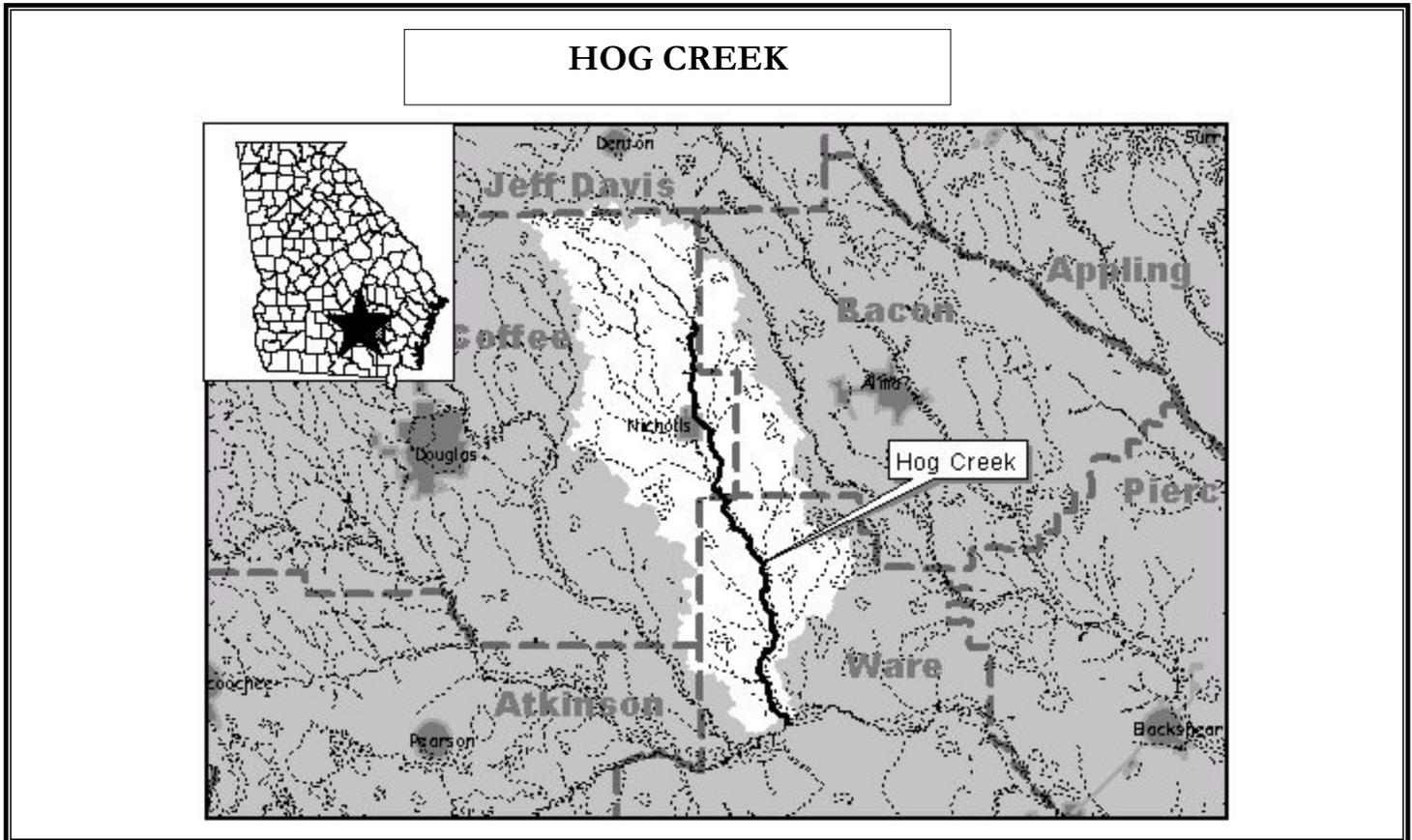


**STATE OF GEORGIA
TMDL IMPLEMENTATION PLAN**

**HOG CREEK
(Fecal Coliform)**

Prepared by
**The Georgia Department of Natural Resources
Environmental Protection Division
Atlanta, GA**

TMDL Implementation Plans are platforms for establishing a course of actions to restore the quality of impaired water bodies in a watershed. They are intended as a continuing process that may be revised as new conditions and information warrant. Procedures will be developed to track and evaluate the implementation of the management practices and activities identified in the plans. Once restored, appropriate management practices and activities will be continued to maintain the water bodies. 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. This plan was originally prepared as an implementation inventory by the Southeast Georgia RDC with a Section 604(b) Grant. TMDL load allocation information has been updated to reflect the approved TMDL.



Impaired Waterbody*	Impaired Stream Location	River Basin	Miles/Area Impacted	Partially Supporting/ Not Supporting
Hog Creek	Downstream CR 185 to Hurricane Cr. Near Nicholls, Coffee County	Satilla	10 Miles	Partially Supporting
Hog Creek	Hurricane Cr. to Satilla River near Bickley, Ware County	Satilla	15 Miles	Partially Supporting

TMDL IMPLEMENTATION PLAN HOG CREEK, COFFEE AND WARE COUNTIES, GEORGIA

Hog Creek in Coffee and Ware Counties, Georgia has a fishing water use classification and is currently listed as an impaired water body. The degree of impairment is classified as a partially supporting use and the TMDL for Hog Creek is set at a target level of 150 cfu/100 ml of water, a level that will allow the water body to achieve water quality standards necessary for the fishing use classification.

A Total Maximum Daily Load (TMDL) is a calculation of the maximum amount of a pollutant, from both point and non-point sources, that a water body can receive and still meet water quality standards. The Clean Water Act, section 303, establishes the water quality standards and the TMDL's. The 303(d) list is an inventory of impaired streams and water bodies. Although some TMDL's are aimed at managing all sources of pollution which affect beneficial uses of water, the focus of this implementation plan relates primarily to nonpoint sources. The purpose of this plan is to provide a framework of goals, objectives, and strategies for reducing or eliminating the pollutants contained in the runoff into Hog Creek.

The Southeast Georgia Regional Development Center's planning staff has guided the process of developing the TMDL Implementation Plan for Hog Creek. The process began with a meeting of a small stakeholder committee comprised of representatives from Coffee County, the City of Nicholls, the Coffee County Planning Commission, the Coffee County Industrial Authority, Ware County, the Waycross/Ware County Planning Commission, and the Waycross/Ware County Development Authority. The individuals who made up the committee were already knowledgeable about TMDL's and the need for an implementation plan. The conclusion was reached that private septic systems and agricultural animals were the most likely sources of fecal coliform in the stream.

The decision was reached that the implementation plan should primarily focus on monitoring, specifically of the areas in proximity to high concentrations of private septic systems and agricultural operations. There is also a need to address the problems associated with stormwater runoff from urban impervious surfaces in the City of Nicholls. Education is another important element of the plan. Coffee County, Ware County, and the City of Nicholls also intend to reexamine and possibly improve existing buffer regulations.

STATE OF GEORGIA

TMDL IMPLEMENTATION PLAN FOR: Hog Creek
(STREAM)

Fecal Coliform
(PARAMETER)

RIVER BASIN: Satilla
PLAN DATE: September 30, 2001

Prepared by: Southeast Georgia Regional Development Center Address: 3395 Harris Road City: Coffee County State: Georgia Zip: 31503 e-mail: bdhsegardc@accessatc.net Date Submitted to EPD: 3/15/2001		Or Prepared By: Address: _____ City: _____ State: _____ Zip: _____ e-mail: _____ Date Submitted to EPD: _____					
General Information Obtain this information from the TMDL document or other information. When completed, this document will be a self-contained report independent of the TMDL document.		Significant Stakeholders Identify local governments, agricultural organizations or significant land holders, commercial forestry organizations, businesses and industries, and local organizations including environmental groups with a major interest in this water body.					
TMDL ID (to be entered by EPD)	SAT0000007	Name/Organization	Coffee County				
Water body name	Hog Creek	Address	101 South Peterson Avenue				
HUC basin name	Satilla River	City	Douglas	State	GA	Zip 31533	
HUC number	030702020403	Phone	(912) 384-4799		e-mail		
Primary county	Coffee	Name/Organization	City of Nicholls				
Secondary county	Ware	Address	P.O. Box 218				
Primary RDC	Southeast Georgia	City	Nicholls	State	GA	Zip 31554	
Secondary RDC	None	Phone	(912) 359-2060		e-mail		
Water body location	Tributary to Satilla River in	Name/Organization	Coffee County Industrial Authority				
	Coffee and Ware Counties	Address	P.O. Box 2470				
Miles or area impacted	25 miles	City	Douglas	State	GA	Zip 31534	
Parameter addressed in plan	Fecal coliform	Phone	(912) 384-1873		e-mail		
Water use classification	Fishing	Name/Organization	Coffee County Planning Commission				
Degree of impairment	Partially supporting use X	Address	P.O. Box 470				
	Not supporting use	City	Douglas	State	GA	Zip 31534	
Date TMDL approved by EPA	June 2000	Phone	(912) 384-3302		e-mail		
Impairment due to	Point sources	Name/Organization	Ware County				
	Nonpoint sources X	Address	P.O. Box 1069				
	Both	City	Waycross	State	GA	Zip 31502	
Point source-Form A; Nonpoint source-Form B; Both-Form A+B+C		Phone	(912) 287-4300		e-mail		

If more, add to comments on last page.

FORM B

SUMMARY OF ALLOCATION MODEL RESULTS FROM TMDL DOCUMENT (existing load, target TMDL, and needed reduction)

WATERSHED ID	EXISTING LOAD	ALLOCATED LOAD	PERCENT REDUCTION
Hurricane Creek	5.35 X 10 ¹²	8.63 X 10 ¹¹	85%
Hog Creek @ Nicholls	2.42 X 10 ¹²	3.62 X 10 ¹¹	85%
Hog Creek @ Bickley	1.13 X 10 ¹³	1.64 X 10 ¹²	85%

I. IDENTIFY **NONPOINT SOURCE** CATEGORIES AND SUBCATEGORIES OR INDIVIDUAL SOURCES WHICH MUST BE CONTROLLED TO IMPLEMENT LOAD ALLOCATIONS:

List major nonpoint sources contributing to impairment including those identified in TMDL document.

SOURCE	DESCRIPTION OF CONTRIBUTION TO IMPAIRMENT	RECOMMENDED LOAD REDUCTION (FROM TMDL)
Animal Agriculture	Some parcels contain large numbers of chickens, cows, pigs, etc.	50%
Septic Tanks	Older septic tanks often malfunction; when tanks are pumped out, sewage could be spilled or illegally dumped.	90%
Residential Development (Pets)	Many residents have one or more non-agricultural animals on their property that could contribute to the fecal coliform levels in the stream.	90%
Urban Impervious/Pervious Surfaces	Developed urban surfaces increase the volume of runoff to the stream.	90%

II. DESCRIBE ANY REGULATORY OR VOLUNTARY ACTIONS INCLUDING MANAGEMENT MEASURES OR OTHER CONTROLS BY GOVERNMENTS OR INDIVIDUALS THAT SPECIFICALLY APPLY TO THE POLLUTANT AND THE WATERBODY FOR WHICH THE TMDL WAS WRITTEN, THAT WILL BE ACCOMPLISHED THROUGH RELIABLE AND EFFECTIVE DELIVERY MECHANISMS, AND THAT WILL HELP ACHIEVE THE LOAD ALLOCATIONS IN THE TMDL:

See the attachment for more instructions.

Existing or required regulatory actions

RESPONSIBLE GOVERNMENT, ORGANIZATION OR ENTITY	NAME OF REGULATION/ORDINANCE	DESCRIPTION	ENACTED OR PROJECTED DATE (mm/yy)	STATUS
Coffee County	Soil Erosion & Sedimentation Plan	State model ordinance adopted by Coffee County Commission – BMP's.	6/98	Active
Coffee County	Septic Tank Ordinance	Requires permit for new septic tanks.	3/74	Active
Coffee County	Subdivision Ordinance	Requires report of drainage plans for new subdivisions.	3/74	Active
Ware County	Storm Drainage Evaluation	Monitors integrity of storm drainage system.	5/94	Active
Ware County	Soil Erosion & Sedimentation Plan	State model ordinance adopted by Ware County Commission – BMP's.	2/93	Active
Ware County	Stream Buffers/Agricultural Buffers	Provides a 25-foot minimum protective buffer along streams.	5/00	Active
Ware County	Septic Tank Ordinance	Requires permit for new septic tanks.	1/96	Active

Existing voluntary actions

RESPONSIBLE ORGANIZATION OR ENTITY	NAME OF ACTION	DESCRIPTION	ENACTED OR PROJECTED DATE (mm/yy)	STATUS
City of Nicholls	Land Use Plan	Estimated 20-year future land uses.	10/91	To be updated 7/1/07
Coffee County	Land Use Plan	Estimated 20-year future land uses.	10/91	To be updated 7/1/07
Ware County	Land Use Plan	Estimated 20-year future land uses.	8/93	To be updated 7/1/08

Additional recommended regulatory or other measures which should be implemented to reduce the loads of the TMDL parameter

ENTITY/ORGANIZATION RESPONSIBLE	NAME OF PROPOSED REGULATION/ORDINANCE/ OTHER	DESCRIPTION	ENACTED OR PROJECTED DATE (mm/yy)	STATUS
Coffee and Ware Counties	Septic Tank Survey	Survey to determine the location, number, and operational status of area septic tanks.	TBA	TBA
Coffee and Ware Counties	Stormwater Treatment	Retention ponds could be used to separate pollutants from stormwater runoff before entering the stream.	TBA	TBA
Coffee and Ware Co. School Systems	River Kids Program	A state-approved environmental curriculum for use in schools for education and public service.	TBA	TBA
City of Nicholls	Septic Tank Survey	Survey to determine the location, number, and operational status of area septic tanks.	TBA	TBA

III. SCHEDULE FOR IMPLEMENTING MANAGEMENT MEASURES OR OTHER CONTROL ACTIONS:

These must be implemented as expeditiously as practicable within five years of when the implementation plan is accepted by EPA.

IMPLEMENTATION ACTION	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Form stakeholders group	X				
Organize implementation work with stakeholders and local officials to identify remedial measures and potential funding sources	X				
Identify sources of TMDL parameter		X			
Develop management programs to control runoff including identification and implementation of BMPs (Phase I):					
Agriculture	X	X	X	X	X
Forestry					
Urban	X	X	X	X	X
Mining					
Organize and implement education and outreach programs	X	X			
Detect and eliminate illicit discharges	X	X	X	X	X
Evaluate additional management controls needed	X	X	X	X	X
Monitor and evaluate results	X	X	X	X	X
Reassess TMDL allocations					X
Provide periodic status reports on implementation of remedial activities	X	X	X	X	X
If needed, begin process for Phase II (next 5 years) and subsequent phases				X	X

Describe any planned or proposed sampling activities or other surveys. (Scheduled EPD sampling can be found in the Basin Planning document.)

ORGANIZATION	TIME FRAME	PARAMETERS	PURPOSE	STATUS
EPD	2003	Multiple	Basin Planning	Ongoing
Southeast Health Unit	2001 until fecal coliform levels meet threshold	Fecal Coliform	To determine success of plan implementation.	Under development

VII. CRITERIA TO DETERMINE WHETHER SUBSTANTIAL PROGRESS IS BEING MADE:

- % concentration or load change (monitoring program)
- Categorical change in classification of the stream (delisting the stream is the goal)
- Regulatory controls or activities installed (ordinances, laws)
- Best management practices installed (agricultural, forestry, urban)

COMMENTS: Additional Stakeholders
Waycross/Ware County Development Authority
P.O. Box 137
Waycross, GA 31502
(912) 283-3742

Waycross/Ware County Planning Commission
902 Grove Avenue
Waycross, GA 31501
(912) 287-4379