

SOUTHSIDE BRANCH
TMDL Implementation Plan
City of Tifton
Tift County, Georgia

Background

Southside Branch originates on the southeast quadrant of the City of Tifton and meanders into Tift County. The 1.75-mile segment impacts 568 acres of urban and agricultural land uses. It is currently listed as an impaired stream segment by the Georgia Environmental Protection Division. Southside Branch has a water use classification of “fishing” and, according to the Georgia 303(d) data which placed it on the Georgia 1996 303(d) list, Southside Branch is “partially supporting” this designated classification.

Existing Land Use

Within the City of Tifton Southside Branch flows through residential neighborhoods, which are served by public water and sanitary sewer systems. There are 144 acres of impervious surfaces and 144 acres of pervious surfaces. The land uses within the unincorporated Tift County are farm and forest uses. There are 280 acres of pervious (40 acres forest and 240 acres agriculture) surfaces.

Monitoring Data

This TMDL is based on the limited fecal coliform data that was readily available and used to put the stream segment on the 303(d) list. No watershed or stream specific modeling data were collected. This TMDL should be considered a level 1 TMDL that is useful in making screening level decisions, used as one factor to priority rank the watersheds for additional monitoring or for planning the implementation of pollution controls, and/or determine additional intensive monitoring needs to better define the cause and effect relationships.

Existing Regulatory or Voluntary Actions

Currently, the City of Tifton and Tift County have several ordinances in place designed to regulate and limit stream pollutants. They are:

- The County Sanitary Code-Regulates the installation of on-site septic systems;
- City construction regulations for installation of sanitary sewer lines;
- City and County Zoning Ordinances;
- City and County Part V Environmental Regulations, namely Protected River Corridors; Groundwater Recharge Areas and Wetlands Protection District;
- Erosion Control and Sedimentation Act-Construction code to reduce pollutants to navigable waters.

Recommended Regulatory or Voluntary Actions

It is recommended that the City of Tifton and Tift County conduct periodic monitoring for fecal coliform of the impaired stream segments. This will be done on a monthly basis to determine when, if any, impairment is at its peak levels. The City/County could also conduct thirty day monitoring periods at least once a year. This would be instrumental to determine if the action plans should be more pro-active or re-active.

It should be noted that the Upper Suwannee River Watershed Initiative (USRW) is a citizen-led coalition partnered with public and private agencies to bring together residents of the USRW to identify and solve water quality basin problems that affect their water, soils, and forests. The main goal of this basin-planning group is to address potential problems early and help avoid costly and continuous battles over limited financial resources.

Schedule For Implementing Management Measures

The schedule for implementing such a monumental plan as this should be as follows:

Year One

- Stakeholders Group is formed identifying major constituents that would be impacted by the impaired stream segment.
- Organize implementation work with stakeholders and local officials to identify remedial measures and potential funding sources. *(this would continue for the entire five year period)*
- Identify sources of TMDL parameters
- Develop management programs to control runoff including identification and implementation of BMPs. *(this would continue into year two)*
- Organize and implement education and outreach programs. *(this would continue into year three)*

Year Two

- Monitor and evaluate results.

Year Three

- Evaluate additional management controls needed. *(this would continue into year five)*
- Provide periodic status reports on implementation of remedial activities.

Year Four

- Reassess TMDL allocations. *(this would continue into year five)*
- Monitor and evaluate results.

Year Five

- Provide periodic status reports on implementation of remedial activities.

There are three particular aspects of the plan that need to be addressed separately because of their importance. First, it is important to determine if fecal coliform levels still warrant listing the branch on the 303(d) list. This needs to be done as soon as possible. Second, if monitoring determines fecal coliform levels still exceed acceptable limits, the stream segment should be monitored in several different locations to identify a source of the contamination. Then, the necessary measures can be taken to decrease the fecal coliform levels and have the stream taken off the 303(d) list. Finally, after the sources of the fecal coliform contamination have been determined and measures have been taken to abate the impairment, periodic monitoring needs to be done to ensure the integrity of the segment has remained below the acceptable fecal coliform levels.

It should be noted, however, these measures will require proper funding and coordination from specialized groups to ensure the measures are implemented correctly.

Funding

It is recommended that if preliminary monitoring shows no significant reduction in levels of fecal coliform, funding should be sought for extensive long term monitoring to identify sources of the pollutants and also to determine proper action to reduce levels of fecal coliform. Funds could be used not only for water quality monitoring, but also for the “proper” checking of on-site sewage systems as well as city sewer lines. It could also be used to monitor ground water for potential contamination beyond the surface level of the streams. This would help ensure quality of water both above and below the surface.

Conclusion

It has been determined that more extensive monitoring and up-to-date data collection needs to be done before determining the specific cause and source of impairment of the stream segment. Once this has been completed, then the proper actions can be taken to ensure the highest quality of sustainability for our waters.

STATE OF GEORGIA

TMDL IMPLEMENTATION PLAN FOR: Southside Branch FC
 (STREAM) (PARAMETER)

RIVER BASIN: Suwannee
 PLAN DATE: _____

Prepared by: <u>South Georgia RDC</u>		Or Prepared By: _____					
<u>South Georgia</u> Regional Development Center Address: <u>327 West Savannah Ave.</u>		Address: _____					
City: <u>Valdosta</u> State: <u>GA</u>		City: _____ State: _____					
Zip: <u>31601</u> e-mail: _____		Zip: _____ e-mail: _____					
Date Submitted to EPD: <u>08/25/03 (Revision 01)</u>		Date Submitted to EPD: _____					
General Information		Significant Stakeholders					
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.		Identify local governments, agricultural organizations or significant landholders, 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)		Name/Organization	Mr. Buddy Bryan, Ch. Tift Co. Commission				
Water body name	Southside Branch	Address	P.O. Box 826				
HUC basin name	Suwannee	City	Tifton	State	GA	Zip	31793
HUC number	03110203	Phone	(229) 386-7850			E-mail	
Primary county	Tift	Name/Organization	Tift County Health Department				
Secondary county	N/A	Address	P.O. Box J				
Primary RDC	South Georgia	City	Tifton	State	GA	Zip	31793
Secondary RDC	N/A	Phone	(229) 386-8373			E-mail	
Water body location	Tributary to New River	Name/Organization	City of Tifton Utilities Department				
	Southeast of Tifton	Address	204 N. Ridge Avenue				
Miles or area impacted	1.75 miles / 568 acres	City	Tifton	State	GA	Zip	31794
Parameter addressed in plan	Fecal Coliform	Phone	(229) 391 - 3949			E-mail	
Water use classification	Fishing	Name/Organization	Brian Tankersley, Tift Co. Ext. Services				
Degree of impairment	Partially supporting use <input checked="" type="checkbox"/>	Address	1468 South Carpenter Road				
	Not supporting use <input type="checkbox"/>	City	Tifton	State	GA	Zip	31793
Date TMDL approved by EPA	2/19/1998	Phone	(229) 382-7980			E-mail	
Impairment due to	Point sources <input type="checkbox"/>	Name/Organization	Natural Resources Conservation Service				
	Nonpoint sources <input checked="" type="checkbox"/>	Address	1468 South Carpenter Road				
	Both <input type="checkbox"/>	City	Tifton	State	GA	Zip	31793
Point source-Form A; Nonpoint source-Form B; Both-Form A+B+C		Phone	(229) 382-4776			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)

EXISTING LOAD	TARGET TMDL	NEEDED REDUCTION
483CFU/100ml	150CFU/100ml	333CFU/100ml

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

List major non-point sources **potentially** contributing to impairment including those identified in TMDL document.

POTENTIAL SOURCE	DESCRIPTION OF POTENTIAL CONTRIBUTION TO IMPAIRMENT	RECOMMENDED LOAD REDUCTION (FROM TMDL)
Urban Land Uses	Urban Storm Water Run-off	25%
Residential Land Uses	Leaking Septic Tanks, Pet Waste, Leaking Sewer Lines	
Public Land Uses	There is a fair ground facility that is located on the northeast side of Southside Branch, which during certain times of the year holds livestock shows on the south side of the property. The livestock holding area, however, is not connected to the City water/sewer system. Also, the fair grounds are built on top of an old landfill.	
Municipal Uses	The City of Tifton's Regional Wastewater Treatment Complex	

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
Tift County Health Dept.	Sanitary Code	Installation of on-site sewerage systems	1970's	In-force
Tift County	Zoning Ordinance	Part V: Environmental Standards	2000	In-force
Tift County	State of Georgia Soil & Sedimentation Control Act	Construction code to reduce pollutants to navigable waters	1980's	In-force
City of Tifton	Zoning Ordinance	Part V: Environmental Standards	2000	In-force
City of Tifton	State of Georgia Soil & Sedimentation Control Act	Construction code to reduce pollutants to navigable waters	1980's	In-force
Tift County	Local Wetlands Policy Ordinance	Georgia Planning Act Part V: Environmental Criteria. This ordinance regulates development of areas designated as wetlands as defined by the U.S. Army Corps of Engineers as jurisdictional wetlands.	2000	In-force
Tift County	Floodplain Management Ordinance	100 year / 500 year flood levels are shown on FEMA flood maps	Adopted	In-force
City of Tifton	Local Wetlands Policy Ordinance	Georgia Planning Act Part V: Environmental Criteria. This ordinance regulates development of areas designated as wetlands as defined by the U.S. Army Corps of Engineers as jurisdictional wetlands.	2000	In-force
City of Tifton	Floodplain Management Ordinance	100 year / 500 year flood levels are shown on FEMA flood maps	Adopted	In-force

EXISTING VOLUNTARY ACTIONS

RESPONSIBLE ORGANIZATION OR ENTITY	NAME OF ACTION	DESCRIPTION	ENACTED OR PROJECTED DATE (mm/yy)	STATUS
Forestry and Agricultural Stakeholders	Best Management Practices	Soil and Sedimentation Control Ordinance	Ongoing	Ongoing
Tift County, City of Ty Ty, City of Omega	EPD – Local Government Environmental Enforcement & Education Grant	To reduce the illegal dumping of scrap tires, reduction in solid waste, and other environmental issues by hiring an enforcement / education officer to respond and monitor	2001 - 2002	Re-funded in 2002
Tift County	Code Enforcement Officer	The Code Enforcement Officer has the authority to write citations, fine, and take to Magistrate Court if someone is found to be in violation.	2001	Current
City of Tifton	Code Enforcement Officer	The Code Enforcement Officer has the authority to write citations, fine, and take to Magistrate Court if someone is found to be in violation.	2001	Current
City of Tifton	Urban Service Area	The City of Tifton’s Capital Improvement Plan includes the expansion of the water/sewer services.	Current	On-going

Note: All organizations listed in tables are considered stakeholders.

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
Tift County / City of Tifton	Periodic Monitoring	Monitor impaired stream segments for fecal Coliform	2002	Pending Funding
Upper Suwannee River Basin Management Plan	Water Quality Management Plan	Implement regulatory/voluntary activities to meet water quality goals	2004	Ongoing

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	X			
Identify sources of TMDL parameter	X				
Develop management programs to control runoff including identification and implementation of BMPs (Phase I):	X	X			
Agriculture					
Forestry					
Urban	X	X			
Mining					
Organize and implement education and outreach programs	X	X	X		
Detect and eliminate illicit discharges					
Evaluate additional management controls needed			X	X	X
Monitor and evaluate results		X		X	
Reassess TMDL allocations				X	X
Provide periodic status reports on implementation of remedial activities			X		X
If needed, begin process for Phase II (next 5 years) and subsequent phases					

IV. PROJECTED ATTAINMENT DATE AND BASIS FOR THAT PROJECTION:

The projected attainment date is 10 years from acceptance of the implementation plan by EPA.

V. MEASURABLE MILESTONES:

- Number of management controls and activities already implemented 4
- Number of management controls and activities proposed in five-year work program 2
- Number of management controls and activities actually implemented in five-year work period _____ (to be completed after 5 years)
- Stream sampled to identify areas of concern See monitoring plan
- Other _____ _____
- Other _____ _____

VI. MONITORING PLAN:

Monitoring data that placed stream on 303(d) list will be provided if requested.

Describe previous or current sampling activities or other surveys to detect sources or to measure effectiveness of management measures or other controls.

ORGANIZATION	TIME FRAME	PARAMETERS	PURPOSE	STATUS
???-Funding must be identified	As soon as possible	Fecal Coliform	Determine if fecal coliform levels still warrant listing the branch on the 303(d) list	Funding for monitoring must be identified
???-Funding must be identified	If additional monitoring determines F.C. levels exceed limits	Fecal Coliform	Monitor branch at several different points to identify source of contamination. Implement necessary measures to decrease F.C. load	Needs to be done if stream is not de-listed; Funding must be identified.
???-Funding must be identified	After sources are determined and measures to abate are implemented	Fecal Coliform	Periodic monitoring to determine if implemented measures are successful	Needs to be done if stream is not de-listed; Funding must be identified.
The City of Tifton's Regional Wastewater Treatment Complex	Continuous	Fecal Coliform, Flow, Biochemical Oxygen	Required by their NPDES permit GA0048470	Continuous

		Demand, Ammonia, Total Residual Chlorine, pH, Dissolved Oxygen, Temperature, etc.		
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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	2003-2004	Fecal Coliform	Basin planning	N/A
Tift County	2002	Fecal Coliform	Test for impairment	N/A

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)
See Section II
- Best management practices installed (agricultural, forestry, urban)

COMMENTS

The following comments pertain to this plan revision.

After reviewing the aerial photography of Southside Branch as well as visiting the area, it should be noted that this area is primarily residential, not agricultural land, and has small patches of trees. Agriculture/Pasture and Forestry land uses have been removed as potential sources of pollution from the original TMDL Implementation Plan dated 03/31/2001.

It has been noted by stakeholders that what is known as Southside Branch is primarily an urban drainage way.

Before 2001, there were a few cases where there were some sites along this impaired stream segment that had some issues with faulty plumbing and sewer pipes that had collapsed. The Tift County Health Department responded to complaints of raw sewage actually on the ground. These problems were corrected by those responsible and these instances are thought to have possibly contributed to the high fecal coliform counts in the sampling that was done back in 1998.

A preliminary watershed evaluation was completed and submitted as a separate document in September 2003. This served, in part, as the basis for revisions to the original TMDL Implementation Plan dates 03/31/2001.