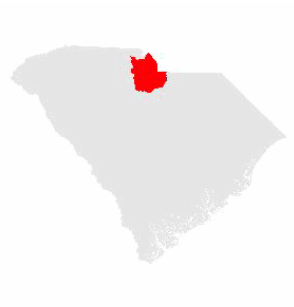
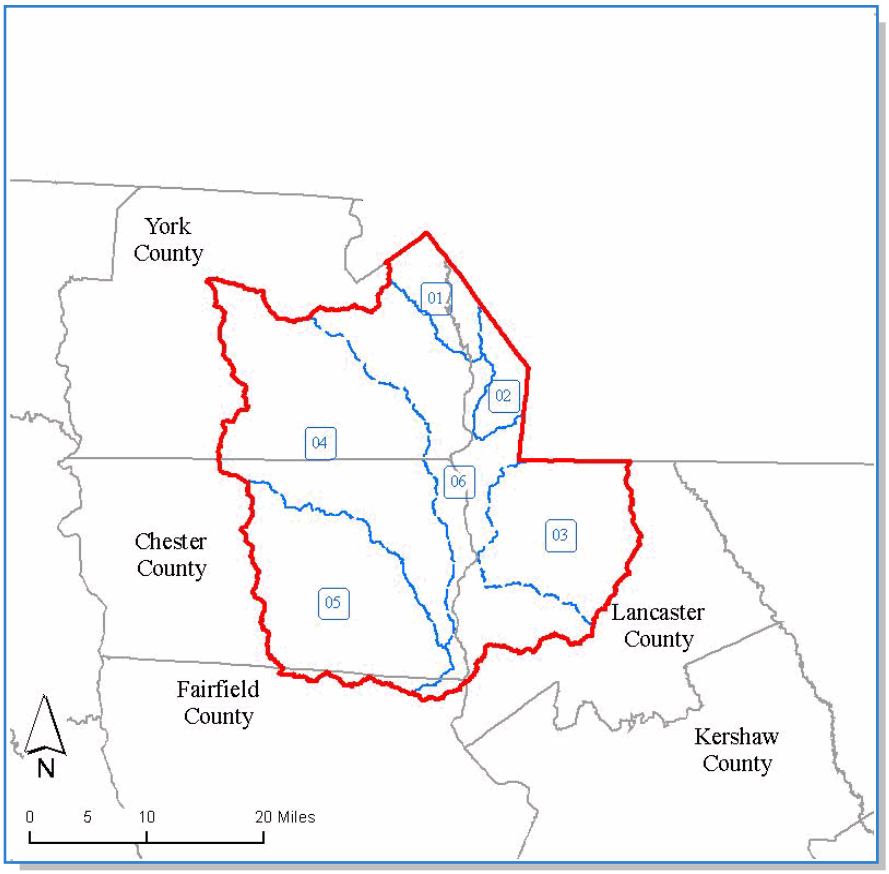
LOWER CATAWBA Subbasin

August 31, 2007

An Assessment of the Lower Catawba Subbasin

Hydrologic Unit Code (8 Digit): 03050103





WATERSHED (10-digit HUC)
(E.g., 01 = 0305010301)

- 01 Sugar Creek
- 02 Twelvemile Creek-Catawba River
- 03 Cane Creek
- 04 Fishing Creek
- 05 Rocky Creek-Catawba River
- 06 Fishing Creek Reservoir-Catawba River

NRCS
Natural Resources
Conservation Service

EXECUTIVE SUMMARY

Watershed Description

The Catawba River originates in the Blue Ridge Mountains of North Carolina and enters South Carolina through Lake Wylie. The Lower Catawba subbasin covers 927 square miles (594,000 ac) and begins just downstream of Lake Wylie. In South Carolina, the Catawba River passes *east* of Rock Hill, SC, and then *west* of Lancaster, SC, before it flows into the Fishing Creek, Great Falls and Cedar Creek Reservoirs in the lower end of the subbasin. Tributaries that enter the Catawba River in the subbasin include Sugar Creek, Twelve Mile Creek, Cane Creek, Rocky Creek, Camp Creek and Beaver Dam Creek. As the Catawba River exits these reservoirs, the Lower Catawba subbasin ends and the Wateree subbasin begins.

The subbasin passes through the Piedmont (45) ecoregion (Figure 1). A brief description of the Piedmont ecoregion in this watershed is available in this document's appendix. A more detailed description of the Level III and Level IV Common Resource Areas (Ecological Regions) is available online (See Griffith *et al.* 2002 in References section.).

FIGURE 1:
LEVEL IV ECOLOGICAL REGIONS

45b Southern Outer Piedmont
45c Carolina Slate Belt

EXECUTIVE SUMMARY

Land Use/Land Cover

This subbasin is urbanized where Rock Hill and Lancaster, SC, are located in the watershed. The "panhandle" of Lancaster County, north of SC Rd 55 (Van Wyck Rd) is now almost completely urbanized. Parts of York, and Chester, SC, and even the outskirts of Charlotte, NC, occupy some of the subbasin (Figure 2). The majority of the farmland in the subbasin is pasture and hayland. (Table 2).

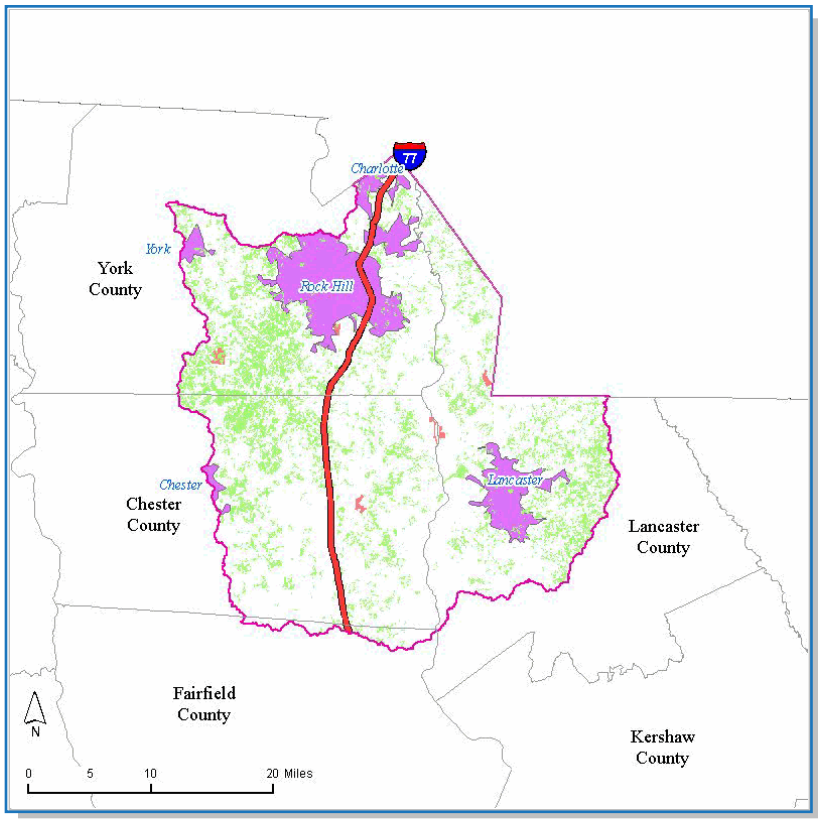


FIGURE 2:
MAJOR LAND USE/LAND COVER CATEGORIES

- FSA Farm Fields
- Urban Areas
- Parks & Land Under Easement
- Other Land

Table 1:
MAJOR LAND USE/LAND COVER CATEGORIES

	Acres	% of Watershed
Watershed (Total)	593,639	-
Urban Area	65,788	11%
Parks/Land Under Easement (not NRCS)	3,080	1%
Farm Service Agency Designated Farm Fields	94,226	16%

Table 2:
AGRICULTURAL LAND USE: FSA ACREAGE AND ESTIMATED FARM FIELD USE FROM THE 2002 AG CENSUS
(NASS Whole County Data Used. Cropland includes: Field Crops, Orchards, and Specialty Crops.)

County	FSA Fields (Acres)	% Pasture (Estimated)	% Cropland (Estimated)	% Hayland (Estimated)
Chester	32,491	43%	21%	36%
Fairfield	991	44%	16%	40%
Lancaster	26,763	37%	22%	41%
York	33,981	39%	25%	36%

EXECUTIVE SUMMARY

Summary of Resource Concerns

The following is a summary of resource concerns for the watershed. Each resource concern has a more detailed analysis provided in its corresponding section.

Soils
Land capability limitations are dominated by erosion in this subbasin that is typical of an area within the Piedmont. Highly erodible and potentially highly erodible soils comprise 90% of the subbasin and are the key resource concerns.

Water Quantity
Awaiting SCDNR's 2007 state water assessment.

Water Quality
There are diverse impairments including fecal coliform biological (benthic invertebrates), total phosphorus, dissolved oxygen and turbidity.

Plant Condition
The most prominent crops in the subbasin include sorghum for grain, forage, and cut Christmas trees. Timber revenues exceed agricultural revenues in Fairfield and Chester Counties.

Fish, Wildlife, and Native Plants
According to SC DNR's "Comprehensive Wildlife Conservation Strategy: 2005 - 2010" (see SCDNR 2005 in References section), the following applies to this subbasin: Biologists have identified habitat protection as one of the most important actions to ensure the protection of South Carolina priority species. Loss and fragmentation of habitat have been identified as a major threat to many of the species listed as threatened and endangered in South Carolina.

Domestic Animals
Sizeable grazing livestock populations, while confined livestock populations are dominated by turkeys.

Economic and Social Factors
-

EXECUTIVE SUMMARY

Progress on Conservation

Table 3:
A SUMMARY OF NRCS APPLIED CONSERVATION TREATMENTS (ACRES)
(See Appendix for NRCS Conservation Practices used for Conservation Treatment Categories.)
(Applied practice data is reported on a fiscal year basis commencing on October 1st)

Conservation Treatments	2004	2005	2006	Total
Buffers and Filter Strips	2	1	11	14
Conservation Tillage	223	391	126	740
Erosion Control	170	1,886	257	2,313
Irrigation Water Management	-	-	52	52
Nutrient Management	1,774	1,363	168	3,305
Pest Management	854	260	349	1,463
Prescribed Grazing	1,575	66	69	1,710
Trees and Shrubs	486	197	258	941
Wetlands	-	-	-	-
Wildlife Habitat	218	29	244	491

Table 4:
LANDS REMOVED FROM PRODUCTION BY FARM BILL PROGRAMS (WHOLE COUNTY DATA SHOWN)

County	Conservation Reserve Program (ac) 2005	Conservation Reserve Program (ac) 1986 - 2005	Grassland Reserve Program (ac) 2005	Farmland & Ranch Protection Program (ac) 2005	Wetland Reserve Program (ac) 2005
Chester	1,993	42,212	-	-	-
Fairfield	-	0	-	-	-
Lancaster	2,061	53,475	-	-	-
York	924	24,924	-	-	-

Table 5:
APPROVED TOTAL MAXIMUM DAILY LOAD (TMDL)
(See SCDHEC 2007 (a) in Reference Section.) - SCDHEC Contact: Matt Carswell - (803) 898-3609

TMDL Document	Numberof Stations	Parameter of Concern	Status	WQMS ID Standard Attained
Catawba River and Reservoirs	2	Phosphorus	Under Development	-
Camp Creek	1	Fecal Coliform	Completed & Approved	-
Cane Creek	5	Fecal Coliform	Completed & Approved	-
Catawba River Trib	1	Fecal Coliform	Completed & Approved	-
Catawba River-Rocky Creek	2	Phosphorus	Completed & Approved	-
Fishing Creek	11	Fecal Coliform	Approved & Implementing	-
Grassy Run Branch	1	Fecal Coliform	Completed & Approved	-
Rocky Creek	4	Fecal Coliform	Approved & Implementing	-
Steele Creek	3	Fecal Coliform	Under Development	-
Un-named trib. to Catawba	-	Fecal Coliform	Approved & Implementing	-
Waxhaw Creek	3	Fecal Coliform	Completed & Approved	-

Table 6:
OTHER PLANS, ASSESSMENTS, AND PROJECTS IN THE WATERSHED

Organization	Description	Contact	Telephone
SCDNR	Catawba River Watershed Plan	Barry Beasley	803-734-9095
SCDHEC	Watershed Water Quality Assessment: Catawba River Basin (2005)	Carol Copeland	803-898-4203

EXECUTIVE SUMMARY

Other Watershed Considerations

In 2006, residents of Cabarrus County, NC, proposed to pump water from the Catawba River for domestic purposes, then to pump the cleaned waste water into the Yadkin River, east of Cabarrus. Residents of the Catawba watershed in both North and South Carolina generally oppose this plan.

Lancaster County is experiencing rapid urbanization with large tracts being developed with thousands of homes at a time. The influx of new residents and the need for infrastructure to support them is causing conflicts with the long-time citizens and traditional bureaucracy.

RESOURCE CONCERNS

Soils

The Lower Catawba subbasin lies entirely within the Piedmont and contains Carolina Slate Belt and Southern Outer Piedmont subregions. Most of the land (89%) in this subbasin has limitations due to erosion (Table 7). Most of the erosion is associated with sloping areas on uplands in the subbasin (Figure 4, Table 9). Low soil organic matter in the highly erodible soils is a soil health concern. Hydric soils and wetness are not major resource concerns in this subbasin with 92% of the land classified as not hydric (Figure 5, Tables 7 and 10). Over half (52%) of the land in the Lower Catawba subbasin is either prime farmland (28%) or statewide important farmland (23%) and occurs mostly in the South Outer Piedmont portion of the subbasin (Figure 3, Table 8).

Table 7:
LAND CAPABILITY CLASSES (See NRCS 2007 [a] and [b] in References section.)

Percentages are based on the whole watershed (593,639 ac).

Land Capability Class 1	Acres	Percent
1 - Slight limitations	-	-

	% Land by Subclass Limitation					
	Erosion (e)		Wetness(w)		Droughtiness (s)	
Land Capability Classes 2-8	Acres	Percent	Acres	Percent	Acres	Percent
2 - Moderate limitations	185,794	31%	10,544	2%	741	0%
3 - Severe limitations	116,467	20%	19,988	3%	718	0%
4 - Very severe limitations	107,891	18%	15,060	3%	627	0%
5 - No erosion hazard, but other limitations	-	-	594	0%	-	-
6 - Severe limitations; unsuitable for cultivation; limited to pasture, range, forest	94,242	16%	-	-	-	-
7 - Very severe limitations; unsuitable for cultivation; limited to grazing; forest, wildlife habitat	24,923	4%	-	-	288	0%
8 - Miscellaneous areas; limited to recreation, wildlife habitat, water supply	-	-	-	-	116	0%

RESOURCE CONCERNS

Prime Farmland

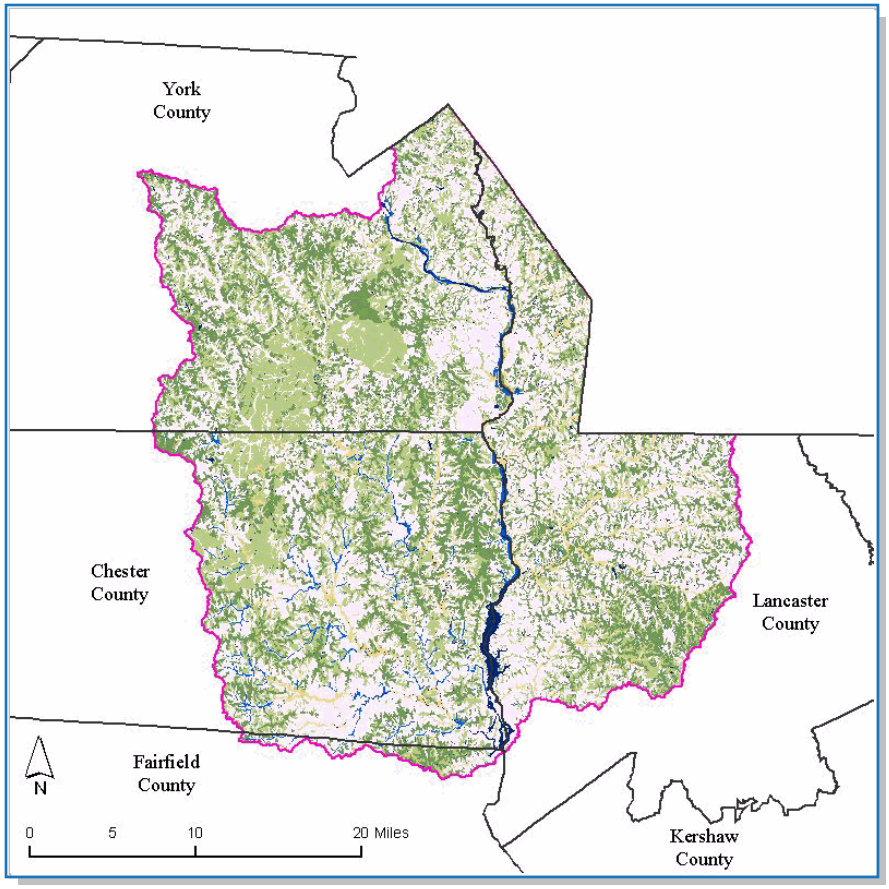


FIGURE 3:
PRIME FARMLAND
(See NRCS 2007 [a] and [b] in References section.)

Table 8:
PRIME FARMLAND

Prime Farmland Categories	Acres	Percent of Land
All areas are prime farmland	143,662	24%
Farmland of statewide importance	136,663	23%
Not prime farmland	284,682	48%
Prime farmland if drained	0	0%
Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	20,459	3%
Prime farmland if irrigated	0	0%
Prime farmland if irrigated and drained	0	0%
Prime farmland if protected from flooding or not frequently flooded during the growing season	7,855	1%

RESOURCE CONCERNS

Highly Erodible Land

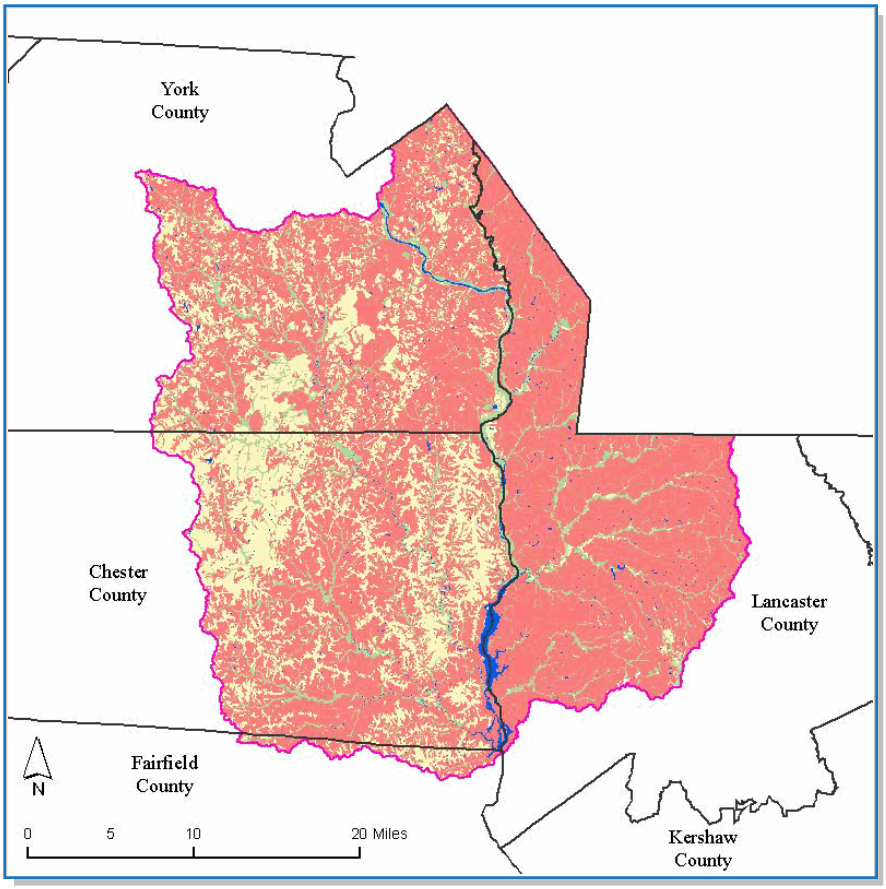


FIGURE 4:
HIGHLY ERODIBLE LAND
(See NRCS 2007 [a] and [b] in References section.)

Table 9:
HIGHLY ERODIBLE LAND

Highly Erodible Land Categories	Acres	Percent of Watershed
Highly erodible land	407,288	69%
Not highly erodible land	49,671	8%
Potentially highly erodible land	127,433	21%

RESOURCE CONCERNS

Hydric Soils

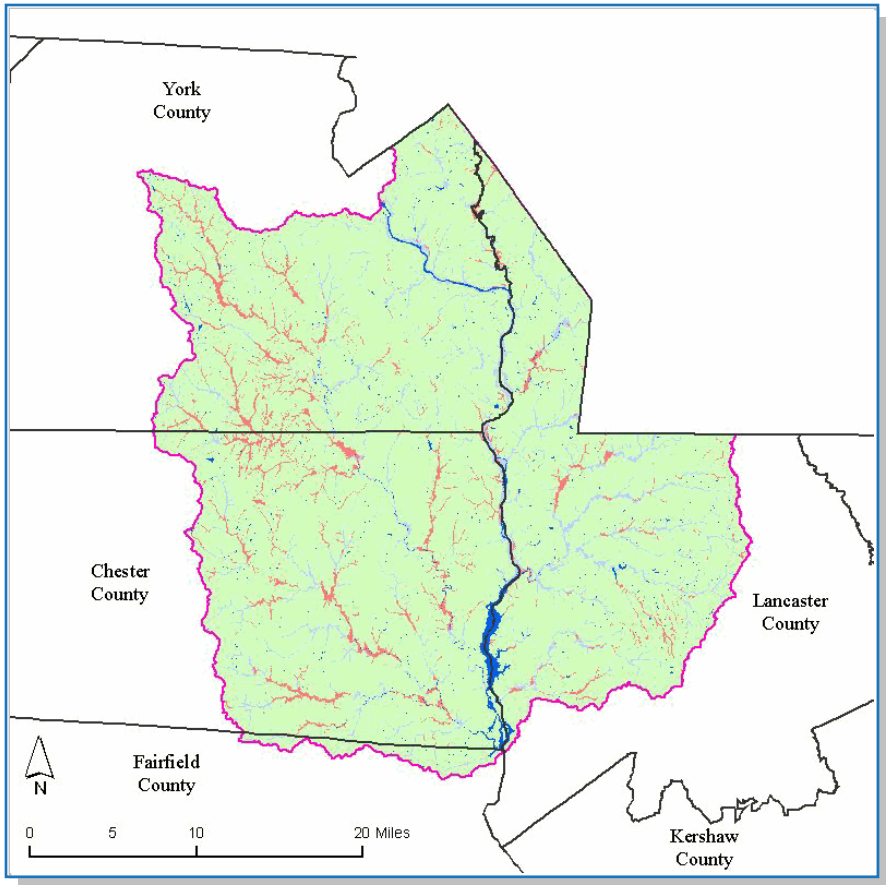


FIGURE 5:
HYDRIC SOILS
(See NRCS 2007 [a] and [b] in References section.)

Table 10:
HYDRIC SOILS

Hydric Soils Categories	Acres	Percent of Watershed
All Hydric	21,750	4%
Not Hydric	546,638	92%
Partially Hydric	24,934	4%

RESOURCE CONCERNS

Water Quantity

The Catawba River is under considerable pressure from upstream urban areas such as Carrabus County and Charlotte, NC. This problem is compounded by drought.

Soils in the subbasins have considerable production potential, particularly in York and Chester Counties, but there is a lack of availability for irrigation water from both ground and surface sources

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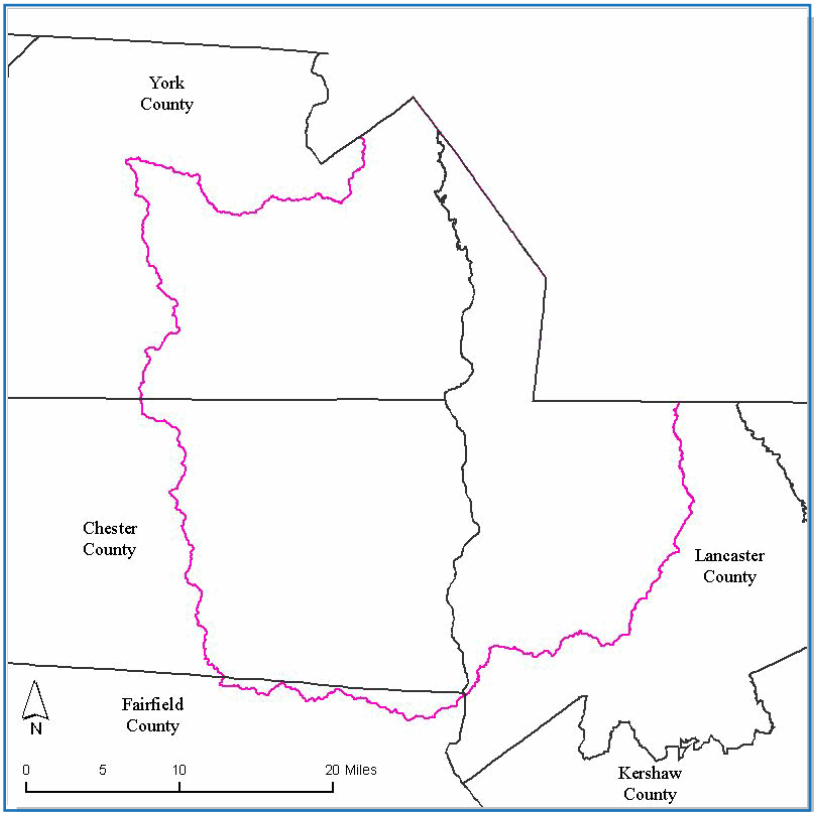

FIGURE 6:
WATERSHED RELATIVE TO CAPACITY USE AREAS, NOTICE OF INTENT AREAS, AND CONES OF DEPRESSION

Table 11:
CAPACITY USE, NOTICE OF INTENT, AND CONES OF DEPRESSION AREA IN WATERSHED
(See SCDHEC 2007 [c] and SCDNR 2004 in Refrerences Section.)

Area	Percent of Watershed
% Watershed in Cone of Depression and Capacity Use (CU) Area	0%
% Watershed in SCDHEC Capacity Use (CU) Area	0%
% Watershed in SCDHEC Notice of Intent (NOI) Area	0%

RESOURCE CONCERNS

Water Quantity Cont.

Table 12:
INDICATORS OF IRRIGATION WATER USAGE (WHOLE COUNTY DATA ARE USED)
(See NASS 2002 and SCDNR 2004 in References Section)

County	Total Irrigated Water Used MGD	Total NASS Cropland (ac)	Cropland Under Irrigation (ac)	Percent Cropland Under Irrigation	Water Use Gal/Ac/Day for Irrigated Land
Chester	0.31	31,773	221	0.7	1,403
Fairfield	2.46	16,750	250	1.5	9,840
Lancaster	0.95	31,049	443	1.4	2,144
York	1.00	54,017	757	1.4	1,321

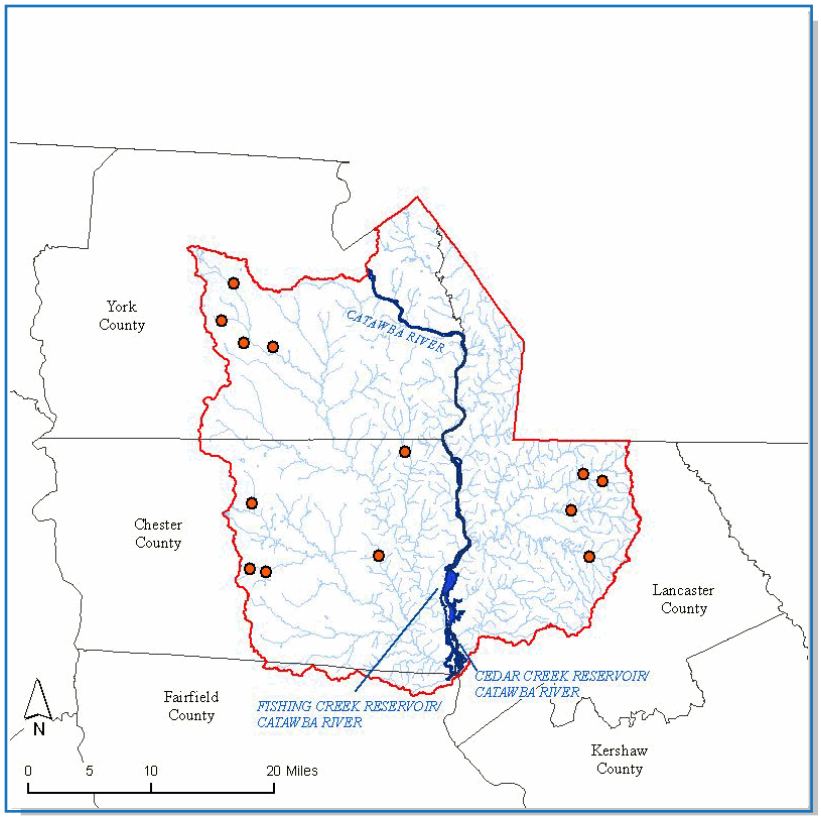

FIGURE 7:
NRCS ASSISTED FLOOD CONTROL STRUCTURES IN WATERSHED

- Flood Control Structure
- Main River
- Hydrography

Table 13:
NRCS IMPLEMENTED FLOOD CONTROL STRUCTURES

Number of Structures (in Watershed)	Maximum Storage (AcFt)	Number of Structures by Hazard Class			
		High	Low	Significant	Unclassified
13	34,951	1	6	6	0

RESOURCE CONCERNS

Water Quality

The number of surface water quality impairments is shown in Table 15 resulting in a "303(d)" listing of that Water Quality Monitoring Site (WQMS). Table 5 indicates what progress has been made to address surface water quality through the Total Maximum Daily Load (TMDL) process. Once a TMDL plan is approved, the WQMS is removed from the 303(d) list even though the standard may not have been attained. Note that standards for total nitrogen, total phosphorus, and chlorophyll-a only exist for lakes; therefore, no stream in the state can be listed for any of these three parameters.

The primary concern in the subbasin is fecal coliform. This concern will be addressed through ongoing TMDLs (Table 5). Other concerns in the subbasin include biological, total phosphorus, dissolved oxygen and turbidity impairments(Table 15).

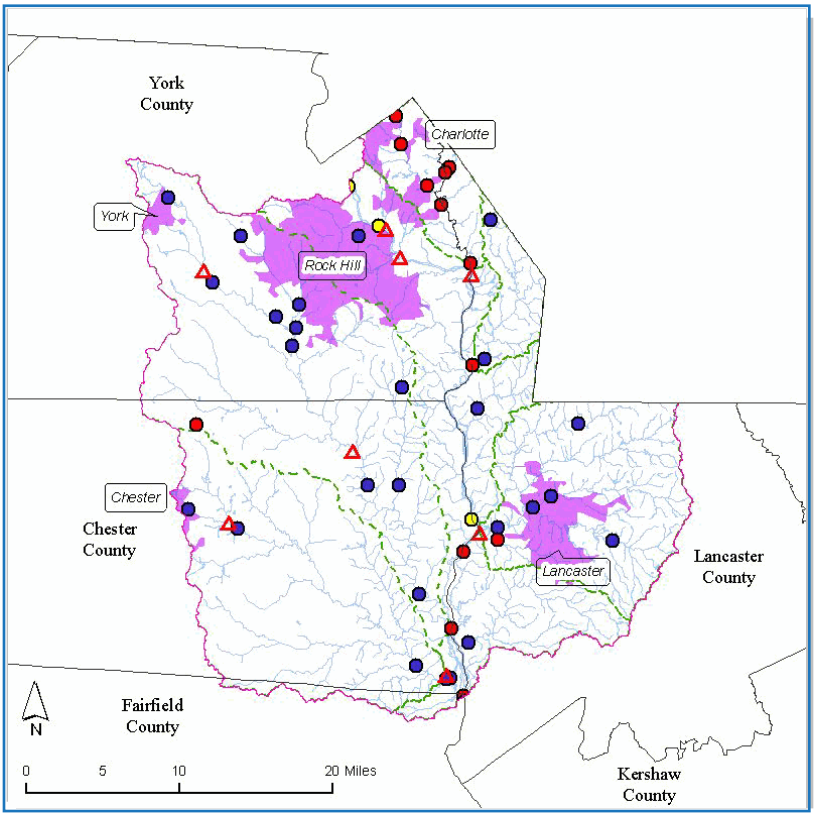

Table 14:
WATER QUALITY MONITORING SITES

Permanent Water Quality Monitoring Sites (WQMS)	43
Random Water Quality Monitoring Sites (WQMS)	22

FIGURE 8:
PERMANENT WATER QUALITY MONITORING SITES

- WQMS (No Impairment)
- WQMS (303d Listed)
- WQMS (Approved TMDL)
- Waste Water Treatment Plant
- Hydrography
- Hydrologic Unit Code 10 Boundary

Table 15:
NUMBER OF MONITORING SITES SHOWING SURFACE WATER QUALITY IMPAIRMENTS
(See SCDHEC 2006 in References for the state 303(d) list.)

Recreational Use Standard

Parameter	Impairments
Fecal Coliform	4

Fish Tissue Standard

Parameter	Impairments
Mercury	0
PCB's	0

Shellfish Harvest Standard

Parameter	Impairments
Fecal Coliform	NA

Aquatic Life Use Standard

Parameter	Impairments	Parameter	Impairments	Parameter	Impairments
Biological	12	Dissolved Oxygen	13	Total Phosphorus	12
Chlorophyll A	3	Ammonia Nitrogen	0	pH	0
Chromium	0	Nickel	0	Turbidity	10
Copper	9	Total Nitrogen	2	Zinc	0

RESOURCE CONCERNS

Plant Condition

Plants of Economic Importance

Plants of economic importance are shown in Table 16. The crops shown in this table are from NASS data where the top five crops, by acres, in each county are displayed. The timber statistics (Clemson Extension Forest Services 2003) indicate the relative importance of the timber industry within the state and the importance of the timber industry compared to agriculture within the county.

The most prominent crops in the subbasin include cotton, sorghum for grain, and forage.

Native Plant Species

According to SC DNR's "Comprehensive Wildlife Conservation Strategy: 2005 - 2010" (see SCDNR 2005 in References section), the following applies to this subbasin: the Piedmont ecoregion plant community historically consisted of oak and hickory-dominated forest with associated tree species varying by slope and soil moisture. This was the primary potential vegetation type in the Piedmont. Due to land disturbances however, today the majority of these sites exist mostly in closed canopy pine-dominated forests.

Table 16:
WHOLE COUNTY DATA OF PLANTS OF ECONOMIC IMPORTANCE IN SUBBASIN
(See: USDA NASS 2002 & Clemson University Forest Extension Services 2003 in References section)

Plant	Counties
All Cotton	Chester, York
All Wheat for grain	York, Chester, Lancaster, Fairfield
Corn for grain	Fairfield, Lancaster
Corn for silage	Chester
Cut Christmas trees	Fairfield
Forage - land used for all hay and haylage, grass silage, and greenchop	York, Lancaster, Chester, Fairfield
Short-rotation woody crops	Lancaster, York, Fairfield, Chester
Sorghum for grain	York
Soybeans	Lancaster
Timber, Top 10 Rank in SC	Fairfield
Timber Revenues Exceed Ag. Revenues	Fairfield, Chester

Table 17:
FEDERALLY LISTED THREATENED AND ENDANGERED PLANT SPECIES IN WATERSHED
(See USFW 2006 in References section.)

Common Name	Latin Name	Status
Schweinitz's sunflower	*Helianthus schweinitzii*	Endangered
Smooth coneflower	*Echinacea laevigata*	Endangered
Georgia aster	*Aster georgianus*	Supported Proposals to List
Little amphianthus	*Amphianthus pusillus*	Threatened
Dwarf-flowered heartleaf	*Hexastylis naniflora*	Threatened
Black-spored quillwort	*Isoetes melanospora*	Endangered

RESOURCE CONCERNS

Fish and Wildlife

The Lower Catawba subbasin contains one of four surviving populations of the Carolina Heelsplitter mussel *Lasmigona decorata* in a short reach of Gill's creek, Waxhaw creek, and one other creek in the panhandle of Lancaster County and is designated as a critical habitat for the species. This habitat has been reduced to a few streams in the state, primarily resulting from impoundments and channelization projects. The general deterioration of water quality from siltation and other pollutants due to poor land use practices has also contributed to the reduction of habitat.

For additional information, the SC Department of Natural Resources has completed a "Comprehensive Wildlife Conservation Strategy: 2005 - 2010" (see SCDNR 2005 in References section).

In 2005, mercury advisories were issued for 57 water bodies in South Carolina. Higher concentrations of mercury in fish tissue tend to occur in the Coastal Plain of South Carolina with relatively lower concentrations (and therefore fewer advisories) in the Piedmont. For more details on fish advisories, please refer to the SCDHEC fish advisory website at: **http://www.scdhec.gov/environment/water/fish/**

Table 18:
FEDERALLY LISTED THREATENED AND ENDANGERED WILDLIFE SPECIES IN WATERSHED
(See USFW 2006 in References section.)

Common Name	Latin Name	Status
Red-cockaded woodpecker	*Picoides borealis*	Endangered

Table 19:
FEDERALLY LISTED THREATENED AND ENDANGERED AQUATIC SPECIES IN WATERSHED
(See USFW 2006 in References section.)

Common Name	Latin Name	Status
Carolina heelsplitter	*Lasmigona decorata*	Endangered
Carolina heelsplitter	*Lasmigona decorata*	Endangered, Critical Habitat

RESOURCE CONCERNS

Domestic Animals

Grazing livestock populations are significant in this subbasin (Table 20), and are typical of any Piedmont setting. Confined livestock operations are dominated by turkeys (Figure 9, Table 21).

Table 20:
WHOLE COUNTY GRAZING ANIMAL POPULATION DATA FROM 2002 AG. CENSUS
(See NASS 2002 in References section. "D" in table = "Cannot be disclosed".)

County	Cows/Calves	Grazing/Forage (ac)	County Rank in State
Chester	14,331	13,559	9
Fairfield	6,009	7,310	25
Lancaster	12,520	11,433	11
York	19,211	20,958	5

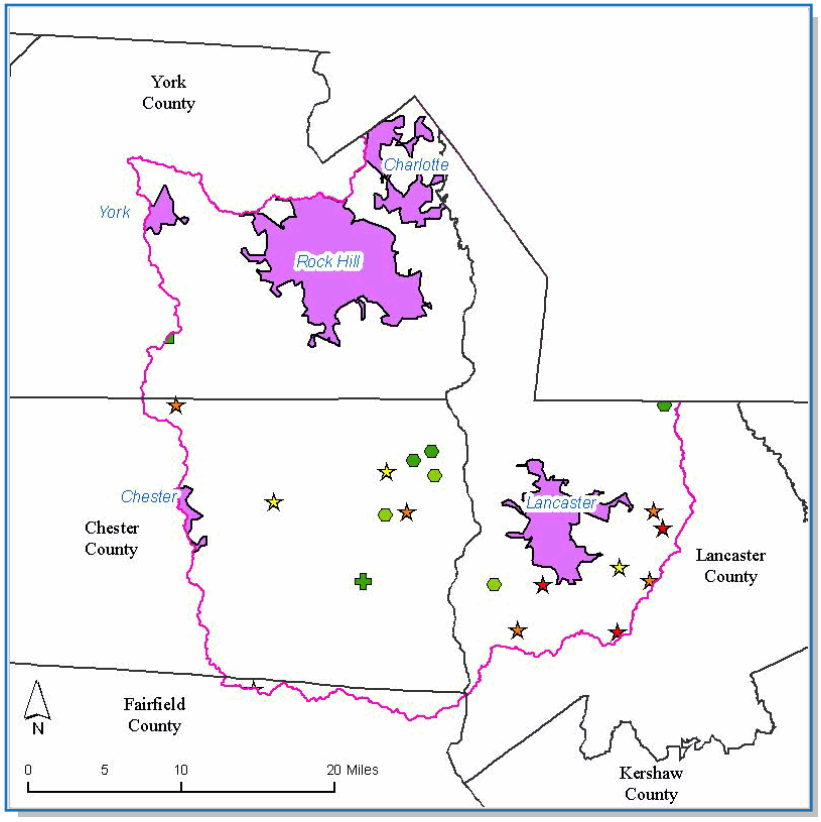

Table 21:
CONFINED ANIMAL POPULATION [As given by SCDHEC] (Au = Animal Unit = 1,000 lbs)

Beef Live Weight (Au)	-
Dariy Live Weight (Au)	84
Horse Live Weight (Au)	-
Poultry Live Weight (Au)	1,052
Swine Live Weight (Au)	30
Turkey Live Weight (Au)	12,478

FIGURE 9:
TYPE AND SIZE OF CONFINED ANIMAL OPERATION

Permit Design Count (Live Weight AU)
- 0 - 163
- 164-372
- 373 - 680
- 681 - 1360
- 1361 - 7076

- Beef
- Dairy
- Other
- Poultry
- Swine
- Turkey

ECONOMIC & SOCIAL FACTORS

The number of full-time farmers is similar to the state average of 47% and farm sizes are slightly *smaller* than the state average of 197 ac (Table 22), suggesting average or below-average levels of participation in conservation programs in the subbasin. Farm sizes decreased by an estimated 10% between 1997 and 2002, whereas on average farm sizes decreased by 13% across the state for the same period. Loss of cropland between 1997 and 2002 is estimated at 4%, lower than the SC average of 8%.

The relative importance of crop and livestock commodity groups in the watershed is shown in Tables 24 and 25; a *qualitative* indication of the relative importance of timber is provided on Table 16.

For more economic and farm information from the 2002 Agricultural Census, more detailed reports for all South Carolina counties can be found at:
http://www.nass.usda.gov/census/census02/profiles/sc/index.htm

Table 22:
2002 FARM CENSUS DATA (WHOLE COUNTY DATA SHOWN) (SC average farm size = 197 ac)

County	Total Number of Farms	% Full Time Farmers	% Farms > 180 (ac)	Average Farm Size (ac)
Chester	430	50%	34%	226
Fairfield	237	38%	38%	238
Lancaster	637	48%	18%	128
York	858	45%	19%	139
Weighted Avg*	**636**	**47%**	**24%**	**165**

Table 23:
2002 FARM CENSUS ECONOMIC DATA (WHOLE COUNTY DATA SHOWN) (Results in $1,000)

County	Market Value of Ag Products Sold	Market Value of Crops Sold	Market Value of Livestock, Poultry, and Their Products	Farms with sales < $10,000
Chester	17,577	1,517	16,060	350
Fairfield	16,307	752	15,555	192
Lancaster	45,710	1,660	44,050	532
York	82,873	-	-	-
Weighted Avg*	**48,772**	**988**	**17,950**	**270**

Table 24:
VALUE OF CROP COMMODITY GROUPS - COUNTY RANK IN STATE
(See NASS 2002 in References section. "D" in table = "Cannot be disclosed".)

County	Value of All Crops	Grains & Oilseeds	Tobacco	All Cotton	Vegetables & Melons	Fruits, Nuts, & Berries	Nursery, Etc.	Christmas Trees & Woody Crops	Hay & other Crops
Chester	42	30	-	(D)	30	37	(D)	(D)	7
Fairfield	44	44	-	-	(D)	-	(D)	2	29
Lancaster	41	36	-	-	35	(D)	(D)	15	18
York	(D)	31	-	23	(D)	(D)	(D)	4	10

* Weighted averages are estimated based on agricultural land use area.

ECONOMIC & SOCIAL FACTORS

Table 25:
VALUE OF LIVESTOCK AND POULTRY COMMODITY GROUPS - RANK IN STATE
(See NASS 2002 in References section. "D" in table = "Cannot be disclosed".)

County	Value of Livestock, poultry	Poultry, Eggs	Cattle & Calves	Milk & Dairy	Hogs & Pigs	Sheep & Goats	Horses, etc.
Chester	18	18	9	(D)	38	32	(D)
Fairfield	20	17	25	(D)	44	39	(D)
Lancaster	8	6	11	20	43	15	19
York	(D)	(D)	5	7	(D)	5	8

REFERENCES

Clemson University Extension Forest Service. 2001. *Cash Receipts from Timber Harvests - 2001 Ag and Timber Comparison.*. Compiled by A. Harper. Available at:
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APPENDIX

Level III Common Resource Area (Ecological Region) Descriptions

Piedmont (45)

The Piedmont is an erosional terrain with some hills; the soils are generally finer-textured than those found in coastal plain regions with less sand and more clay. Piedmont soils are moderately to severely eroded; most of this region is now in planted pine or has reverted to successional pine and hardwood woodlands, with some pasture; spreading urban- and suburbanization is apparent. The Piedmont of South Carolina is divided into five level IV ecoregions: Southern Inner Piedmont (45a), Southern Outer Piedmont (45b), Carolina Slate Belt (45c), Triassic Basins (45g) and Kings Mountain (45i).

NRCS Conservation Practices used for Conservation Treatment Categories in Table 3

Report Category	Practice Codes
Buffer and Filter Strips	332, 391, 393, 412
Conservation Tillage	324, 329, 329A, 329B, 344, 484
Erosion Control	327, 328, 330, 340, 342, 561, 585, 586
Irrigation Water Management	441, 449
Nutrient Management	590
Pest Management	595
Prescribed Grazing	528, 528A
Trees and Shrubs	490, 612, 655, 656, 66
Wetlands	657, 658, 659
Wildlife Habitat	644, 645

Hydrologic Unit Numbering System

In 2005, the NRCS in cooperation with the U.S. Geological Survey, the South Carolina Department of Health and Environmental Control, and the U.S. Forest Service updated the South Carolina part of the USGS standard hydrologic unit map series. The report, "Development of a 10- and 12- Digit Hydrologic Unit Code Numbering System for South Carolina, 2005", describes and defines those efforts. The following is from the Abstract contained in that report: "A hydrologic unit map showing the subbasins, watersheds, and subwatersheds of South Carolina was developed to represent 8-, 10-, and 12-digit hydrologic unit codes, respectively. The 10- and 12-digit hydrologic unit codes replace the 11- and 14-digit hydrologic unit codes developed in a previous investigation. Additionally, substantial changes were made to the 8-digit subbasins in the South Carolina Coastal Plain. These modifications include the creation of four new subbasins and the renumbering of existing subbasins." The report may be obtained at **http://www.sc.nrcs.usda.gov/technical/HUC_report.pdf**. See Table 2 in the report for a cross-reference of old to new 8-digit HUC.

This subbasin profile uses the new HUC 8 numbering system with its modified and newly created subbasins. The NRCS reports implemented practices by 8-digit Hydrologic Unit Code. All NRCS reported Conservation Practices were reported using the older numbering system. 2005 and 2006 data were converted to the new HUC 8 numbering system through the Latitude and Longitude data reported with the applied practice. The use of these differing numbering systems has resulted in some NRCS implemented practices being credited in this report to an 8-digit HUC as reported by the NRCS but not correctly credited in the new numbering system. Likewise, the newly created 8-digit HUC will not be credited with the 2004 applied practices.