

Negro Branch

Brooks County, Georgia
TMDL Implementation Plan

Background

Negro Branch, near the City of Quitman (Brooks County, Georgia), is a 3.16-mile stream segment (impacting approximately 2161 acres) that meanders through primarily agricultural land. Until recently, Negro Branch was listed as an impaired stream segment by the Georgia Environmental Protection Division for violating fecal coliform criteria. Negro Branch has a water use classification of fishing and, according to the Georgia 305(b) data that was used to place it on the Georgia 1996 303(d) list, Negro Branch is “partially supporting” this designated classification. Within the last three months, Negro Branch was taken off the EPA’s list of stream segments impaired by fecal coliform¹. Because of this, there will be a pro-active approach taken to keep Negro Branch from ever being “re-listed.”

Existing Land Use

Since Negro Branch is located in a rural area of Brooks County, the impaired stream segment is surrounded entirely by agricultural land uses. Because it is rural, there are a large number of farms in the area. As with many farming operations, there are uses of pesticides and fertilizers, as well as animal waste to cause possible impairment to this waterway.

Monitoring Data

In February of 1998, the Fecal Coliform TMDL Development Plan for Negro Branch was completed. That plan listed the stream segment as being impaired based on “limited fecal coliform data that was readily available and used to put the stream segment of the 303(d) list.” The necessary load reductions were based primarily on modeling data from 1987 and 1988.

According to recently provided data, Negro Branch has been taken off the 305(b)/303(d) list of impaired stream segments. After speaking with the Brooks County Extension Agent and meeting with the Brooks County Special Projects Coordinator, it was concluded that two possible things happened to cause the stream segment to be “delisted.”

According to Johnny Whiddon, (Brooks County Extension Agent), and Tommy Burch, (Special Projects Coordinator), over the past five years Brooks County has been under drought conditions. This slows the amount of contaminant being flushed off the land and into the streams. There would be more of a ground filtration process with the contaminants having time to be naturally filtered through percolation into the soil.

Second, over the past seven years Brooks County as a whole has experienced approximately a **75% decrease** in the amount of hogs and hog farms. An adjacent

¹ A portion of this stream segment is still impaired by dissolved oxygen.

property owner operating a hog farm operation had a sewerage lagoon leak directly into the Negro Branch stream segment. The problem has since been discovered and this particular farm operation is no longer in the hog business. This would cause a dramatic decrease in the amount of contaminants that would potentially end up in the waters of the county. These two factors may have been enough to reach the “target TMDL” of approximately 300 cfu/100ml.

Existing Regulatory or Voluntary Action

Currently, the county has several required and voluntary ordinances that are designed to regulate and limit stream pollutants. They are:

- *The Sanitary Code*-Regulates the installation of on-site septic systems.
- *Zoning Ordinance-Part V: Environmental Regulations*-mandated by the state of Georgia for Ground Water Recharge Areas, Protected River Corridors, and Wetlands, (in this case, only Wetlands will apply) is pending adoption.
- *Erosion Control and Sedimentation Act*-Construction code to reduce pollutants to navigable waters.
- *Best Management Practices*-Soil and sedimentation control ordinances.

Recommended Regulatory or Voluntary Action

It is recommended that the county conduct periodic monitoring of the stream segments. This could be done on a monthly basis to determine if the fecal coliform levels have remained below the acceptable levels. The county could also conduct thirty day monitoring periods at least once a year. This would also be instrumental in determining if suggested action plans are pro-active enough or need to be adjusted. However, the county does not currently provide water and sewer services to its residents and this could prove a costly option for the community.

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 problems that affect their water, soils, and forest. The main goal of this group is to address potential problems early and help avoid costly and continuous battles over limited resources.

Schedule For Implementing Management Measures

The actions noted in the above paragraphs should be implemented immediately to ensure that proper sampling is being done and the sampling is being done in a timely manner. If the time frame for the monitoring gets to be too broad, Negro Branch could be exceeding the acceptable levels of contamination and it would not be known. It is important to start this process immediately so the appropriate measures can be taken.

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 are still low enough to warrant “delisting” the branch on the 303(d) list. This needs to be done as soon as possible.

Second, if monitoring determines fecal coliform levels have exceeded the 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 before the segment is placed back on 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 appears the funding needed for this segment, since it has been “delisted” as an impaired stream will consist of the need for monies to saddle the cost of monitoring this stream periodically. Brooks County does not provide water and sewer services to its residents, as such, they do not seek permits for surface water or ground water withdrawal. The funding required to pay for monitoring, however minimal, will be essential to provide sampling and keep the stream off the 303(d) list.

Conclusion

It has been determined that more extensive monitoring and up-to-date data collection needs to be done. It is the intent of Brooks County to set up voluntary actions to eliminate the impairments of the stream segment. The ceasing of operating the hog farm along the Negro Branch stream segment appears to have been the largest reason for Negro Branch becoming “Delisted.”

In addition, very little development is occurring in this area of Brooks County, and as such, many of the voluntary actions and re-actions posed in this implementation plan will keep this segment off the 303(d) list and support fish and wildlife again.

STATE OF GEORGIA

TMDL IMPLEMENTATION PLAN FOR: Negro Branch (STREAM) F.C. (PARAMETER) RIVER BASIN: Suwannee PLAN DATE:

Prepared by: <u>South Georgia RDC</u> <u>South Georgia</u> Regional Development Center Address: <u>327 W. Savannah Ave.</u> City: <u>Valdosta</u> State: <u>Georgia</u> Zip: <u>31601</u> e-mail: <u> </u> Date Submitted to EPD: <u> </u>		Or Prepared By: <u> </u> Address: <u> </u> City: <u> </u> State: <u> </u> Zip: <u> </u> e-mail: <u> </u> Date Submitted to EPD: <u> </u>	
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 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)	SUW0000001	Name/Organization	Mr. Wayne Carroll, County Commission Chairman
Water body name	Negro Branch	Address	P.O. Box 272
HUC basin name	Suwannee	City	Quitman State GA Zip 31643
HUC number	03110203	Phone	(229) 263-5561 e-mail
Primary county	Brooks	Name/Organization	Brooks County Health Department
Secondary county	N/A	Address	500 W. Courtland Ave.
Primary RDC	South Georgia	City	Quitman State GA Zip 31643
Secondary RDC	N/A	Phone	(229) 263-7585 e-mail
Water body location	West of City of Quitman	Name/Organization	U.S. Fish and Wildlife Service
		Address	1875 Century Blvd. Suite 400
Miles or area impacted	3.16 miles / 2161 acres	City	Atlanta State GA Zip 30345-3319
Parameter addressed in plan	Fecal Coliform	Phone	(404) 679-4000 e-mail
Water use classification	Fishing	Name/Organization	
Degree of impairment	Partially supporting use <input checked="" type="checkbox"/>	Address	
	Not supporting use <input type="checkbox"/>	City	State Zip
Date TMDL approved by EPA		Phone	e-mail
Impairment due to	Point sources <input type="checkbox"/>	Name/Organization	
	Nonpoint sources <input checked="" type="checkbox"/>	Address	
	Both <input type="checkbox"/>	City	State Zip
Point source-Form A; Nonpoint source-Form B; Both-Form A+B+C		Phone	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
454 CFU/100ml	150CFU/100ml	304CFU/100ml

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)
Agriculture/Pasture Land Uses	Pesticides & Fertilizers / Cattle Farming	70%
Forest Land Uses	Wildlife Animals	70%

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
Brooks County Health Dept.	Sanitary Code	Installation of on-site septic systems	1970's	Enforce
Brooks County	Zoning Ordinance	Part V: Environmental Regulations	2003	Pending Adoption
Brooks County	Erosion Control & Sedimentation Act	Construction code to reduce pollutants to navigable waters	1980's	Enforce

Existing voluntary actions

RESPONSIBLE ORGANIZATION OR ENTITY	NAME OF ACTION	DESCRIPTION	ENACTED OR PROJECTED DATE (mm/yy)	STATUS
Forestry & Agricultural Stakeholders	Best Management Practices	Soil and Sedimentation Control Ordinance	Ongoing	Ongoing

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
Brooks County/Local Governments	Periodic Monitoring	Monitor impaired stream segments regularly	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	X	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	X	X			
Urban					
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					

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			basin planning	
Brooks County	2002	Fecal Coliform	Testing 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)
- Best management practices installed (agricultural, forestry, urban)

COMMENTS
