

STATE OF GEORGIA

TIER 2 TMDL Implementation Plan (Revision # 01)

Segment Name: Camp Creek Date:9/30/2009

River Basin: Coosa River Basin

Local Watershed Governments:

Gordon, Floyd, Walker, and Whitfield Counties;

Cities of Calhoun, Resaca, Plainville.

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.

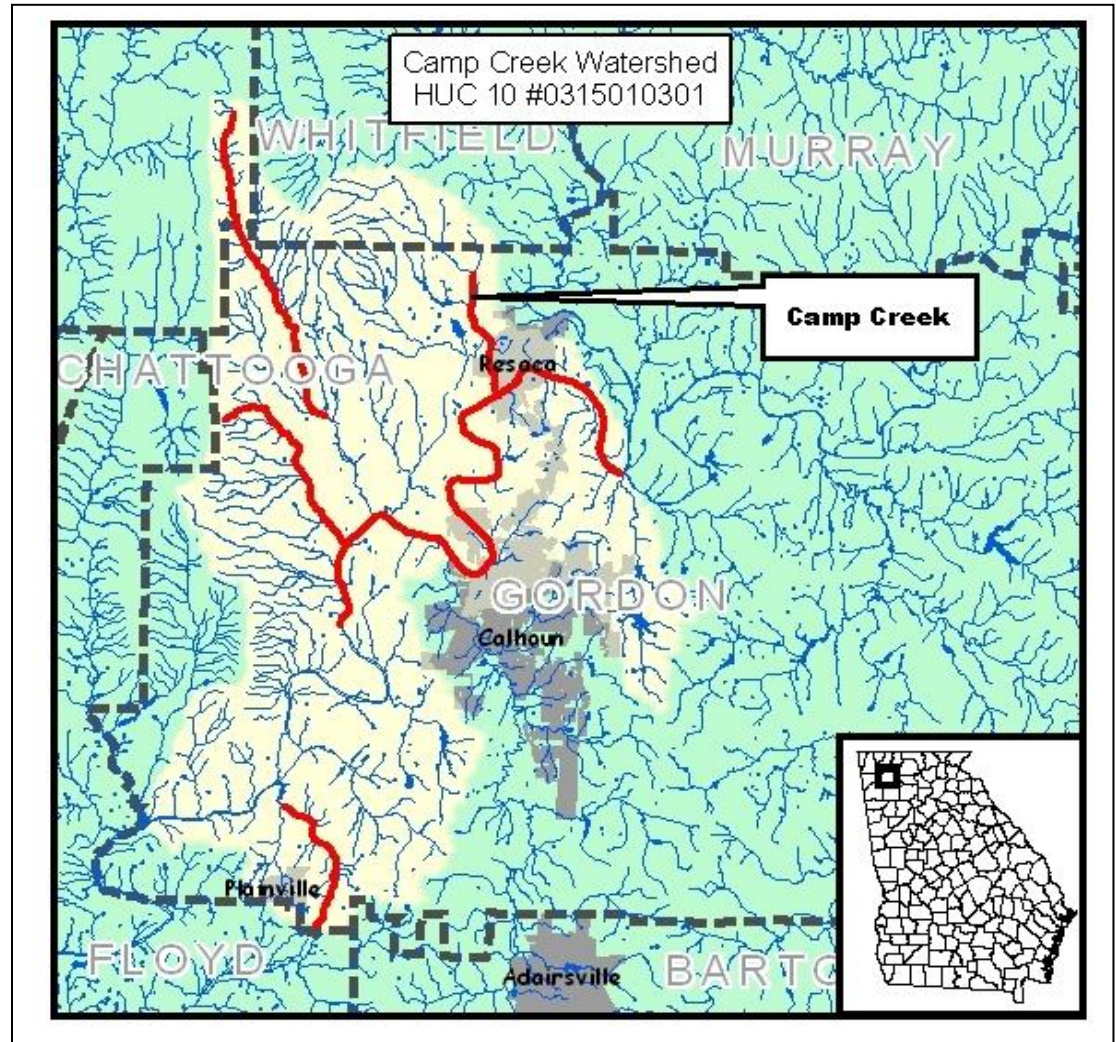


Table 1. IMPAIRED SEGMENTS IN THE HUC 10 WATERSHED

IMPAIRED SEGMENT	IMPAIRED SEGMENT LOCATION	EXTENT (mi/ac)	CRITERIA VIOLATED	EVALUATION
Oostanaula River	Conasauga/Coosawattee to Oothkalooga Creek	11	Fecal Coliform	Not Supporting
Camp Creek	Dry Creek to Oostanaula River	3	Fecal Coliform	Not Supporting
Snake Creek	Headwaters to Oostanaula River	11	Fecal Coliform	Not Supporting

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.

General Information on the HUC #10

The 0315010301 HUC 10 watershed drains an area of approximately 75,459 acres or 118 square miles. It stretches from its northwest corner in southern Walker and Whitfield Counties to the western and southern borders of Gordon County. Its borders mostly skirt southern and central Calhoun taking in Calhoun's northern tip while encompassing almost all of Resaca and in total about the whole western half of Gordon County. It also takes in very small parts of northern and east-central Floyd County.

Forestry and Agricultural Land Use in Gordon County

Forestland: % of Total/ Acres	Land in Farms: % of Total Land/ Acres	Harvested Cropland: % of Total Land/Acres
53.4% / 121, 600	34.8%/ 79,128	10%/ 22,794

Source: georgiastats.uga.edu (2007)

The physiographic type of this area is defined as the Ridge and Valley 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.

Potential Sources

The potential non-point sources of fecal coliform in the watershed are of both the point and non-point source variety. A point source is defined as a discernable, confined, and discrete conveyance from which pollutants are or may be discharged to surface waters. Nonpoint sources are diffuse, and generally, but not always, involve accumulation of fecal coliform bacteria on land surfaces that wash off as a result of storm events.

Point Sources in the Watershed

Title IV of the Clean Water Act establishes the National Pollutant Discharge Elimination System (NPDES) permit program. Basically, there are two categories of NPDES permits: 1) municipal and industrial wastewater treatment facilities, and 2) regulated storm water discharges. There are no such storm water discharges in the Camp Creek sub-watershed.

Wastewater Treatment Plants and 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 WWTPs/WPCPs 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.

NPDES Permit Holders – HUC 10 # 0315010301

Facility Name	Receiving Waterway	Type of Facility	Discharge Flow (MGD)	Permit Number
Calhoun WPCP	Oostanaula River	Municipal/LAS	16	GA0030333
W.L. Swain Elementary School	Robbins Creek	Gen PID	.01	GA0032221
Cumberland Academy	Oostanaula River	PID	.016	GA0035947
Tolbert Elementary	UNK	PID/LAS	.013	#02-218

* None of these except for the Tolbert Elementary discharge into the Camp Creek sub-watershed, as they are all downstream. Tolbert Elementary is located on a hill, within three different sub-watersheds including the Camp Creek sub-watershed. Source: EPD Data

Nonpoint Sources in the Watershed

Wildlife Sources

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. This is because they are typically found on the water surface, often in large numbers, and deposit their feces directly into the water. 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).

Agricultural Sources

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 following tables provide the estimated amount of farm animals in Gordon for livestock and chicken.

Livestock population for Gordon 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
12,800	4,200	0	760	200	80	1,800	0	0

Source: georgiastats.uga.edu (2008)

The majority of poultry farms in Georgia are dry manure operations where the manure is land applied. This can be a nonpoint source for fecal coliform bacteria. Chicken litter (manure) that is not properly stored or covered from the elements could also lead to fecal runoff. Chicken litter is

also commonly spread on fields as a natural fertilizer, which expands the area of potential chicken waste contamination beyond just chicken farms. Current federal regulations require that large poultry farms operate under an NPDES permit. There are many chicken farms in Gordon County and they may be one of the sources of the fecal coliform pollution. The below chart lays out an approximate number of chickens in the county from all chicken operations, broken down by types of chickens. The figures are approximate since they are based on the exact number of houses in Gordon multiplied by the average capacity of the typical chicken house in the county.

Gordon County Chicken Population, by type (thousands)

Breeder Pullet Unit	Broiler Chickens	Hatching Layers	Table Layers	Total
408	11,180	686.4	100.5	12,374.9

Source: georgiastats.uga.edu (2008)

Agriculture in Northwest Georgia has been experiencing a long-term declining trend along with the increase of development. This is borne out by both conversations with USDA personnel at stakeholder meetings, other stakeholder input, and by the county farm numbers, which show an across the board decrease in the amount of farmland and harvested acreage. Plus, livestock is more often than not slowly decreasing year to year or just staying the same. Poultry levels have plateaued off region-wide. Still, agriculture remains a potential nonpoint source of fecal coliform pollution, but the scope of agriculture in the watershed and any decrease in the size should be considered in the establishment of potential causes of the pollution.

Urban Sources

The Camp Creek watershed is mostly forested and agricultural, which is representative of Gordon counties land use as a whole. Gordon County is less populated, less dense, and more rurally populated than some of its neighboring counties. Though the watershed almost completely falls within Gordon County, urban development is still a potential source for fecal coliform contamination. Even small low- or high-density developments can have an adverse impact if there is a systemic problem. Upstream of the segment it does pass under I-75 and GA Hwy. 136 where there is the potential for storm water introducing bacteria into the creek.

Urban/Rural Demographics of Gordon County

County Pop., 2000 Census	Density/mi ² , 2007	Population Projection for 2010 ¹	Density/mi ² Projection in 2010	% of pop. in rural land, 2000	% of pop. in urban area, 2000
44,104	146.7	56,506	155.5	65.8	34.2

Sources: All georgiastats.uga.edu (2007) except for 1: North Georgia RDC

Fecal coliform originating in urban areas are attributable to multiple sources including: domestic animals, leaks and overflows from sanitary sewer systems, illicit discharges of sewage from older or illegal hookups of sewer lines into storm water systems, leaking septic systems (whether from urban or rural households), runoff from improper disposal of waste materials, and leachate from both operational and closed landfills. Urban runoff can contain high concentrations of fecal coliform from domestic animals and urban wildlife. Fecal coliform bacteria enter streams by direct washoff from the land surface, or the runoff may be diverted to a stormwater system and discharged through a discrete outlet.

A portion of the fecal coliform contributions into the waterways may be attributed to failure of septic systems and illicit discharges of raw sewage. Most of the residences of the Camp Creek sub-watershed are on septic tanks instead of sewer lines (Georgia DCA, <http://www.georgiaplanning.com/planners/SDmaps>).

There has been continued urban development in Gordon Counties, as there has been along the I-75 corridors. Some of this new development falls outside of the sewer service areas. These new installations are not really viewed as potential sources as almost all new installations are done correctly due to the current rigorous oversight of the Department of Public Health's Environmental Health Specialists, as is the inspection of repairs. The older septic tanks are more likely candidates to fail due to age, increased probability of lack of regular maintenance such as pump-outs, and their installation under a less stringent regulatory system. Those installed pre-1984 didn't have to have professionally certified contractors. Also, pre-1997 the compliance and enforcement mechanisms dealing with violating homeowners and installers were weak. In 1997, Act 280/Senate Bill 165 increased the oversight of this area with strengthened enforcement and inspection powers. The Department of Public Health phased in the implementation of these measures over time in order to correctly train and retrain all involved in the industry and regulatory agency. Failing septic tanks' potential contribution to contamination of surface water is difficult to gauge, as it depends on the type and extent of failure, the dynamics of the geology and the groundwater table at the particular site, and there is also a remote but still significant possibility that there is a failure underground without any tell-tell signs like bubbling up sewage – what's called a sub-surface failure. Between 2004 and 2009 (partial year), there were 2,047 installations of septic tanks and 978 repairs in Gordon County (Northwest Georgia EH). These numbers give a sense of how many new systems are in Gordon County. But they don't tell the total number of septic tanks, and which ones are prone to failure in the Camp Creek area as this is contingent upon many variables such as lot size, size and type of septic tank, intensity of usage, and age along with other factors. Also, these numbers are countywide, not on a watershed basis. Septic tank failures usually are either self-reported or brought to the attention of environmental health staff by concerned neighbors, so individual failures aren't typically a chronic problem. Straight pipes, either of grey or black water, are of immediate concern and they continue to be found periodically in predominantly rural areas.

Many smaller communities use land application systems (LAS) for treatment of their sanitary wastewaters. These facilities are required through LAS permits to treat all their wastewater by land application and are to be properly operated as non-discharging systems that contribute no runoff to nearby surface waters. However, runoff during storm events may carry surface residual containing fecal coliform bacteria to nearby surface waters. Some of these facilities may also exceed the ground percolation rate when applying the wastewater, resulting in surface runoff from the field. If not properly bermed, this runoff, which probably contains fecal coliform bacteria, may discharge to nearby surface waters. Gordon County has one private LAS, Terra Renewal Services plus the City of Calhoun's wastewater treatment plant land applies its partially treated wastewater that's had bio-solids removed.

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. Many of the older, inactive landfills were never permitted. There are three landfills in the HUC 10, but none of them are near the Camp Creek watershed.

In rural areas of North Georgia, it is also not uncommon for refuse to be illegally dumped, occasionally directly into the waterways. This illicit activity also includes the dumping of game animal carcasses directly into waterways. This can be a potential human-caused source of pollution.

Management Activities in HUC 10 Watershed

- Erosion & Sedimentation Controls: Gordon County issues its own permits through its building inspector who also is in charge of compliance.
- 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 and Plan has four sites located in the City of Calhoun, but none on the northern side of the Oostanaula where Camp Creek flows.

- Watershed Association: The New Echota River Alliance (NERA) is a charter organization of the Coosa River Basin Initiative which focuses its efforts on the major rivers and tributaries within Gordon County.

Information on the Camp Creek Segment (HUC#12: 031501030107)

Camp Creek originates just north of where this particular segment starts at its confluence with Dry Creek - just on the northeast side of I-75. This segment runs due south for three miles thru mostly forest and agricultural land before entering the Oostanaula River west of the City of Resaca, on the north end of the big bend around the City of Calhoun. The sub-watershed drains an area of approximately of 9,900 acres. Though the below land use data shows agriculture overall to be the next to highest land use - a statement that the land use verification confirmed - it shows the highest agricultural use of the area to be row crops. This was not observed in the field survey but rather a large farm without row crops was seen. This reversal of row crop land use percentages with the pastureland & hayfield land use percentages in the supplied data versus what was witnessed in the land use survey appears to be common occurrence in the surveyed creeks.

Land use for HUC 10# 0315010301 by category: Acres (Percent)

Waterway Segment	Open Water	Low Intensity Residential	High Intensity Residential	High Intensity Commercial, Industry, Transportation	Bare Rock, Sand, Clay	Quarries, Strip Mines, Gravel Pits	Forest	Row Crops	Pasture, Hay	Other Grasses (Urban, recreational e.g. parks, lawns)	Woody Wetlands	Emergent Herbaceous Wetlands	Totals
Oostanaula River	3,872 (.5)	14,791 (1.9)	5,192 (.6)	2,880 (.4)	1,464 (.2)	503 (.1)	529,539 (66.2)	21,227 (2.7)	126,283 (19.7)	56,105 (7)	5,710 (.7)	75 (.01)	767,641 (100)
Camp Creek	79 (.8)	209 (2.2)	27.6 (.3)	5.1 (.1)	5.6 (.1)	0 (0)	6,436.6 (67.3)	1,920.8 (20.1)	185 (1.9)	633 (6.6)	65.6 (.7)	1.3 (.01)	9,568 (100)
Snake Creek	4.5 (.04)	66.6 (.6)	20.2 (.2)	14.7 (.1)	1.8 (.02)	42.5 (.4)	7,247 (73.2)	1,656.8 (16.7)	433.7 (4.4)	387.6 (3.9)	30.7 (.3)	1.1 (.01)	9,901.8 (100)

This land use came from the GAEPD TMDL Study document: “Total Maximum Daily Load Evaluation for Twenty-Nine Stream Segments in the Coosa River Basin for Fecal Coliform.” This land use data was largely confirmed – excluding the agricultural land use breakdown- during the visual field survey and using satellite imagery from Google.

Other Management Measures having an impact on the HUC 12

Georgia Forestry Commission BMPs

- All forestry operations are required to comply with the GFC’s handbook, “Georgia’s Best Management Practices for Forestry” and the BMPs contained within. There were no BMP assurance exams for forestry operations in Gordon County, as there were no complaints to generate such a required inspection and examination. Gordon County is within GFC’s District 1 (Rome).

Major BMP Program in Sub-Watershed

- Environmental Quality Incentives Program (EQIP): An NRCS program, it is used to help farmers offset the costs of implementing agricultural BMPs targeted to improve water quality. These contracts can last up to 5 years and can include technical expertise along with financial assistance. Along the Camp Creek segment the BMPs that have been most used are cross fences and heavy use area protection projects.

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
Camp Creek	Dry Creek to Oostanaula	Fecal Coliform			1.34E+12	1.49E+12

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	1,000 per 100 ml (geometric mean Nov-April) 200 per 100ml (geometric mean May-Oct)	Agricultural Runoff	12%
		Urban Runoff	
		Wildlife	
		Failing Septic Systems	

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.

The geographic extent and potential contribution to the pollution of each non-point source was determined using input from stakeholders, land use data, a field survey, satellite photography from Google maps, and the precedents of the TMDL study documents. Using these sources, one can make a general statement about the geographic extent of each potential nonpoint source and each source's potential contribution to the fecal coliform contamination.

Camp Creek's drainage area is mostly rural, so urban runoff is highly unlikely to contribute to the pollution. But runoff from Interstate 75 and GA Hwy. 136 could contribute to elevated bacterial levels.

Agriculture makes up the predominant developed land use at over 20%, so it makes up a medium sized geographic extent. Runoff from livestock grazing fields and from direct deposit of fecal matter into unfenced streams are the usual agricultural sources of fecal coliform. Bovine feces do contain a large amount of fecal coliform. But runoff from row crops and other crops that have been fertilized with chicken litter or other animal manure are also potential sources. From the field survey, sufficient riparian buffers were seen on farmland at one creek crossing. From the satellite imagery, at least 26 chicken houses are in the immediate drainage area, all but two of which are of the large variety and 16 of which are in one large complex. This is not to definitively say these poultry & livestock operations are causing most of the problem, but to note their presence and their potential to contribute to elevated fecal coliform levels.

There is a small percentage of improved land besides agricultural land, and most of it is low-intensity residential land. Most of the residences in the area are on septic, a small portion of which could have the potential to fail. The status of septic systems is hard to determine because they are on private property, underground, and because they typically don't exhibit signs of the potential to fail until they fail unless they are regularly maintained. On a positive note, when they do fail they are commonly immediately recognized and fixed by trained installers under the oversight of the Environmental Health Department. There is also the possibility, however remote, that failing septic systems are not even apparent to the human eye because they lack the common signs of bubbling up sewage or unusually green grass – a sub-surface failure. This typically is more of a groundwater contamination issue rather than a surface water one, but as the two hydrological systems are sometimes linked, so too can they share potential sources of contamination. These possible scenarios, plus the fact that the majority of soils in the area are considered poor quality for septic systems, make failing septic systems a potential contributor of the contamination in the watershed.

With about 90% of the land use in the sub-watershed either forested or agriculture, wildlife is certain to be present and contribute somewhat to the impairment as both land uses serve as either natural or adapted habitats for such fauna. There is also a similar issue of lack of definitive data to use to ascertain the potential impact of wildlife but they do add to the 'natural' background level of fecal coliform. Deer are unlikely to contribute as much as waterfowl and other creatures that spend a significant amount of time in the water, as deer have not been frequently observed leaving droppings in waterways.

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)	
Urban Runoff		.5		1	.5
Agricultural Runoff	Large Tract of Farm Land; Many Chicken Houses	3		3	9
Wildlife		3		1	3
Failing Septic Systems		3		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:

Gordon County Management Measures

- The Gordon County Soil and Erosion and Sedimentation Control Ordinance (enacted 3-16-2004; Chapter 14) covers generally all land disturbing activity over one acre and mandates the use of BMPs from the "Manual for Erosion and Sediment Control in Georgia" specified in O.C.G.A. § 12-7-6(b) and decreed by the Georgia Water Quality Control Act (O.C.G.A. § 12-5-30(f)).
- A riparian buffer requirement over the State of Georgia Mandated minimum 25 feet for regular waterways or 50 feet for trout streams is not in place.
- Water Supply watershed, wetlands and groundwater recharge area protection ordinances along with a river corridor ordinance that protects the area alongside the Coosawattee, Conasauga, and Oostanaula river have been enacted as required by the environmental criteria for Comprehensive Plans, Part V (Respectively found in Article VI,; Article VII; Article IV; and Article V – all enacted 9-15-1998 and part of Chapter 14).

Watershed Group

- The New Echota River Alliance is an environmental advocacy and outreach nonprofit organization that focuses on the part of the Coosa River Basin that falls within Gordon County. It is a charter organization of the Coosa River Basin Initiative with whom it forms the Upper Coosa Riverkeeper.

Agricultural Conservation Projects

- Environmental Quality Incentives Program (EQIP): An NRCS program, it is used to help farmers offset the costs of implementing agricultural BMPs targeted to improve water quality. These contracts can last up to 5 years and can include technical expertise along with financial assistance. Along the Camp Creek segment the BMPs that have been most used are cross fences and heavy use area protection.

Georgia Forestry Commission BMPs

All forestry operations are required to comply with the GFC's handbook, "Georgia's Best Management Practices for Forestry" and the BMPs contained within. There were no BMP assurance exams for forestry operations in Gordon County, as there were no complaints to generate such a required inspection and examination. Gordon County is within the GFC District 1 (Rome).

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).

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)	RESPONSIBILITY (2)	DESCRIPTION OF MEASURES (3)	FUNDING & RESOURCES (4)	IMPAIRMENT SOURCES (5)	DATE (6)	BMP LRP RATING (7)
Cross Fences (NRCS # 382)	USDA NRCS/ Contract-bound Farmer	A subdivision of larger pastures that in conjunction with prescribed grazing reduces overgrazing and the subsequent erosion and runoff. Not directly recommended for Fecal Coliform but can reduce it by reducing runoff.	EQIP	Agricultural Runoff: Due to overgrazing & erosion		
Heavy Use Areas Protection (NRCS # 561)	USDA NRCS/ Contract-bound Farmer	Involves the establishment of vegetation and/or the installation of erosion prevention materials that protect areas where heavy traffic is expected. Not recommended directly for FC, but can reduce the runoff that FC can travel with.	EQIP	Agricultural Runoff: Livestock Operations		1 ²

Sources: 1: Best Management Practices for Georgia Agriculture. The Georgia Soil and Water Conservation Commission.

2: NRCS National Conservation Practices Standards (NHCP): Conservation Practice Information Sheets.

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)
Urban Runoff	.5	N/A	N/A	N/A
Agricultural Runoff	9	Cross Fences	N/A	If this BMP implementation is judged by qualified experts & stakeholders to be inadequate, modification based off of targeted water monitoring and/or assessment should be considered
		Heavy Use Areas		
Wildlife	3	N/A	N/A	N/A
Failing Septic Systems	9	N/A	N/A	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 BMPs	Farmers; USDA; local environmental groups	New	Various	Agricultural Runoff	TBD	UNK
Stormwater BMPs	Industry; city and county government	New	Various	Urban Runoff	TBD	UNK
Septic Tank BMPs: Educational and Structural Programs	County Environmental Health Office; City of Adairsville and City of Calhoun Sewer Officials; and concerned citizens.	Enhanced from existing Environmental Health outreach with their pamphlets. Possibly new program of pump-outs with 319 (h) grant program.	Various	Failed Septic Tanks	TBD	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 [].

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)
New Echota River Alliance (NERA)	General outreach concerning water issues in Gordon County	General Public	Ongoing.
Coosa River Basin Initiative (CRBI)/ NERA	Train educators and their students in QA/QC Adopt-a-Stream monitoring protocols; conduct environmental education presentations in schools.	Gordon County and City of Calhoun School Teachers and Pupils.	October, 2009
UGA Cooperative Extension Service – Gordon County Agent	Participate with local school children in clean up of local rivers and parks during Rivers Alive, a state wide event held annually	Gordon County and City School Children	Ongoing
UGA Cooperative Extension Service – Gordon County Agent	Instruct kids about water quality issues with UGA supplied environmental education module, “Poisoned Pump.”	5 th Graders in Gordon County and City Schools	Ongoing
UGA Cooperative Extension Service – Gordon County Agent	Instruct kids about water quality and conservation with UGA supplied environmental education module, “Drought and Georgia Curriculum.”	6 th Graders in Gordon County and City Schools	Ongoing
Gordon 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.	Gordon County homeowners on septic – primarily reaches new home owners and homeowners w/ recently failed systems.	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.
Cross Fences		NRCS/ Contracted Farmer		x	
Heavy Use Areas		NRCS/ Contracted Farmer		x	
General Outreach to Public		NERA		x	
Adopt-a-Stream Training		CRBI/NERA			x
Rivers Alive Clean-up		UGA Cooperative Extension Service/ 4-H		x	
5 th and 6 th Grade Environmental Education		UGA Cooperative Extension Service/ 4-H		x	
Septic Tank Maintenance Education		Gordon County Department of Environmental Health		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.

On April 1, 2009 an 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 mailed or email invitations and 24 attended. The City of Calhoun had representatives present, with only someone representing Gordon County's interests missing. Chris Faulkner, Environmental Outreach Coordinator from the Georgia Environmental Protection Department gave a PowerPoint presentation that explained the TMDL process and how they are developed, as well as how the list of the 303 (d)/305 (b) impaired streams list is developed. He then took multiple questions. At the end of the meeting it was determined that the people in attendance would compile a list of people that they would like to act as stakeholders for the impaired streams in their particular watershed. This was ultimately unproductive, as we got very few responses.

On May 28th, 2009 a TMDL Implementation meeting was held in Calhoun, with a presentation shown by employees of the NWGRC on what fecal coliform, a TMDL, and a TMDL Implementation Plan are. Also covered during the presentation was what is asked from the stakeholders. The potential impacts of the TMDL plan upon different stakeholders and the potential sources of fecal coliform pollution were covered in addition.

Doug Cabe of the Limestone Valley RC & D gave a presentation on a 319(h) grant program his organization along with the Conasauga River Alliance that addressed fixing failing septic systems in the Conasauga River Basin.

Machelle Simmons of NRCS described the many programs that the USDA offers to implement agricultural BMPs dealing with water pollution and habitat conservation.

The floor was opened up to questions and there was a discussion that involved almost every stakeholder present. Questions were asked concerning using more monitoring to narrow down the source of the pollutant; chicken litter used as fertilizer and its relationship to the fecal coliform contamination; the presence or decrease of agriculture in Gordon and the possible decrease of it as a source of pollution; peculiar smells coming from what Joe Cook of CRBI thought was the Calhoun wastewater LAS (Calhoun says they aren't the source of the smell); how old is an old septic tank (20+ yrs.); and how long this TMDL process has been going on and how long will it continue. Camp Creek did not come up directly during the conversation.

The second public TMDL meeting for Bartow and Gordon Counties was held in Adairsville on August 6, 2009. This meeting was open house format because all of the attendees had either been at a previous TMDL meeting or had a good understanding of the TMDL program. The attendees were asked about BMPs in the area and if there were any new BMPs or outreach activities that they would like to see in the watersheds. One farmer stated the he along with many other farmers would be in favor of BMPs; however many haven't learned about them. Sources of non-point pollution were discussed. It was also noted that the real estate bust had a silver lining of reducing the runoff into waterways. Then a discussion began regarding that fecal coliform counts increase significantly during storm events, which is backed by recent sampling done on a Bartow County Creek. The increased funds for year 2010 319 grant projects were discussed and it was mentioned that this funding could be used to purchase monitoring equipment and to start an Adopt-a-Stream group in Bartow or Gordon County or to address leaking septic tanks with either records inventory or a aerial infrared photography survey. Also, the possibility of teaming up with the New Echota Rivers Alliance in Gordon County or the Coosa River Basin Initiative in Bartow County to do water monitoring through their Adopt-a-Stream programs. This was well received by many present. Cattle intrusion into waterways was described as widespread, especially on the Oostanula. Mohawk Industries described their main current focus as controlling stormwater, along with conducting environmental community service. The possibility of tributaries of these impaired streams contributing to the bacterial problem was addressed by the EPD representative. Camp Creek didn't come up specifically in the discussion.

Table 9. STAKEHOLDER ADVISORY GROUP MEMBERS

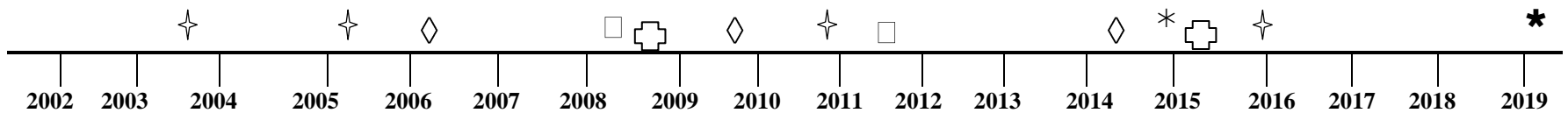
NAME/ORG	ADDRESS	CITY	STATE	ZIP	PHONE	E-MAIL
Larry Pratt/ City of Adairsville	116 Public Square	Adairsville	GA	30103	(770) 773-2605	lvp2853@bellsouth.net
Wade Wilson/City of Adairsville, Wilson Engineering	105 S. Main St.	Adairsville	GA	30103	(770) 773-1717	wade_wilson@comcast.net
Christy Blair/GCHD, Environmental Health- Gordon County	318 N. River St.	Calhoun	GA	30701	(706) 624-1440	chblair@dhr.state.ga.us
Mary Griffin	3086 Martha Berry Hwy.	Rome	GA	30165	(770) 720-3525	mgriffin@gfc.state.ga.us
Machelle Simmons/ USDA NRCS	717 South Wall St. Suite 1	Calhoun	GA	30701	(706) 629-2582 x 3	machelle.simmons@ga.usda.gov
Doug Cabe/ Limestone Valley RC & D	125 Redbud Rd. Suite 7	Calhoun	GA	30701	(706) 625-7044	doug.cabe@ga.usda.gov
Ted Collins/ Limestone Valley RC & D	8363 Fairmount Hwy.	Fairmount	GA	30319	(706) 629-8222	nogaapp@bellsouth.net

Plan for Camp Creek
HUC 10 # 0315010301

Aimee Abernathy/ City of Fairmount	2265 US Hwy. 411	Fairmount	GA	30319	(706) 337-5306	cityoffairmount@comcast.net
Michael Fowler/Gordon County	200 South Wall St.	Calhoun	GA	30701	(706) 629-0505	mfowler@gordoncounty.org
Jerry Crawford/City of Calhoun	700 West Line St.	Calhoun	GA	30701	(706) 602-6078	jcrawford@calnet-ga.net
Erica Stewart/ Mohawk Industries	405 Virgil Dr.	Dalton	GA	30720	(706) 428-8133	erica_stewart@mohawkind.com
Randy Waskul/Mohawk					(706) 428-8147	randy_waskul@mohawkind.com
Chuck Patterson/ Mannington Commercial Carpets	1844 US Hwy. 41 SE	Calhoun	GA	30701	(706) 602-6381	chuckp@mannington.com
Robert Darnell	813 Plainville Rd.	Adairsville	GA	30103	(770) 773-6181	
Sam Payne	P.O. Box 246	Calhoun	GA	30703	(678) 986-6366	paynefrm@bellsouth.net
Millard Payne					678) 986- 6366/(770) 608- 9909	paynefrm@bellsouth.net
Arthur Bowman	121 Bowman Rd.	Calhoun	GA	30701	(706) 629-6118	
Joe Powell	225 Thelma Rd. SW	Calhoun	GA	30701	(706) 629-1840	
Joe Cook/Upper Coosa Riverkeeper	408 Broad Street	Rome	GA	30161	(706) 232-2724	jcook@coosa.org
Dan McBee/NERA	1721 Pine Chapel Rd.	Calhoun	GA	30701	(706) 263-4002	McBee.Dan3@gmail.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
- * Projected Implementation Timeline for Plans Prepared in 2006
- * Projected Implementation Timeline for Plans Prepared in 2009

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 and Jonathan Bridges		
Agency:	Northwest Georgia Regional Commission		
Address:	P.O. Box 1798		
City:	Rome	ST: GA	ZIP: 30162-1793
E-mail:	brobinson@nwgrc.org; jbridges@nwgrc.org		
Date Submitted to EPD:	9-30-2009	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.

Plan for Camp Creek
HUC 10 # 0315010301

NAME/ORGANIZATION	ADDRESS	CITY	STATE	ZIP	PHONE	E-MAIL
Larry Pratt/ City of Adairsville	116 Public Square	Adairsville	GA	30103	(770) 773-2605	lvp2853@bellsouth.net
Wade Wilson/City of Adairsville, Wilson Engineering	105 S. Main St.	Adairsville	GA	30103	(770) 773-1717	wade_wilson@comcast.net
Christy Blair/GCHD, Environmental Health- Gordon County	318 N. River St.	Calhoun	GA	30701	(706) 624-1440	chblair@dhr.state.ga.us
Mary Griffin	3086 Martha Berry Hwy.	Rome	GA	30165	(770) 720-3525	mgriffin@gfc.state.ga.us
Machelle Simmons/ USDA NRCS	717 South Wall St. Suite 1	Calhoun	GA	30701	(706) 629-2582 x 3	machelle.simmons@ga.usda.gov
Doug Cabe/ Limestone Valley RC & D	125 Redbud Rd. Suite 7	Calhoun	GA	30701	(706) 625-7044	doug.cabe@ga.usda.gov
Ted Collins/ Limestone Valley RC & D	8363 Fairmount Hwy.	Fairmount	GA	30319	(706) 629-8222	nogaapp@bellsouth.net
Aimee Abernathy/ City of Fairmount	2265 US Hwy. 411	Fairmount	GA	30319	(706) 337-5306	cityoffairmount@comcast.net
Michael Fowler/Gordon County	200 South Wall St.	Calhoun	GA	30701	(706) 629-0505	mfowler@gordoncounty.org
Jerry Crawford/City of Calhoun	700 West Line St.	Calhoun	GA	30701	(706) 602-6078	jcrawford@calnet-ga.net
Erica Stewart/ Mohawk Industries	405 Virgil Dr.	Dalton	GA	30720	(706) 428-8133	erica_stewart@mohawkind.com
Randy Waskul/Mohawk					(706) 428-8147	randy_waskul@mohawkind.com
Chuck Patterson/ Mannington Commercial Carpets	1844 US Hwy. 41 SE	Calhoun	GA	30701	(706) 602-6381	chuckp@mannington.com
Robert Darnell/Farmer	813 Plainville Rd.	Adairsville	GA	30103	(770) 773-6181	

Sam Payne/Farmer	P.O. Box 246	Calhoun	GA	30703	(678) 986-6366	paynefrm@bellsouth.net
Millard Payne/Payne Farm					(678) 986-6366 (770) 608-9909	paynefrm@bellsouth.net
Arthur Bowman/Farmer	121 Bowman Rd.	Calhoun	GA	30701	(706) 629-6118	
Joe Powell/ Farmer	225 Thelma Rd. SW	Calhoun	GA	30701	(706) 629-1840	
Joe Cook/Upper Coosa Riverkeeper	408 Broad Street	Rome	GA	30161	(706) 232-2724	jcook@coosa.org
Dan McBee/NERA	1721 Pine Chapel Rd.	Calhoun	GA	30701	(706) 263-4002	McBee.Dan3@gmail.com

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 Plan.

APPENDIX C.

VISUAL FIELD SURVEYS, NOTES, PHOTOGRAPHS, AND MAPS.

A visual survey was conducted by the Northwest Georgia Regional Commission on March 9, 2009 during a rain event. The survey team was limited to only one public access creek crossing on Ga Hwy. 136 overlooking pastureland up and downstream. This was the only stop allowed, but a windshield visual land use survey was performed further upstream where a large single tract was observed on either side of Camp Creek, and also further upstream (past the segment start) on the I-75. Due to the rain the creek was somewhat swollen and had the reddish-orange tinge of sedimentation from Georgia clay. It parallels I-75 for most of its course. The road crossing visited was at GA Hwy. 136, across I-75 from Resaca.





**Appendix D: Sources
(in order of appearance in plan)**

www.georgiastats.uga.edu

“Georgia Land Use Trends: Chattooga County Data.” 2005. Natural Resources Spatial Analysis Lab, College of Agricultural and Environmental Sciences, University of Georgia. Accessed at <http://narsal.uga.edu/glut/county.php>.

SWAP Information: In-house project done by Coosa Valley RDC and North Georgia RDC in 2001-2003.

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.

“Watershed Management Population Projections and Employment Trends and Projections Fact Sheet.” October 2004. North Georgia RDC.

Georgia DCA, <http://www.georgiaplanning.com/planners/SDmaps>

Northwest Georgia Environmental Health/Public Health Onsite Sewage System Installation and Repair Permit History: 2004-2009. Received from Tim Allee, District EH Director, via email on 8/25/2009.

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

www.newechotarivers.org.

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

<http://www.newechotarivers.org/>.

“Georgia’s Best Management Practices for Forestry.” January 1999, Georgia Forestry Commission.

Email Correspondence with Mabelle Simmons, USDA NRCS Agent, Bartow & Gordon Counties: 7/13-7/14/2009.

Email Correspondence with Tom Burgess, Director of Gordon County Department of Building, Planning, and Development: 7/21/2009

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

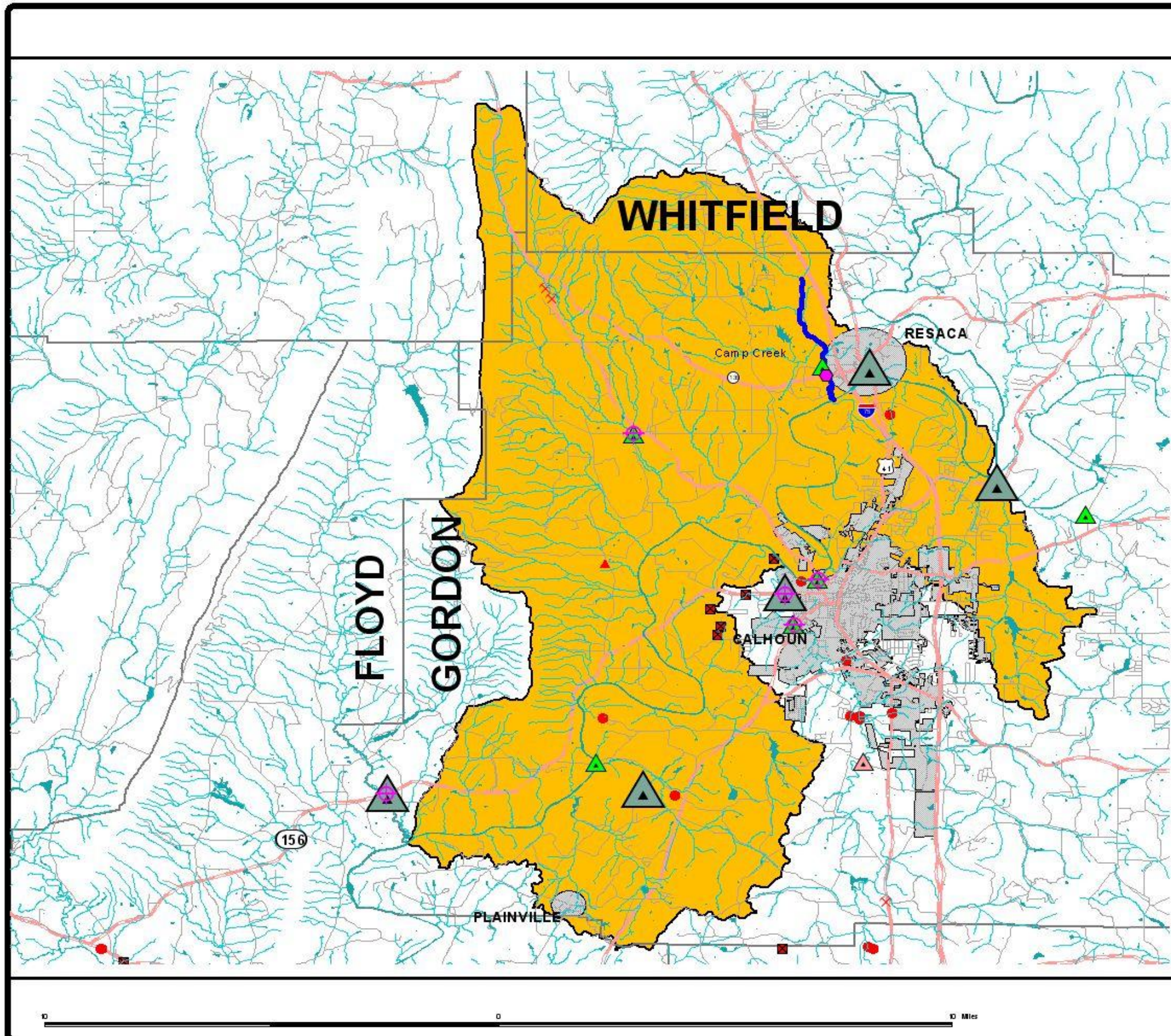
<http://maps.google.com>

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

NRCS National Conservation Practices Standards (NHCP): Conservation Practice Information Sheets. Accessed at <http://www.nrcs.usda.gov/technical/standards/nhcp.html>

Gordon County Comprehensive Plan 2007-2027: Community Assessment prepared for Gordon County, City of Fairmount, City of Plainville, City of Ranger, Town of Resaca. MACTEC Engineering and Consulting, Inc., Project 6311-05-0067. Accessed at www.georgiaplanning.com.

Phone Conversation with Beth Watson, CEA for Gordon County. 7/16/2009.



Tier 2 TMDL Implementation Plan
and
Extended Revisions
Camp Creek
Oostanaula Watershed
HUC10# 0315010301
Dry Creek To Oostanaula River



- 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