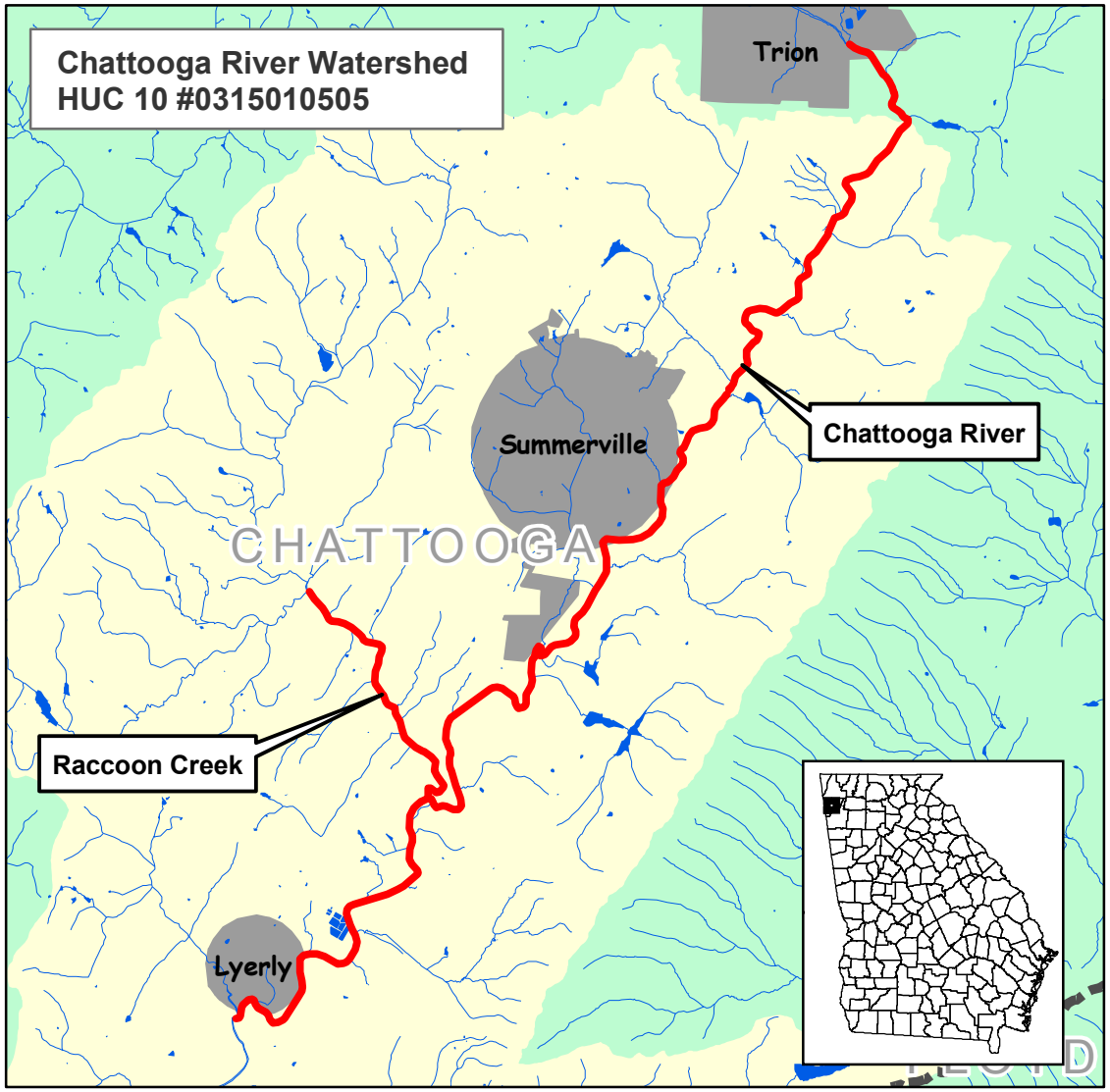
STATE OF GEORGIA
TIER 2 TMDL IMPLEMENTATION PLAN REVISION 1
Chattooga River
Coosa River Basin
April 28, 2006

Chattooga County, City of Summerville, City of Trion, City of Lyerly



I. INTRODUCTION

Total Maximum Daily Load (TMDL) Implementation Plans are platforms for evaluating and tracking water quality protection and restoration. These plans have been designed to accommodate continual updates and revisions as new conditions and information warrant. In addition, field verification of watershed characteristics and listing data has been built into the preparation of the plans. The overall goal of the plans is to define a set of actions that will help achieve water quality standards in the state of Georgia.

This implementation plan addresses the general characteristics of the watershed, the sources of pollution, stakeholders and public involvement, and education/outreach activities. In addition, the plan describes regulatory and voluntary practices/control actions (*management measures*) to reduce pollutants, milestone schedules to show the development of the management measures (*measurable milestones*), and a monitoring plan to determine the efficiency of the management measures.

Table 1. IMPAIRMENTS

IMPAIRED STREAM SEGMENT	IMPAIRED SEGMENT LOCATION	IMPAIRMENT	TMDL ID
Chattooga River	Henry Branch to Lyerly	Fecal Coliform Bacteria	CSA0000057
Chattooga River	Cane Creek, Trion to Henry Branch	Fecal Coliform Bacteria	CSA0000117
Raccoon Creek	Upstream Chattooga River, Berryton	Fecal Coliform Bacteria	CSA0000055

II. GENERAL INFORMATION ABOUT THE WATERSHED

Write a narrative describing the watershed, HUC 10 #0315010505. Include an updated overview of watershed characteristics. Identify new conditions and verify or correct information in the TMDL document using the most current data. Include the size and location of the watershed, political jurisdictions, and physical features which could influence water quality. Describe the source and date of the latest land cover/use for the watershed. Describe and quantify major land uses and activities which could influence water quality. See the instructions for more information on what to include.

The entire 10 digit HUC watershed covers 700 square miles.
The headwaters of the **Chattooga River** are at the base of Lookout Mountain in Walker County near Lafayette. Upstream from the City of Trion the river is much smaller and barely navigable. The impaired segment begins at Cane Creek just upstream of Trion. Below the mill dam at Trion, in Chattooga County, the river takes on more character. It once was a dependable source of water for Mt. Vernon Mills, once the economic lifeblood of Chattooga County. It fueled the mill that put food on the table for generations of mill workers by day and was a place to fish and relax for workers and their families in the evening.
Flowing southwest through the floodplain along the eastern border of the Summerville city limits, the steep slopes of Taylor's Ridge form the eastern edge of the watershed. Along Penn Bridge Rd. the elevation drops in some locations from 900 ft. to 630 ft. within 100 ft.
The river meanders to the southwest through low hills and valleys to the City of Lyerly. At Lyerly there are the remnants of an old dam once used to provide electricity to the City. Lyerly Dam is still a popular fishing spot for nearby residents. From Lyerly the river flows on into Lake Weiss in Alabama.
The main stem of **Raccoon Creek** flows directly south from the southeastern edge of the Summerville Fish Hatchery. Several intermittent streams from higher elevations and springs such as Perennial Springs converge just upstream of Berryton to form the larger Raccoon Creek. A water filtration plant is located at Berryton just downstream from this confluence.
The City of Summerville has its' primary intake for drinking water directly behind the filter plant. Past Berryton the creek continues flowing southeast through a gap with extremely steep slopes on either side and a gravel pit at the foot. It continues to flow through floodplain into the Chattooga River about halfway between Lyerly and Summerville. This small watershed encompasses around 25 square miles.

Land Use – for contributing watersheds
Chattooga River – Henry Branch to Lyerly: forest 75.1%, pasture/hay 18.2%, row crops 3.5%, high intensity residential 1.1%, high intensity commercial 0.5%, mines 0.1%, transitional 0.5%, and other grasses 0.6%.
Chattooga River – Cane Creek to Henry Branch: forest 74.4%, pasture/hay 17.8%, row crops 3.6%, high residential 1.4%, high commercial 0.6% mines 0.1%, transitional 0.9%, and other grasses 0.8%.
Raccoon Creek: forest 69.2%, pasture/hay 21.6%, row crops 3.5%, high intensity residential 0.2%, high intensity commercial 0.2%, and transitional at 4.7%. Note that this is a very high percentage of pasture and hay in comparison with other watersheds. Source of land use data: "Total Maximum Daily Load Evaluation for Fifty Eight Stream Segments in the Coosa River Basin for Fecal Coliform" Submitted by The Georgia Department of Natural Resources Environmental Protection Division. January 2001

Point Sources:
Chattooga : Trion to Heny Branch:

- Mt. Vernon Mills, Inc. Permit #GA 0001422

- Trion WPCP – Permit #GA0025607 (EPD issued Order # EPD-PCEP-01-271 in June 2001 for NPDES permit violation and unpermitted discharges into Chattooga River and Chappel Creek. They were fined $7450 and required to correct the situation immediately.

Chattooga : Henry Branch to Lyerly:

- Summerville WPCP – Permit #GA0025704 Several EPD Enforcement Orders have been issued between 1998 and 2002. In 1999 they exceeded effluent limits and were required to develop and implement an approved industrial pretreatment program; submit a corrective action plan to resolve upsets caused by Image Industries. In 2001 as a result of a violation of their NPDES permit they were fined $41,800 and required to develop/implement an approved industrial pretreatment program by 7/31/2001.
- City of Summerville sewer system – Permit #GA00640010 has had a few enforcement orders against them for exceeding permit limitations and unpermitted discharges to waters of state. In each case they were fined and ordered to correct the situation immediately.
- Mohawk carpets – Permit #GA0024104 was fined $1,000 for an unpermitted discharge to state waters in 2003 and ordered to correct immediately.

Raccoon Creek:

- Harriet and Henderson Yarns, Inc. – Permit #GA0000841 had been fined $250 for a violation of their permit in 2001. The industry is no longer in operation.

Landfill: The sanitary landfill along Penn Bridge Rd. Permit #027-006D, is now closed. It is an unlined landfill so there may be leachate. The GIS coverage and stakeholder input indicate that this is the only landfill in this subwatershed.

Mines: City of Summerville Chert Pit (#1200-98) is approximately one mile west of Chattooga River.
Chattooga Co. Cummings Borrow Pit (#1458-03) – approximately one mile east of Chattooga River
Lee's Chert Pit (#1450-03) – close to Chattooga River
Patty Construction Co. (#1232-99) – Lyerly section
Ragland Chert Pit (#1412-02) - Lyerly

City of Lyerly LAS – Permit #GA02-277 (*information about this facility will be added in updates to the plan*)

Georgia Forestry Commission Best Management Practices

The Forestry Commission has implemented best management practices on its lands to reduce sedimentation and erosion from silviculture practices. The Georgia Forestry Commission also provides education, technical and financial assistance through cost-share programs to private landowners especially in the Forestland Enhancement Program, a part of the 2002 Farm Bill. Ongoing Georgia Forestry Commission activities include the following programs.

- Federal Clean Water Act Section 404: GFC received referrals from EPA for compliance determinations in situations involving forestry. It requires normal ongoing agricultural and silvicultural practice to adhere to BMPs and 15 baseline provisions for road construction and maintenance in and across waters of the US including lakes, rivers, perennial and intermittent streams, wetlands, sloughs in order to qualify for the exemption from the permitting process.
- Georgia's Best Management Practices: A GFC program to inform landowners, foresters, timber buyers, loggers site preparation and reforestation contractors and others involved with silvicultural operations about commonsense, economical effective practices to minimize nonpoint source and thermal pollution. GFC encourages and monitors compliance and conducts a complaint resolution program.

- Georgia Forestry Commission Monthly BMP Assurance Examination: In an effort to document "reasonable assurance" that water quality will be proactively protected during regular ongoing silvicultural operations, the GCF will offer a monthly BMP assurance examination of active sites. All active of ongoing sites will be identified either through monthly air patrol flights, courthouse records, riding the roads, notification or by landowners. Sites located within watersheds of specific biota (sediment) impaired streams will be given a higher priority to identify and conduct examinations.
- Memo to the Field: Application of BMPs to mechanical silvicultural site preparation activities for the establishment of pine plantations in the Southeast (Silviculture). Although overseen by the EPA/ US Army Corps of Engineers, cases are normally referred to GFC to make the initial determination. It identifies certain bottomland hardwood wetlands that should be subject to permitting if converting to pine plantations.

Department of Natural Resources Best Management Practices

The Department of Natural Resources, Wildlife Management Division provides outreach to landowners on prevention of soil erosion and sedimentation from land-disturbing activities contributing to habitat destruction, advises landowners of best management practices and habitat development for increased wildlife on their property, and encourages landowners to implement conservation practices on their lands through the NRCS.

2002 Farm Bill, US Department of Agriculture Natural Resources Conservation Service and Farm Service Agency

The Farm Security and Rural Investment Act of 2002 (Farm Bill 2002) funded conservation practices for farmers and ranchers with a focus on environmental issues by making existing programs simpler as well as funding new programs. The 2002 Farm Bill enhances the long-term quality of our environment and conservation of our natural resources. This bill provides several opportunities for receiving grants to improve water quality. These include the following programs administered by the US Department of Agriculture, Natural Resources Conservation Service and Farm Service Agency. Primarily, EQIP programs in use in this watershed include prescribed grazing, fencing, nutrient management, and animal waste storage structures.

- The Federal Farm Bill (Swampbuster Ag) prohibits landowners participating in federal price support programs from converting forested wetlands to agriculture.
- The Water Bank Act preserves, restores and improves wetlands of the Nation and thereby conserves surface waters to preserve and improve habitat for migratory waterfowl and other wildlife resources to retire lands not in agricultural production to enhance the natural beauty of the landscape and to promote comprehensive and total water management planning.10-year contracts with landowners to preserve wetlands and retire adjoining agricultural lands. Annual payments may be made to participating owners, and the costs of conservation measures may be shared. Total annual payments to owners were limited to $10 million in any year.
- The Conservation of Private Grazing Land Program will offer technical assistance opportunities for better grazing land management. Projects for improving water quality include: protecting soil from erosive wind and water; conserving water; providing habitat for wildlife; sustaining forage and grazing plants. This is not a Cost-Share Program.
- Conservation Security Program (CSP) is the first program that rewards farmers and ranchers for high levels of environmental stewardship. Producers on cropland, orchards, vineyards, pasture and range may apply for CSP regardless of size, type of

operation, or crops produced. Land in other cost share programs is not eligible. CSP will first be offered in watersheds with greatest potential for improving water quality, soil quality and grazing land condition. An enhancement example is to install a riparian buffer. There are three tiers of involvement, which result in different expectations and cost share opportunities.

- Environmental Quality Incentives Program (EQIP) is a voluntary program that provides technical and cost share assistance for protection of ground and surface water, erosion control, air quality, wildlife habitat, and plant health. It is a 50% cost share with possible additional incentive payments.
- Wetlands Reserve Program (WRP) provides technical and financial assistance to landowners to enhance wetlands degraded by farming or draining. There are three options with WRP to receive funds that have differing time agreements and easements resulting in different cost share. In all programs participants control access to the land, may lease or use land for hunting, fishing, and other passive recreational activities. Compatible uses are allowed as long as they do not degrade the wetland. Permanent Easement pays appraised value of land ($2,000/ acre cap) and 100% of costs of restoration. The 30-Year Easement pays 75% of appraised value of land and 75% of restoration costs. The Restoration Cost Share Agreement pays 75% of restoration costs, no easement on the property.
- The Conservation Reserve Program (CRP) provides technical assistance, rental payments and cost share funding to address specific natural resource concerns including: protection if ground and surface waters, soil erosion and wildlife habitat. Eligible practices include tree planting, grassed waterways, wildlife habitat buffers, and shallow water area for wildlife and filter strips. An annual rental payment is given for land taken out of production and 50% cost share for practice installation.

Chattooga River

COMPLETE THE FOLLOWING TABLES FOR AND NARRATIVES ABOUT EACH IMPAIRED STREAM IN THE WATERSHED.

STREAM SEGMENT NAME	LOCATION	MILES/AREA	DESIGNATED USE	PS/NS
Chattooga River	Henry Branch to Lyerly (Chattooga County)	8	Fishing	NS

III. SOURCES AND CAUSES OF STREAM SEGMENT IMPAIRMENT LISTED IN TMDLs

After reviewing the TMDLs written for this stream, complete the following tables with **the information found in the TMDLs**. List each parameter for which the stream segment is impaired and the water quality standard violated. See the instructions for the water quality standards. Describe the sources and causes of each violation identified in the TMDLs.

Table 2. SOURCES OF IMPAIRMENT AS INDICATED IN TMDLs

PARAMETER 1	WQ STANDARD	SOURCES OF IMPAIRMENT	NEEDED REDUCTION FROM TMDL
Fecal Coliform bacteria	1000 per 100 ml (geometric mean Nov-April) 200 per 100 ml (geo. Mean May-Oct)	Wildlife Agricultural/Livestock • Animal grazing • Animal access to streams • Application of manure to pastureland and cropland Urban Development • Leaking septic systems • Landfills	50 percent from all sources

Chattooga River

COMPLETE THE FOLLOWING TABLES FOR AND NARRATIVES ABOUT EACH IMPAIRED STREAM IN THE WATERSHED.

STREAM SEGMENT NAME	LOCATION	MILES/AREA	DESIGNATED USE	PS/NS
Chattooga River	Cane Creek, Trion to Henry Branch	7	Fishing	NS

III. SOURCES AND CAUSES OF STREAM SEGMENT IMPAIRMENT LISTED IN TMDLs

After reviewing the TMDLs written for this stream, complete the following tables with **the information found in the TMDLs**. List each parameter for which the stream segment is impaired and the water quality standard violated. See the instructions for the water quality standards. Describe the sources and causes of each violation identified in the TMDLs.

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Fecal Coliform Bacteria	1000 per 100ml (geometric mean Nov-April) 200 per 100ml (geo. Mean May-Oct)	Wildlife Agricultural/Livestock • Animal grazing • Animal access to streams • Application of manure to pastureland and cropland Urban Development • Leaking septic systems • Landfills	56 percent from all sources

Raccoon Creek

COMPLETE THE FOLLOWING TABLES FOR AND NARRATIVES ABOUT EACH IMPAIRED STREAM IN THE WATERSHED.

STREAM SEGMENT NAME	LOCATION	MILES/AREA	DESIGNATED USE	PS/NS
Raccoon Creek	Upstream Chattooga River, Berryton	3	Fishing	NS

III. SOURCES AND CAUSES OF STREAM SEGMENT IMPAIRMENT LISTED IN TMDLs

After reviewing the TMDLs written for this stream, complete the following tables with **the information found in the TMDLs**. List each parameter for which the stream segment is impaired and the water quality standard violated. See the instructions for the water quality standards. Describe the sources and causes of each violation identified in the TMDLs.

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PARAMETER 1	WQ STANDARD	SOURCES OF IMPAIRMENT	NEEDED REDUCTION FROM TMDL
Fecal Coliform Bacteria	1000 per 100ml (geometric mean Nov-April) 200 per 100ml (geo. Mean May-Oct)	Wildlife Agricultural/Livestock • Animal grazing • Animal access to streams • Application of manure to pastureland and cropland Urban Development • Leaking septic systems • Landfills	81 percent for all sources

IV. IDENTIFICATION AND RANKING OF POTENTIAL SOURCES OR CAUSES OF IMPAIRMENT

INVESTIGATE AND EVALUATE the sources of impairment for each parameter listed in Table 2. Write a narrative describing efforts made or procedures used to verify the significance and extent of the sources or causes of each impairment listed in the TMDLs. Include:

- Involvement of stakeholder group
- Review of land cover data
- Field surveys
- Evaluation of sources

The **Chattooga River** segments begin in Trion at Cane Creek. As the river leaves Trion urban influences and the Trion Wastewater Treatment Plant may have an impact. Several stakeholders identified the Plant as a possible source of fecal coliform bacteria. The highway bridges over the river allow for stormwater runoff. Although urban influences come into play around the urbanized areas of the Cities of Trion and Summerville, a great deal of the watershed remains heavily forested so wildlife has been identified as a potential source of bacteria. The steep slopes along Penn Bridge Rd., although forested, do not allow for much infiltration before stormwater runs off the slopes. A sanitary landfill along Alexander Rd. is closed but is an older landfill built prior to lining requirements so there may be leachate that reaches the river.

Stakeholder involvement was primarily from the agricultural sector of the community who maintained that there is very little land use devoted to row cropping in the watershed. Much of that land has been converted to pasture and grasses or has progressed along the natural succession lines to pasture abandoned to trees. Some pasture does remain in this segment.

Raccoon Creek is a tributary to the Chattooga River as it flows toward the City of Lyerly. The land use data indicates that the Raccoon Creek watershed has a high percentage of land devoted to pasture and hay in comparison with the other watersheds reviewed for this study (22%). Stakeholders identified that there is more pasture in this segment of the watershed, although the USDA Cooperative Extension Service, NRCS, and Chattooga Young Farmers have reported aggressive efforts to work with the agricultural community on issues related to pasture management, which in turn have the potential of improving water quality.

Chattooga County is without sewer, so there is the potential for malfunctioning septic systems to contribute to fecal coliform bacterial contamination throughout the watershed. Chattooga County Health Department has a septic maintenance program available to homeowners to educate them as to proper care and maintenance of their septic systems.

In 2001 Coosa Valley Regional Development Center contracted with EPD to compile Source Water Assessment Plans (SWAP) for drinking water intakes under the Safe Drinking Water Act. In their “Summary of Potential Pollution Sources“, the land use is noted as forest and pasture, wildlife and livestock populations are cited and they report some residential areas with septic tanks. DNR has a fish hatchery on a spring fed tributary of the creek upstream of the intake.

FIELD NOTES
Jill Joss
Wx : 60 and partly cloudy, day following hard rain

Chattooga River - Henry Branch to Lyerly

#1 did not develop
#2 & #3 - Down Maddox Lake Rd. toward Maddox Lake (east bank of Chattooga R.) .75 miles from Maddox Lake (access to Lake down dirt road to Lake blocked by pasture gate and "road closed" sign). Signs of recently forested area – clear cut

#4 Opposite side of hill in #2&3. Unimproved dirt road parallels the stream draining to Maddox Lake, which in turn has an outfall to the river.

#5 Wildlife Lake Rd. gaging station, 200 ft from Hwy 27 bridge spanning the river.
appears to be local fishing spot. Compacted trails lead along an old bridge abutment down to the bank.
#6 – did not come out
#7 & 8 "Jim's Used Cars" has abandoned and rusted vehicles in various stages of disrepair within approx. 100 ft. of river .

#9 & 10 Runoff from the highway gets channeled by concrete culvert down the hillside. It continues down the hill to river along area heavily cut for right of way for power lines. Litter and garbage is all along the right of way.
Three fisherman indicate the popularity of the spot as a fishing hole.

#11 Wetlands on both sides of the river.

#13-24 Henry branch from opposite (west) bank. Natural stream connects to retention pond which has been culverted and drains from private property down a ditch and then directly into the river. It appears to be an intermittent stream, or rather a ditch flowing only after heavy rains. The ditch is lined with grasses. The perimeter of fields that surround the ditch have been mowed all the way up to the riverbank, allowing no buffer zone.

#18-21 Highway bridge over river
top of hill
stormwater drainage pipe
low-lying flooded area

#29 & 30 Tributary stream - with horse pasture, some buffer present
Chattooga River Field Notes (cont.)

#31 Flooded wetland area

#32 - 34 Lyerly Dam : sudsy . Conversation with nearby resident/ believed it may be coming downstream from the Sewage Treatment Plant in Trion. He estimated the water level to be up around 3ft above normal following the rains.

FIELD NOTES
Jill Joss
6/20/05
Wx : Sunny – 85 degrees

Chattooga River - Cane Creek, Trion to Henry Branch

I. Hwy 27 - Trion
#23.) Trion Water Pollution Control Plant on Hwy 27
#24.) Hwy 27 rd. bridge – Upstream. Water is relatively clear here with a good flow, stream depth is slightly below normal.
#25.) Same location – Downstream, similar conditions

II. Rd. headed into Trion due east. from Hwy 27 approx. .5 miles
#26.) Small tributary , note pipe crossing stream, river is just beyond right hand side of photo. Urban runoff possibly a factor here. Dense brush buffers either side of tributary.

III. Hwy 27 Rd. Bridge in center of Trion
#27.) Upstream view of river, flowing slowly, somewhat clear.
#28.) Where tributary enters river
#29.& 30.) Downstream water very clear, banks well-vegetated and buffer zone is fairly thick with hardwoods. Residential comes within 100 ft. of river at this point.

IV. Penn Bridge Rd. bridge over river – to the east are extremely steep slopes, to the west is floodplain and pasture. Area is heavily wooded.
#31.) Upstream view – slow flow to river here, channel appears deep, water is muddy from heavy rains two days prior.
#32.) Downstream view – same conditions, bedrock can be seen at right hand of photo as stream bed.

V. North on small road NW of river off Penn Bridge Rd. – gravel pit on right side of road. No pictures taken.

VI. SE on Penn Bridge Rd. Thick buffer except for isolated areas where there is access to river. Road is private property.
#33.) Slow flow, trash and debris, example of break in buffer.

VII. Penn Bridge Rd. – extremely steep slopes to east of road.
#34.) Property owner here has terraced along some of the steep slopes extending down to the road.

VIII. **#35.)** Gravel pit on Penn Bridge Rd.- within one mile of river.

To the extent possible, identify sources and quantify the extent of pollution in the stream segment for each of the parameters listed in Table 2 and evaluate the likely impact on the parameter load to the stream. This should follow research performed and described in preceding narrative and should correct or add information to the TMDLs. **The *SOURCES SHOULD BE RANKED*** from those having the most impact to those having the least impact. The estimated extent of contribution can be expressed as the area of the watershed effected, the stream miles effected, or the number of activities contributing to the problem. The magnitude of contribution should be estimated to be large, moderate, small, or negligible.

Table 3. CONCLUSIONS MADE OF POTENTIAL SOURCES OF STREAM SEGMENT IMPAIRMENT

PARAMETER	POTENTIAL SOURCES	ESTIMATED EXTENT OF CONTRIBUTION	ESTIMATED MAGNITUDE OF CONTRIBUTION	COMMENTS
CHATTOOGA (Cane Creek to Henry Br.)				
Fecal Coliform	Urban Development - stormwater runoff	Roughly 10% of watershed around Trion, bridges over highways	Moderate	
	Urban Development - leaking septic systems	Throughout	Moderate	Health Department has aggressive program but many old systems exist / no sewer is available
	Urban Development – sewerage system leaks	Throughout	Moderate	Trion WPCP had been identified by several residents as possible source though complaints were not made
	Wildlife	In forested areas northeast quadrant of watershed		Although area is heavily forested, the steep slopes along Penn Bridge Rd. accelerate runoff
	Landfill	Extreme northeast corner of watershed	Small	The landfill is now closed but is an older, unlined landfill so may be some leachate
	Agriculture – pasture		Small	Some pasture in this segment
	Agriculture – row crops		Negligible	Stakeholders reported very little row cropping, land use has converted to pasture/grasses and succeeded to trees
PARAMETER	**POTENTIAL SOURCES**	**ESTIMATED EXTENT OF CONTRIBUTION**	**ESTIMATED MAGNITUDE OF CONTRIBUTION**	**COMMENTS**
CHATTOOGA (Henry Br. –				

Lyerly)				
Fecal Coliform	Urban Development – stormwater runoff	Center quadrant of watershed surrounding City of Summerville	Moderate	Highway bridges are culverted so runoff accelerates to river, cutting power line right of ways reduces buffered areas
	Urban Development – sewerage system leaks		Moderate	Summerville WPCP has received enforcement orders for violating their NPDES permit. Fines were issued and immediate correction required.
	Urban Development - leaking septic systems	Throughout	Moderate	Health Department has aggressive program but many old systems exist / no sewer is available
	Wildlife	Outer edges of watershed outside urban area	Small	Still forested, though not as heavily as upstream segment
	Agriculture - pasture	Lower half of watershed	Moderate	More pasture, grasses along this segment. Row cropping has converted to pasture and other grasses and trees
PARAMETER	**POTENTIAL SOURCES**	**ESTIMATED EXTENT OF CONTRIBUTION**	**ESTIMATED MAGNITUDE OF CONTRIBUTION**	**COMMENTS**
RACCOON				
Fecal Coliform	Agriculture - pasture	22% of watershed	Moderate	22% of watershed is denoted as pasture
	Rural septic systems	Throughout	Moderate	Sparse residential though much is located beside stream. No sewer available in this watershed, reportedly some straight pipe systems
	Wildlife	Throughout	Moderate	Very rural, forested area

V. STAKEHOLDERS

PUBLIC INVOLVEMENT AND THE ACTIVE PARTICIPATION OF STAKEHOLDERS is essential to the process of preparing TMDL implementation plans and improving water quality. Stakeholders can provide valuable information and data regarding their community, impaired water bodies, potential causes of impairments, and management practices and activities which may be employed to reduce the impacts of the causes of impairment.
Describe outreach activities to advise and engage stakeholders in the TMDL implementation plan preparation process. Describe the stakeholder group employed or formed to address the impaired segments in the watershed. Summarize the results of the number of attendees and meetings and describe major findings, recommendations, and approvals.

The Coosa Valley Regional Development conducted several TMDL informational and stakeholder public meetings:
The mailing list for the first meeting included all officials from the cities and counties in the watersheds for the impaired streams. A notice about the 303(d) listed streams, a general handout on the TMDL process, and an RSVP form were mailed to each of the 136 individuals on the list (see attachment).
Outreach for the second meeting included over 200 poultry farmers in the watersheds added to the mailing list. A similar letter was sent to all of those notified of the first meeting as well as the added farmers, watershed groups, educators, and other stakeholders identified at the first meeting or by additional outreach.
The mailing for the third meeting in December was supplemented by posting of flyers in the watershed community. 10-15 flyers were posted/handed out for each 10-digit HUC in an attempt to attract and educate more of the public-at-large (see attachment). The meeting was purposely scheduled during evening hours to allow for broader participation. The Stakeholder Advisory Groups were formed, including individuals who had attended one or more of the past stakeholder meetings. Where we discovered key stakeholders that had not yet participated, they were included even at the late date

<u>May 17, 2005 TMDL Stakeholder Meeting held at the Forum in Rome, Georgia for the streams in the Coosa Basin (27 attendees)</u>
A powerpoint presentation was given concerning TMDL s and the TMDL process, responsibilities under the contract and the timeline involved. Comments were made concerning how the TMDL process fits together with watershed assessments, stormwater requirements, and other water quality programs. There is a lot of overlap. Standards for bacteria monitoring were discussed, concerning whether e-coli or fecal coliform is the best indicator of threats to human health. For the purposes of the TMDL process as it stands we are working with data indicating impairment due to fecal coliform. Some participants had expected that these meetings would be concerning phosphorus and dissolved oxygen issues and wondered where things stood with that process. There was confusion surrounding the issue of quantifying, identifying, and subsequently addressing non-point sources of pollution given the fact that non-point sources are, by their very definition, unable to be pinpointed. BMP's used to target non-point pollution from various land uses were discussed.
One stakeholder questioned the EPD and Contractors' commitment to the TMDL process. They recall having participated in other TMDL meetings in the past and never heard anything more. One stakeholder suggested that approval of Phase II Stormwater plans would give some authority to certain groups to be responsible for runoff pollution.

<u>September 1, 2005 TMDL Stakeholder Meeting held in Rome, Georgia for the Floyd/Chattooga County areas (24 attendees)</u>
This meeting started with the showing of two videos, "TMDLs in Georgia, and "When Red Clay Meets Blue Water". A powerpoint presentation followed with photos from the field surveys reviewed and findings shared regarding ranking of sources from field survey observations. Discussion

followed. Local government officials commented on the fact that there is no regulatory authority to control agriculture, septic processes, or homeowners who clear vegetation along the streambank. Some states require regulation of septic systems beyond initial installation. A comprehensive approach to on-site septic systems has been used in some communities where there are no sewer systems.

The general consensus was that the State needed to partner with local government on these issues, not pass the responsibility of enforcement down to the local level. The action at the State level to reduce the minimum size of buffers is a good example. The Georgia Poultry Federation shared the extensive work that has been done voluntarily by the poultry community as far as their Comprehensive Nutrient Management Plans. It was expressed that farms are managed best when allowed to make improvements on a voluntary basis and cautioned about over-regulating the industry. Some stakeholders urged more monitoring to be sure that the data that communities are regulated on is accurate.

October 18, 2005 Fall Workshop-Northwest Georgia Regional Water Resources Partnership held in Dalton, Georgia. Workshop title: CLEAN WATER the TMDL Link, A Toolbox for Improving Water Quality. Coosa Valley Regional Development Center & North Georgia Regional Development Center had two separate breakout sessions on the TMDL Implementation Plans for Stakeholder Interest (73 attendees)

December 8, 2005 Stakeholder Meeting held at the Sara Hightower Regional Library in Rome, Georgia for Floyd and Chattooga Counties (12 attendees)

Stakeholders were also contacted individually to introduce the TMDL implementation process and to invite input into the implementation plans as members of the advisory committee.

The Stakeholder Advisory Committee for Chattooga and Floyd Counties met at the Coosa Valley Regional Development Center on February 14, 2006. In attendance were Leigh Ross, Rome-Floyd County Water and Sewer, Kennith Moseley representing Chattooga County Farmers, Brent Allen, Chattooga County USDA Cooperative Extension Agent, David Howerin, Planning Director, Coosa Valley RDC, and Jill Joss and Julie Meadows of Coosa Valley RDC. The major agricultural focus for the USDA Cooperative Extension Service in the watershed is on crop and pasture improvement including soil testing, proper application of fertilizer- nutrient management , grants for improving grass stands, improvement using rotational grazing and cross fencing. In addition the Chattooga Young Farmers conducts classes and workshops which focus on improvements in agricultural practices that in turn, can have a positive impact on water quality. Their activities include tours of innovative facilities and demonstration projects of bmp's.
A major topic of discussion centered on additional monitoring to better isolate sources of bacteria. The group brainstormed on potential resources and costs to the community.

Involvement of Stakeholder Group: A local resident at the Lyerly Dam was informally interviewed during the field survey and attributed the sudsy water at the Dam to be the result of discharges from the Trion Wastewater Treatment Plant. Sheri Teems, the NRCS representative for the area noted that point sources are more likely to be the source rather than the small amount of row cropping or cattle in the watershed. There is "zero poultry" in this watershed, row cropping has dropped off substantially and there are some cattle that do have access to the streams. NRCS has a waiting list longer than the list of those it is able to serve through cost-share programs. The agricultural community is waiting to see what this years Farm Bill Reauthorization will bring. The EQIP program has undergone substantial reductions in funding.

List the watershed or advisory committee members of the stakeholder group for this segment in the following table.

Table 4. COMMITTEE MEMBERS

NAME/ORG	ADDRESS	CITY	STATE	ZIP	PHONE	E-MAIL
Mike Dawson – Chattooga County Commissioner	P.O. Box 211	Summerville	GA	30747		
Nichole Dyer – Chattooga Chamber of Commerce	P.O. Box 217	Summerville	GA	30747	(706) 506-3160	nicholedyer@alltel.net
Mike Pitts – Chattooga County Health Dept.	60 Farrar Rd.	Summerville	GA	30747	(706) 857-3471	
Brent Allen – Chattooga Co. Extension Service	10011 Commerce St.	Summerville	GA	30747	(706) 857-0744	brenta@uga.edu
Sid Swords – City of Menlo	P.O. Box 155	Menlo	GA	30731	(706) 862-2440	
Kennith Moseley – Chattooga Young Farmers	11851 Co. Rd. 41	Gaylesville	AL	35973	(706) 895-2385	
Wayne Hurley	20 Trixie Ln.	Summerville	GA	30747	(706) 857-3214	
Limestone Valley RC&D	125 Red Bud Rd. NE Suite 7	Calhoun	GA	30701	(706) 825-7044	
Sheri Teems – NRCS	1401 Dean St.	Rome	GA	30161-6494	(706) 291-5651 x3	Sheri.Teems@ga.usda.gov
CRBI – Joe Cook, Katie Owens	408 Broad St.	Rome	GA	30161	(706) 232-2724	jcook@coosa.org

In Appendix A, list the names, addresses, telephone numbers, and e-mail addresses for local governments, agricultural or commercial forestry organizations, significant landholders, businesses and industries, and local organizations including environmental groups and individuals with a major interest in this watershed.

VI. MANAGEMENT MEASURES AND ACTIVITIES

Describe any management measures or activities that have been put into place or will be put into place including regulatory or voluntary actions or other controls by governments or individuals that specifically apply to the pollutant that will help achieve water quality standards. Include who will be responsible for the measure, how it will be funded, the status, the date it will be or was initiated, and a short description of how effective the measure is or will be.

Table 5. MANAGEMENT MEASURES AND ACTIVITIES

GENERAL MEASURES APPLICABLE TO ALL PARAMETERS

MEASURE	RESPONSIBILITY	DESCRIPTION	SOURCE OF FUNDING	STATUS	ENACTED/ IMPLEMENTED	EFFECTIVENESS (Very, Moderate, Weak)
Federal Clean Water Act, Section 305(b) and 303 (d)	USEPA, Georgia DNR EPD, Chattooga County	The congressional objective of the Clean Water Act "is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Section 305 (the *National Water Quality Inventory*) requires states to report progress in restoring impaired waters to EPA on a Biennial basis. Section 303(d) requires states to identify 'impaired' waters, submit a list to EPA every two years, and develop TMDLs for these waters	Federal, Georgia	Enforced		
Georgia Water	Georgia Rules and	Law prohibiting	Federal,	Enforced	11/1964	

Quality Control Act (OCGA 12-5-20)	Regulations for Water Quality Control, Chapter 391-3-6	discharge of excessive pollutants (sediments, nutrients, pesticides, animal wastes, etc.) into waters of the State in amounts harmful to public health, safety, or welfare, or to animals, birds, or aquatic life or the physical destruction of stream habitats. Law authorizing Georgia EPD to control water pollution, eliminate phosphate detergents, and regulate sludge disposal; to require permits for agricultural ground and surface water withdrawals; to prohibit situation of state waters by land disturbing activities and require undisturbed buffers along state waters; to require land-use plans that include controls to protect drinking water supply sources and wetlands; to require river basin	Georgia, Chattooga County			

		management plans on a rotation schedule for all major river basins.				
Georgia Erosion and Sedimentation Control Act, Construction Permit, 2003 Amendment	Chattooga County, Georgia DNR/ EPD, Georgia Soil and Water Conservation Commission	Requires Erosion and Sedimentation Control Plan incorporating best management practices plus "Qualified Personnel" Training and Certification Program adopted from Georgia Soil and Water Conservation Commission. Certification of on-site "Qualified Personnel" to ensure proper design, construction, and maintenance of standard E & S control measures and storm water management practices	Chattooga Co.	Enforced		
Erosion and Sedimentation Control Training and Certification	Georgia Soil and Water Conservation Commission, GA EPD, Limestone Valley RC&D	House Bill 285 requires state certification in Erosion and Sedimentation Control for anyone involved in the following activities: land development, design, review, permitting,	Georgia Soil and Water Conservation Commission, GA EPD	Enforced, certification by end of 2006		Very

		construction, monitoring, inspection, or any land-disturbing activity in Georgia (Georgia Soil and Water Conservation Commission, 2005). The GSWCC also has updated requirements for E&SC plans to be submitted with each project. Three levels of certification are offered through the Limestone Valley Regional Conservation and Development Council (RC & D) for Chattooga County.				
Construction Storm Water Discharge NPDES Permit	Georgia DNR/ EPD	General storm water permit for stand-alone construction sites; infrastructure permits; and common developments. Requires implementation of Erosion, Sedimentation and Pollution Control Plan plus monitoring of discharge for compliance with Georgia's in-stream water quality	State	Enforced		

		standards.				
Industrial Storm Water Discharge NPDES Permit	Georgia DNR/ EPD	General storm water discharge permit for manufacturing facilities; mining, oil, and gas operations; hazardous waste treatment; storage or disposal facilities; recycling centers; steam electric power generating facilities; transportation facilities; domestic sewage or sewage treatment. Requires implementation of Storm Water Pollution Prevention Program. May require storm water monitoring program targeting discharges into/near 303 (d) listed waters.	State	Enforced		
Sanitary Sewer Maintenance Program	Chattooga County	Sanitary Sewer system inventory and inspection (mapping, television inspections); infiltration and inflow identification and reduction (flow monitoring, smoke testing); sewer line rehabilitation (pipe bursting, relining, cleaning) and	Chattooga County	Enforced	Ongoing	

		manhole rehabilitation.				
EPA Section 319 Non-point Source Implementation Grants	Georgia Department of Agriculture/ Georgia Environmental Protection Division for enforcement action	Funds distributed through a competitive process to public agencies, regional development centers, state colleges and universities, and state agencies.	Federal, State		Yearly	Varies with BMP or project
Georgia Best Management Practices	Georgia DNR/EPD	Informs those involved in the agriculture business of effective practices to minimize non-point sources of pollution	Georgia			Varies with BMP
Federal Farm Bill 2002	United States Department of Agriculture/ Natural Resources Conservation Service	Enhances long-term quality of our environment and conservation of our natural resources. This bill provides several opportunities for receiving grants to improve water quality.	Federal Cost-Share and Incentive Programs		2002	Varies with BMP applied.
Watershed Protection Tools Addressing Point Sources	Chattooga County and stakeholders	Improved NPDES permits; Enforcement of existing permits				Very if enforced
Farmer Education	Chattooga Co. Young Farmers	Holds workshops for membership on topics such as rotational grazing, silviculture in pastures, and home farm conservation practices. They	USDA	ongoing	2003	

		average 35-40 individuals per workshop.				
Crop and pasture improvement efforts	USDA Cooperative Extension Service	Doing soil testing, education as to the proper application of fertilizer and better management of grass, education around crop rotation and planting more legumes to make soil more productive	USDA	ongoing		
EQIP	NRCS	Voluntary program that provides technical and cost share assistance for protection of ground and surface water, erosion control, air quality, wildlife habitat, and plant health	Federal (Farm Bill 2002) 50% cost share with possible additional incentive payments	ongoing		
Conservation Reserve Program (CRP)	NRCS/USDA Farm Services Agency	Provides technical assistance, rental payments and cost-share funding to address specific natural resource concerns including: protection if ground and surface waters, soil erosion and wildlife habitat. Eligible practices include tree planting, grassed waterways, wildlife habitat	Federal Annual rental payment for land taken out of production and 50% cost share for practice installation			

		buffers, and shallow water area for wildlife and filter strips.				
Flood Damage Prevention Ordinance	Chattooga County	Participation in National Flood Insurance Program		Ongoing	Enforced	
Dowdy Park Clean-up activities	Chattooga County	Clean-up activities at Dowdy Park	Local community	Ongoing annually		
Environmental Trust Fund Resolution	NERA, Local governments	Resolution calling for State of Georgia to fully appropriate fees collected from developers for erosion and sedimentation intended to fund additional inspectors to implement ordinances as intended	State	March 2006	Very	

VII. MONITORING PLAN

The purposes of monitoring are to obtain more data, to determine the sources of pollution, to describe baseline conditions, and to evaluate the effects of management and activities on water quality. Describe any sampling activities or other surveys - active, planned or proposed - and their intended purpose. Reference the development and submission of a Sample Quality and Assurance Plan (SQAP) if monitoring for delisting purposes.

Table 6. MONITORING PLAN

PARAMETER(S) TO BE MONITORED	ORGANIZATION	STATUS (CURRENT, PROPOSED, PLANNED)	TIME FRAME START	TIME FRAME END	PURPOSE (If for delisting, date of SQAP submission)
Watershed Flow and Temperature Data; Continuous Water Quality Monitoring for DO, temperature, conductivity, pH, depth; Water Quality Sampling; carbonaceous and total BOD_5 (inhibited and uninhibited), DO, temperature, TKN, NH_3, NO_2-NO_3, total phosphorus, ortho-phosphate, TOC, conductivity, and pH; Chlorophyll A; Special Studies includes reaeration, sediment oxygen demand (SOD), long-term BOD tests, and dye studies.	GA EPD, USGS	Current	2005-2006		Coosa River Basin Modeling study
Fecal coliform	GA EPD	Planned	2006		In association with five year rotating basin monitoring schedule

VIII. PLANNED OUTREACH FOR IMPLEMENTATION

List and describe outreach activities which will be conducted to support this plan and the implementation of it.

Table 7. PLANNED OUTREACH

RESPONSIBILITY	DESCRIPTION	AUDIENCE	DATE
NRCS	Determine what impact the new Farm Bill is going to have on these programs	Agricultural community	April 2006
CVRDC	Continue discussion about additional monitoring, determine if Summerville has lab resources to help leverage the cost	Stakeholder Advisory Group	April 2006
CVRDC	Conduct additional outreach to include additional stakeholders on Advisory Group	County-at-large	March 2006
CVRDC	Conduct outreach to Commissioner Mike Dawson to encourage his involvement in the process	Commissioner Dawson	March 2006
CVRDC	Contact Trion WPCP for comments	Max Hollis	April 2006
CVRDC	Convene SAG to announce CVRDC's recommendations for implementation	Stakeholder Advisory Group	April 2006
CVRDC	Convene Chattooga County SAG separate from combined Chattooga/Floyd Group	Stakeholder Advisory Group	April 2006

IX. MILESTONES/ MEASURES OF PROGRESS OF BMPs AND OUTREACH

This table will be used to **track and report progress of management measures including BMPs and outreach**. Record milestone dates for:
- accomplishment of management practices or activities - outreach activities
- installation of BMPs

to attain water quality standards. Comment on the effectiveness of the management measure, how much support the measure was given by the community, what was learned, how the measure might be improved in the future, and any other observations made. This table can be "pulled out" of this template and used to report and track progress.

Table 8. MILESTONES

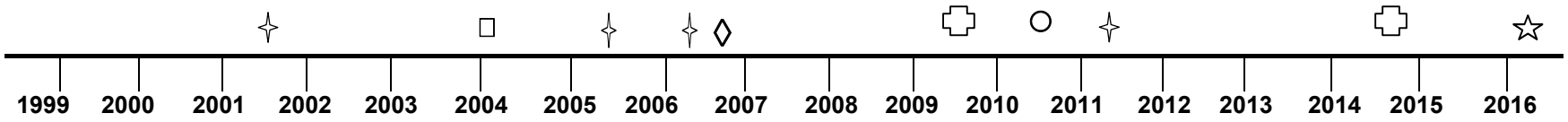
MANAGEMENT MEASURE	RESPONSIBLE ORGANIZATIONS	STATUS PROPOSED	STATUS INSTALLED	COMMENT
Stormwater Management Education and Outreach				
• Complete Center for Watershed Protection's Codes and Ordinances Worksheet	Local Governments	Summer 2006		
• Consider Adopting 22 Model Development Principles as discussed in Better Site Design: A Handbook for Changing Development Rules in Your Community where applicable	Local Governments	2007-2008		
• Implement education of community using After the Storm non-point source pollution video presentation on public access channels	Local Governments	Ongoing		
• Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations	Local Governments	2006-2008		
• Reconvene Stormwater Working Group to include all counties, municipalities in Coosa Valley RDC area	Coosa Valley RDC, stakeholders	2006		
• Will investigate 319 h non-point source pollution grant				

possibilities regarding funding for development of stormwater management training for municipal employees	Coosa Valley RDC, stakeholders	2006		Application deadline May 31, 2006. Yearly deadline.
Septic System Maintenance Education and Outreach				
• Investigate expansion of district-wide outreach component to homeowners to include those with existing systems	Coosa Valley RDC, stakeholders	2006		
• Will investigate 319 h non-point source pollution grant possibilities regarding septic system maintenance and repair project	Coosa Valley RDC, stakeholders	2006		Application deadline May 31, 2006. Yearly deadline.
Riparian Buffer Education and Outreach				
• Consider adopting relevant principles as detailed in 22 Model Development Principles as discussed in Better Site Design: A Handbook for Changing Development Rules in Your Community	Local Governments	2007-2008		
• Continue education and outreach to local communities through USDA NRCS/FSA, County Extension Service	USDA NRCS/FSA, County Extension Service	Ongoing		
• Will investigate 319 h non-point source pollution grant possibilities regarding purchasing and distribution of education materials encouraging homeowners to develop, maintain riparian buffers	Coosa Valley RDC, stakeholders	2006		Application deadline May 31, 2006. Yearly deadline.
Investigate Funding Sources • Will investigate 319 grant possibilities regarding development of a project to survey schools in Coosa	Coosa Valley RDC, stakeholders	2006		Application deadline May 31, 2006. Yearly deadline.

Valley RDC service area to determine interest in and feasibility of interest in water quality education, specifically on causes of non-point source pollution, importance of riparian buffers, and stormwater pollution prevention				

PROJECTED ATTAINMENT DATE

The projected date to attain and maintain water quality standards in this watershed is 10 years from acceptance of the TMDL Implementation Plan by Georgia EPD.



Scheduled EPD Basin Group Monitoring ✧
TMDL Completed □
Revised TMDL Implementation Plan Accepted ◊
Plan Status Evaluation Report ✠
Plan Update or Revision, if Necessary ○
Project Attainment for Plans Prepared in 2006 ☆

Prepared By:	**Jill Joss**				
Agency:	**Coosa Valley Regional Development Center**				
Address:	**P.O. Box 1793**				
City:	**Rome**	**ST:**	**GA**	**ZIP:**	**30165**
E-mail:	**jjoss@cvrdc.org**				
Date Submitted to EPD: 04/22/06				**Revision: 01**	

APPENDIX A.

STAKEHOLDERS

List the names, addresses, telephone numbers, and e-mail addresses for local governments, agricultural or commercial forestry organizations, significant landholders, businesses and industries, and local organizations including environmental groups and individuals with a major interest in this watershed.

NAME/ORG	ADDRESS	CITY	STATE	ZIP	PHONE	E-MAIL
Mike Dawson – Chattooga County Commissioner	P.O. Box 211	Summerville	GA	30747		
Nichole Dyer – Chattooga Co. Chamber of Commerce,Director of Tourism and Community Development	P.O. Box 217	Summerville	GA	30747	(706) 506-3160	nicholedyer@alltel.net
Brent Allen – Chattooga Co. Extension Service	10011 Commerce St.	Summerville	GA	30747	(706) 857-0744	brenta@uga.edu
Kennith Moseley – Chattooga Co. Young Farmers' Association	11851 Co. Rd. 41	Gaylesville	AL	35973	(706) 895-2385	
Mike Pitts – Chattooga Co. Health Department	60 Farrar Rd.	Summerville	GA	30747	(706) 857-3471	
Greg Hurley – Farm Representative	221 Trixie Ln.	Summerville	GA	30747	(706) 857-7689	
Wayne Hurley – Farm Representative	20 Trixie Ln.	Summerville	GA	30747	(706) 857-2707	
Ann Hutchins – Town of Trion WPCP Land App.	P.O. Box 850	Trion	GA	30753	(706) 734-7015	
Limestone Valley RC & D Council	125 Red Bud Rd. NE Suite 7	Calhoun	GA	30701	(706) 825-7044	
Sid Swords – City of Menlo	P.O. Box 155	Menlo	GA	30731	(706) 862-2440	
John Leslie	1045 Fish Hatchery Rd.	Summerville	GA	30747	(706) 857-4525	
Keith Gilmer – GA. Soil and Water Conservation Commission	700 E. 2nd Ave. Suite J	Rome	GA	30161	(706) 295-6131	Kgilmer@gaswcc.org

Ron Beegle – Mt. Vernon Mills	P.O. Box 7	Trion	GA	30753	(706) 734-2311 x 132	
Joe Cook – Katie Owens – Coosa River Basin Initiative	408 Broad St.	Rome	GA	30161	(706) 232-2724	jcook@coosa.org
Shaun Brand – Chattooga Co. Health Dept.						
Linda Elder – Chattooga Co. resident	P.O. Box 257	Armuchee	GA	30105	(706) 802-5506	

APPENDIX B.

UPDATES TO THIS PLAN

Describe any updates made to this plan. Include the date, section or table updated, and a summary of what was changed and why.

APPENDIX C.
MAPS AND PHOTOS

CHATTOOGA RIVER
HUC 10 #0315010505

DSC00009 – Chattooga River – Henry Branch to Lyerly
Highway 27 Bridge over Chattooga River. Runoff from highway is channeled directly down to river

DSC00010 Chattooga River - Henry Branch to Lyerly (same location off Hwy 27 as above). The culvert channels runoff from the highway directly to the river.

DSC00015 Chattooga River – Henry Br. to Lyerly – Ditch which drains directly to river (opposite bank can be seen in background of photo). This is in the area of the Henry Branch.

DSC00030 Chattooga River – Henry Branch to Lyerly. Tributary stream near Lyerly. Horse pasture in background, animals appear to be fenced out at this location.

DSC00016 Chattooga River Henry Br. To Lyerly. Same location as DSC00015. Photo illustrates field being mowed all the way to the bank, allowing no buffer whatsoever.

DSC00023 Chattooga River – Cane Creek, Trion to Henry Branch
Trion Water Pollution Control Plant on Highway 27

DSC00026 Chattooga River – Cane Creek, Trion to Henry Branch
Potential for urban runoff – tributary to river in downtown Trion, note pipe crossing stream

DSC00027 Chattooga River – Cane Creek, Trion to Henry Branch
Upstream view of the river from Highway 27 road bridge in the center of Trion. Urbanized area of watershed. Note there is no buffer along the river here.

DSC00033 Chattooga River – Cane Creek, Trion to Henry Branch
Penn Bridge Rd. Example of a break in the buffer. Trash and debris from stormwater runoff is abundant.

DSC00035 Chattooga River – Cane Creek, Trion to Henry Branch
Penn Bridge Rd. gravel pit is within one mile of the river.

DSC00036 Chattooga River – Cane Creek, Trion to Henry Branch
This is the location of the closed Alexander Rd. landfill, an older, unlined landfill which may contribute leachate.