

Chassahowitzka River SWIM Plan

Steering Committee Draft

April 5, 2017

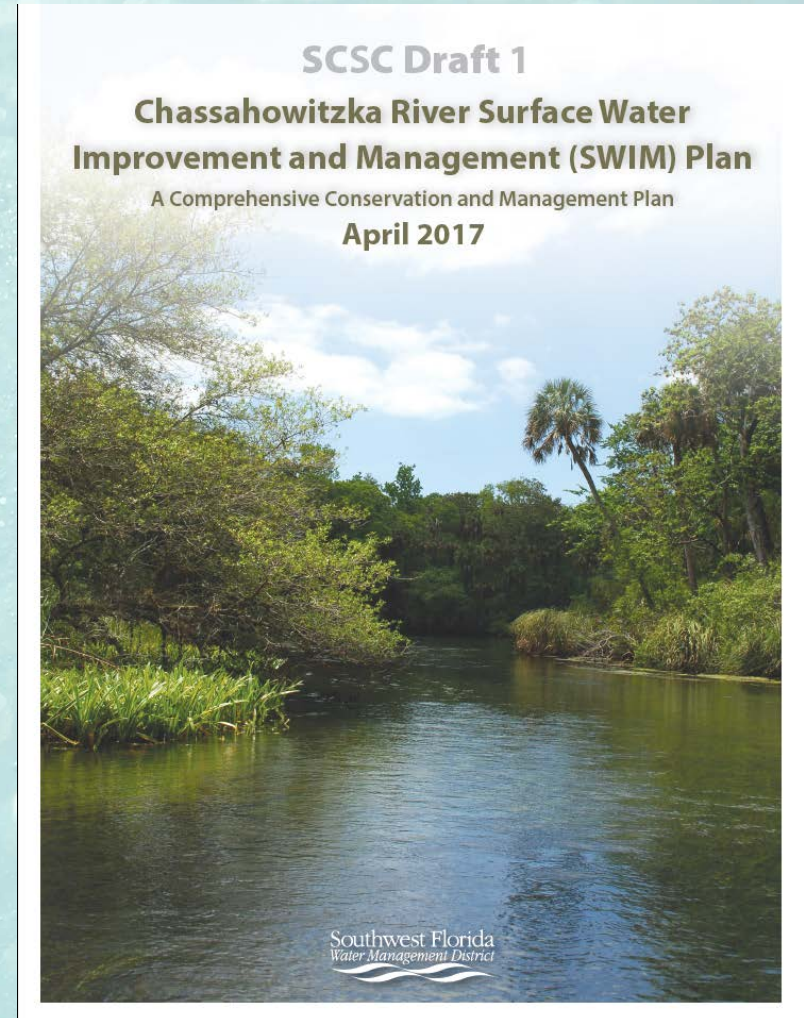
My Home.
My Springs.

Southwest Florida
Water Management District
#MySprings



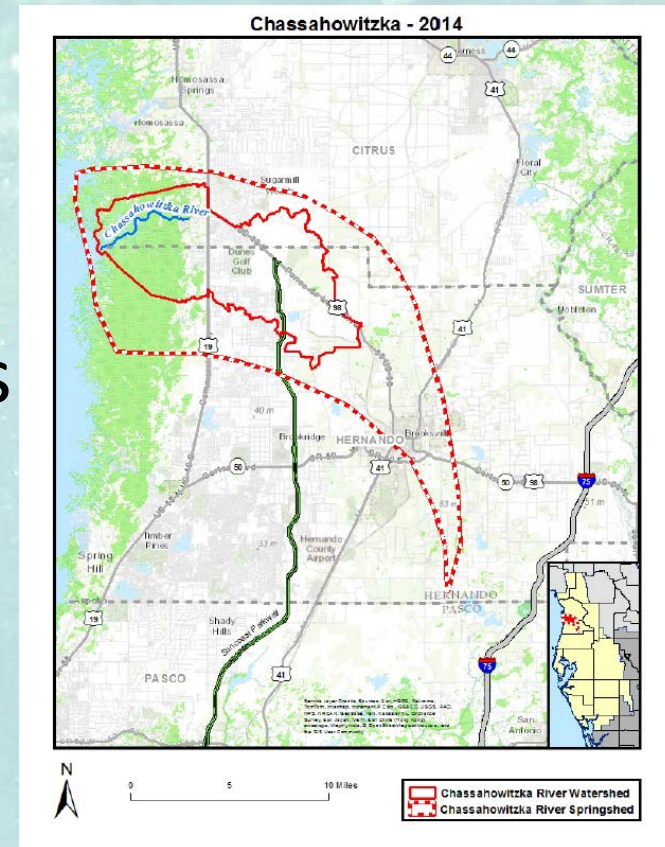
Chassahowitzka River SWIM Plan

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



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



Focus Areas

WATER QUALITY



WATER QUANTITY



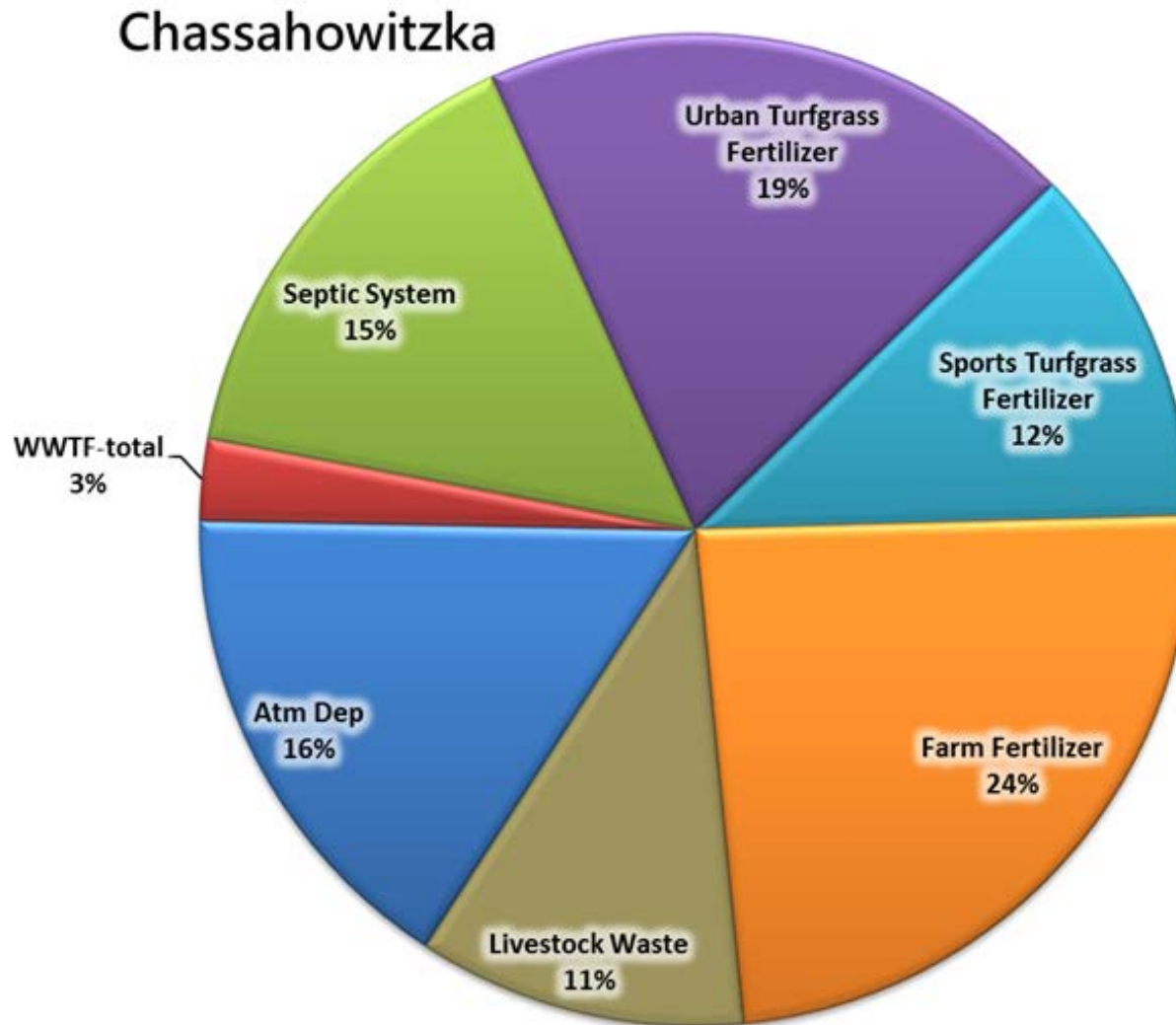
NATURAL SYSTEMS



Primary Issues

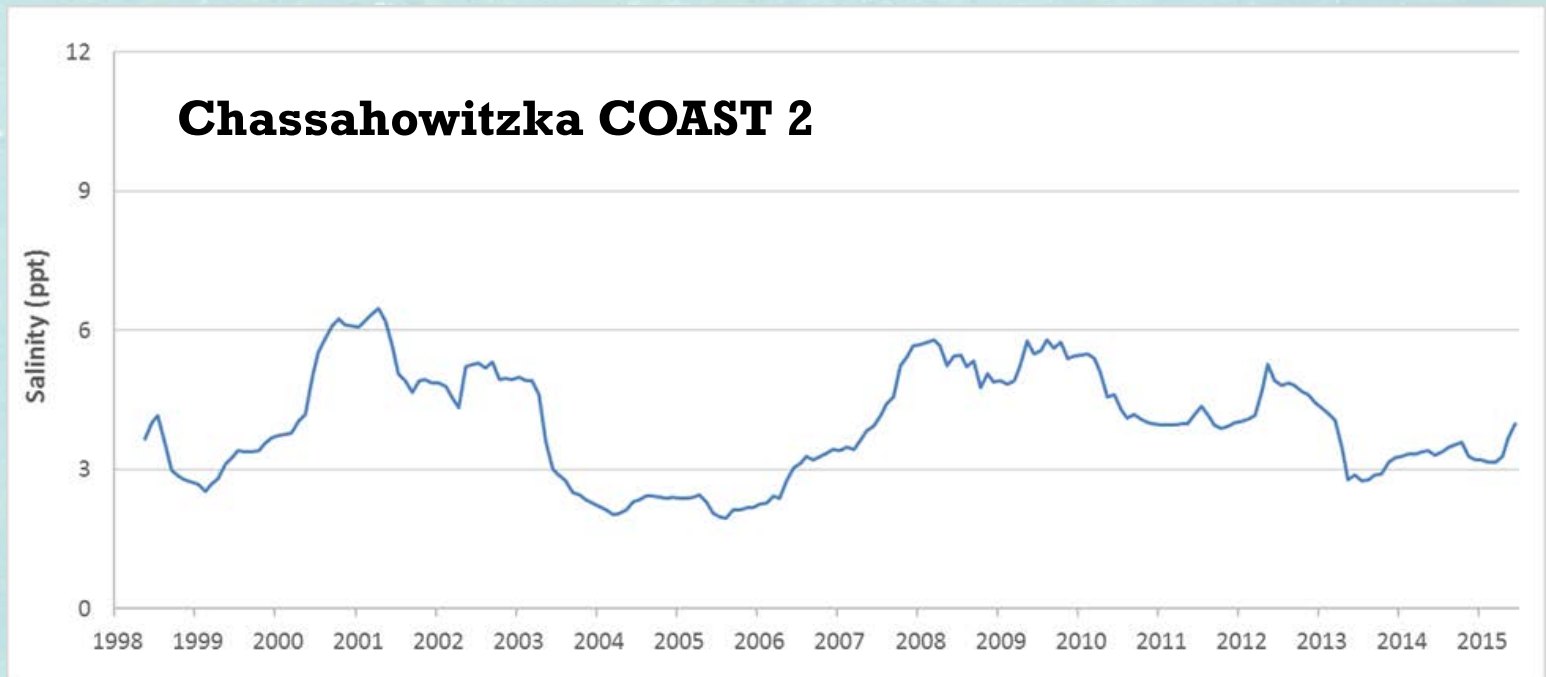
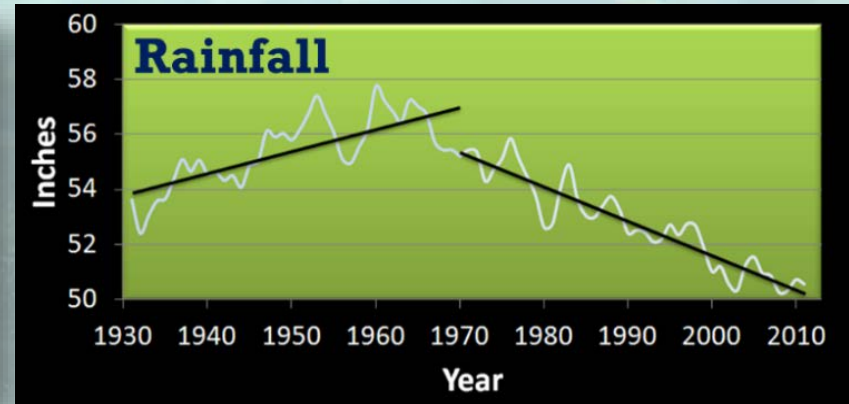
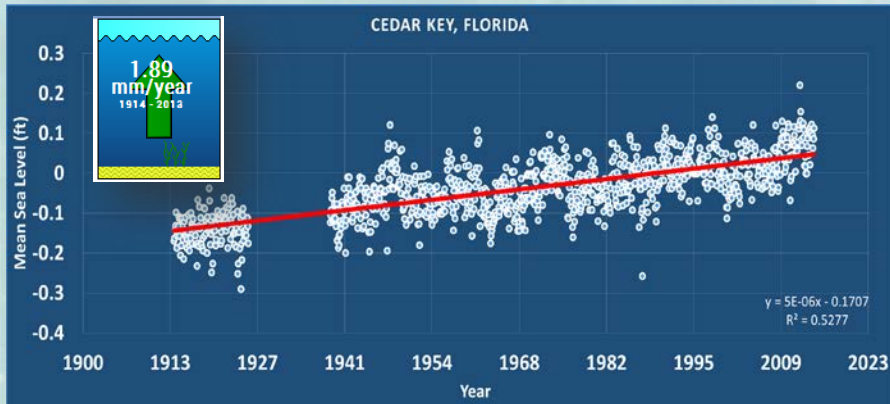
	Rainbow	Crystal River / Kings Bay	Homosassa	Chassahowitzka	Weeki Wachee
Water Quality	Nitrate Enrichment Reduced Water Clarity	Nitrate Enrichment Reduced Water Clarity	Nitrate Enrichment Changing Salinity	Nitrate Enrichment Changing Salinity	Nitrate Enrichment
Water Quantity	Potential Decrease in Historical Flows	Sea-Level Rise	Potential Decrease in Historical Flows	Potential Decrease in Historical Flows	Potential Decrease in Historical Flows
Natural Systems	Altered Aquatic Vegetation	Altered Aquatic Vegetation	Altered Aquatic Vegetation	Altered Aquatic Vegetation	Altered Aquatic Vegetation Sedimentation

Primary Issue: Nitrate Enrichment

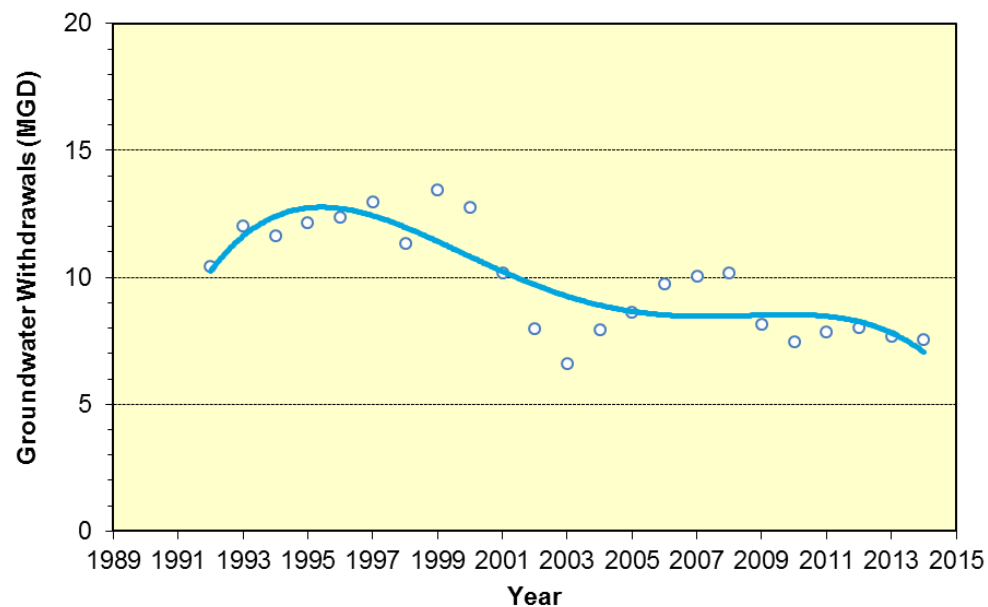
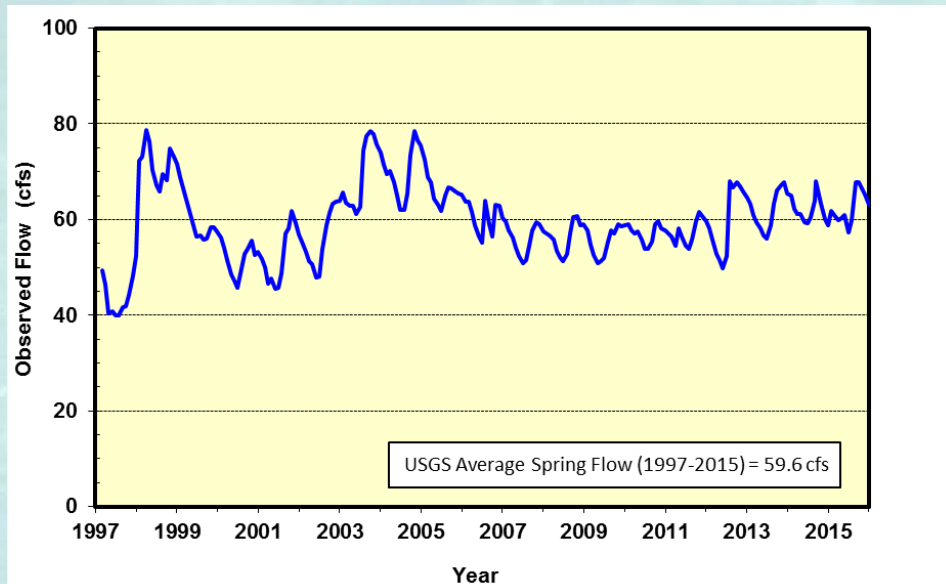


Nitrogen Sources to Groundwater (FDEP draft)

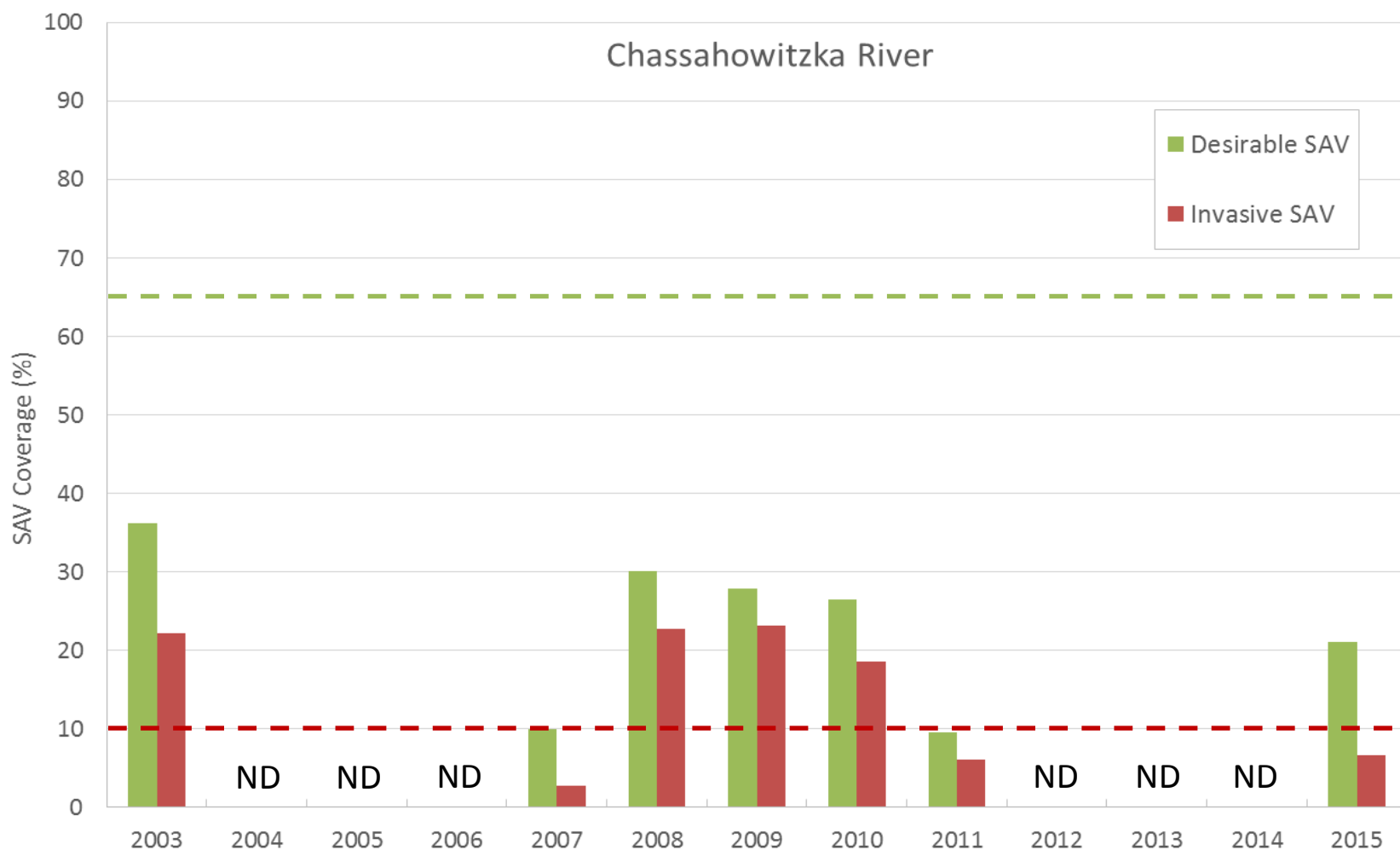
Primary Issue: Salinity Changes



Primary Issue: Potential Decrease in Historical Flows



Primary Issue: Altered Aquatic Vegetation



Submerged Aquatic Vegetation Coverage

Chassahowitzka 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
Total nitrogen concentration in the river	<0.25 mg/L
Water Quantity	
Minimum flow for the river system	>97% of natural flows
Natural Systems	
Coverage of desirable submerged aquatic vegetation in the river	>65%
Coverage of invasive aquatic vegetation (including filamentous algae) in the river	<10%

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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 Chassahowitzka River.”

Chassahowitzka 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 Chassahowitzka River.”

Chassahowitzka 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 Conservation** are the priority Natural Systems management action categories for Chassahowitzka River.”

Projects and Initiatives

WATER QUALITY



WATER QUANTITY



NATURAL SYSTEMS



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
- Expand Education and Outreach/Fertilizer Best Management Practices

Stormwater

- Neighborhood Swale Treatment

Ongoing	10
Proposed	5

Proposed Priority Projects

Conservation

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

Alternative Water Supply

- Potential Reclaimed Water User Study

Ongoing	26
Proposed	6

Proposed Priority Projects

Monitoring and Research

- Aquatic Vegetation Mapping Evaluation

Habitat Conservation

- Annutteliga Hammock Acquisition
- Chassahowitzka River and Coastal Swamps Property Acquisition, Martha Blanche Yandle, Trustee
- Chassahowitzka River and Coastal Swamps Property Acquisition, Roberts David Trustee
- Chassahowitzka River and Coastal Swamps Property Acquisition, Stephens Donald E Trustee et al.
- Establish the Nature Coast Aquatic Preserve
- Springs and Related Waterway Law Enforcement

Ongoing	5
Proposed	7

Chassahowitzka NEXT STEPS

Date	Task
February 8, 2017	SCMC Priority Project Selection ✓
April 5, 2017	Present Draft Report to SCSC
April 12, 2017	Present 2 nd Draft Report to SCMC
June 14, 2017	SCMC Plan Approval
July 12, 2017	SCSC Plan Approval