local ordinances

Consider water use when developing comprehensive plans

Homosassa River SWIM Plan

MANAGEMENT ACTIONS
Monitoring and Research
Habitat Conservation
Habitat Restoration
Invasive Species Management
Recreation Management

“The SCSC recognizes that **Monitoring & Research** and **Habitat Restoration** are the priority Natural Systems management action categories for Homosassa River.”

Projects and Initiatives

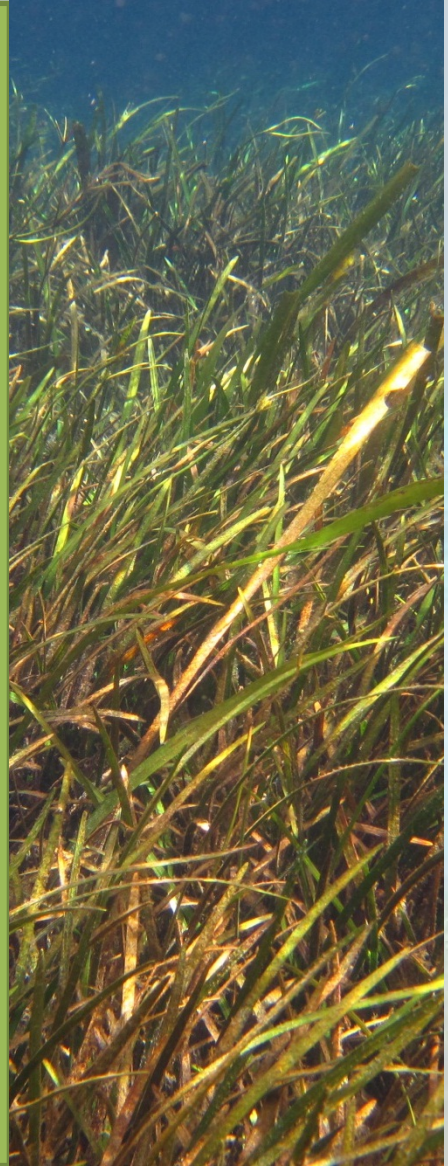
WATER QUALITY



WATER QUANTITY



NATURAL SYSTEMS



DRAFT Proposed Priority Projects

Septic Tanks

- Community Outreach and Education Campaign for Wastewater Solutions
- Update GIS Map of Drinking Water Source and Wastewater Disposal for Areas of Concern

Urban/Residential Fertilizer

- Develop a Springs Coast Model Fertilizer Ordinance

Wastewater Treatment Facilities

- Mason Creek Private Package Plant Interconnection
- Floral City Collection System

Stormwater

- Kingston Drive/US19 Stormwater Treatment

Ongoing	14
Proposed	6

DRAFT Proposed Priority Projects

Conservation

- Domestic Self-Supply Indoor Water Conservation Pilot Project
- Springshed Water Conservation Incentive Program and Projects
- WaterSense® Labeled Irrigation Controller Contractor Installation
- Adopt Landscape Irrigation Design and Maintenance Standards Similar to Florida Water Star Certification
- WaterSense® Labeled Toilet Installation by Contractor

Alternative Water Supply

- Sugar Mill Woods Reclaimed Water Distribution System
- Potential Reclaimed Water User Study

Ongoing	26
Proposed	7

DRAFT Proposed Priority Projects

Monitoring and Research

- Aquatic Vegetation Mapping Evaluation

Habitat Conservation

- Springs and Related Waterway Law Enforcement
- Establish the Nature Coast Aquatic Preserve
- Homosassa River and Springs Land Acquisition – Dylan Kramer Property
- Homosassa River and Springs Land Acquisition – Joseph Moody Property
- Homosassa River and Springs Land Acquisition – Parkway Towne Properties LLC Property
- Homosassa River and Springs Land Acquisition – Yates Bleachery Property

Habitat Restoration

- Oyster and SAV Enhancement

Ongoing	8
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Proposed	8
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Homosassa NEXT STEPS

Date	Task	
October 12,2016	SCMC Priority Project Selection	✓
December 14, 2016	Present 2 nd Draft Report to SCMC	✓
January 11, 2017	Present Draft Report to SCSC	✓
February 8, 2017	SCMC Plan Approval	
April 12, 2017	SCSC Plan Approval	