

STATE OF GEORGIA

TIER 2 TMDL Implementation Plan (Revision # 01)

Segment Name: Kings Creek and Horseleg Creek

Date: Sept. 30, 2009

River Basin: Coosa River Basin

Local Watershed Governments:

Floyd County Government

Chattooga County Government

City of Rome

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 non-point pollution, stakeholders and public involvement, and education/outreach activities. In addition, the plan describes regulatory and voluntary practices/control actions (Best Management Practices, or BMPs) to reduce non-point sources of pollutants, milestone schedules to show development of the BMPs (*measurable milestones*), and a monitoring plan to determine BMP effectiveness.

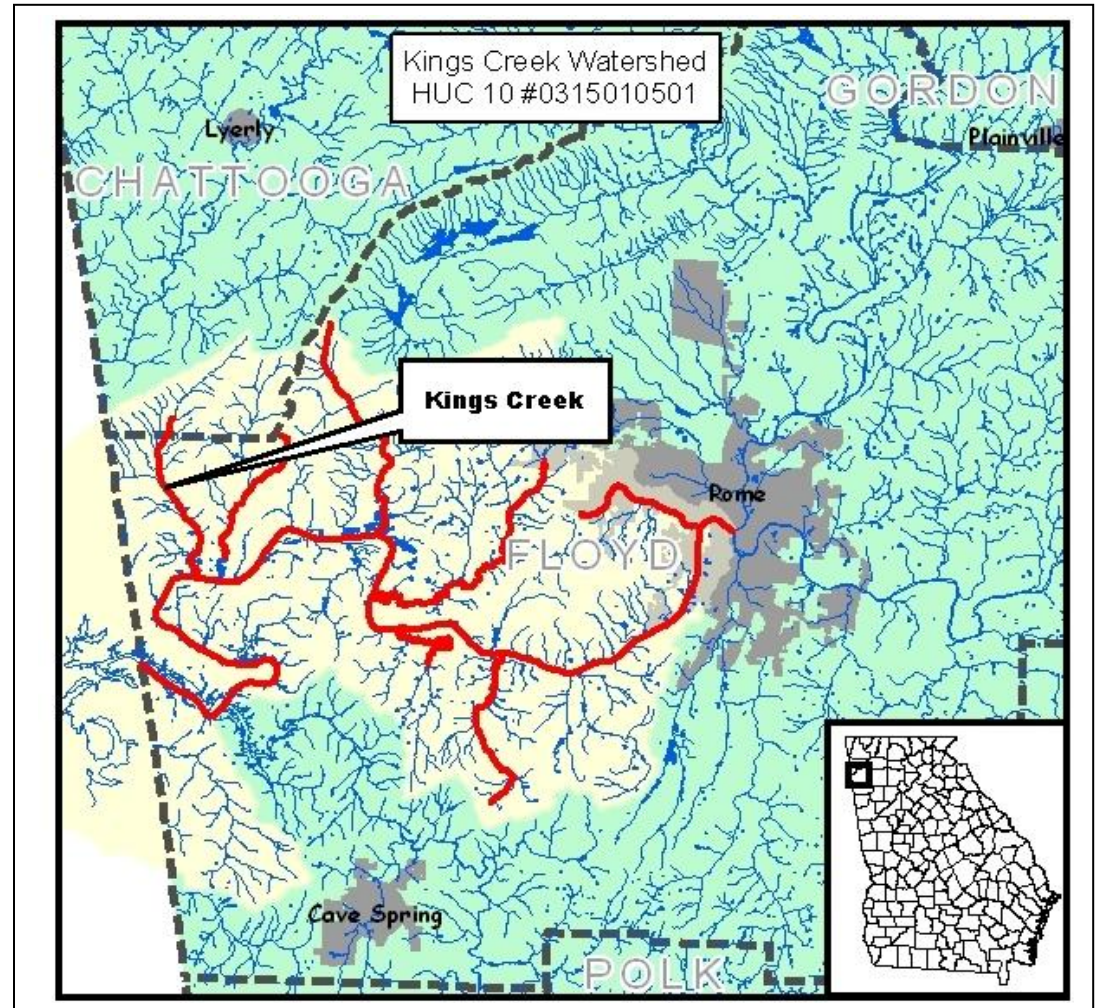


Table 1. IMPAIRED SEGMENTS IN THE HUC 10 WATERSHED

IMPAIRED SEGMENT	IMPAIRED SEGMENT LOCATION	EXTENT (mi/ac)	CRITERIA VIOLATED	EVALUATION
Kings Creek	Coosa River Tributary	4	Fecal Coliform Bacteria	NS
Horseleg Creek	Rome (Floyd County)	4	Fecal Coliform Bacteria	NS

II. GENERAL INFORMATION ABOUT THE HUC 10 WATERSHED AND THE INDIVIDUAL IMPAIRED SEGMENT

This section reviews HUC 10 watershed characteristics followed by pertinent information on the drainage delineation of the individual stream segment. New conditions or changes to information contained in the TMDL study documents should be in **bold** and underlined.

The headwaters of **Kings Creek** begin in Kincaid Valley, which is located in Chattooga County. Kings Creek flows south by southwest where it collects the drainage from the east side of Bogan Mountain and the west side of Kincaid Mountain. The creek then crosses into Floyd County near the Coosa area where it runs through Carr Mountain Valley on its way to the Coosa River, which eventually enters into Lake Weiss in Alabama. The Kings Creek watershed drains a total of 7,841 acres.

Land Use: The primary use of land in the Kings Creek watershed is forest at 82.5% with 6,472 acres. Agriculture is the second highest land use category at 11.9% with 988 acres. Other Grasses account for 2.6% of the land in this watershed with 200 acres. Woody Wetlands account for 1.3% of land with 104 acres. Open Water, Low Intensity Residential, and Bare Rock each make up less than one percentage point.

Kings Creek is the Ridge and Valley physiographic region in Georgia. The ridges in this area are typically composed of chert and capped sandstone, while the valleys are usually limestone or shale. The thicker, more fertile soils typically form in the valleys from erosion of soil at higher elevations and the weathering of parent material. The weathering of sandstone and chert on ridges help form the acidic soils which maintain the forested areas of this region.

The current TMDL for Kings Creek indicates possible sources of fecal coliform bacteria are nonpoint sources, mainly wildlife, agriculture, and urban development.

The importance of wildlife as a source of fecal coliform bacteria in streams varies considerably, depending on the animal species present in the watersheds. Based on information provided by the Wildlife Resources Division (WRD) of GA DNR, the animals that spend a large portion of their time in or around aquatic habitats are the most important wildlife sources of fecal coliform. Waterfowl, most notably ducks and geese, are considered to potentially be the greatest contributors of fecal coliform. Other potentially important animals regularly found around aquatic environments include raccoons, beavers, muskrats, and to a lesser extent, river otters and minks. Recently, rapidly expanding feral swine populations have become a significant presence in the floodplain areas of all the major rivers in Georgia. Population estimates of these animal species in Georgia are currently not available.

White-tailed deer populations are significant throughout the Coosa River Basin. Fecal coliform bacteria contributions from deer to water bodies are generally considered less significant than that of waterfowl, raccoons, and beavers. This is because a greater portion of their time is spent in terrestrial habitats. This also holds true for other terrestrial mammals such as squirrels and rabbits, and for terrestrial birds (GA WRD, 2002). However, feces deposited on the land surface can result in the introduction of fecal coliform to streams during runoff events. It should be noted that

between storm events, considerable decomposition of the fecal matter might occur, resulting in a decrease in the associated fecal coliform numbers.

Agricultural livestock are a potential source of fecal coliform to streams in the Coosa River Basin. The animals grazing on pastureland deposit their feces onto land surfaces, where it can be transported during storm events to nearby streams. Animal access to pastureland varies monthly, resulting in varying fecal coliform loading rates throughout the year. Beef cattle spend all of their time in pastures, while dairy cattle and hogs are periodically confined. In addition, agricultural livestock will often have direct access to streams that pass through their pastures, and can thus impact water quality in a more direct manner (USDA, 2002). The table below provides the estimated number of beef cattle, dairy cattle, goats, horse, swine, sheep, and chickens by category reported by county. The following tables provide the estimated amount of farm animals in Floyd for livestock and chicken.

Livestock Population in Floyd County

Beef Cows, Total Head	Beef Stockers	Dairy Cows	Horses Raised	Horses, Boarding/Breeding/ Training	Sheep, # of ewes	Goats, total nannies	Pork, Farrow to Finish	Pork, Feeder Pigs, Total Head
14,000	2,500	30	290	315	150	575	0	3,500

Sources: georgiastats.uga.edu (2008)

There is a significant presence of poultry operations in Floyd County, which can be a source of the fecal coliform pollution. The chart below lays out an approximate number of chickens in each county from all poultry operations, broken down by type of chicken. The numbers are an approximate number based on the exact number of houses in the county multiplied by the average capacity of the typical chicken house in the county.

Floyd County Poultry Population, by type (Thousands)

Breeder Pullet Unit	Broiler Chickens	Hatching Layers	Table Layers	Totals
24	3,480	20	0	3,524

Sources: georgiastats.uga.edu (2008)

Fecal coliform from urban areas are attributable to multiple sources, including: domestic animals, leaks and overflows from sanitary sewer systems, illicit discharges, leaking septic systems, runoff from improper disposal of waste materials, and leachate from both operational and closed landfills. Fecal coliform bacteria enter streams by direct washoff from the land surface, or the runoff may be diverted to a storm water collection system and discharged through a discrete outlet structure.

A portion of the fecal coliform contributions in the Coosa River Basin may be attributed to failure of septic systems and illicit discharges of raw sewage. The table below presents the number of septic systems that have been installed from 2004-2009, as well as the number of septic systems that have been repaired in this time period. Often, this is a reflection of population increases outpacing the expansion of sewage collection systems during this period. Hence, a large number of septic systems are installed to contain and treat the sanitary waste.

Septic History (2004-2009)

County	New Septic Systems (2004-2009)	Septic Systems Repaired (2004-2009)
Floyd	1,226	1,054

Northwest Georgia Public Health (District 1-1)

Leachate from landfills may contain fecal coliform bacteria that may at some point discharge into surface waters. Sanitary (or municipal) landfills are the most likely to serve as a source of fecal coliform bacteria. These types of landfills receive household wastes, animal manure, offal, hatchery and poultry processing plant wastes, dead animals, and other types of wastes. Older sanitary landfills were not lined and most have been closed. Those that remain active and have not been lined operate as construction/demolition landfills. Currently active sanitary landfills are lined and have leachate collection systems. All landfills, excluding inert landfills, are now required to install environmental monitoring systems for groundwater and methane sampling. There are 109 known landfills in the Coosa River Basin. Of these, 19 are active landfills, 3 are in the process of being closed and 87 are inactive or closed. There are 4 landfills in the Kings Creek HUC 10 watershed.

Landfills within Floyd County

Name	Permit No.	Type	Status
Cave Spring		NA	Inactive
Cave Spring – Hwy 411		NA	Inactive
Cave Spring – Perry Road		NA	Inactive
City of Rome	057-004D(SL)	Sanitary Landfill	Inactive
D.C. McCoy Landfill		NA	Inactive
Floyd Co. – Rome Walker Mtn. Rd	057-021D(C&D)	Construction and Demolition Landfill	Operating
Floyd Co. – Berryhill Rd.	057-009D(SL)	Sanitary Landfill	Closed
Inland Rome – Turner Bend Rd.	057-017D(LI)	Industrial Landfill	Operating
Jack Morgan		NA	Inactive
Potts Road		NA	Inactive
Rome – Walker Mtn Rd. Site 2	057-020D(MSWL)	Municipal Solid Waste Landfill	Operating
Rome – Walker Mtn Rd.	057-013D(SL)	Sanitary Landfill	Closed

PH 1, 2, & 3			
Sarah Chandler Property – Disp Areas 1 & 3	057-012D(L)(I)	NA	Inactive

GAEPD study document Total Maximum Daily Load Evaluation for Twenty-Nine Stream Segments in the Coosa River Basin for Fecal Coliform (Jan. 2009)

Wastewater Treatment Plants & other NPDES Permit Holders

In general, industrial and municipal wastewater treatment facilities (abbreviated WWTP or WPCP) have NPDES permits with effluent limits. These permit limits are either based on federal and state effluent guidelines (technology-based limits) or on water quality standards (water quality-based limits). These WWTP/WPCP's should be treated as potential sources, though their potential contribution is limited by the tight regulations that include stringent monitoring and management requirements. These regulations are based off of technology-based guidelines that the EPA has developed, which establish a minimum standard of pollution control for municipal and industrial discharges without regard for the quality of the receiving waters. These are based on Best Practical Control Technology Currently Available (BPT), Best Conventional Control Technology (BCT), and Best Available Technology Economically Achievable (BAT). The level of control required by each facility depends on the type of discharge and the pollutant.

Facility	Permit #	Factory Type	Flow (MGD)	Receiving Stream
Georgia Power Company – Plant Hammond	GA0001457	Industrial	0.000	Coosa River
General Electric Company – Rome	GA0024155	Industrial	0.000	Horseleg Creek Tributary
TIN Inc./DBA Temple- Inland	GA0001104	Industrial	0.000	Coosa River
TIN Inc./DBA Temple- Inland	GA0001104	Industrial	0.000	Smith/Cabin Creek
Rome WPCP	GA0024112	Municipal	18.000	Coosa River
Rome - Coosa WPCP	GA0024341	Municipal	2.000	Coosa River

Data Provided by EPD

Relevant Watershed Planning and Management Activities

Erosion and Sedimentation

Rome and Floyd County are Local Issuing Authorities for E & S permitting of land-disturbing activities which are required to submit an NOI under the NPDES General Permit for Construction Activity.

The 2008 Unified Land Development Code of Rome-Floyd County includes the following ordinances: Environmental codes relevant to water quality include Soil and Sedimentation Control section 6.13; Flood Damage Prevention section 6.14; Stormwater Management section 6.15; Tree Conservation section 6.18; and Protection of Natural Waters Section 6.19, which includes Watershed Protection, River Corridor Buffer, Wetlands Protection, and Groundwater Recharge Area Protection. This section also notes that river tributaries including Horseleg Creek, Johns Creek, Dykes Creek and Woodward Creek shall have a 40 foot greenway.

Stormwater

For large, medium, and small urban areas, the storm water outlets are regulated under MS4 permits. Phase I MS4 permits are issued for large urban areas with populations greater than 100,000. Phase II permits are issued for urbanized areas with a population of at least 50,000 and a density of 1,000 residents per acre. Floyd County and Rome City both have phase II MS4 permits. However, Kings Creek does not fall within the MS4 boundary. For smaller urban areas, the storm water discharge outlets currently remain unregulated. In addition to urban animal sources of fecal coliform, there may be illicit connections to the storm sewer system. As part of the MS4 permitting program, municipalities are required to conduct dry-weather monitoring to identify and then eliminate these illicit discharges. Fecal coliform bacteria may also enter streams from leaky sewer pipes, or during storm events when combined sewer overflows discharge.

Floyd County has an NPDES-permitted Small Municipal Separate Storm Sewer System (MS4) and is subject to the Phase II MS4 Stormwater Rules. These extended Phase II permitting rules include six parameters that deal with water quality including 1. Public Education and Outreach; 2. Public Participation and Involvement; 3. Illicit Discharge Detection and Elimination; 4. Construction Site Runoff Control; 5. Post-Construction Runoff Control; 6. Pollution Prevention and Good Housekeeping.

Industrial Storm Water Discharge NPDES Permit is required for all manufacturers that discharge stormwater.

Region-wide Watershed Assessments and Plans

The Northwest Georgia Comprehensive Water Management Plan was prepared in October 2004 by the consulting firms MACTEC Engineering and Consulting, Inc. and Brown and Caldwell for the Northwest Georgia Regional Water Resources Partnership (NWGRWRP) and the U.S Army Corps of Engineers (COE). A Preliminary Water Supply Study was issued in January, 2008 by the same consulting firms for the NWGRWRP in order to identify existing water supplies, the projected long-term water supply needs for Northwest Georgia, and the potential new water supply sources to meet those needs. There is an ongoing study – Northwest Georgia Water Quality Improvement Study and Implementation Plan- conducted by these same firms for the NWGRWRP and the U.S. Army COE. This study has 15 study sites in Floyd County.

Environmental Planning Criteria

The purpose of the environmental planning criteria is to offer standards that are used to protect an area's natural resource. Floyd County has adopted and enforces the applicable environmental criteria. The environmental criteria adopted in Floyd County are Water Supply Watersheds, Protection of Groundwater Recharge Areas, Wetlands Protection, and River Corridor Protection.

Developments of Regional Impact

- The Northwest Georgia Regional Commission advises that compliance on the site to protect water quality is a necessity. Best Management Practices (BMPs) on this site should exceed the minimum requirements and attempt to consider all possible problems in order to adequately protect water quality in streams and drainage-ways/State waters.
- The Northwest Georgia Regional Commission recommends that the project design professionals meet with the Georgia Soil and Water Conservation Commission to review plans and assist in providing adequate erosion and sedimentation control measures, and storm water runoff quantity and quality control measures (Georgia Soil and Water Conservation Commission, Region 1 Office, 700 East 2nd Avenue, Suite J, Rome, Georgia 30161-3359, Telephone: 706-295-6131.

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.

- The BMP Assurance Examination can be given at random; however, the majority of these exams are given because of complaints sent to the GFC. When complaints are received the forester usually makes 4 or 5 visits to the property until it is retired properly. Typically, there is a large improvement in scores from the initial exam to the final exam. In Floyd County there is no BMP Assurance Examination data given from June 15, 2008 – June 15, 2009. However, during this time the overall exam score for north Georgia was 95.96%.
- 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. Farmers in this area have applied for the EQIP Program in particular. EQIP is widely used for the area's poultry and cattle operations. Through this program or through the permitting process for AFO status operations, certain farmers are required to develop Soil and Erosion Control Plans for their farms. Farms are checked yearly to see that they have implemented those measures so that they remain in compliance for funding. EQIP programs are in use in this watershed including prescribed grazing, fencing, nutrient management, and animal waste storage structures.

- 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.
- The Conservation Reserve Program (CRP) provides technical assistance, rental payments and cost share funding to address specific natural resource concerns including: protection of 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.

- Continuous Conservation Reserve Program (CCRP) is a voluntary program that helps agricultural producers safeguard environmentally sensitive land. Participants plant long-term, resource-conserving covers to improve the quality of water, control soil erosion, and enhance wildlife habitat. Rental payment is provided for the participant as well as up to 90% cost share.

Local Outreach Groups

Keep Rome Floyd Beautiful is local group that hopes to achieve a cleaner more beautiful community through education and involvement of the local citizens. Two cleanup projects that this group annually hosts are “Renew Our Rivers” and “Rivers Alive”. Citizens that attend this event help the overall water quality of local waterways by cleaning up litter. Another event is the “Polar Bear Paddle”, in which participants pick up garbage while paddling down the Etowah River. Keep Rome Floyd Beautiful often works with local businesses to encourage and educate local citizens about the rivers and streams in our area through stream cleanups and outdoor events.

Coosa River Basin Initiative (CRBI) “is an environmental organization based in Rome, Georgia with the mission of informing and empowering citizens so that they may become involved in the process of creating a clean, healthy and economically viable Coosa River Basin.” CRBI offers many different types of education and outreach to Floyd County. A few outreach programs involve going to local elementary schools and educating the students on non-point pollution. Summer camps are also held to educate local children on water quality.

Kings Creek

III. CAUSES AND SOURCES OF SEGMENT IMPAIRMENT(S) LISTED IN TMDLs

Table 2. provides information contained in the current TMDL for the impaired water body. By definition, “wasteload allocations” (WLA) for municipal and industrial wastewater discharges and (WLA_{sw}) for storm water outfalls are established in permitted areas, while “load allocations” (LA) are established for non-point sources of pollution. **Wasteload allocations are assigned by Georgia EPD during the NPDES permitting process and are not part of the TMDL implementation planning process, which deals solely with non-point sources of pollutants.**

Table 2. WASTE LOAD AND LOAD ALLOCATIONS AND TMDLS FOR THE IMPAIRED SEGMENT

STREAM SEGMENT NAME	LOCATION	CRITERIA VIOLATED	WLA	WLA _{sw}	LA	TMDL
Kings Creek	Coosa River Tributary	Fecal Coliform	0	0	2.94E+11	3.27E+11

Table 3. contains information presented in the TMDL study that this implementation plan addresses.

Table 3. POTENTIAL NON-POINT SOURCES OF IMPAIRMENT INDICATED IN THE TMDLs

CRITERIA VIOLATED: FC	WQ STANDARD	SOURCES OF IMPAIRMENT	NEEDED % REDUCTION (FROM THE TMDL)
Fecal Coliform Bacteria	1,000 per 100 ml (geometric mean November- April) 200 per 100 ml (geometric mean May-October)	Wildlife Agricultural Livestock <ul style="list-style-type: none"> • Animal grazing • Animal access to streams Urban Development <ul style="list-style-type: none"> • Leaking sanitary sewer lines • Leaking septic systems • Land Application Systems • Landfills • Urban Runoff • Domestic Animals 	90

IV. IDENTIFICATION AND RANKING OF POTENTIAL NON-POINT SOURCES OF IMPAIRMENT

This section identifies and describes **in order of importance**, as determined through this TMDL implementation planning process, the extent and relative contributions from historic as well as current potential non-point sources of pollutants to the water quality impairment.

Identification and ranking of potential sources or causes of impairment were performed through a visual survey of the watershed and involvement of a stakeholder group. The visual survey was conducted on March 24, 2009. Images of the stream and land use were recorded, as well as, possible sources of fecal coliform bacteria. During the visual survey the land use of the Kings Creek watershed was confirmed.

During the visual survey it was noticed that this watershed is on septic systems. To the north of Hwy 20 the homes are fairly spread out and not much agriculture was noticed. South of Hwy 20 more cattle operations were seen. This area is predominately forested so wildlife is prevalent and is probably a contributor of fecal coliform bacteria in this watershed.

When discussing the Kings Creek watershed at the stakeholder meeting many people were surprised that the reduction for this stream was so high. It was noted that leaking septic systems and straight piping could possibly be the main contributor of fecal coliform in this watershed. The stakeholders mentioned that there is not much agriculture in the area and the wildlife is present throughout.

Table 4. offers a simple format to rank **in order of importance**, as determined through this TMDL implementation planning process, the extent and relative contribution to the water quality impairment from all the potential non-point sources of pollution identified in Section IV. A “rating scale” of 0.5 to 5 has been developed to rank the sources. The rating chart provides guidance for rating the estimated extent (Rating A) and portion of the contribution (Rating B) from each potential non-point source and cause:

Rating A: Rating Chart to Estimate Geographic Extent of the Source or Cause in the Contributing Watershed	Rating B: Rating Chart to Estimate Portion of Contribution from the Source to the Pollutant Load Causing the Impairment	Rating
None or negligible (approximately 0-5%)	None or negligible (approximately 0-5%)	0.5
Scattered or low (approximately 5-20%)	Scattered or low (approximately 5-20%)	1
Medium (approximately 20-50%)	Medium (approximately 20-50%)	3
Widespread or high (approximately 50% or more)	Widespread or high (approximately 50% or more)	5
Unknown	Unknown	UNK

Table 4. EVALUATION OF POTENTIAL SOURCES OF STREAM SEGMENT IMPAIRMENT

APPLICABLE TO CRITERION 1: Fecal Coliform

IMPAIRMENT SOURCES	ESTIMATED EXTENT OF CONTRIBUTION		ESTIMATED PORTION OF CONTRIBUTION		IMPACT RATING (A X B)
	Comments	Rating (A)	Comments	Rating (B)	
Wildlife	High	5	Medium	3	15
Urban Development • Leaking Septic Systems • Urban Runoff	Medium	3	Medium	3	9
Agriculture	Medium	3	Medium	3	9

V. CURRENT AND ACTIVE MANAGEMENT MEASURES AND ACTIVITIES

Table 5A. identifies significant current and active Best Management Practices (BMPs) that have been installed to address potential non-point sources of impairment listed in Section IV, Table 4., and provides ratings of each management measure’s estimated Load Reduction Potential (LRP) when applied to a specifically identified non-point source. The rating chart provides guidance for rating the BMP Load Reduction Potential applied to a specifically identified non-point source:

BMP Load Reduction Potential Rating Chart (Percent Removal of Pollutant by the BMP)	Rating
None or negligible (approximately 0-5%)	.5
Low to medium (approximately 5-25%)	1
Medium to High (approximately 25-75%)	3
High (approximately 75% or more)	5
Unknown	UNK

Table 5A. CURRENT AND ACTIVE MANAGEMENT MEASURES AND ACTIVITIES

GENERAL AND SPECIFIC MEASURES APPLICABLE TO CRITERION 1: Fecal Coliform

BMPs (1)	RESPONSIBILI TY (2)	DESCRIPTION OF MEASURES (3)	FUNDING & RESOURCES (4)	IMPAIRMENT SOURCES (5)	DATE (6)	BMP LRP RATING (7)
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Plan for Kings Creek
HUC 10 # 0315010501

Georgia Growth Planning Act, Part 5	City of Rome/Floyd County Government	Coordinated Planning Program, managed by Georgia DCA, assigns local governments Environmental Planning Criteria (set by Georgia DNR) to include in local long-term comprehensive plans: <ul style="list-style-type: none"> • Water Supply Watersheds • Groundwater • Wetlands • Protected Rivers • Protected Rivers Program also requires local governments to identify Developments of Regional Impact (DRI) and develop plans to protect and manage Regional Impact Resources (RIR).	City of Rome/Floyd County Governments Impact Fees	Urban Development Agriculture Wildlife	1989	Effectiveness varies with the specific BMPs applied.
Capacity, Management, Operations and Maintenance (CMOM)	USEPA, City of Rome Government	USEPA regulation requires local utilities to increase O&M reviews on sewer collection systems and lift stations. Applicable BMPs include frequent inspections and testing, back-up power facilities.	City of Rome Government	Urban Development	2006	Effectiveness will vary with the specific application and must be individually determined.
Georgia's Best Management Practices	Georgia Forestry Commission (matters involving enforcement are generally referred to GA EPD)	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.	On private land the responsibility /cost for installing and maintaining BMPs would be on the landowner, or the timber harvester when a company is logging on someone's land.	Silviculture Runoff	Ongoing	>75% when properly applied to site preparation and harvesting activities.

Georgia Forestry Commission Monthly BMP Assurance Examination	Georgia Forestry Commission (matters involving enforcement are generally referred to GA EPD	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.	Federal and State	Silviculture Runoff	Ongoing	5
Phase II NPDES Storm Water Permit for Small MS4	Georgia DNR & EPD, City of Rome/Floyd County	Requires local jurisdictions to develop a comprehensive Storm Water Management Program (SWMP) to include 1. Public Education and Outreach; 2. Public Participation and Involvement; 3. Illicit Discharge Detection and Elimination; 4. Construction Site Storm Water Runoff Control; 5. Post-Construction Storm Water Management in New Development and Redevelopment; 6. Pollution Prevention and Good Housekeeping related to municipal operations, reporting, monitoring and program implementation.	Floyd County, City of Rome	Urban Development	2005	5
Industrial Storm Water Discharge NPDES Permit	Georgia DNR/EPD	General storm water discharge permit for manufacturing facilities; mining, oil & gas operations; hazardous waste treatment; storage or disposal facilities; recycling centers; steam electric power generating facilities; transportation	State	Urban Development	UNK	5

		facilities; domestic sewage or sewage sludge treatment. Requires implementation of Storm Water Pollution Prevention Plan. May require storm water monitoring program targeting discharges into/near 303(d) listed waters.				
Construction Storm Water Discharge NPDES Permit	Georgia DNR/EPD	General storm water discharge permit for stand-alone construction sites; infrastructure projects; 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 standards.	State	Urban Development	UNK	5
National Pollution Discharge Elimination System (NPDES) Permit Regulations for CAFOs over 1,000 animal units.	U.S. Environmental Protection Agency & GA Environmental Protection Division	U.S. Environmental Protection Agency and GA Environmental Protection Division	Federal and State	Agriculture	UNK	5
Erosion and Sedimentation Control Training and Certification, Amended 2007	City of Rome-Floyd County, Georgia Soil and Water Conservation Commission, GA EPD, Rolling Hills 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, 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 Rolling Hills Regional Conservation and	Georgia Soil and Water Conservation Commission, GA EPD		2006	5

		Development Council (RC & D) for City of Rome- Floyd County.				
Georgia Erosion and Sedimentation Control Act, Construction Permit, 2003 Amendment	City of Rome- Floyd County, Georgia DNR/ EPD, Georgia Soil and Water Conservation Commission	City of Rome, Floyd County certified as Local Issuing Authority for land-disturbing activities. 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	City of Rome- Floyd County	Urban Development	2003	5
Sanitary Sewer Maintenance Program	City of Rome- Floyd 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 manhole rehabilitation.	City of Rome- Floyd County	Urban Development	Ongoing	UNK
Regulation of On-Site Sewage Management Systems, IAW O.C.G.A. 290-5-26	Georgia DHR, Floyd County Board of Health	Rules and regulations for installation and repair of on-site sewage management systems.	State, Floyd County Board of Health	Urban Development	Ongoing	Effectiveness will vary with the specific application and must be individually determined.
Environmental Quality Incentives Program (EQIP)	Natural Resources Conservation Services	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	Agriculture	Yearly	Effectiveness varies with the specific BMPs applied.

Cattle

		<ul style="list-style-type: none"> • Fencing • Water Troughs • Pasture Overseeding • Cross fencing which promotes rotational grazing <p style="text-align: center;"><u>Poultry</u></p> <ul style="list-style-type: none"> • Stackhouses • Composting • Nutrient Management Plans 	incentive payments			
Conservation Reserve Program (CRP)	Natural Resources Conservation Services / USDA Farm Services Agency	<p>Provides technical assistance, rental payments and cost share funding to address specific natural resource concerns including: protection of 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.</p> <ul style="list-style-type: none"> • Fencing • Alternative Water Sources • Cross fencing 	Federal Annual rental payment for land taken out of production and 50% cost share for practice installation.	Agriculture	Yearly	Effectiveness varies with the specific BMPs applied.
Continuous Conservation Reserve Program (CCRP)	Natural Resources Conservation Service	<p>Conservation cost-share for best management practices such as fencing livestock out of streams; provides up to a 90-10% cost-share</p>	Federal Annual rental payment for land taken out of production and 50% cost share for practice installation.	Agriculture	Yearly	Effectiveness varies with the specific BMPs applied.

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Work Sheet for Table 5B. is designed to evaluate the capacity of existing or installed BMPs described in Table 5A. that have been implemented to reduce pollutant loadings from significant non-point sources identified in Table 4. Apply this work sheet as a local guide to evaluate BMPs in achieving water quality goals, establishing priorities for grant or loan programs, and identifying priorities for local watershed assessments and management plans.

Work Sheet for Table 5B. EVALUATION OF CURRENT AND ACTIVE MANAGEMENT MEASURES AND ACTIVITIES

APPLICABLE TO CRITERION 1: Fecal Coliform

IMPAIRMENT SOURCES (1) (From Table 4)	IMPACT RATING (2) (From Table 4)	APPLICABLE BMPs (3) (From Table 5A)	EVALUATION SUMMARY (4)	ADDITIONAL INFORMATION / ACTIONS NEEDED (5)
Wildlife	15	N/A	N/A	N/A
Urban Development	9	N/A	N/A	N/A
Agriculture	9	<ul style="list-style-type: none"> • Fencing • Water Troughs • Pasture Overseeding • Cross Fencing • Stack Houses • Composting • Nutrient Management Plans 	These are all good agricultural BMP's when implemented properly.	N/A

Table 5B. identifies new management measures that could improve or supplement current Load Reduction Potential (LRP) ratings or enhancements to existing BMPs that have been judged inadequate for achieving the load reductions. Evaluations in the Work Sheet for Table 5B. have determined that additional or enhanced management measures are necessary to more effectively reduce pollutant loads from the most likely non-point sources of impairment. The rating chart provides guidance for rating the Load Reduction Potential (LRP) of a BMP applied to a specifically identified non-point source:

New or Enhanced BMP Load Reduction Potential Rating Chart (Percent Removal of Pollutant by the BMP)	Rating
None or negligible (approximately 0-5%)	.5
Low to medium (approximately 5-25%)	1
Medium to High (approximately 25-75%)	3
High (approximately 75% or more)	5
Unknown	UNK

Table 5B. RECOMMENDED NEW MANAGEMENT MEASURES AND ACTIVITIES

APPLICABLE TO CRITERION 1: Fecal Coliform

NEW BMPs (1)	RESPONSIBILITY (2)	DESCRIPTION (Identify whether new or enhanced) (3)	FUNDING & RESOURCES (4)	IMPAIRMENT SOURCES (5)	TARGET DATE (6)	NEW BMP LRP RATING (7)
Agricultural BMP's	USDA, NRCS, farmers	New	Various	Livestock waste	N/A	UNK
Stormwater BMP's	Industry, Local Government	New	Various	Urban Runoff	N/A	UNK
Septic Tank Outreach	Local Environmental Health Department	Use 319 funds to enhance outreach for septic tank maintenance	Various	Leaking septic systems	N/A	UNK
Wildlife	N/A	N/A	N/A	Fecal Coliform	N/A	UNK

VI. MONITORING PLAN

This section describes parameters to be monitored, status, whether monitoring is required for watershed assessments or storm water permits, and the intended purpose. **Submittal of a Sampling Quality Assurance Plan (SQAP) for Georgia EPD approval is mandatory if monitoring data is to be qualified to support listing decisions.**

Water quality data used to evaluate the criteria violated are less than five years old? Yes [X] No [] .

Table 6. MONITORING PLAN

APPLICABLE TO CRITERION 1: Fecal Coliform

PARAMETER (S) TO BE MONITORED (1)	RESPONSIBLE ENTITY (2)	STATUS (CURRENT, PROPOSED, OR RECOMMENDED) (3)	TIME FRAME (4)		PURPOSE (If for listing assessment, date of SQAP submission) (5)
			START	END	

VII. PLANNED OUTREACH FOR IMPLEMENTATION

Table 7. lists and describes local outreach activities that will be conducted to support this implementation plan or to help improve water quality in the segment watershed.

Table 7. PLANNED OUTREACH FOR IMPLEMENTATION

APPLICABLE TO CRITERION 1: Fecal Coliform

RESPONSIBILITY (1)	DESCRIPTION (2)	AUDIENCE (3)	START OR COMPLETION DATE (4)
Keep Rome Floyd	“Renew Our Rivers” is an annual river cleanup on	Local Citizens	Spring/Yearly

Beautiful	Brushy Branch in Coosa. Over 4,200 lbs. of trash was removed in 2008.		
Keep Rome Floyd Beautiful	“Rivers Alive” is an annual river cleanup around Floyd County. Over 10,000 lbs. of trash was collected in 2008.	Local Citizens	October/Yearly
Keep Rome Floyd Beautiful	“Polar Bear Paddle” is an annual event where participants collect litter along the trip	Local Citizens	January/Yearly
CRBI	Presentations are given every Tuesday throughout the summer to approximately 100 YMCA children.	Local Children/Adults	Tuesdays/Summer
CRBI	Summer camps are held for children from the Boys/Girls Club.	Local Children	June-July 2009
CRBI	Perform workshops for teachers so that they can educate students on water quality.	Local Teachers	Yearly
CRBI	“First Fridays” CRBI sells food at local events every first Friday of the month. This provides a good chance for them to spread the word about activities that the organization is doing.	Local Citizens	First Friday/Monthly
CRBI	Rain Barrel Program helps to install rain barrels in West Rome.	Local Citizens	July 2009
CRBI	Presentations concerning non point pollution are given to elementary school students at local schools.	Local Schools	Throughout Year
CRBI	Stream cleanups are performed on many streams in Floyd County throughout the year.	Local Citizens	Throughout Year
Floyd County Environmental Health Department	Provide packets of information containing do’s and don’ts for septic system maintenance as well as a 9 minute DVD dealing with septic system maintenance.	Packets of information are issued for every permit issued as well as every repair permit issued. Information is also given to people concerned with this issue.	Ongoing

VIII. MILESTONES AND BENCHMARKS OF PROGRESS FOR BEST MANAGEMENT PRACTICES (BMPs) AND OUTREACH

Table 8. shows what milestones and benchmarks have been developed to validate the progress of local best management measures identified in Tables 5A., 5B., and other sections of this plan in reducing pollutant loads from identified non-point sources of impairment.

Table 8. MILESTONES OF PROGRESS

BMP (1)	MILESTONE / BENCHMARK (2)	RESPONSIBLE ORGANIZATION (3)	METHOD / TIMELINE (4)	BMP STATUS (5)	
				INSTALLED TABLE 5A.	PROPOSED TABLE 5B.
Fencing	N/A	NRCS,USDA, and contracted farmer	UNK	x	
Water Troughs	N/A	NRCS,USDA, and contracted farmer	UNK	x	
Pasture Overseeding	N/A	NRCS,USDA, and contracted farmer	UNK	x	
Cross Fencing	N/A	NRCS,USDA, and contracted farmer	UNK	x	
Stackhouses	N/A	NRCS,USDA, and contracted farmer	UNK	x	
Composting	N/A	NRCS,USDA, and contracted farmer	UNK	x	
Nutrient Management Plans	N/A	NRCS,USDA, and contracted farmer	UNK	x	
Outreach/Education	Hoping to educate 2,500 children in 2009.	CRBI	UNK		x
“Renew Our Rivers”	UNK	Keep Rome Floyd Beautiful	UNK	x	
“Rivers Alive”	UNK	Keep Rome Floyd Beautiful	UNK	x	
“Polar Bear Paddle”	UNK	Keep Rome Floyd Beautiful	UNK	x	
Presentations given to around 100 YMCA children every Tuesday throughout the summer.	UNK	CRBI	UNK	x	
Summer camps are held for children from the Boys/Girls Club.	UNK	CRBI	UNK	x	
Perform workshops for teachers so that they can	UNK	CRBI	UNK	x	

educate students on water quality.				
"First Fridays"	UNK	CRBI	UNK	x
Rain Barrel Program	UNK	CRBI	UNK	x
Presentations concerning non point pollution are given to elementary school students at local schools.	UNK	CRBI	UNK	x
Stream cleanups are performed on many streams in Floyd County throughout the year.	UNK	CRBI	UNK	x
Septic tank education and outreach	UNK	Floyd County Environmental Health Department	UNK	x

IX. STAKEHOLDERS

This section describes outreach activities engaging local stakeholders in the TMDL implementation plan preparation process, including the number of attendees, meeting dates, and major findings and recommendations.

April 1, 2009 Initial TMDL Planning Meeting held at the Northwest Georgia Regional Commission The mailing list for the first meeting went to out to local government officials in cities and counties that had impaired streams in their watershed. For the initial meeting 62 people were emailed and 24 attended. Chris Falkner, Environmental Outreach Coordinator from the Environmental Protection Department gave a PowerPoint presentation that explained the TMDL process and how they are developed, as well as a list of the streams that are currently on the 303 (d) list. At the end of the meeting it was determined that the people in attendance compile a list of people that they would like to act as stakeholders for the impaired streams in their particular watershed.

June 9, 2009 Stakeholder Meeting concerning impaired streams in Floyd County (15 attendees) The meeting began with a PowerPoint presentation that described the TMDL process and the contractor's responsibilities under this contract, as well as the timeline for the TMDL process. Cindy Haygood of the Rolling Hills RC & D gave a presentation describing some of the programs that the RC & D is involved in. Mike Pitts of the Floyd County Health Department gave a presentation about on-site sewage management. When discussing Kings Creek a few stakeholders were surprised at how high of a reduction that the creek requires. It was mentioned that there is a possibility of some straight piping in this watershed. It was mentioned that there is not a large amount of agriculture in this area. It was also noted that there are some large timber tracts near the headwaters of Kings Creek in Chattooga County and there may be some forestry practices taking place.

August 11, 2009 Stakeholder Meeting concerning impaired streams in Floyd/Chattooga Counties (22 attendees) This meeting had many concerned stakeholders that were unaware of the TMDL implementation program so a brief PowerPoint presentation was given to help describe the goals of the TMDL process. After the presentation the meeting turned into local farmers arguing about how they are not the source of nonpoint pollution and that the pollution has to come from another source. It was stated several times that nobody was trying to place blame solely on the farmers because nonpoint pollution can come from several sources. Although this was a fairly disruptive meeting some positive comments from local septic tank installers were helpful. One installer stated that long before there were any kind of septic regulations he knew that some septic systems were installed in shallow water tables and other areas that would not be allowed today. He also stated that he believed that the key to solving any kind of pollution issue was to educate the public.

Following is a list of advisory committee or watershed group members who participated in this TMDL implementation planning process.

Table 9. STAKEHOLDER ADVISORY GROUP MEMBERS

NAME/ORG	ADDRESS	CITY	STATE	ZIP	PHONE	E-MAIL
Mike Pitts/Floyd County Health Dept.	16 E 12 th St.	Rome	GA	30165	(706) 295-6316	wmpitts@dnr.state.ga.us
Sheri Teems/NRCS	1401 Dean St. Suite 1	Rome	GA	30161	(706) 291-5651	Sheri.teems@ga.usda.gov
Keith Mickler/UGA Coop Ext	12 E 4 th Ave Suite 107	Rome	GA	30161	(706) 295-6210	mickler@uga.edu
Bill Davin/Berry College	2277 Martha Berry	Mt. Berry	GA	30149	(706) 290-2663	bdavin@berry.edu
Eric Lindberg/Rome-Floyd Co.	PO Box 1433	Rome	GA	30162	(706) 236-4674	elindberg@rome.ga.us
Ed Watters/Watters & Associates Landscape	134 Silver Ave.	Rome	GA	30161	(706) 234-5482	ed@watters.landscape.com
Bill Tharp/Oglethorpe Power Rocky Mountain Hydroelectric Plant	4050 Big Texas Valley Rd.	Rome	GA	30165	(706) 290-5402	Bill.tharp@opc.com
Cindy Haygood/Rolling Hills RC&D	512 Main St	Cedartown	GA	30125	(770) 749-0444	Cindy.haygood@ga.usda.gov
John Boyd/Utilities Manager Floyd County					(706) 233-0062	boydj@floydcountyga.org
Troy Atkins					(706) 291-5244	atkinst@floydcountyga.org
Mark Knauss/Georgia Highlands Bio. Professor	3175 Cedartown Hwy., SE	Rome	GA	30161	(706) 368-7535	mknauss@highlands.edu
Joe Cook/CRBI	408 Broad Street	Rome	GA	30161	(706) 2332-2724	jcook@coosa.org
Adam Hammond/DNR Johns Mountain WMA					(706) 295-6041	Adam.hammond@dnr.state.ga.us
Brent Womack/DNR					(706) 295-	Brent.womack@dnr.state.ga.us

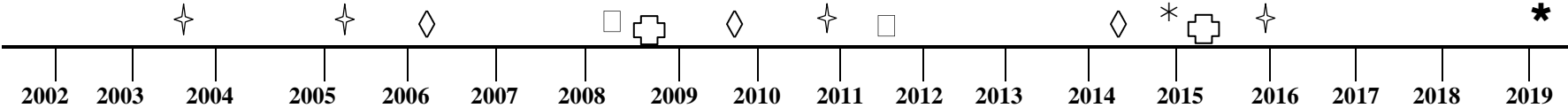
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HUC 10 # 0315010501





Johns Mountain WMA					6041	
Chris Faulkner/Environmental Outreach Coordinator	4220 International Parkway, Suite 101	Atlanta	GA	30354	(404) 675-1654	Chris_Faulkner@dnr.state.ga.us
Ted Mikalsen/ Acting TMDL manager, EPD	4220 International Parkway, Suite 101	Atlanta	GA	30354	(404) 362-6538	
Ken Magnusson/Advanced Plumbing & Septic Service	1 Buck Trail 41 Vail Pkwy.	Rome	GA	30165	(706) 234-5259	ken@advancedplumbinginc.com
Doug Cabe/Limestone Valley RC&D	125 Red Bud Rd. NE, Suite 7	Calhoun	GA	30701	(706) 625-7044	Doug.cabe@usda.gov
Nathan "Todd" Hice	1401 DEAN ST STE I	Rome	GA	30161	(706) 291-5654 ex.2	nathan.hice@ga.usda.gov
Ozelle Edwards/Dykes Creek homeowner	453 Fred Kelly Rd.	Rome	GA	30161	(706) 291-4310	
Charles Logan	914 Thomas Rd.	Trion	GA	30753	(706) 734-3593	
William C. Otwell	758 NW Holland Rd.	Rome	GA	30165	(706)232-6305	
David Clay	#31 Pleasant Valley Rd. South	Silver Creek	GA	30173	(706) 234-5983	
Fred Kerce	142 Wilshire Rd	Rome	GA	30161	(706) 252-6040	
Jarrell Cagle	462 Reynolds Bend Dr. SE	Rome	GA	30161	(706) 291-8651	Jarrellcagle@bellsouth.net
Rebekah Wright Skelton	10 Burton Rd. NE	Rome	GA	30161	(706) 295-8651	
John Leslie	1045 F. Hatchery Rd.	Summerville	GA	30247	(706) 857-4523	
Wayne Hurley	20 Trixie Ln.	Summerville	GA	30747	(706) 857-2707	
Karen Smith	13 Ridgewood Rd.	Rome	GA	30165	(706) 235-5232	Smika13@comcast.net

David Crowder/ WRGA Radio	20 John Davenport Dr.	Rome	GA	30165	(706) 291- 8088	davidc@south107.com
Nick Godfrey/ RN-T	E. 6 th St.	Rome	GA	30161		Rn-t.com

PROJECTED IMPLEMENTATION TIMELINE

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



-  Projected EPD Basin Group Monitoring
-  New TMDLs Completed
-  Tier 2 TMDL Implementation Plan Received by EPD
-  Evaluation of Implementation Plan / Water Quality Improvement

Preparation of this report was financed in part through a grant from the U.S. Environmental Protection Agency under the provisions of Section 106 of the Federal Water Pollution Control Act, as amended.

Prepared By:	Ben Robinson & Jonathan Bridges		
Agency:	Northwest Georgia Regional Commission		
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E-mail:	brobinson@nwgrc.org jbridges@nwgrc.org		
Date Submitted to EPD:	09/30/09	Revision:	01

APPENDIX A.
OUTREACH ATTENDANCE

Following is a list of the 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/ORGANIZATION	ADDRESS	CITY	STATE	ZIP	PHONE	E-MAIL
Mike Pitts/Floyd County Health Dept.	16 E 12 th St.	Rome	GA	30165	(706) 295-6316	wmpitts@dhr.state.ga.us
Sheri Teems/NRCS	1401 Dean St. Suite 1	Rome	GA	30161	(706) 291-5651	Sheri.teems@ga.usda.gov
Keith Mickler/UGA Coop Ext	12 E 4 th Ave Suite 107	Rome	GA	30161	(706) 295-6210	mickler@uga.edu
Bill Davin/Berry College	2277 Martha Berry	Mt. Berry	GA	30149	(706) 290-2663	bdavin@berry.edu
Eric Lindberg/Rome-Floyd Co.	PO Box 1433	Rome	GA	30162	(706) 236-4674	elindberg@rome.ga.us
Ed Watters/Watters & Associates Landscape	134 Silver Ave.	Rome	GA	30161	(706) 234-5482	ed@watters.landscape.com
Bill Tharp/Oglethorpe Power Rocky Mountain Hydroelectric Plant	4050 Big Texas Valley Rd.	Rome	GA	30165	(706) 290-5402	Bill.tharp@opc.com
Cindy Haygood/Rolling Hills RC&D	512 Main St	Cedartown	GA	30125	(770) 749-0444	Cindy.haygood@ga.usda.gov
John Boyd/Utilities Manager Floyd County					(706) 233-0062	boydj@floydcountyga.org
Troy Atkins					(706) 291-5244	atkinst@floydcountyga.org
Mark Knauss/Georgia Highlands Bio. Professor	3175 Cedartown Hwy., SE	Rome	GA	30161	(706) 368-7535	mknauss@highlands.edu
Joe Cook/CRBI	408 Broad Street	Rome	GA	30161	(706) 2332-	jcook@coosa.org

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					2724	
Adam Hammond/DNR Johns Mountain WMA					(706) 295-6041	Adam.hammond@dnr.state.ga.us
Brent Womack/DNR Johns Mountain WMA					(706) 295-6041	Brent.womack@dnr.state.ga.us
Chris Faulkner/Environmental Outreach Coordinator	4220 International Parkway, Suite 101	Atlanta	GA	30354	(404) 675-1654	Chris_Faulkner@dnr.state.ga.us
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Ken Magnusson/Advanced Plumbing & Septic Service	1 Buck Trail 41 Vail Pkwy.	Rome	GA	30165	(706) 234-5259	ken@advancedplumbinginc.com
Doug Cabe/Limestone Valley RC&D	125 Red Bud Rd. NE, Suite 7	Calhoun	GA	30701	(706) 625-7044	Doug.cabe@usda.gov
Nathan "Todd" Hice	1401 DEAN ST STE I	Rome	GA	30161	(706) 291-5654 ex.2	nathan.hice@ga.usda.gov
Ozelle Edwards/Dykes Creek homeowner	453 Fred Kelly Rd.	Rome	GA	30161	(706) 291-4310	
Charles Logan	914 Thomas Rd.	Trion	GA	30753	(706) 734-3593	
William C. Otwell	758 NW Holland Rd.	Rome	GA	30165	(706)232-6305	
David Clay	#31 Pleasant Valley Rd. South	Silver Creek	GA	30173	(706) 234-5983	
Fred Kerce	142 Wilshire Rd	Rome	GA	30161	(706) 252-6040	
Jarrell Cagle	462 Reynolds Bend Dr. SE	Rome	GA	30161	(706) 291-8651	Jarrellcagle@bellsouth.net
Rebekah Wright Skelton	10 Burton Rd. NE	Rome	GA	30161	(706) 295-8651	
John Leslie	1045 F. Hatchery Rd.	Summerville	GA	30247	(706) 857-4523	
Wayne Hurley	20 Trixie Ln.	Summerville	GA	30747	(706) 857-2707	
Karen Smith	13 Ridgewood Rd.	Rome	GA	30165	(706) 235-	Smika13@comcast.net

					5232	
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APPENDIX B.

STATUS REPORTS / UPDATES TO THIS PLAN

If there are any revisions to an existing plan, this section will describe the date, section or table updated, and a summary of what was changed and why. A Status Report / Updates on Existing Local TMDL Implementation Plans and Watershed Remediation will be attached as a separate document.

N/A This is a new TMDL implementation report.

APPENDIX C.

VISUAL FIELD SURVEYS, NOTES, PHOTOGRAPHS, AND MAPS.

King's Creek- Coosa River Tributary, Floyd County

Surveyors: Ben Robinson and Jonathan Bridges 3/24/09

Weather: Some Rain clouds, sunny

Site #1: Halls Valley Rd.

Clear, steady slow flow. Periwinkle snails viewed attached to the rocky bottom. Upstream is mostly rural, mountainous terrain – with a hunting lodge further north.



Site #2: Mid section of creek at 2nd intersection with Halls Valley Rd.
Good, clear flow through shallows; fenced off pasture surrounding creek. Periwinkle snails seen again.



Site #3: GA Hwy. 20

Clear and a bit slower, due to increased depth. The northwest, upstream side is unfenced pastureland with some buffer. Animal tracks seen nearby.



Site #4: Old River Rd.

One large fish was seen, along with wildlife tracks. The creek is deep, slow-flowing, and green here, largely due to the S-curve immediately downstream.



This area has been widened and appears to be used for a fishing pond as many fish were noticed in this area.



This picture shows the stream as it runs out of the pond area in the previous picture.

Sources

www.georgiastats.uga.edu

EPD data (NPDES, landfill, supplied by Chris Faulkner, Environmental Outreach Coordinator, EPD.

“Total Maximum Daily Load Evaluation for Twenty-Nine Stream Segments in the Coosa River Basin for Fecal Coliform.” January, 2009. The Georgia Environmental Protection Division of the Department of Natural Resources. Atlanta, GA.

In person discussion with CRBI Program Coordinator David Promis, 7/16/2007.

<http://maps.google.com>

Statement on Developments of Regional Impact: David Howerin, Planning Director: Northwest Georgia Regional Commission.
“Georgia’s Best Management Practices for Forestry.” January 1999, Georgia Forestry Commission.

LRP rating- Best Management Practices for Georgia Agriculture: conservation practices to protect surface water Quality. March 2007. The Georgia Soil and Water Conservation Commission.

Erosion and Sedimentation Control Issuing Authorities, by County. Updated January 23, 2009. Georgia EPD: Watershed Protection Branch. Frank Carubba.

The Northwest Georgia Comprehensive Water Management Plan. October 2004. MACTEC Engineering and Consulting, Inc. and Brown and Caldwell for the Northwest Georgia Regional Water Resources Partnership (NWGRWRP) and the U.S Army Corps of Engineers (COE).

Preliminary Water Supply Study January, 2008. MACTEC Engineering and Consulting, Inc. and Brown and Caldwell for NWGRWRP.

Northwest Georgia Water Quality Improvement and Implementation Plan: Data Summary Report – Year 1 Events. April 24, 2009. MacTec Engineering and Consulting, Inc. and Brown and Caldwell. Prepared for the NWGRWRP and the U.S. Army COE. Project # 6110-08-0325.

CODE OF ORDINANCES County of FLOYD, GEORGIA http://www.municode.com/Resources/ClientCode_List.asp?cn=Floyd%20County&sid=10&cid=5340

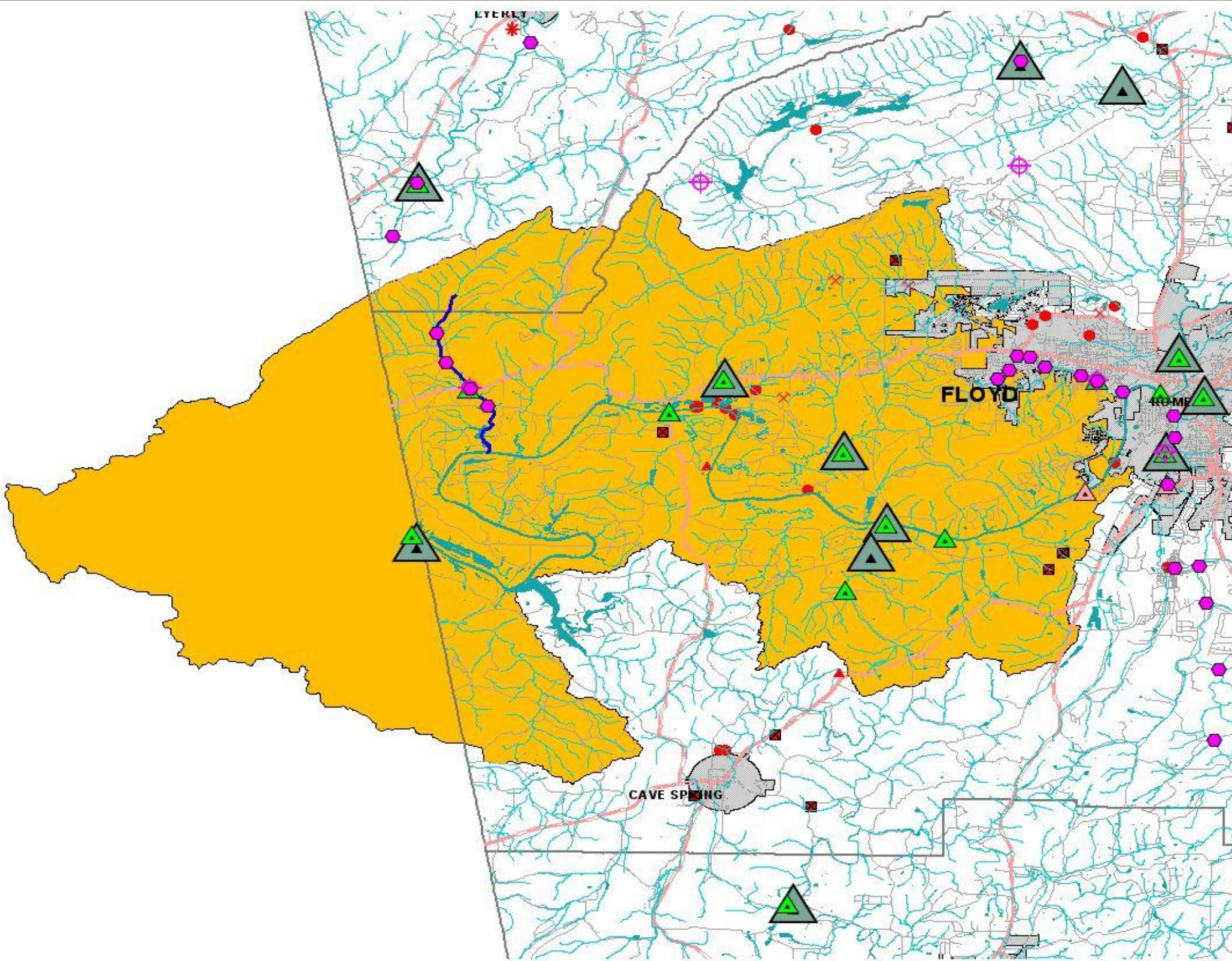
THE UNIFIED LAND DEVELOPMENT CODE of Floyd County and the City of Rome, Georgia Initial Adoption: August 2001
Date of Revision: 2008

CITY OF ROME AND FLOYD COUNTY COMPREHENSIVE PLAN INCLUDING THE CITY OF CAVE SPRING ADOPTED APRIL 8, 2008 Planning Works

Tier 2 TMDL Implementation Plan
and
Extended Revisions

**Kings Creek
Upper Coosa Watershed
HUC10# 0315010501**

Kings Creek Coosa River Tributary



LEGEND	
	REPAIRED STREAM SEGMENT
	AGRICULTURE
	FOREST
	LAKES
	STREAMS
	CELS
	LANDFILL
	LAND APPLICATION SITE
	NPDES PERMITTED SITE
	MINES
	STATE HIGHWAYS
	ROADS

- Water Quality Monitoring Stations 2009
- USGS Water Quality Monitoring Stations 2001
- USGS Water Quality Monitoring Stations 2005
- EPD Water Quality Monitoring Stations
- Field Survey Locations 2009

