

About Guilford County

As part of the eleven-county Piedmont Triad region, Guilford County is centered along the Piedmont industrial crescent stretching from Raleigh to Charlotte. The County's traditional employment base of textiles, apparel and furniture has diversified greatly in the last fifty years, and now encompasses more than 300 concerns producing a wide range of products. Capital investment of over \$1.2 billion by new and expanding firms created 27,000 new jobs in the past ten years. An excellent transportation infrastructure, including three Interstate highways (I-40, I-85, I-73), Piedmont Triad International Airport, and readily available rail and truck service, has helped to solidify the County's position as a major distribution and transportation center in the Southeast.

Many corporate and regional offices are located in Guilford, including Jefferson-Pilot, Burlington Industries, Volvo Trucks North America, Lorillard Corporation, Cone Mills, Guilford Mills and VF Corporation. The International Home Furnishings Market in High Point attracts some 140,000 visitors annually. Aggressive economic recruitment efforts by both the private and public sectors have yielded many new corporate neighbors. Federal Express Corporation recently announced that it will construct a mid-Atlantic cargo hub adjacent to Piedmont Triad International Airport. This hub is projected for completion in 2007 and will employ some 1,500 people.

Guilford County affords the full range of amenities of a thriving urban area, including three regional shopping malls. Major cultural and recreational events include the North Carolina Shakespeare Festival, the Eastern Music Festival, the City Stage street festival, the Greater

Greensboro Chrysler Classic professional golf tournament, and the annual men's basketball tournaments for the Atlantic Coast Conference and the Southern Conference.

Governmentally, Guilford is administered by an eleven-member Board of County Commissioners who oversees an annual budget of \$414 million that is raised from a tax base of some \$28.75 billion in valuation. Major areas of allocation include education (42.33%), human services (34.71%), public safety (10.98%), administrative support (5.20%) and community development (3.63%).

Physical Characteristics (Source: USGS Report on Groundwater Recharge for Guilford County)

The topography of Guilford County consists of low, rounded hills and long, rolling northeast-southwest trending ridges. The upper surfaces of some ridges and interstream divides are relatively flat and may be remnants of an ancient erosional surface of low relief. More recent erosion and downcutting by streams has dissected this ancient erosional surface, creating a local topographic relief of 100 to 200 feet (ft) between stream bottoms and ridge tops. Summit altitudes of ridges in the northwestern part of Guilford County are generally greater than 900 ft above sea level, but summit altitudes decrease to about 750 ft along the eastern side of the County. The lowest altitudes occur along valleys of rivers that flow out of the County on the east and south; altitudes at the County line are less than 600 ft along the Haw River, less than 550 ft along Stinking Quarter Creek, and less than 660 ft along the Deep River. Summit altitudes in downtown Greensboro, N.C., are greater than 850 ft, and greater than 900 ft in downtown High Point, N.C. A few isolated mountains in the County rise above the general Piedmont surface.

The climate of the Guilford County is moderate and can be typed as humid-subtropical. The area is characterized by short, mild winters and long, hot, humid summers. Mean minimum January temperatures range from 31° to 33° Fahrenheit (° F), whereas mean maximum July temperatures range from 87° to 89 ° F. Average annual precipitation varies across the area from 43 to 48 inches (in.). The lowest rainfall occurs in the northern and northwestern parts of the County; the highest rainfall occurs in the southern and southeastern parts of the County. Prevailing winds are from the southwest with a mean annual wind speed of about 9 miles per hour. The average length of the freeze-free season in the area lasts approximately 190 to 210 days, with the last date of freezing temperature occurring between April 1 and April 21. The average first date of freezing temperature occurs between October 30 and November 9.

Guilford County
Comprehensive Stormwater Management Program Report
National Pollutant Discharge Elimination System (NPDES) Phase II

Introduction

The federal Clean Water Act established the National Pollutant Discharge Elimination System (NPDES) Program in 1972 to control point source discharges (pipes, ditches, etc.) to rivers, lakes, estuaries, and other surface waters. The State of North Carolina is delegated by the Environmental Protection Agency to implement the NPDES permit program, which consists of several component programs - wastewater permits, stormwater permits, and the pretreatment program. These programs function primarily through the issuance and enforcement of permits. Phase II of the NPDES Stormwater program was signed into law in December of 1999. This regulation builds upon the existing Phase I program in three ways; (1) it lowers the acreage threshold for construction activities from 5 acres down to 1 acre or more of disturbed area, (2) it provides a no-exposure exemption for Phase I industrial facilities that have no significant materials stored outdoors, and (3) it requires small municipal separate storm sewer systems (MS4s) to be permitted. A small MS4 is a unit of government such as a city, town, county, association or other public body that owns or operates a stormwater collection system. A small MS4 is automatically designated into the program when the U.S. Census Bureau defines that local government as being located, in whole or part, within an Urbanized Area (UA). The definition of an Urbanized Area is complex, but in simple terms it is any local government or group of local governments that combined have a core population of 50,000 or more and a population density of 1,000 people per square mile.

Small MS4s permitted under Phase II are required to develop and implement a comprehensive stormwater management program that includes six minimum measures:

- Public Education and Outreach on Stormwater Impacts
- Public Involvement/Participation
- Illicit Discharge Detection and Elimination,
- Construction Site Stormwater Runoff Control
- Post-Construction Stormwater Management for New Development and Redevelopment
- Pollution Prevention/Good Housekeeping for Municipal Operations

In accordance with Item 7 (b)(ii)(B) of the Rule, Guilford County recognizes that it owns and operates one or more small MS4(s) and elects to implement all six minimum measures and have the permit cover its entire jurisdictional area.

In order to meet the requirements of the National Pollutant Discharge Elimination System (NPDES) Phase II Rules (Rules) 15A NCAC 2H .0126, Guilford County has developed a Comprehensive Stormwater Management Plan that will serve to comply with the federal stormwater requirements. Guilford County is committed to effectively managing stormwater quality issues related to the National Pollutant Discharge Elimination System (NPDES) Phase II Rules and submits the following Stormwater Management Program Report.

1. STORM SEWER SYSTEM INFORMATION

1.1 Population Served

Guilford County is comprised of two major municipalities and eight smaller incorporated towns. Within the unincorporated portion of Guilford County, which also includes any extra-territorial jurisdictions, the population served by the County is 87,182 according to the 2000 Census.

Guilford County and its cities are hosts to several major events, including the Greater Greensboro Chrysler Classic professional golf tournament, two international furniture markets, and college basketball tournaments. In addition six colleges or universities are located within Guilford County. While these represent increases in people within the county, we consider these to be major events, as opposed to seasonal population. With the exception of the golf tournament all of the major events are homebased in one of the two major municipalities and do not pose additional burden on the County's MS4.

1.2 Growth Rate

Based upon the 1990 and 2000 Census', Guilford County has experienced an annual growth rate of 1.05 percent. The growth rate has been affected by the incorporation of Stokesdale (late 1990), Whitsett (1991), Summerfield (1996), Sedalia (1997), Pleasant Garden (1997), and Oak Ridge (1998), as well as, from several annexations by High Point and Greensboro.

1.3 Jurisdictional and MS4 Service Area

The total area of Guilford County is 660.89 square miles. Incorporated cities and towns total 251.68 square miles and the extra-territorial jurisdictions total 11.28 square miles. The net result, which shall serve as the jurisdictional and service areas, is 397.93 square miles.

1.4 MS4 Conveyance System

Guilford County owns and maintains storm sewer systems on its school properties, in its parks, and at a prison farm. The systems are comprised of a combination of piped incidental site drainage and open or natural channels. Within the rights-of-way of publicly maintained streets and roads, the drainage system is maintained by the NC Department of Transportation. Drainage systems in private streets, streets not on the NCDOT maintenance program, and drainageways outside the right-of-way are maintained by the abutting property owners.

1.5 Land Use Composition Estimates

The estimated percentage of Guilford County’s jurisdictional area is as follows:

Residential	30%
Commercial	1%
Industrial	4%
Open Space	65%

1.6 Estimate Methodology

The land use estimates were taken from GIS mapping of the County’s zoning classifications.

1.7 TMDL Identification

Four stream segments within Guilford County’s jurisdiction have been listed on the 2002 303(d)

List as “Waters for which TMDLs are required.” Those streams within the Cape Fear River

Basin are listed below:

<u>Name</u>	<u>Cause of Impairment</u>	<u>Index #</u>	<u>Description</u>
North Buffalo Creek	Ammonia	16-11-14-1b	From WWTP to Buffalo Creek
East Fork Deep River	Fecal Coliform	17-2-(0.3)	From source to a point 0.4 mile downstream of Guilford County SR 1541 (Wendover Ave.)
Deep River	Fecal Coliform	17-(4)b	From SR 1113 (Kivett Dr.) in Guilford to SR 1921 in Randolph Co.
Richland Creek	Fecal Coliform	17-7-(4)	From a point 0.4 mile upstream of SR 1154 (Kersey Valley Rd.) to Randleman Reservoir

2. RECEIVING STREAMS

The table below lists the primary streams and tributaries for each river basin within Guilford County's jurisdiction. Please note that not all streams segments are physically located in unincorporated Guilford County, however if listed, the unincorporated area of the County at a minimum contributes drainage to the stream segment. For each stream, that information is available, the stream segment, water quality classification, use support rating, and any water quality issues are listed.

CAPE FEAR RIVER BASIN

RECEIVING STREAM NAME	STREAM SEGMENT	WATER QUALITY CLASSIFICATION	USE SUPPORT RATING	WATER QUALITY ISSUES
Back Creek (Little Creek)	From source to Big Alamance Creek	C; NSW	*	*
Beaver Creek	From source to Reedy Fork Creek	WS-III; NSW	*	*
Beaver Creek	From source to Little Alamance Creek	WS-IV; NSW	*	*
Beaver Creek	From source to a point 1.2 mile downstream of Guilford County SR 3111 (Holts Store Rd.)	WS-IV; NSW	*	*
Benaja Creek	From source to Haw River	C; NSW	*	*
Big Alamance Creek (Alamance Creek)	From source to a point 2.4 miles downstream of Guilford County SR 3045 (Mt. Hope Church Rd.)	WS-IV; NSW	*	*

RECEIVING STREAM NAME	STREAM SEGMENT	WATER QUALITY CLASSIFICATION	USE SUPPORT RATING	WATER QUALITY ISSUES
Big Alamance Creek (Alamance Creek) (Lake Mackintosh)	From a point 2.4 miles downstream of Guilford County SR 3045 to dam at Lake Mackintosh	WS-IV; NSW, CA	*	*
Blackwood Creek	From source to Buffalo Creek	C; NSW	*	*
Brush Creek	From source to a point 0.5 mile downstream of Guilford County SR 2190 (Carlson Dairy Rd.)	WS-III; NSW	*	*
Buffalo Creek	From junction of North Buffalo Creek and South Buffalo Creek to Reedy Fork	C; NSW	*	*
Bull Run	From source to appoint 0.5 mile upstream of mouth	WS-IV: *	*	*
Bull Run	From a point 0.5 mile upstream of mouth to Randleman Reservoir, Deep River	WS-IV; CA: *	*	*
Candy Creek	From source to Haw River	C; NSW	*	*
Causey Lake	Entire lake and connecting stream to Little Alamance Creek	WS-IV; NSW	*	*
Chocolate Creek	From source to North Prong Stinking Quarter Creek	C; NSW	*	*

RECEIVING STREAM NAME	STREAM SEGMENT	WATER QUALITY CLASSIFICATION	USE SUPPORT RATING	WATER QUALITY ISSUES
Climax Creek (Little Alamance Cr) (Quaker LK.)	From source to Big Alamance Creek	WS-IV; NSW	*	*
Copper Branch	From source to a point 0.6 mile upstream of mouth	WS-IV: *	*	*
Copper Branch	From a point 0.6 mile upstream of mouth to Randleman Reservoir, Deep River	WS-IV; CA: *	*	*
Deep River ■	From dam at Oakdale Cotton Mills, Inc. to SR 1113 (Kivett Dr.)	WS-IV; CA: *	PS	Unknown
Deep River ■	From SR 1113 (Kivett Drive in Guilford) to SR 1921 (Coltrane Mill Rd. in Randolph)	WS-IV CA	PS	Fecal Coliform & Unknown
Dogwood Lake	Entire lake and connecting stream to Reddicks Creek	WS-IV: *	*	*
East Fork Deep River	From source to a point 0.4 mile downstream of Guilford County SR 1541 (Wendover Ave.)	WS-IV	PS	Habitat Degradation, Fecal Coliform, & Turbidity
East Fork Deep River	From a point 0.4 mile downstream of Guilford County SR 1541 to High Point Lake, Deep River	WS-IV; CA: *	PS	Turbidity
Hackett Lake	Entire lake and connecting stream to Little Alamance Creek	WS-IV; NSW	*	*

RECEIVING STREAM NAME	STREAM SEGMENT	WATER QUALITY CLASSIFICATION	USE SUPPORT RATING	WATER QUALITY ISSUES
Haw River	From source to SR 2109 (Eversfield Rd.)	C; NSW	PS	Sediment
Haw River	From SR 2109 to SR 2426 (Cunningham Mill Rd. in Rockingham Co.)	C; NSW	PS	Habitat Degradation
Haw River	From Rockingham County to Alamance County	*	*	*
Hickory Creek	From source to a point 0.6 mile upstream of mouth	WS-IV; *	PS	Habitat Degradation
Hickory Creek	From a point 0.6 mile upstream of mouth to Randleman Reservoir, Deep River	WS-IV; CA: *	PS	Habitat Degradation
Horsepen Creek	From source to U.S. Hwy. 220	WS-III; NSW	PS	Sediment
Horsepen Creek	From U.S. Hwy. 220 to Lake Brandt, Reedy Fork	WS-III; NSW, CA	PS	Sediment
Jenny Branch	From source to Reddicks Creek	WS-IV; *	*	*
Jorden Branch	From source to North Buffalo Creek	C; NSW	*	*
Katie Branch	From source to Reedy Fork Creek	C; NSW	*	*
Little Alamance Creek (Guilford County)	From source to Big Alamance Creek	WS-IV; NSW	NS	Unknown

RECEIVING STREAM NAME	STREAM SEGMENT	WATER QUALITY CLASSIFICATION	USE SUPPORT RATING	WATER QUALITY ISSUES
Long Branch	From source to a point 0.5 mile upstream of mouth	WS-III; NSW	*	*
Long Branch	From a point 0.5 mile upstream of mouth to Lake Townsend, Reedy Fork	WS-III; NSW, CA	*	*
Long Branch	From source to a point 0.5 mile downstream of Guilford County SR 1541 (Wendover Ave.)	WS-IV: *	*	*
Long Branch	From a point 0.5 mile downstream of Guilford County SR 1541 to East Fork Deep River	WS-IV; CA: *	*	*
Lynwood Lake	Entire lake and connecting stream to Little Alamance Creek	WS-IV; NSW	*	*
Mears Fork Creek	From source to Haw River	C; NSW	*	*
Moore's Creek	From source to Reedy Fork	WS-III; NSW	*	*
North Buffalo Creek	From WWTP to Buffalo Creek	C; NSW	NS	Fecal Coliform
North Prong Stinking Quarter Creek (Kimesville Lake)	From source to Stinking Quarter Creek	C; NSW	*	*

RECEIVING STREAM NAME	STREAM SEGMENT	WATER QUALITY CLASSIFICATION	USE SUPPORT RATING	WATER QUALITY ISSUES
Polecat Creek	From source to a point 0.4 mile downstream of Randolph County SR 2116 (New Salem Rd.)	WS-III	*	*
Reddicks Creek	From source to a point 0.9 mile upstream of mouth	WS-IV: *	*	*
Reddicks Creek	From a point 0.9 mile upstream of mouth to Randleman Reservoir, Deep River	WS-IV; CA: *	*	*
Reedy Fork Creek	From source to a point 0.4 mile downstream of Moores Creek	WS-III; NSW	*	*
Reedy Fork Creek (including Lake Brandt and Lake Townsend below normal operating levels)	From a point 0.4 mile downstream of Moore's Creek to Lake Townsend Dam (City of Greensboro water supply intake)	WS-III; NSW, CA	*	*
Reedy Fork Creek (Hardy's Mill Pond)	From Lake Townsend Dam to Haw River	C; NSW	PS	Unknown
Richland Creek (Richland Lake) (Lake Jeanette)	From a point 0.5 mile upstream of dam at Richland Lake to Lake Townsend, Reedy Fork	WS-III; NSW, CA	*	*
Richland Creek ■	From a point 0.4 mile upstream of Guilford County SR 1154 to Randleman Reservoir, Deep River	WS-IV CA	NS	Fecal Coliform & Sediment

RECEIVING STREAM NAME	STREAM SEGMENT	WATER QUALITY CLASSIFICATION	USE SUPPORT RATING	WATER QUALITY ISSUES
Rock Branch (Rocky Branch)	From source to Haw River	C; NSW	*	*
Rock Creek	From source to a point 0.2 mile upstream of U.S. Hwy. 70	WS-IV; NSW	*	*
Rock Creek	From a point 0.2 mile upstream of U.S. Hwy. 70 to Lake Mackintosh, Big Alamance Creek	WS-IV; NSW, CA	*	*
Rocky Branch	From source to Reedy Fork Creek	C; NSW	*	*
Rose Creek (Apple Pond)	From source to Haw River	C; NSW	*	*
Ryan Creek	From source to South Buffalo Creek	C; NSW	*	*
Sandy Creek	From source to a point 0.6 mile upstream of N.C Hwy. 22	WS-III	*	*
Smith Branch	From source to Reedy Fork Creek	C; NSW	*	*
South Buffalo Creek	From source to SR 3000 (McConnell Road)	C; NSW	PS	Sediment
South Buffalo Creek	SR 3000 to US 70	C; NSW	NS	Sediment
South Buffalo Creek	From US 70 to Buffalo Creek	C; NSW	NS	Ammonia

RECEIVING STREAM NAME	STREAM SEGMENT	WATER QUALITY CLASSIFICATION	USE SUPPORT RATING	WATER QUALITY ISSUES
South Prong Stinking Quarter Creek	From source to dam at Kimesville Lake	B; NSW	*	*
South Prong Stinking Quarter Creek	From dam at Kimesville Lake to Stinking Quarter Creek	C; NSW	*	*
Squirrel Creek	From source to a point 0.4 mile downstream of Guilford County SR 1001 (Church St. Ext.)	WS-III; NSW	*	*
Squirrel Creek	From a point 0.4 mile downstream of Guilford County SR 1001 to Lake Townsend, Reedy Fork	WS-III; NSW, CA	*	*
Tickle Creek (Trickle Creek)	From source to Travis Creek	C; NSW	*	*
Travis Creek	From source to Haw River	C; NSW	*	*
Triangle Lake	Entire lake and connecting stream to Richland Creek	WS-IV: *	*	*
Troublesome Creek	From source to Rockingham County SR 2423	WS-III; NSW	*	*
Unnamed Tributary at Brooks Lake	From source to dam at Brooks Lake	B; NSW	*	*
Unnamed Tributary at Brooks Lake	From dam at Brooks Lake To Benaja Creek	C; NSW	*	*

RECEIVING STREAM NAME	STREAM SEGMENT	WATER QUALITY CLASSIFICATION	USE SUPPORT RATING	WATER QUALITY ISSUES
Unnamed Tributary at Camp Douglas Long	From source to dam at Camp Douglas Long Lake	WS-IV, B: *	*	*
Unnamed Tributary at Camp Douglas Long	From dam at Camp Douglas Long Lake to Hickory Creek	WS-IV: *	*	*
Unnamed Tributary at Camp Herman (Lake Herman)	From source to dam at Lake Herman	B; NSW	*	*
Unnamed Tributary at Camp Herman	From dam at Lake Herman to Reedy Fork	C; NSW	*	*
Unnamed Tributary at Cone Mills Club	From Cone Mills Club Lake Dam to Polecat Creek	WS-III	*	*
Unnamed Tributary at Cone Mills Club (Ritters Lake, Cone Mills Lake)	From source to Cone Mills Club Lake Dam	WS-III, B	*	*
Unnamed Tributary at Reedy Fork Creek	From source to Reedy Fork Creek	*	*	*
Unnamed Tributary at Little Alamance Creek	From source to Little Alamance Creek	*	*	*
Unnamed Tributary at Rock Creek	From source to Rock Creek	*	*	*
Unnamed Tributary at West Fork Deep River	From source to West Fork Deep River	*	*	*
Unnamed Tributary at Polecat Creek	From source to Polecat Creek	*	*	*
Unnamed Tributary at Big Alamance Creek	From source to Big Alamance Creek	*	*	*
Unnamed Tributary at Big Alamance Creek	From source to Big Alamance Creek	*	*	*

RECEIVING STREAM NAME	STREAM SEGMENT	WATER QUALITY CLASSIFICATION	USE SUPPORT RATING	WATER QUALITY ISSUES
West Fork Deep River	From source to a point 0.3 mile downstream of Guilford County SR 1850 (Sandy Ridge Rd.)	WS-IV: *	*	*
West Fork Deep River (Oak Hollow Reservoir)	From a point 0.3 mile downstream of Guilford County SR 1850 to dam at Oak Hollow Reservoir	WS-IV; CA: *	*	*

* Information neither available from 303(d) list nor 305(b) report

■ Segment will be impounded by Randleman Reservoir

ROANOKE RIVER BASIN

RECEIVING STREAM NAME	STREAM SEGMENT	WATER QUALITY CLASSIFICATION	USE SUPPORT RATING	WATER QUALITY ISSUES
Kings Creek	From source to East Belews Creek Arm of Belews Lake	B	*	*

* Information neither available from 303(d) list nor 305(b) report

3. EXISTING WATER QUALITY PROGRAMS

3.1 Local Programs

Approximately sixty percent (60%) of Guilford County flows to a water supply watershed. Under a local Water Supply Watershed Protection program, the County protects nine different water supplies. Of those nine, the Lower Randleman Lake has rules more restrictive than a typical WS-IV watershed. Guilford County initiated its water quality regulations in 1984. The County has more stringent requirements, in both the General Watershed Area and the Watershed Critical Area for all water supplies, than those under the State's guidelines.

Guilford County manages its own Erosion and Sediment Control Program, modeled under the State's minimum guidelines.

The County's Board of Commissioners has adopted Area Land Use Plans prepared by the Planning Staff with coordination and input from the area's residents. Land Use Plans have been completed and adopted for the Northwest, Northeast, Southern Guilford, and Airport areas. Work has begun on a Comprehensive Land Use Plan for all of Guilford County. The Commissioners have also adopted an Open Space Plan, which establishes policy and identifies areas for acquisition and dedication.

3.2 State Programs

Guilford County coordinates with the State Erosion and Sediment control program for any publicly owned construction projects. The County enforces riparian buffers for both local and State programs under the Watershed Protection Program.

4. PERMITTING INFORMATION

4.1 Responsible Party Contact List

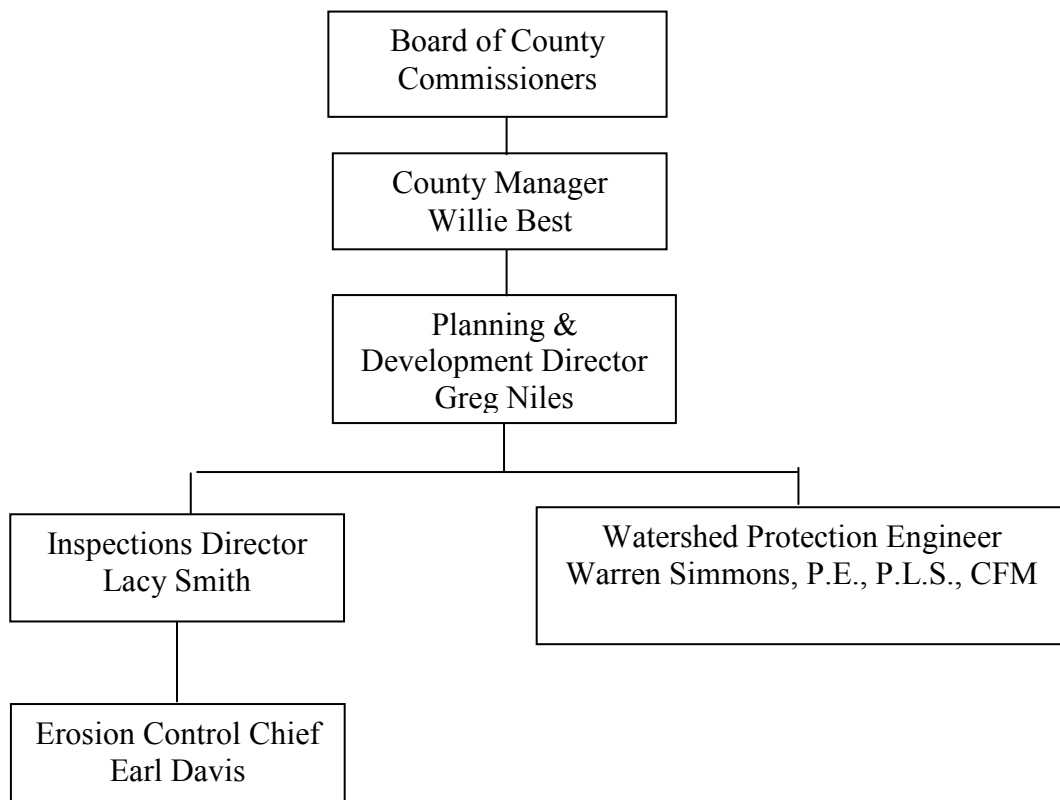
Shown below is a listing of the responsible party for each of the six measurable goals:

<u>Measurable Goal</u>	<u>Responsible Party</u>
1. Public Education & Outreach	Warren L. Simmons, P.E., P.L.S., CFM Watershed Protection Engineer Guilford County - Planning and Development Department P.O. Box 3427 Greensboro, North Carolina 27402 Telephone: (336) 641-3784 Fax: (336) 641-6988 E-mail: wsimmon@co.guilford.nc.us
2. Public Involvement & Participation	Warren L. Simmons, P.E., P.L.S., CFM Watershed Protection Engineer Guilford County - Planning and Development Department
3. Illicit Discharge Detection & Elimination	Warren L. Simmons, P.E., P.L.S., CFM Watershed Protection Engineer Guilford County - Planning and Development Department
4. Construction Site Stormwater Runoff Control	Earl Davis Erosion Control Chief Guilford County - Planning and Development Department P.O. Box 3427 Greensboro, North Carolina 27402 Telephone: (336) 641-3655 Fax: (336) 641-6988 E-mail: edavis@co.guilford.nc.us

5. Post-Construction Storm water Management in New Development and Redevelopment	Warren L. Simmons, P.E., P.L.S., CFM Watershed Protection Engineer Guilford County - Planning and Development Department
6. Pollution Prevention/good Housekeeping for Municipal Operations	Warren L. Simmons, P.E., P.L.S., CFM Watershed Protection Engineer Guilford County - Planning and Development Department

4.2 Organizational Chart

The following details the structure of the Planning and Development Department with the highlighted parties responsible for the measurable goals.



4.3 Signing Official

The signing official for the application shall be the County Manager. The County Manager holds the top administrative position responsible for all functions within Guilford County.

4.4 Duly Authorized Representative

Guilford County will not delegate responsibility to anyone other than the signing official.

5. CO-PERMITTING INFORMATION

At this time, co-permitting is not applicable to Guilford County's permit application. As the small municipalities (2000 Census designated) prepare their respective applications, co-permitting may become an option.

**6. RELIANCE ON OTHER GOVERNMENT ENTITY TO SATISFY ONE
OR MORE PERMIT APPLICATIONS**

Guilford County does not plan to rely on other government entities to satisfy any portion of the permit application. However, the County may supplement its work with a cooperative or joint participation effort with other jurisdictions to more effectively satisfy some educational elements of the program.

7. STORMWATER MANAGEMENT PROGRAM PLAN

It is the intent of Guilford County to develop, implement, and enforce a Stormwater Management Program, suited for our area, that will reduce the discharge of pollutants, protect water quality, and satisfy the appropriate water quality requirements of the Clean Water Act.

7.1 Public Education and Outreach on Stormwater Impacts

Guilford County will implement a public education program to distribute educational materials to the community, conduct outreach activities about the impacts of storm water discharges on water bodies, and advise the public what steps they can take to reduce pollutants in stormwater runoff.

7.1.1 BMP Summary Table

The following table outlines what best management practices Guilford County will use in its education program, the measurable goal for each BMP, the implementation schedule, and the person responsible for the implementation.

7.1.1

BMP's and Measurable Goals for Public Education and Outreach on Stormwater Impacts

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Party
1	Workshop on Land Development	Continue to hold periodic workshops with developers and engineers.	X	X	X	X	X	Watershed Protection Engineer
2	Planning Board Training	Continue to hold annual Planning Board Training Sessions.	X	X	X	X	X	Watershed Protection Engineer
3	Citizen Advisory Group	Continue the involvement of the Advisory Board for Environmental Quality to inform the Commissioners and Public on environmental issues.	X	X	X	X	X	Watershed Protection Engineer
4	Distribution of Educational Material	<p>Continue coordination with County Health Department and County Cooperative Extension involving distribution of educational material.</p> <p>Topics:</p> <ul style="list-style-type: none"> a) Septic Tank Maintenance b) Proper Use of Fertilizer c) Protecting Water Quality d) Drainage e) Floodplain Damage Prevention f) Pond Maintenance g) Related Environmental Reviews h) Stream Buffer Restoration i) Watershed Protection j) Illegal Discharges <p>The distribution will be through mailings to the general public, attachments to building permits for commercial and industrial developments, and as individual mailings to developers, engineers, and any call-ins requesting information.</p>	X	X	X	X	X	Watershed Protection Engineer

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Party
5	Recycling Program	Continue County programs regarding household hazardous waste collection, solid waste collection, scrap tire removal, and disposal of white goods.	X	X	X	X	X	Watershed Protection Engineer
6	Randleman Lake Cooperative Education	The nine jurisdictions affected by the Randleman Rules will explore the possibility of participating in a multi-jurisdictional intergovernmental agreement to meet the educational requirements of the Randleman Rules. The proposed intergovernmental agreement would allow the communities to financially contribute to the creation and dissemination of educational material that would educate the community about the effects of stormwater pollution on our limited water resources. It is envisioned that over the next two years the Randleman Lake Stormwater Education Program will be developed by the participating communities and the intergovernmental agreements will follow.		X	X	X	X	Watershed Protection Engineer
7	Stormwater Educational Bulletins/Brochures	Develop or update informational bulletins on watershed protection, drainage, floodplain development, illegal discharges, water quality, and responsible management of water resources.	X	X	X			Watershed Protection Engineer
8	Informational Website	Place periodic information reports on County Web Page and newspapers.	X	X				Watershed Protection Engineer
9	Educational Material/Presentation for Schools	Distribute educational materials to school teachers and solicit their involvement in watershed program and coordinate with County Health and Cooperative Extension involving demonstrations of watershed model.		X	X	X	X	Watershed Protection Engineer
10	Environmental Hotline	Develop hotline for water quality information and reporting of illicit discharge		X	X	X	X	Watershed Protection Engineer
11	Television	Coordinate with County Health and Cooperative Extension involving educational segments on public access channels and local TV stations.	X	X	X	X	X	Watershed Protection Engineer

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Party
12	Signage	Install educational signs in parks to emphasize water quality	X	X	X	X	X	Watershed Protection Engineer

7.1.2 Target Audience

Guilford County recognizes that all facets of its population should be a target audience for education of stormwater impacts. Due to the fact that residential and open space, including agricultural use, comprises approximately 95 percent (%) of the land use, the County will select this activity as the primary target audience. While industrial and commercial activities comprise a combined land use only approximately five percent (5%) of the jurisdictional area, they are still quite prone to stormwater pollution. Also commercial and industrial development is more dependent on the extension of water and sewer service, which the County does not extend on its own, further limiting expansion of this activity. For these reasons the commercial and industrial activity will be the secondary target audience. The County will structure its primary educational program to be understandable to all age groups and all economic groups. The County will continue its current educational activities for the development community that includes training for engineers, developers, citizen boards, and the Commissioners.

Through a joint education program for the Randleman Lake, a brochure was developed to include a word scramble for the younger readers, as well as more detailed, yet understandable and applicable water quality measures for other age groups. Discussions have been initiated with the other partners in the Randleman Lake program to develop an Hispanic version of the brochure. The brochures are to be distributed through the school system and by individual property owner mailings to reach all communities, including minority and disadvantaged communities.

The same program also uses television ads over three local channels, as well as cable networks to reach all target audiences. Signs identifying specific watershed areas are also placed along major roadways and in parks throughout the County.

7.1.3 Target Pollutant Sources

Guilford County's educational program will target land development, residential, and agriculture as the primary pollutant contributors. A study by American Rivers, Natural Resources Defense Council (NRDC), and Smart Growth America recently named the Triad area as one of the most problematic areas of the country for urban sprawl. Because Guilford County is located at the headwaters of the Cape Fear River Basin, it must rely solely on reservoirs to supply the drinking water. With the dependence on reservoirs and with the land disturbance of development activity, sediment is likely our water quality's Number One enemy. Additionally, with the sprawl of residential development and the importance homeowners place on lush lawns, excess fertilization ranks high with regard to pollutant sources. Since commercial development follows on the heels of residential development, a concern for automotive related pollution is ever present with a high concentration of vehicles in one location. Automotive pollution is also a prime factor considering the number of interstate highways that cross our county, the number of interstate highways planned, and the construction of an air cargo hub facility. Lastly, with fecal coliform being listed as a water quality issue for several receiving streams, that pollutant will also be targeted.

7.1.4 Outreach Program

Guilford County's strategy for educational outreach is to attempt to touch everyone by some means over the permit period. The County will continue its present program by conducting periodic workshops of developers and engineers, holding training sessions for the Planning Board members, continue the involvement of the Advisory Board for Environmental Quality to inform the Board of commissioners on environmental issues, continue the educational efforts of the County Health Department and County Agricultural Extension on such topics as septic tank maintenance and proper application of fertilizer, continue to educate on programs such as household hazardous waste collection, solid waste collection, scrap tire removal, and disposal of white goods. Guilford County will supplement its current education strategy by joining with surrounding jurisdictions for a combined television campaign on clean water, distribution of brochures, and posting of water quality signs. The County will continue to maintain its website, where environmental reports and watershed protection bulletins are posted.

7.1.5 Decision Process

Guilford County hopes to build on its existing program currently conducted by several different departments. By having one central party knowledgeable of all the water quality components, the public can more effectively be directed to the proper source of information.

7.1.6 Evaluation

The educational program measure will be evaluated on the number of brochures distributed, number of meetings and workshops held, and the number of air-time minutes, signs posted, and website contacts. As with each of the different measures, annual achievable goals will be established for each BMP to gauge the success of the individual elements and the overall program.

7.2 Public Involvement and Participation

For the Public Involvement and Participation element of the program, Guilford County hopes to provide an opportunity for all economic and ethnic groups to participate in stormwater management and water quality. In addition to complying with all public notice requirements, Guilford County will offer a variety of methods for participation.

7.2.1 BMP Summary Table

The following table outlines what best management practices Guilford County will use in its Public Involvement/Participation program, the measurable goal for each BMP, the implementation schedule, and the person responsible for the implementation.

7.2.1
BMP's and Measurable Goals for Public Involvement and Participation

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Party
1	Citizen Advisory Board	Continue the involvement of the Advisory Board for Environmental Quality to inform the Commissioners and public on environmental issues.	X	X	X	X	X	Watershed Protection Engineer
2	Recycling Program	Continue County programs regarding household hazardous waste collection, solid waste collection, scrap tire removal, and disposal of white goods.	X	X	X	X	X	Watershed Protection Engineer
3	NC Clean 2000	Participate in NC Clean 2000 program by adopting 2.4 mi. of Hwy. 220 South.						Watershed Protection Engineer
4	Federal Farm Bill	Continue to participate in USDA programs for the Federal Farm Bill and the agricultural use of land.						Watershed Protection Engineer
5	Open Space Report	Adoption by the Board of Commissioners for Open Space Report and Open Space Acquisition Program.	X					Watershed Protection Engineer
6	Land Use Plans	Prepare and adopt land use plan for Southern, Northwest, Northeast Guilford County, Airport Area, and Comprehensive Land Use Plan.	X		X			Watershed Protection Engineer
7	Stream Clean-ups	Participate with Greensboro Beautiful which includes stream clean-ups		X	X	X	X	Watershed Protection Engineer
8	Public Hearings	Conduct public meetings to allow citizens input concerning Stormwater Management Plan and to change ordinance	X	X				Watershed Protection Engineer
9	Stormwater Management Committee	Appoint committee of ABEQ and developers for input on Stormwater Management Plan	X	X				Watershed Protection Engineer

7.2.2 Target Audience

While stormwater is not selective over whom it flows, Guilford County intends not to be selective to a particular economic or ethnic group for participation in the stormwater program. The County for many years has had an Advisory Board for Environmental Quality. The Board is an extension of a Watershed Protection Group that formulated water quality regulations nearly ten years prior to the State Program. The Board currently has 20 members from various specialty fields, various economic levels, and various ethnic backgrounds. The belief is that a wide cross-section of the population is currently served by the board and additional targeting is not necessary. The make-up of the Board includes representatives from the general public, local universities, land developers, lawyers, engineers, environmental groups, and others. Any additional public participation programs will also target the general population as a whole.

7.2.3 Participation Program

The existing Advisory Board for Environmental Quality and an appointed stormwater management sub-committee will serve an advisory role in the development and submittal of the permit application and stormwater management program. Our development ordinance requires the review and approval of ordinance changes by two additional citizen groups prior to consideration by the Board of Commissioners. The first group is the Multi-Jurisdictional Development Ordinance Committee (MDOC), which considers changes to the development ordinance for the County and its towns. The group's purpose is to coordinate development ordinance changes to ensure as much of a unified ordinance as possible. The second citizen group is the Guilford County Planning Board, who has the final recommendation of approval to

the Board of Commissioners. Both the Planning Board and Board of Commissioners meetings will involve a public hearing and public notification in accordance with local and state requirements.

Additionally, the County will hold at least one public hearing/information session to educate the public of the NPDES program and proposed ordinance changes. The county will also promote and encourage homeowner clean-ups for drainageways through neighborhoods and water quality devices serving the subdivisions.

7.2.3.1 Citizen Representatives on a Stormwater Management Panel

The current Advisory Board for Environmental Quality (ABEQ) will serve as a citizen representative board for a stormwater management panel, both as a whole board and as a sub-committee.

7.2.3.2 Public Hearings

The ABEQ has regular monthly meetings that are open to the public. The Planning Board and Board of Commissioners send out formal public notices for their meetings, and both are structured for public comment in a proponent/opponent format. Additionally, special public information meetings will be held for questions from the public about the program.

7.2.3.3 Working with Citizen Volunteers willing to educate other about the program

Nine of the 20 ABEQ members are associated with an institution of higher education and are involved with passing information on to students within their respective programs. Four of the

members are associated with other citizen boards including the Soil and Water Conservation District and School Board. Two members are associated with the Real Estate and Building Associations. The opportunity is present to inform many people through several boards and organizations.

7.2.3.4 Volunteer monitoring of stream/beach clean up activities

Guilford County will continue to participate in NC Clean 2000 and stream and neighborhood clean-up programs, as well as participate in special recycling days at various locations in the County.

7.2.4 Decision Process

Guilford County felt it could best serve the public by making use of its existing Environmental Review Board (Advisory Board for Environmental Quality) for program development. As for the individual BMP's and measurable goals, the decision is to make use of the current programs and participation opportunities now available to the public, rather than to develop new activities that could not be adequately staffed. The County will have one party responsible to coordinate the applicability to NPDES related stormwater management and pollutant reduction.

7.2.5 Evaluation

The Public Involvement and Participation minimum measure will be evaluated by the number of public meetings held, neighborhood clean-up sessions, and by the success of recycling programs. As with each of the different measures, annual achievable goals will be established for each BMP to gauge the success of the individual elements and the overall program.

7.3 Illicit Discharge Detection and Elimination

Guilford County will implement an Illicit Discharge program to detect and eliminate illicit discharges in Guilford County’s storm sewer system. The program will distribute educational materials to the community, effectively prohibit illicit discharges, and provide the public with a method to be informed on stormwater pollutants and report illegal connections to the storm system.

7.3.1 BMP Summary Table

The following table outlines what best management practices Guilford County will use in its illicit discharge program, the measurable goal for each BMP, the implementation schedule, and the person responsible for the implementation.

**7.3.1
BMP's and Measurable Goals for Illicit Discharge Detection and Elimination**

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Party
1	Hazardous Waste Spills	Continue to coordinate with County Health Department regarding notification of hazardous waste spills and septic tank failures.	X	X	X	X	X	Watershed Protection Engineer
2	Illicit Discharge Inspections	As existing stormwater devices are inspected annually, emphasis will be placed to inspect the water surface for oil sheen and discoloration, as an indication of illegal discharges upstream of the device.	X	X	X	X	X	Watershed Protection Engineer
3	Storage Tanks	Continue regulation in Watershed Critical Area that above ground storage tanks have 100% spill containment and approval by the Planning Board is required for underground storage tanks holding fuel and chemicals.	X	X	X	X	X	Watershed Protection Engineer
4	Prohibited Uses	Continue regulation that prohibits certain land uses, involving petroleum products and fertilizer, septic tank cleaning in Watershed Critical Area.	X	X	X	X	X	Watershed Protection Engineer
5	Roadside Pick-up	Continue prisoners' roadside litter pickup program.	X	X	X	X	X	Watershed Protection Engineer
6	Spill Response	Continue spill response program by County Health and Emergency Services	X	X	X	X	X	Watershed Protection Engineer
7	L.U.S.T.	Continue L.U.S.T. (Leaking Underground Storage Tank) Program by County Health Department, which requires leak detection on new tanks, investigates reports of leaking tanks, and conducts inspection of tanks for leakage when removed.	X	X	X	X	X	Watershed Protection Engineer

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Party
8	Wastewater Treatment	Continue to prohibit any type of wastewater treatment facilities in Watershed Critical Area.	X	X	X	X	X	Watershed Protection Engineer
9	Educational Material	Continue coordination with County Health Department and County Agricultural Extension involving educational material, such as septic tank maintenance, proper use of fertilizer, etc.	X	X	X	X	X	Watershed Protection Engineer
10	Water Quality Activity Reports	Continue coordination with County Health Department regarding reporting to Division of Water Quality any activity of ground water quality, wastewater spills, septic tank failures, types of systems installed, and number of systems.	X	X	X	X	X	Watershed Protection Engineer
11	Recycling Program	Continue County programs regarding household hazardous waste collection, solid waste collection, scrap tire removal, and disposal of white goods.	X	X	X	X	X	Watershed Protection Engineer
12	NC Clean 2000	Participate in NC Clean 2000 program by adopting 2.4 mi. of Hwy. 220 South.	X	X	X	X	X	Watershed Protection Engineer
13	Storm Sewer Map	Based upon topographic maps and development plans, develop an outfall inventory map identifying drainage patterns and watershed protection devices.	X	X	X	X	X	Watershed Protection Engineer
14	State Notification	Develop a procedure for staff to notify State and County officials to report illegal discharges		X				Watershed Protection Engineer
15	Environmental Hotline	Implement a hotline for public to report illegal discharges	X					Watershed Protection Engineer
16	Illegal Discharge Brochure	Develop informational brochure to advise public on illegal discharges	X					Watershed Protection Engineer
17	Adopt Ordinance	Draft and adopt an ordinance regulating illegal discharges	X	X				Watershed Protection Engineer
18	Legal Remedies	Explore administrative/legal remedies to eliminate illegal discharges.		X				Watershed Protection Engineer

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Party
19	Identify Sites	Identify sites that have illegal discharges and require the removal through enforcement action.			X	X	X	Watershed Protection Engineer
20	Building Permit Septic Release	Continue to require a septic system inspection for additions to existing buildings.	X	X	X	X	X	Watershed Protection Engineer
21	Soil Evaluation	Continue to require the evaluation of soil suitability for on-site wastewater disposal for new developments	X	X	X	X	X	Watershed Protection Engineer
22	Septic Construction Inspection	Continue to require inspection observation on the installation of on-site wastewater disposal for new developments	X	X	X	X	X	Watershed Protection Engineer
23	Annual Septic Inspection	Continue to conduct annual inspections of on-site wastewater systems that use a pump or LPP (Low Pressure Piping) system	X	X	X	X	X	Watershed Protection Engineer
24	Shared Community Septic System	Continue the requirement of ongoing maintenance and monitoring of shared community septic systems	X	X	X	X	X	Watershed Protection Engineer
25	Site Sanitary Inspections	Continue inspection of sites with known cases of poor soil conditions and failing septic systems	X	X	X	X	X	Watershed Protection Engineer / Health Dept.
26	Employee Training	A training program will be established to train all field inspectors, including health, building, erosion control, and watershed, on how to detect illegal discharges and the reporting procedure to be followed.			X	X	X	Watershed Protection Engineer

7.3.2 Storm Sewer System Map

Guilford County has begun compiling and plotting information to produce a storm sewer system map. The map will be produced using AutoCad with an interface to GIS, showing and naming intermittent and perennial streams as delineated on the latest version of the USGS 1:24,000 scale (7.5 minute quadrangle) topographic maps or the Soil Survey of Guilford County developed by the USDA – Natural Resource Conservation Service. A separate layer of the County’s most recent planimetric and topographic data will be included. As new subdivisions are platted, a field check is made to verify that drainage easements are located correctly. This will be the basis for location of open channel outfalls. For more densely developed areas the storm drainage system and piped outfalls will be plotted from as-built road plans and site construction drawings, with a field check for verification. As new development takes place, the storm sewer map will be updated to reflect a current inventory of drainage piping. For existing piping within road rights-of-way, Guilford County will coordinate with the local NCDOT office to include their records of piping on our mapping.

7.3.3 Regulatory Mechanism

To effectively prohibit illicit discharges the County will add a stormwater management/illicit discharge section to its current Development Ordinance. The Development Ordinance was chosen because it encompasses land use, land development standards, environmental regulations and enforcement procedures. Over the years the ordinance has become the single source to control growth and property use.

7.3.4 Enforcement

Guilford County's enforcement procedures are structured such that once a violation is reported an investigation for finding of fact is conducted. If it is determined that a valid violation has taken place, a notice of violation is issued to the owner, outlining the violation, any corrective actions, and a time schedule for corrections or further proceedings. If no corrective actions are taken, civil penalties are initiated and accumulate until a legal process ensues. Historically, all possible corrective measures will be attempted before a legal/penalty process is initiated. As an added feature, Guilford County can also take its cases to a designated "environmental" court to be heard by a magistrate.

7.3.5 Detection and Elimination

The plan proposes to address illicit discharges through three avenues of reporting: reports of illicit/illegal discharge by the public, through routine field examination for new and existing on-site sewage disposal conducted by the Health Department, and from routine site inspections by erosion control and watershed inspectors. As detailed in the BMP Table, Guilford County through its Health Department will continue an on-site monitoring program for pumped, LPP systems, and shared community septic fields. Additionally, septic systems will be reviewed for soil evaluation and construction inspection.

An environmental telephone "hotline" will be established to receive call-in complaints about water quality, erosion control, and illicit and illegal discharges. Additionally, the hotline will be referenced in an illicit discharge brochure that will outline procedures for reporting discharge

activities. Both Health Department and Erosion control/Watershed inspectors will become the “eyes in the field” and will be trained to become more conscious of suspicious or illegal dumping activity as they do site visits prior to development construction. Forms will be distributed to the various inspectors that document the location, type of suspected discharge, and other pertinent information for the watershed engineers to perform a site visit, photograph the violation, and to initiate enforcement action.

Due to lack of resources available for the jurisdictional area covered and given the fact that most flows, particularly dry weather flows, will undergo infiltration in the open channels, a program to detect illicit discharges from dry weather flows at the outfalls will rely on reporting from neighbors close to the discharge, rather than to assign a specific role in monitoring flows.

7.3.5.1 Priority inspections will occur in known areas of poor soil characteristics for septic system problems and in industrial areas for illegal dumping.

7.3.5.2 Because the majority of the County’s surface flow is overland or by open channel, we suspect the detection of an illicit discharge will occur close to the source of the problem. Likely, infiltration will occur before the runoff travels a great distance. After a report has been made on a suspected illegal discharge and a site specific inspection has been made by watershed staff, photographs and possibly soil samples will be collected to document the activity. To the extent possible the discharge will be traced upstream to determine the source.

7.3.5.3 Once the discharge has been detected and identified, County Staff will develop and forward a clean-up procedure for the landowner. Clean-up activities will be inspected

and monitored by watershed technicians or other appropriate County staff. After a period of time has passed, should the property owner fail to initiate clean-up, the County will assess civil penalties and take other legal action to resolve the dumping violation.

7.3.5.4 To evaluate the plan for illicit discharge detection and elimination, the County proposes to track each violation on a timeline accounting for response and correction.

7.3.6 Non-Stormwater Discharges

Guilford County does not identify any non-stormwater discharges or flows as a significant contributor of pollutants to its storm system.

7.3.7 Occasional Incidental Non-Stormwater Discharges

Guilford County does not anticipate any occasional non-stormwater discharges to its system.

7.3.8 Outreach

To inform the public about the hazards associated with illegal discharges and improper disposal of waste, Guilford County plans to distribute brochures and fact sheets to applicable public employees and hold periodic workshops. For businesses, brochures and other information will be distributed through inspection reports and building permits. For the general public brochures will be distributed, a television advertising campaign will be conducted, an environmental hotline will offer information as well as reporting capabilities, and information will be placed on the County website.

The outreach plan to the public concerning illegal discharges will be an integral part of both the public education and good housekeeping measures.

7.3.9 Decision Process

Working with limited resources, both financial and personnel, Guilford County will focus its efforts on illicit discharge to public information and response to complaints. Other non-compliant inspections will be a part of routine inspections for well and septic checks, erosion control, and watershed protection. The measurable goals will include completion of a composite drainage map of streams and creeks, continuation of a hazardous waste collection program, training sessions for public employees, and detection and elimination of illicit discharges.

7.3.10 Evaluation

The success of the illicit discharge measure will be evaluated by a determination of the number of responses to complaints, a working map of the County's drainage system, collections of household hazardous waste, failing septic systems detected, and elimination of illegal discharges. As with each of the different measures, annual achievable goals will be established for each BMP to gauge the success of the individual elements and the overall program.

7.4 Construction Site Stormwater Runoff Control

To satisfy the requirements for the Construction Site Stormwater Runoff Control minimum measure Guilford County will sustain its current erosion and sediment control program. The program is structured to reduce pollutants in stormwater runoff from construction activities that result in a land disturbance of greater than or equal to one acre. Additionally, reduction of stormwater discharges from construction activity disturbing less than one acre are included if the construction activity is part of a larger common plan of development of sale that will disturb one acre or more. Lastly, the Development Ordinance requires the protection of all property, regardless of size.

It is Guilford County's intention to rely on a combination of its own approved program, the State Erosion and Sediment Control Program, and the DWQ general stormwater permit.

7.4.1 BMP Summary Table

The following table outlines what best management practices Guilford County will use in its Construction Site Stormwater Runoff Control program, the measurable goal for each BMP, the implementation schedule, and the person responsible for the implementation.

7.4.1

BMP's and Measurable Goals for Construction Site Stormwater Runoff Control

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Party
1	Development Ordinance	Continue enforcement of development ordinance.	X	X	X	X	X	Erosion Control Chief
2	Erosion Control Program	Continue County Erosion control program to reduce construction sedimentation.	X	X	X	X	X	Erosion Control Chief
3	WCA Watershed Approval	Continue regulation that prohibits the issuance of a grading permit in the Watershed Critical Area until a watershed protection plan is approved.	X	X	X	X	X	Erosion Control Chief
4	WCA Land Disturbance Minimization	Continue Watershed Critical Area regulation limiting land disturbance to a percentage of usable land.	X	X	X	X	X	Erosion Control Chief
5	State Coordination	Continue coordination with State Erosion control Program on County and State owned construction projects.	X	X	X	X	X	Erosion Control Chief

7.4.2 Regulatory Mechanism

Guilford County will use the Soil Erosion and Sedimentation Control (Section 7-4) portion of the Guilford County Development Ordinance as the mechanism to require and enforce erosion and sediment controls at construction sites. The County's program has been in effect since August 19, 1974 and it is subject to an annual review by the State's Division of Land Quality. Included in the Appendix is a copy of the relevant section of the ordinance.

The ordinance provides for construction site operations to implement appropriate erosion and sediment control BMPs. The erosion control program is based on performance of the devices and the fact is emphasized in pre-construction meetings that devices must be maintained and possibly supplemented to operate properly.

The County's ordinance will be modified as needed to specifically address discarded building materials, concrete truck washout, chemical, litter, and sanitary waste. These topics are already covered in the pre-construction meetings.

7.4.3 Plan Reviews

The County's procedures require the review and approval of all erosion control plans prior to any land-disturbing activity (pre-construction site plans). Staff is always available to discuss with the developer potential water quality impacts. Additionally, for development in sensitive or

Watershed Critical Areas, County procedures require the approval of a watershed protection plan along with a grading/erosion control plan prior to the issuance of a grading permit. Prior to the issuance of a building permit, required erosion control devices must be installed and inspected for compliance with the approved plan.

7.4.4 Enforcement

To ensure compliance with the Erosion and Sediment Control Ordinance, Guilford County incorporates various mechanisms and sanctions. After plan approval and as part of the grading permit package, the developer must establish financial responsibility for the project and post a surety for land disturbance for sites that equal or exceed one acre. Our procedures also include the requirement of installation and inspection of perimeter devices prior to the issuance of a building permit or land disturbing activity. If a site is deemed to be out of compliance and a “Notice of Violation” has been issued, a period of time is established for the contractor to gain compliance. After the time limit has expired the County will begin the assessment of civil penalties, until resolution is reached. On a case-by-case basis and with consideration of the cooperativeness of the responsible party, the County may issue a stop work order or deny approval of subsequent phases of the project.

7.4.5 Inspections

Inspections for grading projects are conducted on routine, unannounced intervals. No particular priority is given for the various sites visited. However, if a site is located in a sensitive area, is larger than normal, or is problematic in nature, additional or more frequent visits will be made.

7.4.6 Public Information

The Erosion Control group addresses complaints and inquiries from the public. After receiving information an assessment is made to either respond to the inquiry at that time, forward an information bulletin that gives a more complete and detailed answer, or schedule a site visit for further investigation.

7.4.7 Decision Process

The decision was made to build upon a program that has proven to be effective for over 28 years. The program is evaluated continuously and updated as the need arises.

7.4.8 Evaluation

The Construction Site Stormwater Runoff Control measure will be evaluated based on the reduction of violations issued, increase of compliance, and reduction of device failures and off-site sedimentation.

7.5 Post-Construction Stormwater Management in New Development and Redevelopment

Currently, Guilford County enforces watershed protection regulations for nine (9) separate drinking water supplies with approximately 60% of the total County area flowing to a protected reservoir. Guilford County has enforced watershed protection since April 2, 1984, approximately a decade before the State mandated regulations. Our intent for the post-construction measure is to build on the current watershed protection program and extend the regulations to cover all unincorporated areas, with supplemental regulations as required.

Guilford County will supplement and enforce its current watershed protection program to include the non-water supply watershed portions of the County to manage post-construction stormwater discharges under the NPDES Phase II requirements. The program will ensure that controls are in place that will prevent or minimize water quality impacts. A combination of structural and/or non-structural Best Management Practices (BMPs) will be incorporated to provide flexibility to the development community in complying with the regulations.

Guilford County will expand its current inspection and enforcement activities to ensure adequate long-term operation and maintenance of BMPs. The expanded program, through the development ordinance, shall apply to all new development projects that cumulatively disturb one acre or more, and to projects less than an acre that are part of a larger common plan of development or sale. Additionally, the post-construction program shall apply to all redevelopment projects that cumulatively disturb one acre or more, and to projects less than an acre that are part of a larger common plan of development or sale.

The effective date for implementation of the local post-construction program shall be March 10, 2005.

Guilford County's post construction stormwater management program will meet the following requirements:

7.5.1. The program shall require all subject projects (as defined above) to apply for locally issued permit coverage under one of the following stormwater management options:

7.5.1.1. Low Density Projects. Projects shall be permitted as low density if the project meets the following:

- (I) No more than 2 dwelling units per acre or 24 percent built-upon area BUA for all residential and non-residential development respectively;
- (II) Stormwater runoff from the development shall be transported from the development by vegetated conveyances to the maximum extent practicable;
- (III) All BUA shall be at a minimum of 30 feet landward of all perennial and intermittent surface waters. For the purpose of this Rule and using N.C. Administrative Code .0250(1)a and .0250(2)b as a guide, a surface water shall be present if the feature is approximately shown on either the most recent version of the soil survey map prepared by the Natural Resources Conservation Service of the United States Department of Agriculture or the most recent version of the 1:24,000 scale (7.5 minute) quadrangle topographic maps prepared by the United States Geologic Survey (USGS). An exception to this requirement may be allowed when surface waters mapped as intermittent streams, perennial streams, lakes, ponds, or estuaries do not actually exist on the ground, as evidenced by a field inspection;

(IV) The permit shall require recorded deed restrictions and protective covenants to ensure that development activities maintain the development consistent with the approved project plans.

7.5.1.2. High Density Projects. Projects exceeding the low density threshold (established above in low density section) shall implement stormwater control measures that:

(I) Control and treat the more restrictive of a) the runoff from a one-inch rainfall or b) the difference in stormwater runoff volume leaving the project site between the pre and post development conditions for the 1 year 24 hour storm. Runoff volume drawdown time shall be a minimum of 24 hours, but not more than 120 hours;

(II) All structural stormwater treatment systems used to meet the requirements of the program shall be designed to have an 85% average annual removal for Total Suspended Solids;

(III) General Engineering Design Criteria for all projects shall be in accordance with 15A NCAC 2H .1008(c);

(IV) All BUA shall be at a minimum of 30 feet landward of all perennial and intermittent surface waters. For the purpose of this Rule and using N.C. Administrative Code .0250(1)a and .0250(2)b as a guide, a surface water shall be present if the feature is approximately shown on either the most recent version of the soil survey map prepared by the Natural Resources Conservation Service of the United States Department of Agriculture or the most recent version of the 1:24,000 scale (7.5 minute) quadrangle topographic maps prepared by the United States Geologic Survey (USGS). An exception to this requirement may be allowed when surface waters mapped as intermittent streams,

perennial streams, lakes, ponds, or estuaries do not actually exist on the ground, as evidenced by a field inspection;

(V) The permit shall require recorded deed restrictions and protective covenants to ensure that development activities maintain the development consistent with the approved project plans;

7.5.2. The program shall include an operation and maintenance component that ensures the adequate long-term operation of the structural BMPs required by the program. The program shall require that a Guilford County Watershed Technician conduct at a minimum an annual inspection and then submit a detailed report to the owner of a permitted structural BMP, who will complete maintenance tasks as outlined;

7.5.3. The program shall be developed to control, to the maximum extent practicable, the sources of fecal coliform. At a minimum, the program shall include the continuation of an oversight program by the County Health Department to ensure proper operation and maintenance of on-site wastewater treatment systems for domestic wastewater. Through the good housekeeping element of the program, Animal Control and the County Animal Shelter will properly dispose of pet waste. Additionally, an educational brochure will be available for the public on pet waste management.

7.5.4. Guilford County does not have runoff draining to SA waters.

7.5.5. Guilford County does not have runoff draining to Trout (Tr) waters.

7.5.6. Since most streams in Guilford County are classified as Nutrient Sensitive waters, the following additional requirements will be incorporated:

7.5.6.1. A local ordinance will be developed, adopted and implemented to ensure that the best management practice for reducing nutrient loading is selected while still meeting the requirements of 15A NCAC .0126(10)(e) and emphasis will be placed on riparian buffers.

7.5.6.2. A nutrient application (both inorganic fertilizer and organic nutrients) management program will be developed around educational brochures and the recommended use of the Cooperative Extension office for soil testing.

7.5.7. Guilford County does not plan to develop a comprehensive watershed protection plan at this time.

7.5.8 BMP Summary Table

The following table outlines what best management practices Guilford County will use in its post-construction stormwater management program, the measurable goal for each BMP, the implementation schedule, and the person responsible for the implementation.

7.5.8

BMP's and Measurable Goals for Post-Construction Stormwater Management in New Development and Redevelopment

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Party
1	Watershed Critical Area	Continue to enforce regulations in Watershed Critical Area that are more stringent than the State's (e.g., Tiers 2 and 3 allow only 2.5% and 4.0% respectively for development without public sewer compared to State's 30%).	X	X	X	X	X	Watershed Protection Engineer
2	Tier System	Continue to regulate with Tier system that results in larger Watershed Critical Area and directs development further from reservoir.	X	X	X	X	X	Watershed Protection Engineer
3	Density Averaging	Coordinate with City of High Point on density averaging and/or transfer, directing more intense development further from reservoir.	X	X	X	X	X	Watershed Protection Engineer
4	BMP in WCA	Continue enforcement of current regulation to require a BMP for any development, low or high density, in Watershed Critical Area.	X	X	X	X	X	Watershed Protection Engineer
5	WCA Land Disturbance	Continue Watershed Critical Area regulation prohibiting land disturbance in stream buffers, slopes greater than 15%, drainageways carrying a flow of 17 cfs in 100-year storm.	X	X	X	X	X	Watershed Protection Engineer
6	WCA Usable Land	Continue Watershed Critical Area regulation limiting land disturbance to a percentage of usable land.	X	X	X	X	X	Watershed Protection Engineer
7	Clustering	Encourage clustering on better land areas of site.	X	X	X	X	X	Watershed Protection Engineer
8	Watershed Manual	Modify watershed manual to include alternative watershed protection devices such as, bio-filtration filters, sand filters, and created wetlands. Revise Watershed Manual for NPDES 1 yr./24 hr. control and quantity control for runoff from impervious areas.	X	X				Watershed Protection Engineer

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Party
9	Certificate of Occupancy	Continue requirement that all watershed protection devices must be installed, complete, and operational before a subdivision plat can be recorded or a commercial building can be occupied.	X	X	X	X	X	Watershed Protection Engineer
10	“Grandfather” Status	Continue regulation that eliminates “grandfathered” status of existing built-upon area once new development is initiated (in water supply watersheds).	X	X	X	X	X	Watershed Protection Engineer
11	Floodplain Dedication	Continue to require in the development ordinance the dedication for drainageway and open space of 100-year floodplain for new developments.	X	X	X	X	X	Watershed Protection Engineer
12	Open Space	Continue to enforce current open space plan that requires dedication along drainageways and for open space and possible trail system.	X	X	X	X	X	Watershed Protection Engineer
13	Rural Preservation District	Encourage use of “Rural Preservation District” that requires assigning a minimum of 50% open space and requires a trail/sidewalk system for pedestrian travel and permits less built-upon area and narrower streets.	X	X	X	X	X	Watershed Protection Engineer
14	Stormwater Inspection	Continue to inspect stormwater devices on an annual basis.	X	X	X	X	X	Watershed Protection Engineer
15	Land Use Plans	Prepare and adopt land use plan for Southern, Northwest, Northeast Guilford County, Airport Area, and Comprehensive Land Use Plan.	X	X				Watershed Protection Engineer
16	Sewer Service to Sensitive Areas	Develop agreement with neighboring jurisdictions on water and sewer service in sensitive areas to prevent high-density development.	X					Watershed Protection Engineer
17	Evaluate Existing Regulations	Evaluate existing regulations with regard to required parking, building setbacks, road widths, curb and gutter, and cul-de-sacs.	X					Watershed Protection Engineer

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Party
18	Low Density Development	Evaluate existing development scoresheet for low-density development.	X					Watershed Protection Engineer
19	Revise Development Ordinance	Adopt ordinance to require Best Management Practices in non-watershed areas	X					Watershed Protection Engineer
20	Riparian Zone Preservation	Evaluate the implementation of a 30 foot undisturbed zone for all intermittent and perennial streams.	X	X				Watershed Protection Engineer

7.5.9 Non-Structural BMP's

7.5.9.1 Guilford County has enforced a zoning ordinance since March 3, 1964 and the following year adopted a subdivision ordinance on May 17, 1965. Through the zoning ordinance the County has identified areas for different land uses and growth. Coupled with the subdivision ordinance, standards were established for development of commercial and residential projects. Within the last few years land use plans have been developed, with the input from citizen groups, for many sections of the County. The Northwest Area Plan, Northeast Area Plan, Southern Guilford Area Plan, and Airport Area Plan direct development to identified commercial, industrial, high and low density residential, and open space areas. Additionally, a Comprehensive Plan is planned to draw together the various area plans. Within the County's water supply watersheds the current ordinance for the Watershed Critical Areas (WCA) is more stringent and covers a larger area than the State's Critical Area. Therefore, greater protection is offered to wetlands and riparian areas in the WCA. The County's development ordinance also requires the public dedication of designated floodplain areas to preserve the natural setting and to ensure that development does not occur close to those streams.

The Guilford County Board of Commissioners created the Guilford County Open Space Committee in 2000. Their charge was to implement the "Open Space Report" which envisioned an open space system based on the concept of greenway corridors connecting various types of open space such as, woodlands, pastures, wetlands, parks, wildlife habitats, school campuses, and historic places. Open space sites will be sought from willing landowners using grants and government funding. The Open Space Committee has proposed several pilot projects including the Upper Haw River, Mears Fork Creek, Northeast Greenway, and Farmland Conservation.

Funding will be sought through the Clean Water Management Trust Fund, Conservation Trust for North Carolina, TEA 21, Parks and Recreation Trust Fund, the Land and Water Conservation Fund, and the North Carolina Farmland Preservation Program.

Guilford County requires stream buffers in accordance with the State's water supply regulations. Additionally, the County requires the dedication to the public of the designated 100-year floodplain areas. Within the County's Watershed Critical Areas, clearing and grading of steeper slopes adjacent to drainageways, as well as within the drainageways themselves, is prohibited.

To minimize impervious surfaces, the County encourages clustering of development on the better land areas of a site. The County has instituted a Rural Preservation District that reduces lot sizes and street widths, but maintains a large open space area around the development. Also, the County has the most intense residential zoning with wells and septic tanks as lots with no less than 30,000 square feet (RS-30). Guilford County has long maintained a tier system in the Watershed Critical area that graduates impervious surface from a maximum of 12 percent to 0 percent (no public sewer) as the site approaches the reservoir. In contrast, the State's regulations allow 30-50 percent impervious surface for WS-III and WS-IV Critical Areas. In minimizing disturbance to soils and vegetation, Guilford County follows the State's sedimentation policies. However, in the Watershed Critical Areas land disturbance regulations have been expanded to prohibit land disturbance in stream buffers, most drainage easements, slopes exceeding 15 percent, and Water Quality Conservation areas. Additionally, in the WCA land disturbance cannot exceed a percentage (graduated by WCA Tiers) of the usable area after excluding the above sensitive areas.

7.5.9.2 While infill development does not have direct application to typical County development, Guilford County has a policy that permits a developer to share a structural BMP with a downstream site. In doing so, the new development can better utilize its land for a more intense development while still protecting the site for water quality.

7.5.9.3 Guilford County will continue to hold periodic workshops for engineers, surveyors, and the real estate industry to educate those affected by changes to the development procedures. Since the NPDES Phase II regulations will have a significant impact in Guilford County, plans are to hold several workshops to explain and give examples of how a site can be developed under the new regulations. Workshops will be held prior to the implementation of the post-construction minimum measure. Public hearing meetings will also be held to respond to inquiries from the general public on NPDES.

7.5.9.4 To meet the requirements of other stormwater management programs, Guilford County is revising its program on low-density development to emphasize the developer's awareness on initial low-impact design and the impact and requirements for future expansion.

7.5.10 Structural BMP's

Guilford County altered its development ordinance and Water Quality Manual in the last few years to accept any structural Best Management Practice detailed in the State's BMP Design Manual. All storage, filtration, and infiltration devices permitted by the State are allowed in the County, but each has its particular application and limitation. Emphasis is routinely given to

those single devices that meet the 85% total Suspended Solid (TSS) removal requirement. Those single devices are the wet detention pond, bioretention cells, sand filter, extended detention wetlands, and infiltration devices. Other BMP's that remove less than 85% TSS will receive credit for a low-density evaluation and can be used in series to attain the required removal rate.

7.5.11 Regulatory Mechanism

The Guilford County Development Ordinance governs watershed protection for approximately 60 percent of the County. Our plan is to expand and modify the existing ordinance to include the minor changes needed for NPDES. The current ordinance has served the County well for many years and has been the basis for ordinances for other jurisdictions. Similarly, our Water Quality Manual will be slightly modified to reflect the minor changes NPDES requires. A copy of the current (not revised) environmental section of the development ordinance is included in the appendix.

7.5.12 Operation and Maintenance

To ensure long-term operation and maintenance of the required BMP's, Guilford County will continue its current program which includes requiring an operation and maintenance manual from the designer detailing required procedures, inspections of the BMP by County staff prior to the issuance of a temporary and final certificates of occupancy, and an annual inspection by County staff to monitor the maintenance and operation. Enforcement of maintenance can range from civil penalties, to court proceedings, to County maintenance and then assessing the landowner.

Contrary to the NPDES suggestion that the owner obtain an annual inspection by a qualified professional, our experience has proven that the method for best assurance is for County staff to conduct the annual inspections. We feel there is benefit from an impartial inspection, an inspection consistent in judgment and interpretation, and an inspection that is assured of occurring by a scheduled date.

7.5.13 Decision Process

7.5.13.1 As indicated in previous sections, Guilford County's experience with water quality issues dates back to 1984. Our water supply watershed regulations are more stringent than the State's for both the General Watershed Area and the Watershed Critical Area. For example, the State's regulation permits the "grandfathering" of existing impervious surface and determines the impervious percentage from the undeveloped area. The County's regulation determines the maximum impervious percentage of the tract including the "grandfathered" area. With our current regulations being more restrictive, the decision was made to use our present ordinance as a baseline for new development and redevelopment. The NPDES rules will primarily address the approximately 40 percent of the County currently unprotected by water supply regulations. Any new requirements will simply supplement the existing rules.

7.5.13.2 The program will require an evaluation of both the runoff from a one-inch storm as well as the comparison of pre/post conditions resulting from a 1 yr-24 hr storm. For the pre/post evaluation, runoff quantity as well as quality will be reviewed. Based on the current design manual, the pre/post quantity requirement should be complied with, without further design changes.

7.5.14 Evaluation

The post-construction elements will be evaluated by the implementation of a low impact design evaluation, a reduction of new impervious surfaces, and number of new BMP's in the non-drinking water supply areas. As with each of the different measures, annual achievable goals will be established for each BMP to gauge the success of the individual elements and the overall program.

7.6 Pollution Prevention / Good Housekeeping for Municipal Operations

Guilford County does not have the more traditional type municipal operations such as garbage collection, road maintenance, mass transit, etc. However, a pollution prevention/good housekeeping program will be implemented at all County owned facilities in unincorporated Guilford County. All facilities located within the Greensboro, High Point, and Jamestown city limits will be covered under the appropriate municipality's NPDES permit and emphasis will be placed upon responsible management in these areas.

7.6.1 BMP Summary Table

The following table outlines what best management practices Guilford County will use in its Pollution Prevention / Good Housekeeping program, the measurable goal for each BMP, the implementation schedule, and the person responsible for the implementation.

7.6.1

BMP's and Measurable Goals for Pollution Prevention/Good Housekeeping for Municipal Operations

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	Responsible Party
1	Recycling Program	Continue County programs regarding household hazardous waste collection, solid waste collection, scrap tire removal, and disposal of white goods.	X	X	X	X	X	Watershed Protection Engineer
2	Roadside Pick-up	Continue prisoners' roadside litter pickup program.	X	X	X	X	X	Watershed Protection Engineer
3	Spill Response	Continue spill response program by County Health and Emergency Services	X	X	X	X	X	Watershed Protection Engineer
4	Open Space Maintenance	Prepare and implement appropriate maintenance and disposal of waste from open spaces. Parks will continue to comply with the National Recreation and Parks Association guidelines. Park managers currently reside on-site for proper oversight at the majority of the parks.	X	X	X	X	X	Watershed Protection Engineer
5	Employee Training	Emphasize employee training to appropriate departments	X	X				Watershed Protection Engineer
6	Information Brochure on Disposal	Develop an informative brochure on proper disposal of dredging, accumulated sediment, and floatables	X	X				Watershed Protection Engineer
7	Fleet Maintenance	Continue to follow appropriate procedures for fleet maintenance	X	X	X	X	X	Watershed Protection Engineer

7.6.2 Affected Operations

The municipal operations of Guilford County that would be affected by this program are parks and open space maintenance, building and grounds maintenance, fleet/equipment maintenance, trash collection, etc. Guilford County does not own or operate any industrial facilities that are subject to NPDES stormwater general permits or individual permits.

Specific application:

Parks and Recreation – County contracts with the cities of Burlington, Greensboro, and High Point to manage the various parks in accordance with the National Recreation and Park Association guidelines.

- Equipment Upkeep (lawn mowers, tractors, etc.)
- Grounds Maintenance (lawn mowing, fertilizing, liming, trail upkeep, tree pruning, trash collection, parking area maintenance)
- Golf course maintenance
- Swimming Pool Maintenance
- Building/Shed/Barn Maintenance
- Gravel/Paved Road and Driveway Maintenance

Emergency Services – County has four bases of operation, all within municipal boundaries. The various volunteer fire departments are under contract with the county under their appropriate fire district.

- Vehicle Cleaning and Maintenance
- Disposal of Hazardous Materials
- Grounds Maintenance

- Trash Collection
- Spill Collection

Animal Shelter

- Proper Disposal of Animal Waste in permitted landfill

Sheriff's Department

- Fleet Maintenance, Etc.
- Grounds Maintenance (Prison Farm)
- Disposal of Animal Waste

School Board

- Fleet and Grounds Maintenance
- Trash Collection / Litter Pick-Up, Etc.

Planning and Development Department

- Recycling Facility Operations (Scrap Tire/White Goods Collection Site)

Health Department

- Proper Waste Disposal, Etc.

Fleet Operations – Maintenance is contracted with private companies within municipal boundaries

- Vehicle Maintenance

7.6.3 Training

Guilford County will focus on training all existing employees that have maintenance/housekeeping responsibilities and each new employee hired for such activities. The training most likely will begin with the train-the-trainer format. The appropriate supervisors will

be responsible for training their groups and individuals, with discussions to include: preferred action, unacceptable activities, and maintenance schedules. Existing maintenance schedules will be used, modified, or supplemented where necessary. All maintenance schedules will be in writing. The County does not intend to directly correlate the in-house training for specific individuals with outreach programs developed for other minimum measures such as public education and illicit discharge detection and elimination. The County will supplement the in-house training with any relevant activities discovered in implementation of the other programs. BMP fact sheets produced by the EPA along with any other source of information will be evaluated for pertinent information to be incorporated into the training.

7.6.4 Maintenance and Inspections

See Section 7.6.2 for a description of maintenance activities. Guilford County will assess all publicly owned facilities for which maintenance schedules would be applicable. Scheduling will begin with discussion and compilation of specific maintenance activities taking place at each affected site within first year. In the first half of the second year, a complete maintenance and inspection list shall be compiled for each facility. Training of personnel and full implementation of the program shall be completed by the end of the second year. The maintenance schedules will place the primary emphasis on the reduction of floatables through proper trash disposal, collection, and pick-up. It will also address the use of proper erosion control techniques, stabilization of soils to reduce sediment loss, and procedures to reduce other pollutants from entering a potential MS4. To track maintenance activities in the County's publicly owned facilities each applicable department will forward a report to the NPDES Coordinator/Watershed

Engineer identifying the maintenance record for the year. The NPDES Coordinator will catalog each year's reports from the various departments.

7.6.5 Vehicular Operations

The primary emphasis to reduce pollutants from municipal parking lots, storage areas, and a proposed scrap tire/white goods facility will be proper trash disposal, collection, and pick-up. The County will reduce pollutants from their parking facilities through routine inspection and maintenance. This will include the proper disposal of spills by utilizing products specifically made for this purpose. The County intends to make a pre-travel inspection mandatory for its own vehicles, to check for any obvious leaks. The County will also emphasize the responsible washing of their own vehicles at facilities with drains connected to a public sewer system. The maintenance for the majority of the County's vehicle fleet is performed under contracts with private garages, utilizing indoor work areas and proper collection of used motor oil, antifreeze, and etc. for recycling. Furthermore, all runoff from the built-upon area at the scrap tire / white good collection facility will be routed through a site-built water quality device prior to leaving the site. The site-built device will be built and maintained in accordance with the State's BMP manual.

7.6.6 Waste Disposal

Guilford County's primary waste to be disposed of from municipal operations is floatables. This will be addressed through proper disposal, collection, and pick-up. Proper disposal will include

having sufficient covered containers at accessible and easily identified locations for trash disposal. Proper collection will mean containers are sized appropriately to prevent overflow and provide sufficient ballast to keep from being knocked over by the wind, children, etc. Proper pick-up means containers will be emptied frequently enough to prevent odors and overflow of garbage. Pick-up of improperly discarded trash (i.e. litter) will be performed on a routine basis and possibly each workday. All trash will be sent to a permitted landfill. Accumulated sediments, including spoil from storm drain cleanout, will either be disposed of in a permitted landfill or spread out in low areas and properly seeded and mulched.

7.6.7 Flood Management Projects

Guilford County is located in the Upper Cape Fear River Basin and is not as prone to large scale flooding like many counties in North Carolina. Several of the larger perennial streams already have inline water supply reservoirs which counteract flooding and the Deep River is currently undergoing changes with the Randleman Dam. Guilford County does not have any plans to undertake any flood management projects. Instead, Guilford County takes the position of requiring dedication of floodplain areas to preserve their natural condition.

7.6.8. Existing Ordinances

As discussed in previous sections, Guilford County is reviewing its existing ordinance regarding stormwater issues to implement low impact design techniques, reduction of built-upon areas, maintain more stringent regulations than required by the State, and will modify its ordinance and manuals to reflect necessary NPDES regulations.

7.6.9 Other Evaluations

Guilford County also evaluated the release of chlorinated water from the proposed swimming facility at Bur-Mil Park. With the NPDES Phase II regulations in mind, the County decided to pump the discharge to the public sanitary sewer.

7.6.10 Decision Process

Since Guilford County does not have typical municipal operations, it will focus on responsible management and the training of staff performing maintenance at publicly owned facilities throughout the unincorporated areas of the County. Guilford County further decided that training staff, which would directly provide maintenance/housekeeping services, would reduce pollution the most. The general public and other County employees using public facilities will be educated under the public education component. Responsible behavior will be one of the main topics. See BMP summary table for individual BMPs, measurable goals, and responsible party(s).

7.6.11 Evaluation

The success of this measure will be measured on the timely completion of maintenance schedules for each facility operated in the unincorporated county and the training of each employee directly connected to these activities. It will further be measured by the convenience

and accessibility of trash containers and the amount of litter that is picked-up. As with each of the different measures, annual achievable goals will be established for each BMP to gauge the success of the individual elements and the overall program.