

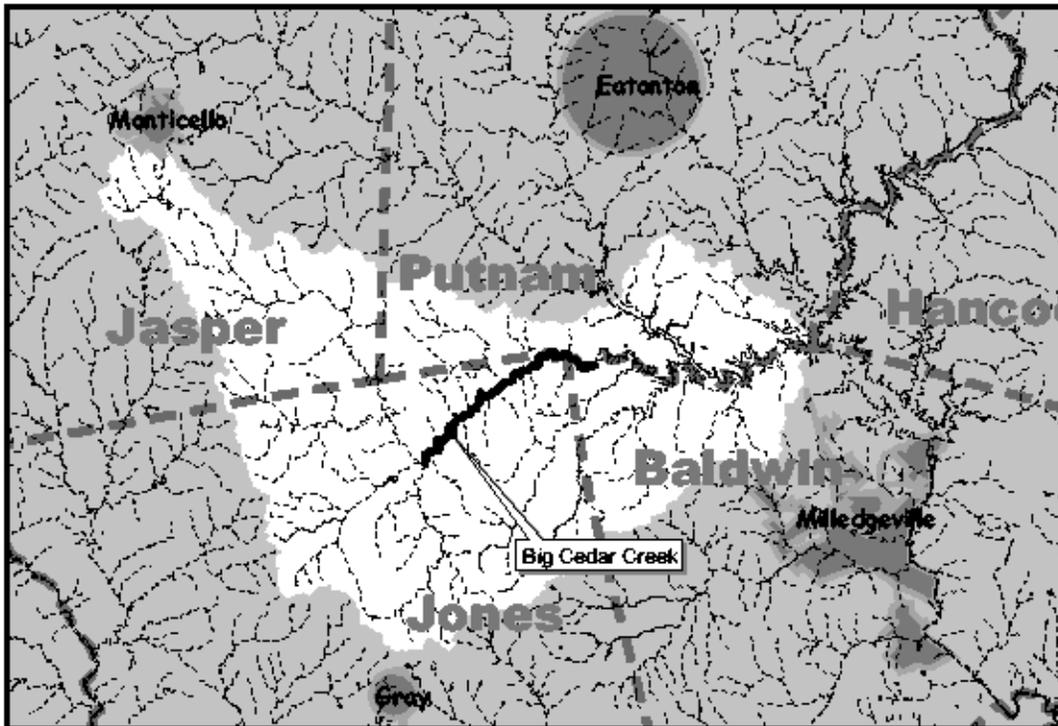
**STATE OF GEORGIA
TMDL IMPLEMENTATION PLAN**

**ROOTY CREEK
(Sediments – Biota)**

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 Middle Georgia RDC with a Section 604(b) Grant. TMDL load allocation information has been updated to reflect the approved TMDL.

HUC10 - 0307010118



Impaired Waterbody*	Impaired Stream Location	River Basin	Miles/Area Impacted	Partially Supporting/ Not Supporting
Rooty Creek	Rd. S926 Eatonton to Little Creek	Oconee	9	Not Supporting

**TMDL IMPLEMENTATION PLAN
For
SEDIMENT (BIOTA IMPACTED)
In
ROOTY CREEK
PUTNAM COUNTY, GEORGIA**

Developed by

Middle Georgia Regional Development Center

In Coordination with

Rooty Creek/Little River Plan Advisory Committee

September 15, 2001

The preparation of this report was financed in part through a grant from the U.S. Environmental Protection Agency under the Provisions of Section 604(b) of the Federal Water Pollution Control Act, as amended.

Rooty Creek Sediment (Biota Impacted) TMDL Implementation Plan

BACKGROUND

The stream segment under study is Rooty Creek from Road S. 926 in Eatonton to Little Creek (see attached map) that covers approximately nine miles in Putnam County. Rooty Creek has water classification of fishing, and its degree of impairment is listed as non-supporting. Sediment was determined to be cause of the biota impairment in Rooty Creek. However, as revealed in the monitoring plan section, other possible sources may be causing the biota impairment and will need to be investigated in the future. Based on the TMDL, the existing sediment load is 4,734 tons per year with a targeted load of also 3,381 tons per year. This equates to a 28.6% needed reduction in sediment load in the Rooty Creek watershed. The basis for these calculations and conclusions are included in the TMDL document prepared by the Georgia Department of Natural Resources and approved January 2002.

To assist in its development of this TMDL Implementation Plan, the Middle Georgia RDC established the Rooty Creek/Little River Plan Advisory Committee consisting of representatives from agriculture, forestry, local government, the private business sector, University of Georgia, Georgia State College and University, major environmental organizations, and local citizens (see Appendix A). Several meetings of this Plan Advisory Committee were held to review the TMDL process and provide input into the plan document. In addition, major property owners along Rooty Creek were notified of the impending TMDL and were asked to provide input during the comment period (see Appendix B). They will also be given an active role during the implementation phase of this process.

SOURCES CONTRIBUTING TO IMPAIRMENT

Five possible major nonpoint sources contributing to the sediment impairment have been identified in the TMDL document, and they are:

- Sediment leaving cropland due to sheet and soil erosion caused by wind or water.
- Gully erosion in pasturelands created by grazing farm animals leaving little or no vegetation; during storm events, sediment is transported to nearby streams.
- Loosened soil particles from unpaved roadways and carried away from the roadway, ditch and road bank by water, wind, or traffic.
- Sediment from urban development (land disturbance activities such as clearing, grading, excavating or filling of land; conversion of forest land to urban area; stormwater runoff from developed urban areas).
- Sediment leaving site of recent timber harvesting or upsloping practices.

EXISTING REGULATORY/VOLUNTARY ACTIONS

In addition to a host of federal and state laws administered by various agencies, there are a number of important regulatory and voluntary actions currently being implemented to address the five possible non-point sources noted above. They are:

- The NPDES Permit for the Eatonton-East WPCP that establishes average flow and TSS (total suspended solids) loading limits.
- Putnam County has adopted a soil and sedimentation control ordinance, a floodplain management ordinance, a zoning ordinance, water supply watershed protection ordinance, a groundwater recharge area protection ordinance, and a wetlands protection ordinance.

- The City of Eatonton has adopted a soil and sedimentation control ordinance and a zoning ordinance.
- The Georgia Department of Natural Resources administers the General Stormwater NPDES Permitting Process for construction sites disturbing five or more acres; with the threshold being reduced to one acre in 2003.
- The University of Georgia Cooperative Extension Service, the Georgia Soil and Water Conservation Commission and the Natural Resources Conservation Service all are very active in preventing non-point pollution from agricultural operations, including livestock and dairy. This includes conducting educational programs, developing BMPs for these operations and providing technical and at times financial assistance to farmers for BMP implementation, and performing basic and applied research on new methods to control agriculture non-point pollution.
- The Georgia Forestry Commission operates a water quality program that includes the development of BMPs, BMP education programs, and BMP monitoring for compliance.
- The Georgia Department of Natural Resources has an adopt-a-stream program along Rooty Creek
- The 4-H Program in Putnam County offers agricultural and natural resource education for youth.
- The Rock Eagle 4-H Center offers numerous environmental workshops and programs for school-age children and adults.
- Eatonton and Putnam County have established a public education program that includes videotapes, natural resource protection curriculum in the school system, and a speaker's bureau.

RECOMMENDED REGULATORY AND VOLUNTARY MEASURES

Additional recommended regulatory or other measures that should be implemented to achieve the sediment load limits set forth in the TMDL are listed below.

- Adoption of Part V Environmental Criteria Ordinances for the City of Eatonton.
- Adherence to BMPs and establishment of BMP criteria related to the buffers/setbacks along all perennial streams.
- Revision of the zoning ordinances for Eatonton and Putnam County to create flexibility and incentives for land developers to protect sensitive natural resources.
- Establish partnerships with the agricultural agencies and the local homebuilders association to set mutual responsibilities for the monitoring of BMPs, providing assistance to implement BMPs, and organizing education programs.
- Expansion of Adopt-A-Stream program along Rooty Creek.
- Application of DIRT II techniques by the local builder/developer community.
- Adoption of stormwater management regulations by the City of Eatonton to require plans to control stormwater runoff on disturbed sites.
- Organization and implementation of education and outreach programs for the builders/developers.
- Utilize the publication entitled Recommended Practices Manual, A Guideline for Maintenance and Service of Unpaved Roads as a guide in maintaining unpaved roads and roadside ditches.

SCHEDULE FOR IMPLEMENTING MANAGEMENT MEASURES

Below is the schedule for the implementation of the management measures.

Year 1

- Form Stakeholders Group
- Organize Implementation Work and Identify Potential Funding Sources

- Identify Sources of TMDL Parameters
- Develop Management Programs to Control Runoff from Agriculture, Forestry and Urban Sites
- Organize and Implement Education and Outreach Programs
- Monitor and Evaluate Results
- Reassess TMDL Allocations
- Provide Periodic Status Reports on Implementation Process

Years 2-5

- Develop Management Programs to Control Runoff from Agriculture, Forestry and Urban Sites
- Organize and Implement Education and Outreach Programs
- Detect and Eliminate Illicit Discharges
- Monitor and Evaluate Results
- Reassess TMDL Allocations
- Provide Periodic Status Reports on Implementation Process

Year 5

- Evaluate Additional Management Controls Needed
- Begin Process for Phase II

A total of 22 management controls and activities have already been implemented. Ten new management controls/activities are proposed in the five-year program.

MONITORING PLAN

In 1998/99, the Department of Natural Resources-Wildlife Resources Division performed numerous tests in Rooty Creek to determine the overall health of the fish population and other aquatic life. The Index of Biotic Integrity (IBI) was used as a means of rating the stream. The 1998/99 results found that the upstream site (just downstream from SR 16) would support the biota criteria (IBI listed as fair) as opposed to the downstream site at MLK, Jr. Drive (IBI listed as poor). In 1999, as part of its basin planning program, the Department of Natural Resources-Environmental Protection Division conducted stream monitoring in Rooty Creek at the downstream site only to assess the presence or absence of chemical impairment. There were no chemical violations found. Tests are performed on a regular basis at the Eatonton East WPCP to determine total suspended solids levels as required by the NPDES permit. The Rooty Creek Adopt-A-Stream program conducts limited stream monitoring and performs visual surveys and stream clean-up to monitor the health of the stream and identify potential sources of pollution.

Future monitoring will include the following:

- Department of Natural Resources-Environmental Protection Division-Chemical testing as part of its Basin Planning Program in 2004.
- Department of Natural Resources-Wildlife Resources Division-Assessment of the fish population and other aquatic life using the IBI and IWB also in 2004.
- TSS testing as part of the NPDES permit for the Eatonton-East WPCP.
- Stormwater turbidity testing for construction sites disturbing five acres or more (one acre beginning in 2003) as part of NPDES Stormwater Permit.
- Contractor and Rooty Creek Adopt-A-Stream program conducting biological and chemical stream monitoring during year 2003.

CRITERIA TO DETERMINE SUBSTANTIAL PROGRESS

The future monitoring program will be designed to include an assessment of the impacts of the Eatonton-East WPCP (ammonia and chlorine residual), and intervening land surfaces that could increase stormwater runoff and the resultant bank erosion and sediment delivery that could affect the habitat suitability and fish population at the downstream site.

Monitoring will also be conducted on the number of regulatory/voluntary programs implemented and the application of all necessary BMPs.

STATE OF GEORGIA

TMDL IMPLEMENTATION PLAN FOR: Rooty Creek (STREAM) (Biota Impacted) (PARAMETER) RIVER BASIN: Oconee
 PLAN DATE: 9/15/01

Prepared by: <u>Phil Clark</u>		Or Prepared By: _____			
<u>Middle Georgia</u> Regional Development Center Address: <u>175-C Emery Highway</u> City: <u>Macon</u> State: <u>GA</u> Zip: <u>31217</u> e-mail: <u>pclark@mgrdc.org</u> Date Submitted to EPD: <u>9/15/01</u>		Address: _____ City: _____ State: _____ Zip: _____ e-mail: _____ 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 land holders, commercial forestry organizations, businesses and industries, and local organizations including environmental groups with a major interest in this water body. (See Appendices A and B.)			
TMDL ID (to be entered by EPD)	<u>OCO0000022</u>	Name/Organization			
Water body name	<u>Rooty Creek</u>	Address			
HUC basin name	<u>Oconee</u>	City	State	Zip	
HUC number	<u>030701011803/1804</u>	Phone	e-mail		
Primary county	<u>Putnam</u>	Name/Organization			
Secondary county	<u>N/A</u>	Address			
Primary RDC	<u>Middle Georgia</u>	City	State	Zip	
Secondary RDC	<u>N/A</u>	Phone	e-mail		
Water body location	<u>Rd. S. 926, Eatonton to</u>	Name/Organization			
	<u>Little Creek</u>	Address			
Miles or area impacted	<u>8.92</u>	City	State	Zip	
Parameter addressed in plan	<u>Sediment (Biota Impacted)</u>	Phone	e-mail		
Water use classification	<u>Fishing</u>	Name/Organization			
Degree of impairment	Partially supporting use <input type="checkbox"/>	Address			
	Not supporting use <input checked="" type="checkbox"/>	City	State	Zip	
Date TMDL approved by EPA	<u>January 2002</u>	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
4,734 tons/year	3,381 tons/year	28.6%

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

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

SOURCE	DESCRIPTION OF CONTRIBUTION TO IMPAIRMENT	RECOMMENDED LOAD REDUCTION (FROM TMDL)
Silviculture	Timber harvesting (firebreaks, prescribed boring, layout of access roads, log decks and skidding trails; construction and stabilization of these areas; cutting of trees, and tree planting), and upslope practices.	No net increase
Cropland	Sheet and soil erosion.	No net increase
Pasture Land	Grazing leaves areas of ground with little or no vegetative cover – gully erosion.	No net increase
Roads	Loosened soil particles carried away from roadway, ditch, or road bank by water, wind, and traffic. Road construction (erosive road-fill soil types, shape and size of coarse surface aggregate; poor soils surface and/or surface drainage, poor road bed construction, roadway shape, and inadequate runoff discharge outlets).	No net increase
Urban Development	More impervious surface results in an increase in volume of runoff entering streams; stream flow rates increase significantly causing stream bank erosion and stream bottom down cutting.	No net increase

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
Eatonton East WPCP	NPDES Permit GA0032271	Daily Avg. Flow - .36 mgd; monthly max. – 0.95 mgd. TSS daily avg. – 5.52 mg/L; monthly max. – 17 mg/L	3/21/97	In effect
Georgia DNR/EPD	General Storm Water NPDES	Construction sites disturbing 5 acres or more; one acre beginning 2003	N/A	In effect
Putnam County/Eatonton	Soil/Sedimentation Control Ordinance	Requires soil/sedimentation control plans for certain land disturbances activities.	10/7/97	In effect
Putnam County	Water Supply Watershed Protection Ordinance	Setbacks and buffers along perennial streams within seven-mile radius upstream from water source intake.	1/5/99	In effect
Putnam County	Groundwater Recharge Area Protection Ordinance	Controls agricultural impoundment areas, lot size for septic tanks, etc.	1/5/99	In effect
EPA/Army Corps of Engineers	Clean Water Act/Section 404	Requires permit for dredge and fill activities in the lakes, rivers, and perennial and intermittent streams, wetlands, sloughs and natural ponds. Requires normal forestry practices to adhere to BMPs and 15 baseline provisions for forest road construction and maintenance and agriculture in the above waters in order to qualify for the silvaculture exemption from permitting process.	1972/6-88	In effect
U.S. Department of Agriculture	Federal Farm Bill	Prohibits landowners from converting forested wetlands to agricultural uses.	N/A	In effect
Georgia DNR EPD	Georgia Water Quality	Makes it unlawful to discharge excessive	1964	In effect

	Act	pollutants (sediments, nutrients, pesticides, animal waste, etc.) into waters of the State in amounts harmful to public health		
Georgia DNR	Georgia Planning Act	Authorized Georgia DNR to develop standards to protect wetlands, ground-water recharge areas, water supply watersheds, protected river corridors, and mountains.	1991	In effect
Georgia State Board of Registration for Foresters	Standards of Practice	Failure to practice professional forestry in accordance with standards shall constitute unprofessional conduct and be grounds for disciplinary action.	1993	In effect
Putnam County	Zoning Ordinance	Regulates use, lot size, yard setbacks, etc. for the protection of the health, safety, and general welfare of the citizens of Putnam County.	1991; Updated 6/97	In effect
City of Eatonton	Zoning Ordinance	Regulates use, lot size, yard setbacks, etc. for the protection of the health, safety, and general welfare of the citizens of Eatonton.	1991; Updated 6/97	In effect
City of Eatonton	Floodplain Management Ordinance	Regulates development in 100-year floodplain.	1986	In effect
Putnam County	Floodplain Management Ordinance	Regulates development in 100-year floodplain.	1994	In effect
Putnam County	Wetlands Protection Ordinance	Regulate development near wetlands, refers to Corps of Engineers when possible regulated activity is within 50 feet of wetlands.	12/00	In effect

Existing voluntary actions

RESPONSIBLE ORGANIZATION OR ENTITY	NAME OF ACTION	DESCRIPTION	ENACTED OR PROJECTED DATE (mm/yy)	STATUS
Georgia Forestry Commission	Forestry Water Quality Program	Includes the development of BMPs, BMP education programs, and BMP monitoring for BMP compliance.	1978; Manual updated 6/99	In effect
University of Georgia – Cooperative Extension Service	Promotion of Soil and Water Conservation in	Provides classroom instruction, basic and applied research, consulting assistance,	N/A	In effect

	Agriculture	preparation of comprehensive nutrient management plans, and information for nonpoint source water quality impacts.		
Georgia Soil and Water Conservation Commission	Agriculture Nonpoint Source Management Lead Agency	Develops nonpoint source management programs and conducts educational activities to promote protection of land and water devoted to agricultural uses.	1937	In effect
Natural Resources Conservation Service	Financial/Technical assistance to farmers	Includes standards and specifications for agriculture BMPs. Implements Environmental Quality Incentives Program, Conservation Reserve Program, and Small Watershed Program. Conducts National Resources Inventory every five years. Provides web-based database application (Performance and Results Measurement System, PRMS).	N/A	In effect
Georgia DNR - EPD	Georgia Adopt-A-Stream	Involves visual surveys, stream monitoring and clean-up along Rooty Creek.	01/98	In effect
Rock Eagle 4-H Center	Education Programs	Includes numerous environmental programs and workshops for school-age children and adults in a variety of settings.	N/A	In effect
Eatonton-Putnam County 4-H Programs	Agricultural Education for Youth	Provides agricultural and natural resources education programs for youth.	N/A	In effect
Eatonton/Putnam County	Public Education	(1) A videotape series that identifies significant natural resources in Eatonton/Putnam County, identifies the vulnerability of these resources to land development and other activities, and identifies ways the public can participate in protecting and preserving these resources; (2) a curriculum that focuses on Putnam County's natural resources and the student's role in protecting them; (3) a Speaker's Bureau of noted local/state officials who could speak to various groups on the state of Putnam County's natural resources and ways the	N/A	In effect

		public can help protect and preserve them.		
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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
City of Eatonton	Part V Environmental Criteria Ordinances (wetlands, groundwater recharge, and water supply watershed)	Protect wetlands, groundwater recharge areas and water supply watersheds and intakes.	10/02	Part of UPWP Update
Eatonton/Putnam County	Buffers/Setbacks along all perennial streams	Adhere to existing BMPs and establish BMP criteria.	10/02	Proposed
Eatonton/Putnam County	Zoning Ordinance Revisions	Create flexibility that creates incentives to land developers and builders to protect on-site wetlands, steep slopes, erodible soils, etc., i.e. use of innovative land use design and conservation easements.	10/02	Proposed
Eatonton/Putnam County	Establish partnerships with NRCS, Georgia Forestry Commission, Soil and Water Conservation Commission, University of Georgia Cooperative Extension Service and Home Builders Association	Set mutual responsibilities on the monitoring of BMPs and NPDES permits, providing assistance to farmers, foresters and builders in implementing BMPs, and providing educational programs to farmers, foresters, builders and the general public.	10/02	Proposed
Georgia DNR – EPD	Georgia Adopt-A-Stream Program	Expand use of program in the city and county by enlisting and training new volunteers to conduct visual surveys, biological monitoring, chemical testing and cleanup on impaired streams.	6/02	Expansion of program on Rooty Creek
Builders/Developers	DIRT II Techniques	Model and manage stormwater runoff from construction sites within Rooty Creek watershed that are located within 100 feet of Rooty Creek and its tributaries.	1/03	Proposed
Putnam County	Maintenance of unpaved roads and roadside	Evaluate procedure for maintaining unpaved roads and roadside ditches and utilize the publication	10/01	Proposed

	ditches	entitled, <u>Recommended Practices Manual, A Guideline for Maintenance and Service of Unpaved Roads</u> as a guide in making changes to its procedure.		
Eatonton/Putnam County	Builder/Developer Education	Hold workshops and other forums to discuss the General Stormwater NPDES Permit for construction activities, DIRT II techniques, and other innovative tech- niques to protect sensitive natural resources.	10/02	Proposed
City of Eatonton	Stormwater Management Regulations	Requires plans to control stormwater runoff from disturbed sites.	10/02	Proposed

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 10/01-02	YEAR 2 10/02/03	YEAR 3 10/03-04	YEAR 4 10/04-05	YEAR 5 10/05-06
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	X	X	X	X	X
Urban	X	X	X	X	X
Organize and implement education and outreach programs	X	X	X	X	X
Detect and eliminate illicit discharges		X	X	X	X
Evaluate additional management controls needed					X
Monitor and evaluate results	X	X	X	X	X
Reassess TMDL allocations	X	X	X	X	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

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 _____ 22 _____
- Number of management controls and activities proposed in five-year work program _____ 10 _____
- 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
DNR – Wildlife Resources Division	1998/1999	Biotic Index of Integrity (IBI) Index of Well-Being (IWB)	Evaluate health of stream’s biological system in order to assess degradation from various sources	Poor IBI Rating
DNR – EPD	1999	DO, Temp, Conductivity, pH, Turbidity, BOD Nitrate-Nitrite, Ammonia, Total Phosphorus, Total Alkalinity, Total Suspended Solids, Total Organic	Assess for the presence or absence of chemical pollution.	No chemical violations

		Carbon, Metals, Semi-Volatile Organics, Pesticides, PCBs		
City of Eatonton – WPCP East	On-going	TSS	To insure effluent meets NPDES permit requirements	In compliance
Adopt-A-Stream – Rooty Creek	On-going	Stream monitoring, visual survey, and stream clean-up.	Monitors the health of the stream and identifies potential sources of pollution.	On-going

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
DNR – Wildlife Resources Division	2004	IBI, IWB	Basin Planning	On-going
DNR-EPD	2004	Chemical Analysis	Basin Planning	On-going
City of Eatonton	On-going	TSS	To meet NPDES permit	On-going
Construction sites disturbing 5 acres or more	On-going	Stormwater Turbidity	To meet NPDES permit	On-going
Construction sites disturbing 1 acre or more	Begin 2003	Stormwater Turbidity	To meet NPDES permit	Proposed
University of Georgia and/or other subcontractors	6/03	IBI, IWB and Chemical Testing	See note below under Monitoring Programs.	Proposed
Adopt-A-Stream – Rooty Creek	6/03	Assist subcontractors with biological and chemical testing and to conduct stream cleanup and visual surveys.	See note below under Monitoring Programs.	Expansion of program to Rooty Creek

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)

1. Monitoring Programs – A recent assessment has found that upstream site (just downstream from SR 16) would support the biota criteria as opposed to the downstream site at MLK, Jr. Drive. Future monitoring program will be designed to include an assessment of the impacts of (1) the Eatonton-East WPCP (ammonia and chlorine residual); and (2) intervening land surfaces that could increase stormwater runoff volumes and the resultant bank erosion and sediment delivery that would affect the habitat suitability and fish population at the downstream site.
2. Regulatory Controls or Activities Installed (ordinances, laws, education programs) – Monitor the number of regulatory and voluntary programs implemented during the five-year period.
3. Best Management Practices Installed (agriculture, forestry, mining, urban development) – Ensure all necessary BMPs are being implemented in the Rooty Creek watershed.

COMMENTS

APPENDIX A

LITTLE RIVER/ROOTY CREEK PLAN ADVISORY COMMITTEE

Mr. David Bennett, Deputy Executive
Director
Ga. Soil & Water Conservation Commission
P. O. Box 8024
Athens, GA 30603

Ms. Roddie Anne Blackwell, President
Eatonton/Putnam County Chamber of
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Piedmont Soil & Water Conservation
District
3014 Heritage Road, Suite 1
Milledgeville, GA 31061

Mr. Grady Calvert, Supervisor
Piedmont Soil & Water Conservation
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Eatonton, GA 31024

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Eatonton, GA 31024

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Eatonton, GA 31024
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Gainesville, GA 30503

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UGA Cooperative Extension Service
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Atlanta, GA 3030
Mr. Wayne Tankersley, District Agent
UGA Cooperative Extension Service

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City Administrator
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P. O. Box 238
Oglethorpe, GA 31068

Mr. Harold West
Georgia Forestry Commission
119 Highway 49
Milledgeville, GA 31061

Dr. Harriett Whipple
Georgia State College & University
P. O. Box 81
Milledgeville, GA 31061

Mr. Bill White
P. O. Box 8024
Athens, GA 30603

Mr. Wayne Williams, President
1473 Hunting Club Road
Crawfordville, GA 30631

Mr. Tom Wooten, Chief Ranger
Georgia Forestry Commission
302 Milledgeville Road
Eatonton, GA 31024

Ms. Sylvie Yon
170 W. Riverbend Drive
Eatonton, GA 31024

APPENDIX B

MAJOR PROPERTY OWNERS ALONG ROOTY CREEK

<u>Rooty Creek</u> - FC, BIO	139 Gray Road, SW Eatonton, GA 31024	643 Oconee Springs Road, SW Eatonton, GA 31024
<u>Putnam County</u>	City of Eatonton Treatment Plant City Hall Marion Street Eatonton, GA 31024	Patrick and Doris Neligan P. O. Box 866 Milledgeville, GA 31061
Sarah Abrams, Clerk P. O. Box 3820 Eatonton, GA 31024		Robert and Lorraine Neligan 485 Milledgeville Road Eatonton, GA 31024
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Frank Carnes 126 Crooked Creek Road Eatonton, GA 31024	Alan E. Hall 3048 A. North Columbia Milledgeville, GA 31061	Joseph and Margaret Rossee 679 Oconee Springs Road Eatonton, GA 31024
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Joe DeLoach, III 451 Oconee Springs Road, SE Eatonton, GA 31024	Shaun Leverette 720 Oconee Springs Road Eatonton, GA 31024	Roy Vining City Administrator P. O. Box 3820 Eatonton, GA 31024
Dumas Family Trust Partnership 9031 Thornton Road Jonesboro, GA 30236	Lockerly Arboretum Foundation 1534 Irwington Road Milledgeville, GA 31061	
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