

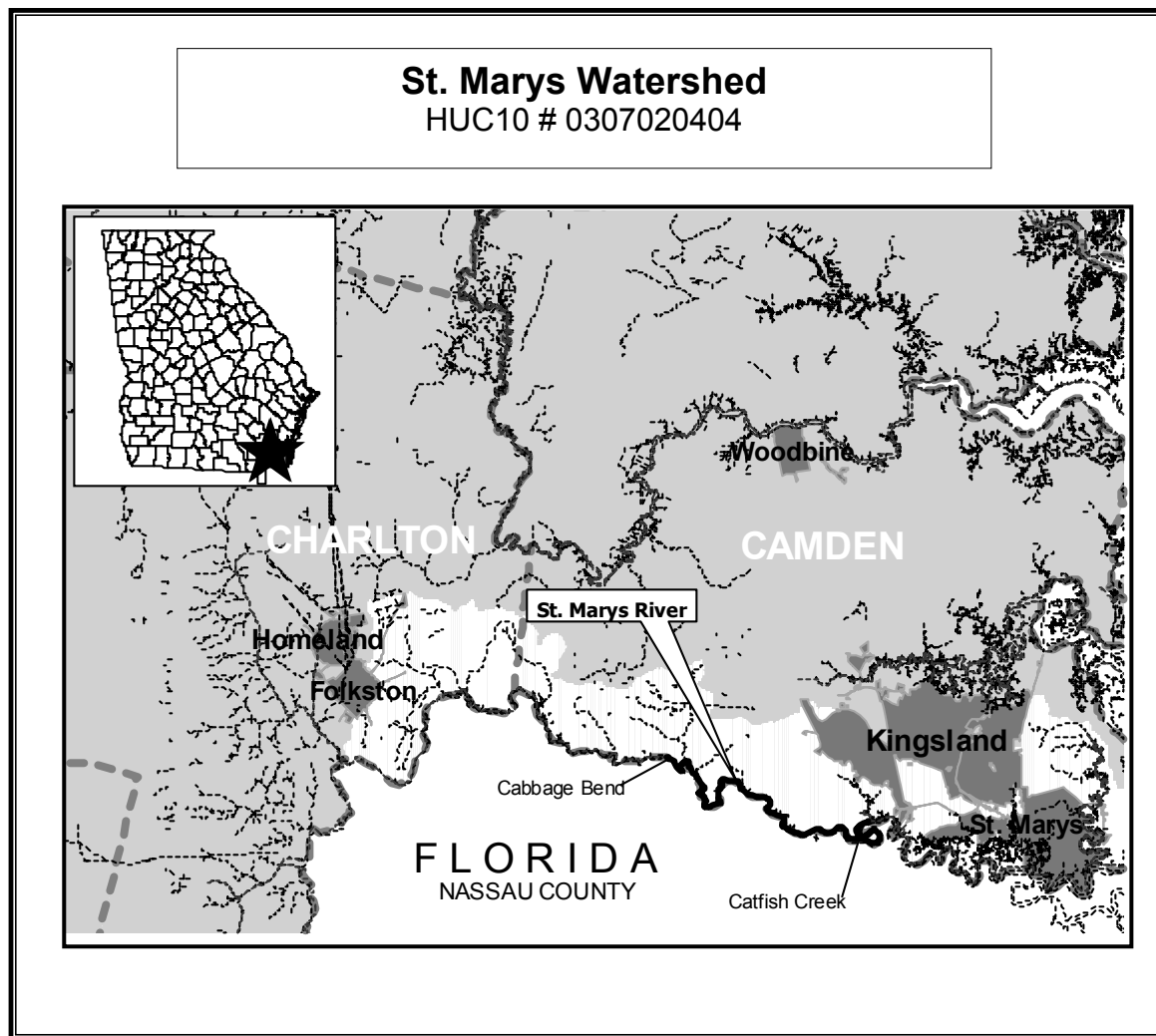
**STATE OF GEORGIA**  
**TMDL IMPLEMENTATION PLAN**  
**WATERSHED APPROACH**  
**St. Marys River Basin**

Local Watershed Governments

Coastal Georgia RDC  
 Cities: Kingsland  
 Counties: Camden

The Code of Federal Regulations 40 CFR 130.33(b)(10) requires States to include an implementation plan as part of a TMDL development and submittal. **With input from appropriate stakeholder groups, a TMDL Implementation Plan has been developed for a cluster of impaired streams and the corresponding pollutants.** The impaired streams are located in the same sub-basin identified by a HUC10 code (Figure 1).

This Implementation Plan addresses an action plan, education/outreach activities, stakeholders, pollutant sources, and potential funding sources affecting the sub-basin. In addition, the Plan describes (a) regulatory and voluntary practices/control actions (*management measures*) to reduce target pollutants, (b) milestone schedules to show the development of the management measures (*measurable milestones*), (c) a monitoring plan to determine the efficiency of the management measures and measurable milestones, and (d) criteria to determine whether substantial progress is being made towards reducing pollutants in impaired waterbodies. The overall goal of the Plan is to define a set of actions that will help achieve water quality standards in the state of Georgia. Following this section is information regarding individual segments.



**FIGURE 1**

Impaired Waterbody*	Impaired Stream Location	Impairment
1. St. Marys River	Upstream Cabbage Bend to Catfish Creek	Dissolved Oxygen (DO)
2.		
3.		

\*These Waterbody Numbers are referenced throughout the Implementation Plan.

# Action Plan for St. Marys Watershed

St. Marys River  
HUC 10# 0307020404

POLLUTANT:	SOURCE:	EFFECT:	WHAT CAN I DO?	
			At Home: Community, School	At Work: Business, Government
<input checked="" type="checkbox"/> Dissolved Oxygen (DO)	<input type="checkbox"/> Industrial	<input type="checkbox"/> Habitat	Check / Maintain Septic Systems Vegetated Buffers Mulching Vehicle Maintenance Sweeping instead of Washing Driveways Proper Trash Disposal Wash Cars at Carwash Report Polluters Lawn Maintenance w/o Fertilizers On Site Soil Retention	Education (Marina/Boatyard BMP Workshops, Coastal Ark, AAS Demos) Storm Drain Stenciling Volunteers Stream Buffers Report Polluters and Illicit Discharges Waste Management Reduction of Impervious Surfaces
<input type="checkbox"/> Fecal Coliform (FC)	<input type="checkbox"/> Urban	<input type="checkbox"/> Recreation		
<input type="checkbox"/> Sediment	<input type="checkbox"/> Agriculture	<input type="checkbox"/> Drinking Water		
<input type="checkbox"/> Metals	<input type="checkbox"/> Forestry	<input type="checkbox"/> Aesthetics		
<input type="checkbox"/> Fish Consumption Guidelines (FCG)	<input type="checkbox"/> Residential	<input type="checkbox"/> Other (Please List)		
<input type="checkbox"/> Other (Please List)	<input checked="" type="checkbox"/> Other (Please List)			
	Natural Conditions Blackwater			

## STAKEHOLDERS

EPD encourages public involvement and the active participation of stakeholders in the process of improving water quality. Stakeholders can provide valuable information and data regarding their community and the impaired water bodies and can provide insight and/or implement management measures.

List of local governments, agricultural organizations or significant landholders, commercial forestry organizations, businesses and industries, and local organizations including environmental groups and individuals with a major interest in this watershed.

Name/Organization	Address	City	State	Zip	Phone	E-Mail
St. Marys River Management Committee	P.O. Box 251	St. Marys	GA	31558	912-729-4464 or 912-729-4464	riverhse@eagnet.com

## The St. Marys River Management Committee

The St. Marys River Management Committee (SMRMC) is an intergovernmental entity of elected and appointed members from four counties along the St. Marys River including Charlton, Camden, Nassau and Baker counties. The committee meets monthly to discuss, develop and implement plans and programs in regards to the St. Marys River.

The committee publishes a semi-annual newsletter entitled POSM which stands for Patrons of the St. Marys River. The SMRMC has developed a St. Marys River Management Plan.

### Committee Members

#### NASSAU COUNTY

Dean Woehrle  
Dan Roach  
David Howard, Comm  
Vivian Ritsma  
Winifred Stephenson

#### CAMDEN COUNTY

Bob Merck  
Mike Parris  
**Jim Wildes (CO-CHAIRMAN)**  
Ron DuBose  
**Ken Hase, Comm. (CHAIRMAN)**

#### NON-VOTING

Kraig McLane, SJRWMD  
Don Harrison, GA DNR

#### BAKER COUNTY

Barbara Yarbrough  
Mark Hartley, Comm.  
Mac McCollum  
Terry Bradley

#### CHARLTON COUNTY

Tommy Tillman  
George Varn, Jr.  
Joe Hopkins  
Bill Staeger, Comm.

Meetings are held on the first Monday of every month **(except if it falls on a holiday - then the following Monday).**

6pm Subcommittees Mtg - Cedar River Seafood in Callahan, 7pm Meeting - Nassau County Building, Callahan

## St. Marys River Planning Effort Guiding Principles

**The Vision:** *To protect the scenic beauty and ecological health of the St. Marys River watershed for the benefit of present and future generations. This can be accomplished through coordinated local action that involves the full spectrum of the basin's citizens and through increased public education efforts that foster greater awareness, appreciation and stewardship of the basin's resources.*

### The Guiding Principles:

Plan for the St. Marys River Management Committee and local government leaders to manage the river over the next ten to fifteen years.

Strongly emphasize maintaining the serenity, solitude, and pristine beauty of the river.

Plan for the watershed in both Georgia and Florida, with primary focus on the river corridor and secondary focus on the river basin.

Involve and inform local government leaders, the St. Marys River Management Committee, and the public.

Use cost-effective, creative, scientifically sound strategies to meet goals.

Use incentives and voluntary cooperation to accomplish conservation goals.

Emphasize public education and awareness.

Develop consistent river protection standards across boundaries and emphasize inter-governmental coordination.

### WATER BODIES/STREAMS COVERED IN THIS PLAN:

These impaired streams are located in the same sub-basin identified by a HUC10 code. Most of the information contained in this section comes from the 303(d) list and has been completed by employees of the EPD Water Protection Branch. Data that placed stream on 303(d) list will be provided upon request.

Waterbody Name #1	Location	Miles/Area Impacted	Use Classification	Partially Supporting/ Not Supporting (PS/NS)
<b>St. Marys River</b>	Upstream Cabbage Bend to Catfish Creek	5	Fishing	NS
Primary County	Secondary County	Second RDC	Source (Point/ Nonpoint)	
Camden			NP	

Pollutants	Water Quality Standards	Required Reduction (%)	TMDL ID	Date TMDL Established
Oxygen-demanding materials contributing to low Dissolved Oxygen (DO)	DO: 5 mg/L (chronic); 4 mg/l (minimum) Natural Target DO for this type of stream: 3.53 mg/l	TOC(lb/yr)=6 TN(lb/yr)=6 TP(lb/yr)=6		December 2001

TOC=Total Organic Carbon TN=Total Nitrogen TP=Total Phosphorus

### POLLUTANT SOURCES

It is important to recognize the potential source(s) causing water quality impairment. Each source must be controlled to comply with target TMDL/Load Allocations for each pollutant. Included is a description of how the sources contribute to the impairment and the waterbody that is impaired.

List of major nonpoint source categories and sub-categories or individual sources (Urban Runoff, Agriculture, Forestry, Municipal Sewage Treatment Plant )

Pollutant	Sources of Pollutants	Description of Contribution To Impairment	Impacted Waterbodies*
Oxygen Demanding Substances	Okefenokee Swamp, Corridor Leaf Litterfall, Blackwater Swamps, Tidal Interface	Undetermined- Most Likely Naturally Occurring	St. Marys River

**MANAGEMENT MEASURES, MEASURABLE MILESTONES AND SCHEDULE**

**(i.e. Local codes and ordinances, Erosion and Sedimentation Control, Storm Water Management, Local water resource monitoring)**

The following table lists management measures that have been or will be implemented to achieve water quality standards and the load reductions established in the TMDL. The management measures, including regulatory or voluntary actions or other controls by governments or individuals, specifically apply to the pollutant and the waterbody for which the TMDL was written. A description is provided of how these management measures are/will be accomplished through reliable and effective delivery mechanisms, and how these management measures are/will help achieve the target TMDL. Included is the source of the pollutant, anticipated/past effectiveness of the management measure (very effective, somewhat effective, not effective), the current status (i.e. enforced, in-progress, planning), and measurable milestones and schedule. Milestones are used to measure progress in attaining water quality standards and to determine whether management measures are being implemented.

**The St. Marys River Management Plan (Draft 2000) is incorporated by reference and hereby made an integral part of this plan. Please see pages 61 – 67 “Strategy Action Chart”.**

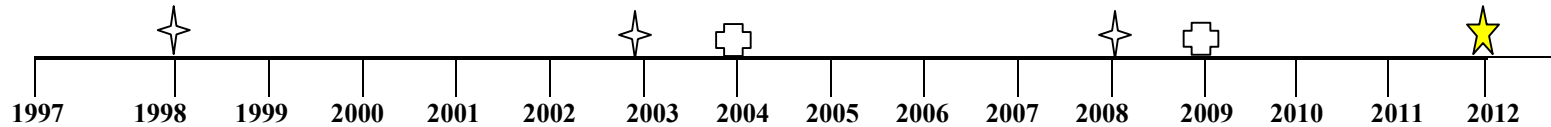
**POTENTIAL FUNDING SOURCES** The identification and discussion of dedicated funding is important in determining the economic feasibility of the above-mentioned management measures.

Funding Source	Responsible Authority	Status	Anticipated Funding Amount	Impacted Waterbodies*
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**Being addressed by the SMRMC.**

### PROJECTED ATTAINMENT DATE

The projected date to attain and maintain water quality standards in this watershed is 10 years from acceptance of the TMDL Implementation Plan by EPD.



- EPD Monitoring
- Evaluate TMDL & Attainment Date
- Project Attainment

### MONITORING PLAN

The purpose of this monitoring plan is to determine the effectiveness of the target TMDL and the management measures being implemented to meet water quality standards. List of previous, current or planned/proposed sampling activities or other surveys. (Monitoring data that placed stream on 303(d) list will be provided if requested.)

Name Of Regulation / Ordinance Or Management Measure	Organization	Impacted Waterbodies*	Pollutants	Purpose/Description	Time Frame		Status (Previous, Current, Proposed)
					Start	End	
Trend Monitoring	St Johns River Water Management District	St Marys River and Floridan Tributaries	Multiple	Ongoing water monitoring (Trend) program	Ongoing		Current
Trend Monitoring	Georgia Department of Natural Resources, Environmental Protection Division	St Marys River and Georgia Tributaries	Multiple	Trend Monitoring program, River basin monitoring program	Ongoing		Current
Routine Monitoring	St Marys River Management Committee	St Marys River and Tributaries	Multiple	Ongoing as part of River Management Plan	2000	Ongoing	Current

## CRITERIA TO DETERMINE WHETHER SUBSTANTIAL PROGRESS IS BEING MADE

The following set of criteria will be used to determine whether any substantial progress is being made towards reducing pollutants in impaired waterbodies and attaining water quality standards. Discussion on each criteria is recorded in the space provided. Additional relevant criteria are presented in comments.

Percent of concentration or load change (monitoring program) \_\_\_\_\_

*If monitoring results show that it is unlikely that the TMDL will be adequate to meet water quality standards, revision of the TMDL may be necessary.*

- Categorical change in classification of the stream (delisting the stream is the goal)

Current monitoring results and trend analysis illustrate naturally low dissolved oxygen in this stream. These findings are similar to other blackwater streams of this type in the region.

- Regulatory controls or activities installed (ordinances, laws)

Please refer to Tables G-1 through G-4 of the St Marys River Management Plan (Draft 2000) incorporated herein.

- Best management practices installed (agricultural, forestry, urban)

Please refer to St. Marys River Management Plan (Draft 2000)

## COMMENTS

The author of this TMDL Implementation Plan would like to acknowledge the St Marys River Management Committee, the Georgia Department of Natural Resources and the St Johns River Water Management District (Florida) for their efforts in the development of a **Comprehensive River Management Plan**. A draft copy of that plan is incorporated into this document by reference. The plan is far more extensive and inclusive than are other TMDL implementation plans in this and other regions. The broad participation, dedication and stakeholder representation that were a part of this plan over a two year period could not easily be duplicated by the author agency of this plan given limited resources and time. We believe that this plan adequately addresses the issues relative to the TMDL prepared for this river.

This effort should be viewed as a model of collaborative watershed based planning and the St Marys River Management Committee should be fully commended and credited for their efforts.



St. Marys River  
HUC 10# 0307020404

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**Environmental Protection Division of the Department of Natural Resources,  
State of Georgia.**

**TOGETHER WE CAN MAKE A DIFFERENCE!**

**Department Use Only:**

Implementation Plan	Impaired Waterbodies			
	1	2	3	4
Action Plan				
Education/Outreach Activities				
Stakeholders				
Pollutant Sources Identified				
Description of Management Measures				
Measurable Milestones and Schedule				
Potential Funding Sources				
Monitoring Plan				
Criteria To Determine Whether Substantial Progress Is Being Made				
Supporting Documents				