

**STATE OF GEORGIA
REVISED TMDL
IMPLEMENTATION PLAN
WATERSHED APPROACH
Ocmulgee River Basin**

Local Watershed Governments - McIntosh Trail RDC
Butts County, Monroe County
Cities of Jenkinsburg, Jackson, Flowilla

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. **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.

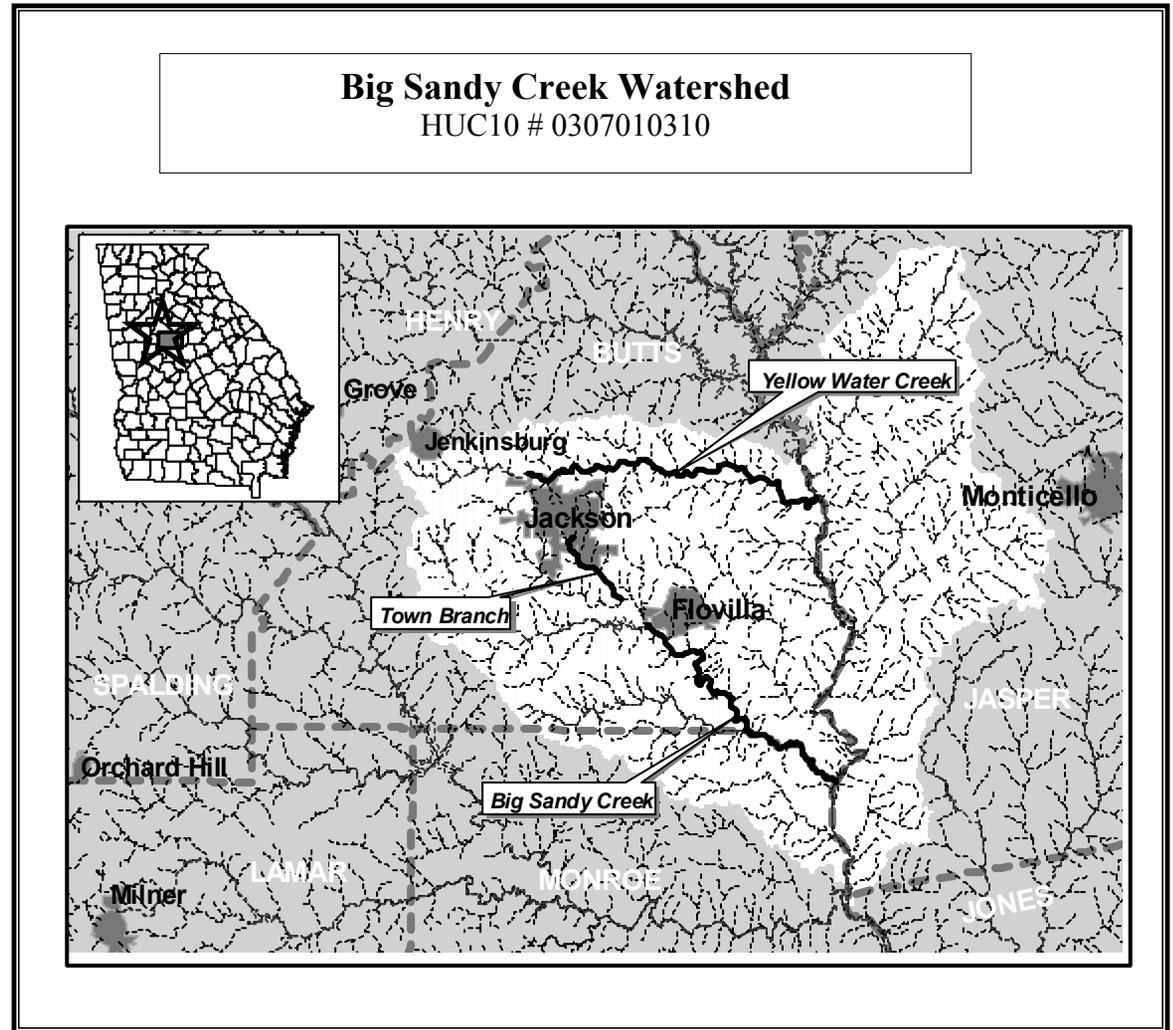


FIGURE 1

Impaired Waterbody*	Impaired Stream Location	Impairment
1. Big Sandy Creek	Aboothlacoosta Creek to Ocmulgee River	Fecal Coliform Bacteria
2. Town Branch	Downstream Jackson South WPCP to Aboothlacoosta Creek	Fecal Coliform Bacteria
3. Yellow Water Creek	1 mile downstream Stark Road, Jackson to Ocmulgee River	Fecal Coliform Bacteria

*These Waterbody Numbers are referenced throughout the Implementation Plan.

POLLUTANT:	SOURCE:	EFFECT:	WHAT CAN I DO?	
			At Home: Community, School	At Work: Business, Government
<input type="checkbox"/> Dissolved Oxygen (DO)	<input type="checkbox"/> Industrial	<input checked="" type="checkbox"/> Habitat	Septic system maintenance	Septic system maintenance
<input checked="" type="checkbox"/> Fecal Coliform (FC)	<input type="checkbox"/> Urban	<input checked="" type="checkbox"/> Recreation	Containment of pets & livestock	Sewerage system maintenance
<input type="checkbox"/> Sediment	<input type="checkbox"/> Agriculture	<input type="checkbox"/> Drinking Water	Proper disposal of animal wastes	
<input type="checkbox"/> Metals	<input type="checkbox"/> Forestry	<input type="checkbox"/> Aesthetics	Proper soil management, use of fertilizers	
<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) Non-point Unknown			

INFORMATION/EDUCATION/OUTREACH ACTIVITIES

An education/outreach component will be used to enhance public understanding of and participation in implementing the TMDL Implementation Plan. List of all previous and planned information/education/outreach activities.

Responsible Organization Or Entity	Description	Impacted Waterbodies*	Target Audience	Anticipated Dates (MM/YY)
Local Governments	Distribution of educational materials, information on BMP's and existing pollution problems		Residents & businesses	1/ 04 – 12/ 04
Butts County	Development/ promotion of educational program for presentation at school and public settings		Residents and businesses	1/ 04 – 12/ 04
Butts. Co. Parks and Recreation Department	Development of Greenspace Plan, with stakeholders		Residents and businesses	3/ 03 – 9/ 03

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
Butts County	PO Box 350	Jackson	GA	30233	770.775.8210	
City of Jackson	PO Box 39	Jackson	GA	30233	770.775.7535	
City of Jenkinsburg	PO Box 99	Jenkinsburg	GA	30234	770.775.4850	
City of Flovilla	PO Box 838	Flovilla	GA	30216	770.775.5661	
Monroe County	PO Box 189	Forsyth	GA	31029	478.994.7000	
Lake Jackson Homeowners Association	PO Box 795	Jackson	GA	30233	770.775.2475	
Butts Co. Chamber of Commerce	206 East Third Street	Jackson	GA	30233	770.775.4839	chamber@buttscochamber.com
Butts Co. Development Authority	431 East College Street	Jackson	GA	30233	770.775.4851	buttscounty@mindspring.com
Indian Springs State Park	678 Lake Clark Road	Flovilla	GA	30216	770.504.2277	
Dauset Trails Nature Center	360 Mt. Vernon Road	Jackson	GA	30233	770.775.6798	dausettrails@mindspring.com
Butts Co. Water Authority	PO Box 145	Jackson	GA	30233	770.775.0042	
McIntosh Trail RDC	PO Box 818	Griffin	GA	30224	770.227.6300	ahazell@cityofgriffin.com
High Falls State Park	76 High Falls Park Drive	Jackson	GA	30233	912.993.3053	
Butts County Farm Bureau	125 South Oak Street	Jackson	GA	30233	770.775.7559	
Butts Co. Recreational Pathways	300 Oak Road	Jenkinsburg	GA	30234	770.775.1210	
Georgia Forestry Commission	1599 Hwy 42 South	McDonough	GA	30252	770.504.2238	gfc04075@gfc.state.ga.us
Towaliga Soil & Water Conservation District	333 Phillips Drive	McDonough	GA	30252		Ken.Gran@gamcdonoug.fsc.usda.gov

Watershed	Big Sandy Creek
HUC 10	0307010310

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)
Big Sandy Creek	Aboothlacoosta Creek to Ocmulgee River	10	Fishing	NS
Primary County	Secondary County	Second RDC	Source (Point/ Nonpoint)	
Butts	Monroe	Middle Georgia RDC	Nonpoint	
Pollutant	Water Quality Standards	Required Reduction	TMDL ID	Date TMDL Established
Fecal Coliform	1,000 per 100 ml (geometric mean Nov-April)	66%		2/2002
Bacteria	200 per 100 ml (geometric mean May-Oct)			

Waterbody Name #2	Location	Miles/Area Impacted	Use Classification	Partially Supporting/ Not Supporting (PS/NS)
Town Branch	Downstream Jackson South WPCP to Aboothlacoosta Creek	3	Fishing	NS
Primary County	Secondary County	Second RDC	Source (Point/ Nonpoint)	
Butts			Nonpoint	
Pollutant	Water Quality Standards	Required Reduction	TMDL ID	Date TMDL Established
Fecal Coliform	1,000 per 100 ml (geometric mean Nov-April)	97%		2/2002
Bacteria	200 per 100 ml (geometric mean May-Oct)			

Waterbody Name #3	Location	Miles/Area Impacted	Use Classification	Partially Supporting/ Not Supporting (PS/NS)
Yellow Water Creek	1 mi. downstream Stark Rd., Jackson to Ocmulgee River	7	Fishing	NS
Primary County	Secondary County	Second RDC	Source (Point/ Nonpoint)	
Butts			Nonpoint	
Pollutant	Water Quality Standards	Required Reduction	TMDL ID	Date TMDL Established
Fecal Coliform	1,000 per 100 ml (geometric mean Nov-April)	86%		2/2002
Bacteria	200 per 100 ml (geometric mean May-Oct)			

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*
Fecal Coliform	Wildlife	Wildlife wastes entering streams directly or through runoff	0307010310
	Livestock & Pets	Wastes entering streams directly or through runoff	0307010310
	Septic systems	Leaking/faulty systems entering streams through runoff	0307010310
	Sewerage systems	Leaks allowing untreated wastes to enter streams	0307010310
	Land applications	Misuse of fertilizers in agricultural operations	0307010310

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.

Regulation/Ordinance or Management Measure		Responsible Government, Organization or Entity		Description	Enacted/Projected Date	Status	Regulatory/Voluntary
Development Standards for water-supply watersheds, wetlands and river corridors and stream banks		Butts County, Flovilla,	Jackson, Jenkinsburg	Enforce the DNR Part V minimum development standards restricting the type and proximity of development to perennial streams, wetlands, and other sensitive areas	2000	In Place	Regulatory
Pollutant(s) Affected	Sources of Pollutant(s)	Impacted Waterbodies*		Anticipated or Past Effectiveness			
Fecal	Runoff	0307010310		Somewhat effective			
Measurable Milestones		Schedule		Comments			
		Start	End				
Verify existing compliance among properties		1/ 04 - 6/ 05		Review of development along impacted streams to identify violations of EPS.			
Enforcement of regulations with new development		2000 - ongoing		Staff must ensure new development complies with regulations.			

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Regulation/Ordinance or Management Measure	Responsible Government, Organization or Entity	Description	Enacted/ Projected Date	Status	Regulatory/ Voluntary
Development Standards for water-supply watersheds, wetlands and river corridors and stream banks	Monroe County	Enforce the DNR Part V minimum development standards restricting the type and proximity of development to perennial streams, wetlands, and other sensitive areas	2000	In Place	Regulatory

Pollutant(s) Affected	Sources of Pollutant(s)	Impacted Waterbodies*	Anticipated or Past Effectiveness
Fecal	Runoff	0307010310	Somewhat effective

Measurable Milestones	Schedule		Comments
	Start	End	
Verify existing compliance among properties	1/ 04	6/ 05	Review of development along impacted streams to identify violations of EPS.
Enforcement of regulations with new development	2000 - ongoing		Ensure new development complies with regulations.

Regulation/Ordinance or Management Measure	Responsible Government, Organization or Entity	Description	Enacted/ Projected Date	Status	Regulatory/ Voluntary
GIS locations of agricultural operations	Butts County/ MTRDC	Create records type of use and data on code violations by parcel.	6/ 03	Planning	Voluntary

Pollutant(s) Affected	Sources of Pollutant(s)	Impacted Waterbodies*	Anticipated or Past Effectiveness
Fecal Coliform	Livestock/ Agriculture	0307010310	Very effective

Measurable Milestones	Schedule		Comments
	Start	End	
Upgrade map info of land use activities	6/ 03	6/ 04	Implement LBBS
Develop database for recording status of code violations and BMP implementation	6/ 03	6/ 04	

Watershed	Big Sandy Creek
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Regulation/Ordinance or Management Measure	Responsible Government, Organization or Entity	Description	Enacted/ Projected Date	Status	Regulatory/ Voluntary
Monitoring of septic tanks	Local Governments	Develop method for monitoring performance of septic systems	TBD	Proposal	Voluntary

Pollutant(s) Affected	Sources of Pollutant(s)	Impacted Waterbodies*	Anticipated or Past Effectiveness
Fecal	Septic systems	0307010310	Very effective

Measurable Milestones	Schedule		Comments
	Start	End	
Identify all septic systems in the County	6/ 03	6/ 04	Use GIS, parcel info
Develop method for regularly monitoring septic tanks	TBD		Work with health dept. to review permitting and repair
Identify all soils unable to support septic tanks	6/ 03		Attain data from NRCS, use in land use planning

Regulation/Ordinance or Management Measure	Responsible Government, Organization or Entity	Description	Enacted/ Projected Date	Status	Regulatory/ Voluntary
Develop Adopt-a-Stream programs/ Clean up events	Butts County	Assist with the formation of Adopt-a-Stream programs and organize stream clean up events	1/ 04 – 12/ 04	Proposed	Voluntary

Pollutant(s) Affected	Sources of Pollutant(s)	Impacted Waterbodies*	Anticipated or Past Effectiveness
Biota, Dissolved Oxygen	Runoff, litter, suburban development	0307010310	Somewhat effective

Measurable Milestones	Schedule		Comments
	Start	End	
Outline Adopt-a-Stream program resources and potential stakeholders	1/ 04	6/ 04	
Establish dates and conditions for events	1/ 04	6/ 04	
Monitoring and clean up events	6/ 04	12/ 04	

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Regulation/Ordinance or Management Measure	Responsible Government, Organization or Entity	Description	Enacted/ Projected Date	Status	Regulatory/ Voluntary
Erosion and sediment control	Butts County, Jackson, Flovilla, Jenkinsburg	Enforcement of erosion control regulations during land disturbing activities		In Place	Regulatory

Pollutant(s) Affected	Sources of Pollutant(s)	Impacted Waterbodies*	Anticipated or Past Effectiveness
Biota	Runoff, erosion	0307010311	Very Effective
Dissolved Oxygen	Litter; decaying matter	0307010311	Somewhat Effective

Measurable Milestones	Schedule		Comments
	Start	End	
Enforcement of existing regulations; Monitoring of land disturbances	6/ 03		
Review existing regulations to ensure highest standards available	6/ 03 – 9/ 03		
Ordinance amendments as needed	9/ 03 – 3/ 04		

Regulation/Ordinance or Management Measure	Responsible Government, Organization or Entity	Description	Enacted/ Projected Date	Status	Regulatory/ Voluntary
Forestry Water Quality Program	Georgia Forestry Commission	Collection of education, monitoring and enforcement measures for erosion/ sediment control practices for forestry; Includes Best Management Practices, workshops and biennial monitoring.	1978	In Place	Regulatory/ Voluntary

Pollutant(s) Affected	Sources of Pollutant(s)	Impacted Waterbodies*	Anticipated or Past Effectiveness
Biota	Sediment/ runoff from forestry activity	0307010311	Very effective

Measurable Milestones	Schedule		Comments
	Start	End	
Review of performances in biennial monitoring reports.	6/ 03 – 9/ 03		

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*
Section 319 Grant	Spalding County	Proposed	\$150,000	0307010310
Watershed Assessment Grant	Local Governments/ MTRDC	Proposed	\$20,000	0307010310
Environmental Education and Enforcement Grant	Local Governments	Existing – Griffin, Butts Co; Proposed – Spalding Co	\$25,000 - \$50,000	0307010310
Clean Water Revolving Funds	Griffin, Spalding Co.	Proposed	\$20,000	0307010310
EPA Matching Grants	Local Governments	Proposed	TBD	0307010310

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) _____

- Regulatory controls or activities installed (ordinances, laws) _____

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

COMMENTS

Watershed Big Sandy Creek
HUC 10 0307010310

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

TOGETHER WE CAN MAKE A DIFFERENCE!