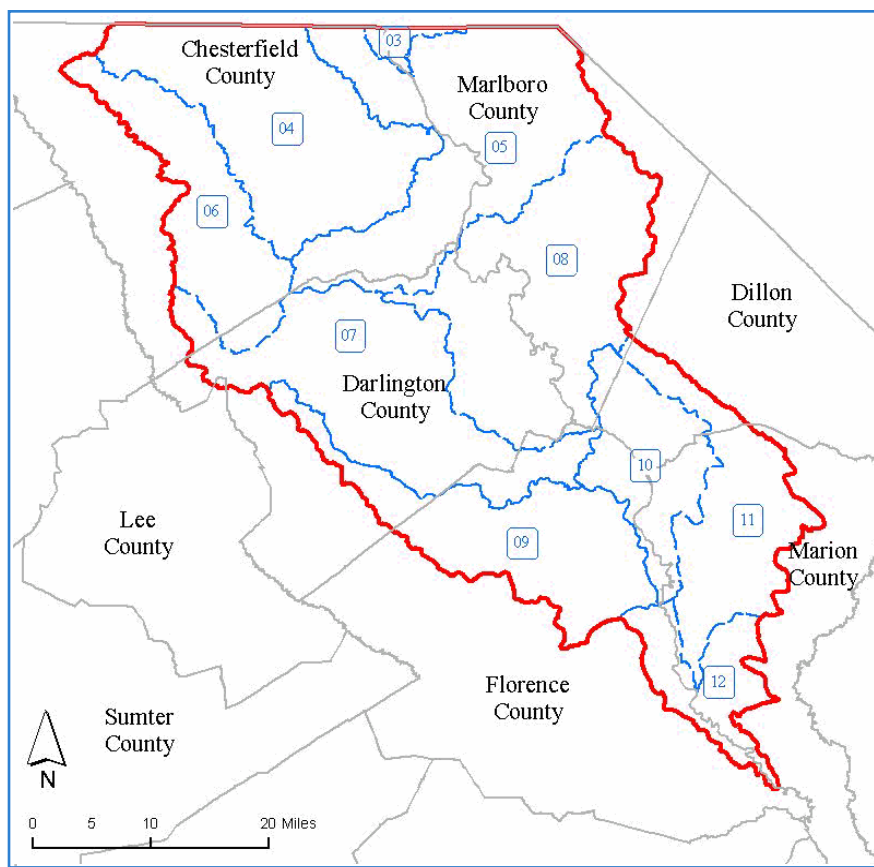


MIDDLE PEE DEE Subbasin

August 31, 2007

An Assessment of the Middle Pee Dee Subbasin

Hydrologic Unit Code (8 Digit): 03040201



WATERSHED (10-digit HUC)
(E.g., 01 = 0304020101)

- 03 Marks Creek-Pee Dee River
- 04 Thompson Creek
- 05 Reedys Branch-Great Pee Dee River
- 06 Upper Black Creek
- 07 Lower Black Creek
- 08 Three Creeks-Great Pee Dee River
- 09 Jeffries Creek
- 10 Tobys Creek-Great Pee Dee River
- 11 Catfish Creek
- 12 Bull Swamp-Great Pee Dee River

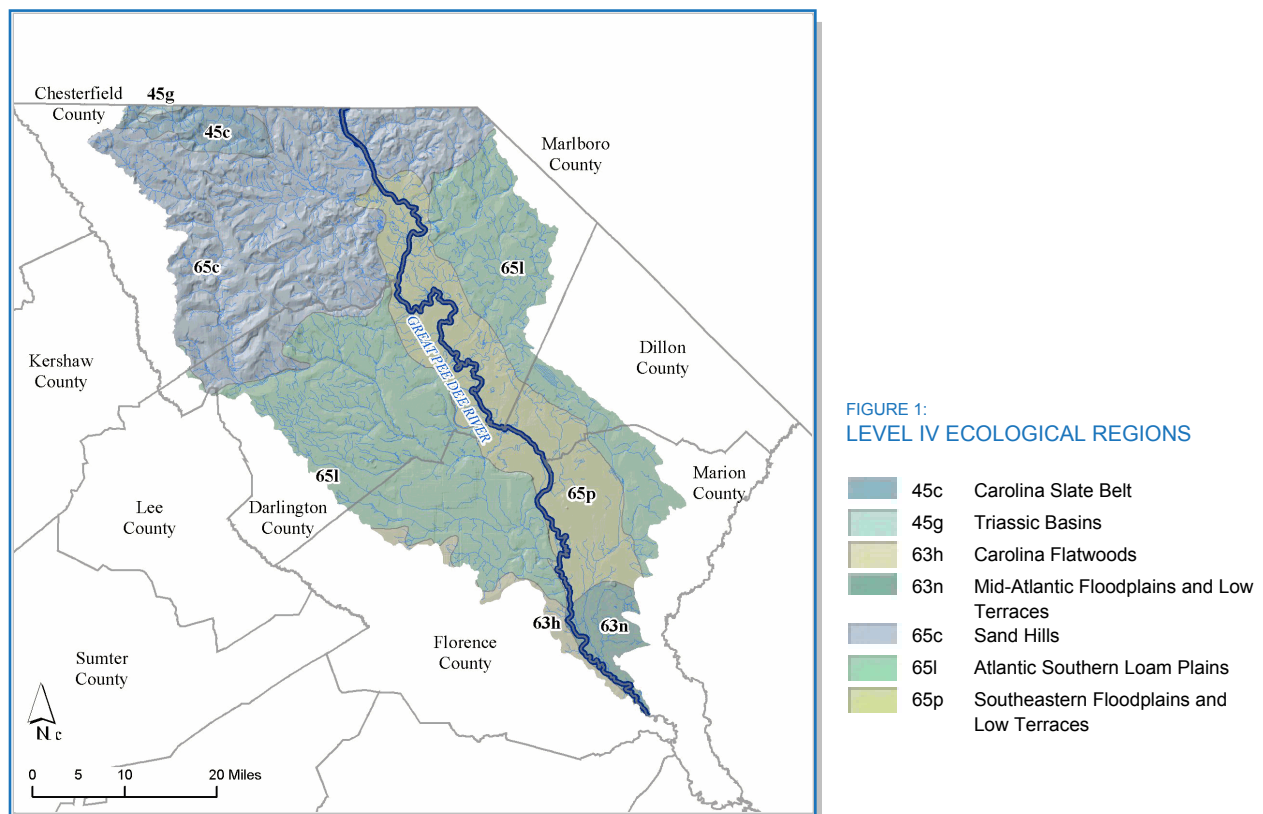


EXECUTIVE SUMMARY

Watershed Description

The subbasin is fed by the Great Pee Dee River that has its source in the Blue Ridge Mountains of North Carolina. In North Carolina, the Great Pee Dee is dammed in several places for flood control and hydroelectric power. In South Carolina however, it flows freely through 2,046 square miles (1.310 million acres) into the coastal flats in Winyah Bay at Georgetown. In South Carolina, the Great Pee Dee River is differentiated from its tributary, the Little Pee Dee River. The Middle Pee Dee subbasin ends where the Great Pee Dee and Lynches River converge, about 25 miles south of Marion, SC, to form the Lower Pee Dee subbasin.

The Middle Pee Dee subbasin lies in the Piedmont (45), Southeastern Plains (65) and Middle Atlantic Coastal Plain (63) ecoregions (Figure 1). A brief description of the Level III ecoregions 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.).



EXECUTIVE SUMMARY

Land Use/Land Cover

Apart from Florence, SC, the subbasin is largely rural within the state. Other urban areas in the subbasin include Darlington, Hartsville, Cheraw, Bennettsville and Marion, SC (Figure 2). In North Carolina (not visible in Figure 2), some of the Charlotte urban areas spill into the Pee Dee/Yadkin basin. Much of the Sandhills State Forest and some of the Sandhills National Wildlife refuge is situated in the subbasin (Figure 2).

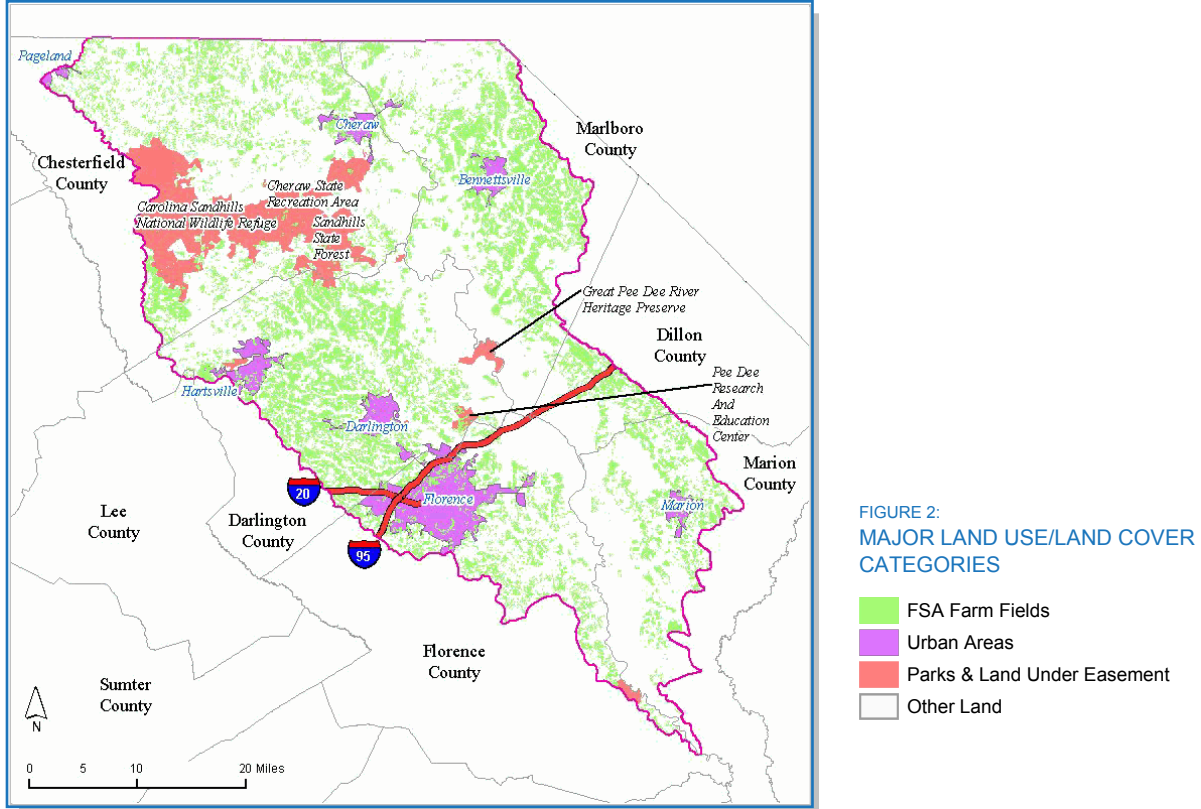


FIGURE 2: MAJOR LAND USE/LAND COVER CATEGORIES

Table 1: MAJOR LAND USE/LAND COVER CATEGORIES

	Acres	% of Watershed
Watershed (Total)	1,309,755	-
Urban Area	73,290	6%
Parks/Land Under Easement (not NRCS)	98,777	8%
Farm Service Agency Designated Farm Fields	310,012	24%

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)
Chesterfield	65,546	18%	62%	20%
Darlington	87,901	2%	94%	3%
Dillon	12,667	2%	96%	2%
Florence	38,406	4%	94%	3%
Marion	27,444	6%	89%	5%
Marlboro	77,891	6%	91%	3%

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 wetness and to a lesser extent by erosion and droughtiness in this subbasin which consists of both Coastal Plain and Piedmont regions. Hydric soils comprise 25% of land in the subbasin and partially hydric soils make up 53% of the subbasin and are the key resource concerns; these soils occur predominantly in the Coastal Plain portion of the subbasin. None of the Piedmont area has hydric soils. Highly erodible soils are confined to the upper part of the subbasin in Chesterfield County and occur in both the Piedmont and Sand Hills.

Water Quantity

Awaiting SCDNR's 2007 state water assessment.

Water Quality

Fecal coliform, biological (aquatic community), pH and dissolved oxygen impairments.

Plant Condition

The most prominent crops in the subbasin include cotton, tobacco, wheat and rye for grain, and soybeans. Timber revenues exceed agricultural revenues in Marion County.

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

Grazing animal populations are low compared to the rest of the state but higher in Chesterfield County. Confined livestock, turkey and poultry operations are clustered mostly to the north, while swine operations are located in the east and southern parts of the subbasin.

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	90	12	30	132
Conservation Tillage	3,586	-	1,709	5,295
Erosion Control	1,577	3,536	2,735	7,848
Irrigation Water Management	-	99	204	303
Nutrient Management	269	866	2,541	3,676
Pest Management	269	1,032	1,427	2,728
Prescribed Grazing	-	56	112	168
Trees and Shrubs	3,548	1,686	271	5,504
Wetlands	170	441	2,257	2,868
Wildlife Habitat	273	176	565	1,014

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
Chesterfield	17,622	390,359	267	-	81
Darlington	3,126	85,065	-	-	2,251
Dillon	2,998	31,665	-	57	410
Florence	3,545	60,525	-	-	19
Marion	1,727	14,178	-	1,074	2,844
Marlboro	4,457	155,878	-	-	350

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

TMDL Document	Number of Stations	Parameter of Concern	Status	WQMS ID Standard Attained
Pee Dee Basin	3	Fecal Coliform	Completed & Approved	-
Thompson Creek	2	Fecal Coliform	Approved & Implementing	-

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

Organization	Description	Contact	Telephone
SCDNR	Great Pee Dee Scenic River Project	SC DNR	803-734-9135
NRCS	South Darlington Watershed Project	Stephen Henry	803-765-5350
NRCS	Hemingway Watershed Project	Stephen Henry	803-765-5350
SCDHEC	Watershed Water Quality Assessment: Pee Dee River Basin (2000)	Roger Hall	803-898-4142

EXECUTIVE SUMMARY

Other Watershed Considerations

RESOURCE CONCERNS

Soils

The Middle Pee Dee subbasin contains two major land resource areas: the Piedmont, which makes up less than 10% of the area and the Coastal Plain, which comprises the remaining 90% of the subbasin. About 43% of land has limitations due to wetness (Table 7). All of the wetness occurs in soils in the Coastal Plain portion of the subbasin and is associated with hydric soils along streams in riparian areas and on uplands flats (Figure 5, Table 10). Droughtiness is a major concern in about 28% of the area (Table 7) and occurs mostly in the sandy soils of the Sand Hills in the upper part of the subbasin in Chesterfield and Marlboro counties (Figure 1). Low soil organic matter in these sandy soils is a soil health concern. Erosion is a major resource concern in the upper portion of the subbasin especially in Chesterfield County (Figure 4). Nearly all of the acreage in the Piedmont portion of the subbasin is highly erodible. In the Coastal Plain portion of the subbasin, only one-quarter of the land is classified as highly or potentially highly erodible (Figure 4, Table 9). Over 60% of the land in the Middle Pee Dee subbasin is either prime farmland (25%) or statewide important farmland (35%) and occurs throughout 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 (1,309,755 ac).

Land Capability Class 1	Acres		Percent			
1 - Slight limitations	126,298		10%			
% Land by Subclass Limitation						
Land Capability Classes 2-8	Erosion (e)		Wetness(w)		Droughtiness (s)	
	Acres	Percent	Acres	Percent	Acres	Percent
2 - Moderate limitations	79,590	6%	123,015	9%	67,894	5%
3 - Severe limitations	27,424	2%	221,861	17%	138,696	11%
4 - Very severe limitations	36,097	3%	63,653	5%	118,869	9%
5 - No erosion hazard, but other limitations	-	-	12,302	1%	-	-
6 - Severe limitations; unsuitable for cultivation; limited to pasture, range, forest	14,935	1%	56,297	4%	35,108	3%
7 - Very severe limitations; unsuitable for cultivation; limited to grazing; forest, wildlife habitat	1,771	0%	86,796	7%	5,875	0%
8 - Miscellaneous areas; limited to recreation, wildlife habitat, water supply	-	-	289	0%	381	0%

RESOURCE CONCERNS

Prime Farmland

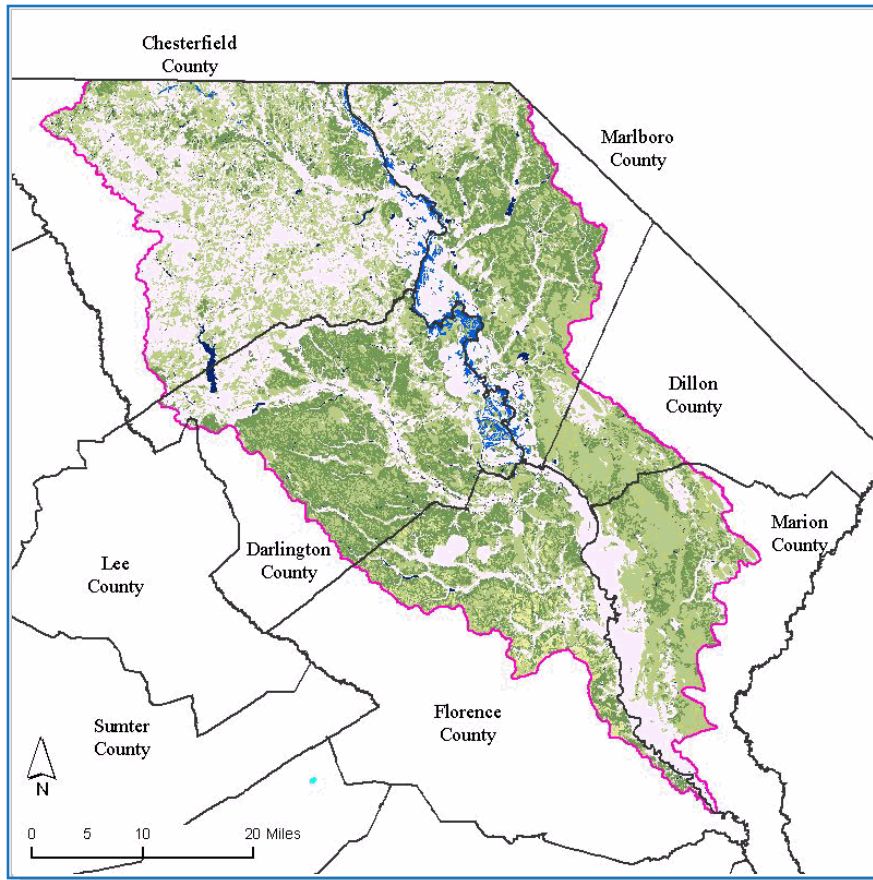


FIGURE 3:
PRIME FARMLAND
(See NRCS 2007 [a] and [b] in
References section.)

Table 8:
PRIME FARMLAND

Prime Farmland Categories	Acres	Percent of Land
All areas are prime farmland	305,552	23%
Farmland of statewide importance	459,371	35%
Not prime farmland	509,337	39%
Prime farmland if drained	17,919	1%
Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	0	0%
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	17,295	1%

RESOURCE CONCERNS

Highly Erodible Land

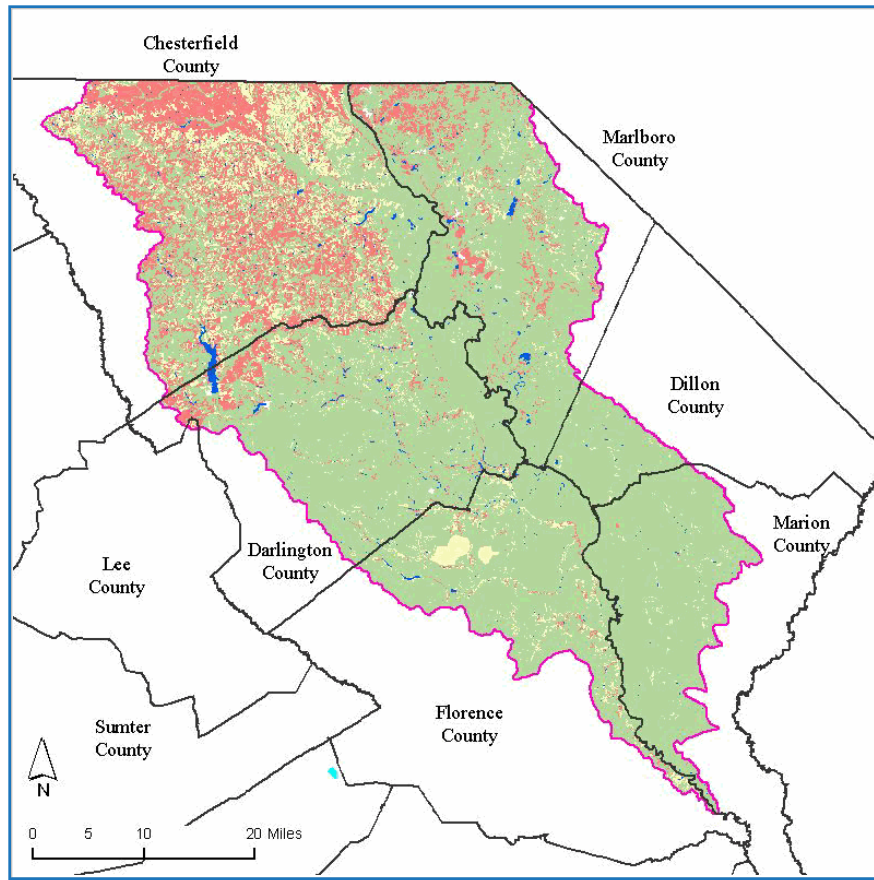


FIGURE 4:
HIGHLY ERODIBLE LAND
(See NRCS 2007 [a] and [b] in
References section.)

Table 9:
HIGHLY ERODIBLE LAND

Highly Erodible Land Categories	Acres	Percent of Watershed
■ Highly erodible land	188,231	14%
■ Not highly erodible land	990,821	76%
■ Potentially highly erodible land	110,961	8%

RESOURCE CONCERNS

Hydric Soils

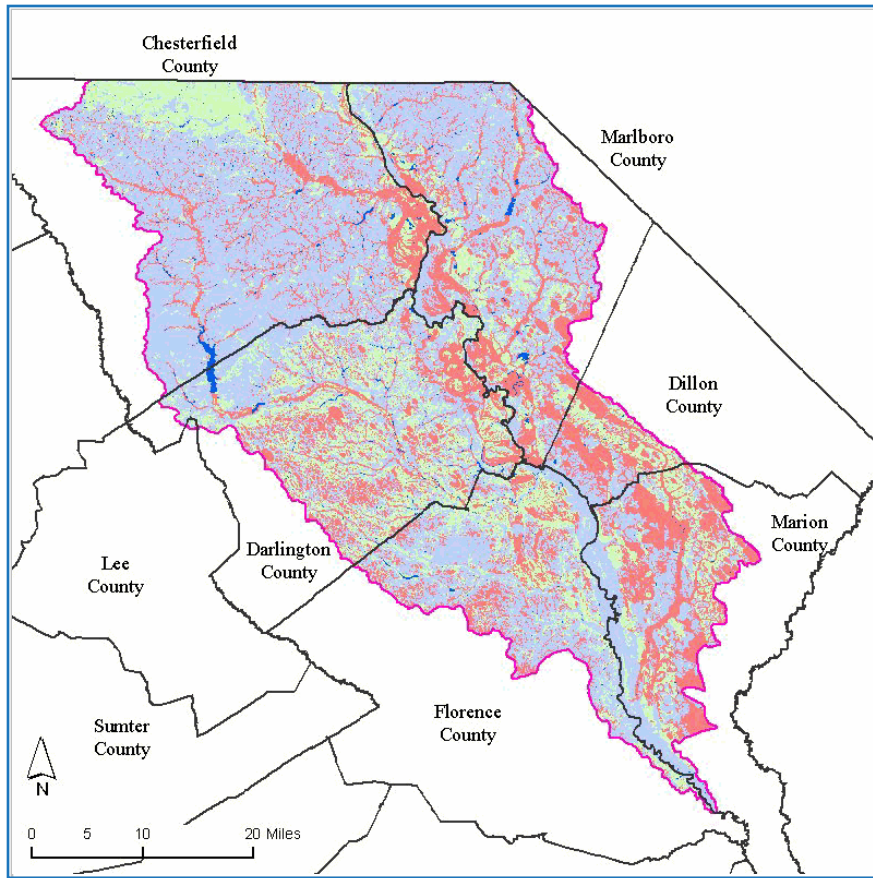


FIGURE 5:
HYDRIC SOILS
(See NRCS 2007 [a] and [b] in
References section.)

Table 10:
HYDRIC SOILS

Hydric Soils Categories	Acres	Percent of Watershed
All Hydric	331,330	25%
Not Hydric	289,283	22%
Partially Hydric	688,861	53%

RESOURCE CONCERNS

Water Quantity

While the Pee Dee is free-flowing in South Carolina, upstream in North Carolina several dams have been constructed on it. The opening and closing of these dams causes dramatic swings in the depth of the river in South Carolina. The sharing of water between the two states has sometimes been a matter of controversy, particularly during period of drought.

Irrigated water usage is typically low and fairly consistent throughout the subbasin with Florence County using the most for irrigation (Table 12). Another agricultural use for water is for livestock (confined and grazing) watering, and while this is less intensive than for irrigation, it is typically more widespread. Much of the subbasin is located in the SCDHEC's Notice of Intent (NOI) or Capacity Use (CU) areas designated for the regulation of groundwater withdrawal. A considerable portion of the watershed in Florence and Marion Counties is located on a cone of depression as described by the SCDNR (Figure 6).

RESOURCE CONCERNS

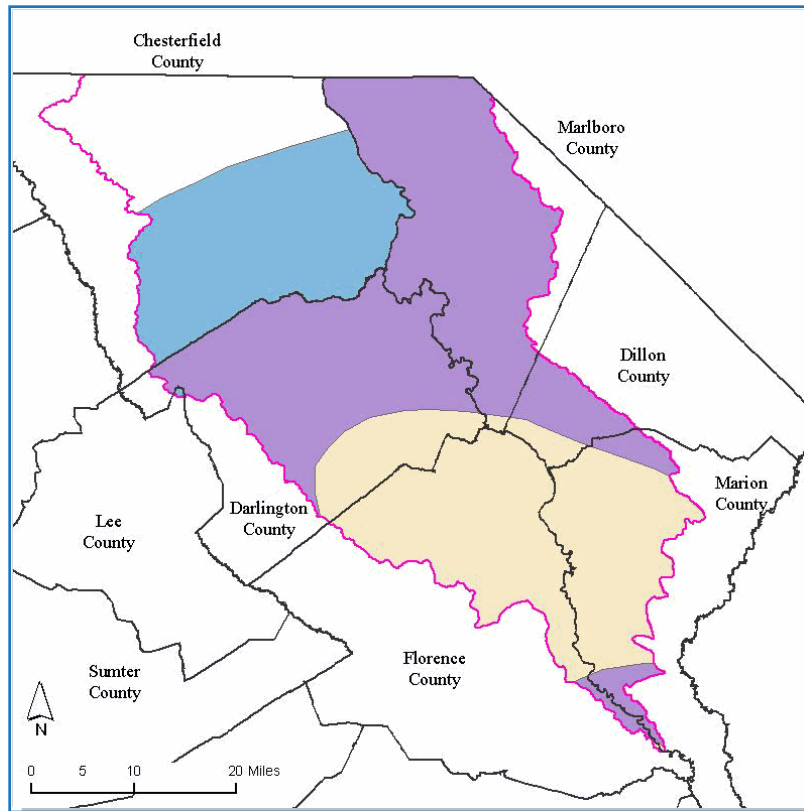





FIGURE 6:
WATERSHED RELATIVE TO CAPACITY
USE AREAS, NOTICE OF INTENT
AREAS, AND CONES OF DEPRESSION

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

Area	Percent of Watershed
 % Watershed in Cone of Depression and Capacity Use (CU) Area	29%
 % Watershed in SCDHEC Capacity Use (CU) Area	41%
 % Watershed in SCDHEC Notice of Intent (NOI) Area	18%

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
Chesterfield	1.50	50,579	1,269	2.5	1,182
Darlington	3.53	96,968	948	1.0	3,724
Dillon	1.80	90,048	1,928	2.1	934
Florence	5.29	103,576	2,505	2.4	2,112
Marion	1.90	57,783	575	1.0	3,304
Marlboro	2.92	74,405	2,136	2.9	1,367

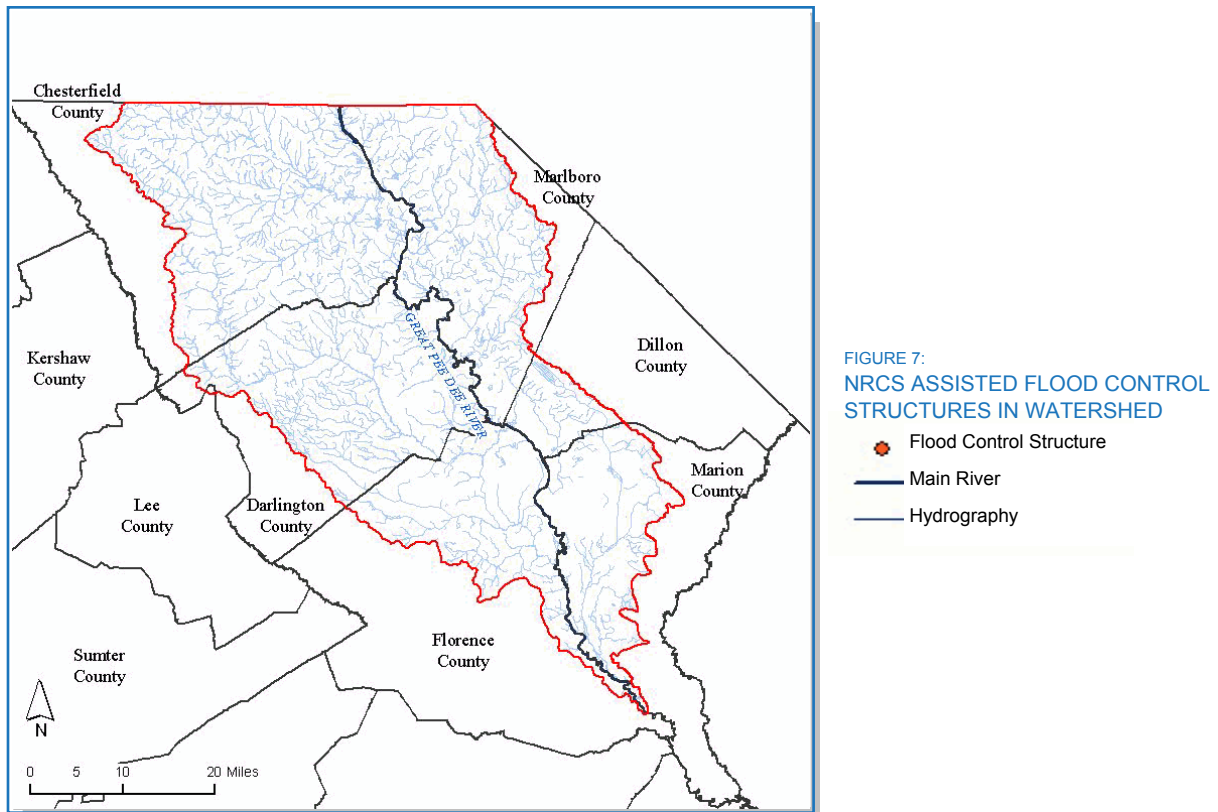


Table 13:
NRCS IMPLEMENTED FLOOD CONTROL STRUCTURES

Number of Structures (in Watershed)	Maximum Storage (AcFt)	Number of Structures by Hazard Class			
		High	Low	Significant	Unclassified
0	-	0	0	0	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 fecal coliform concern will be addressed through ongoing TMDLs (Table 5). Other impairments of the biological (aquatic community) criteria are accompanied by indicators affecting aquatic life use such as pH and dissolved oxygen (Table 15).

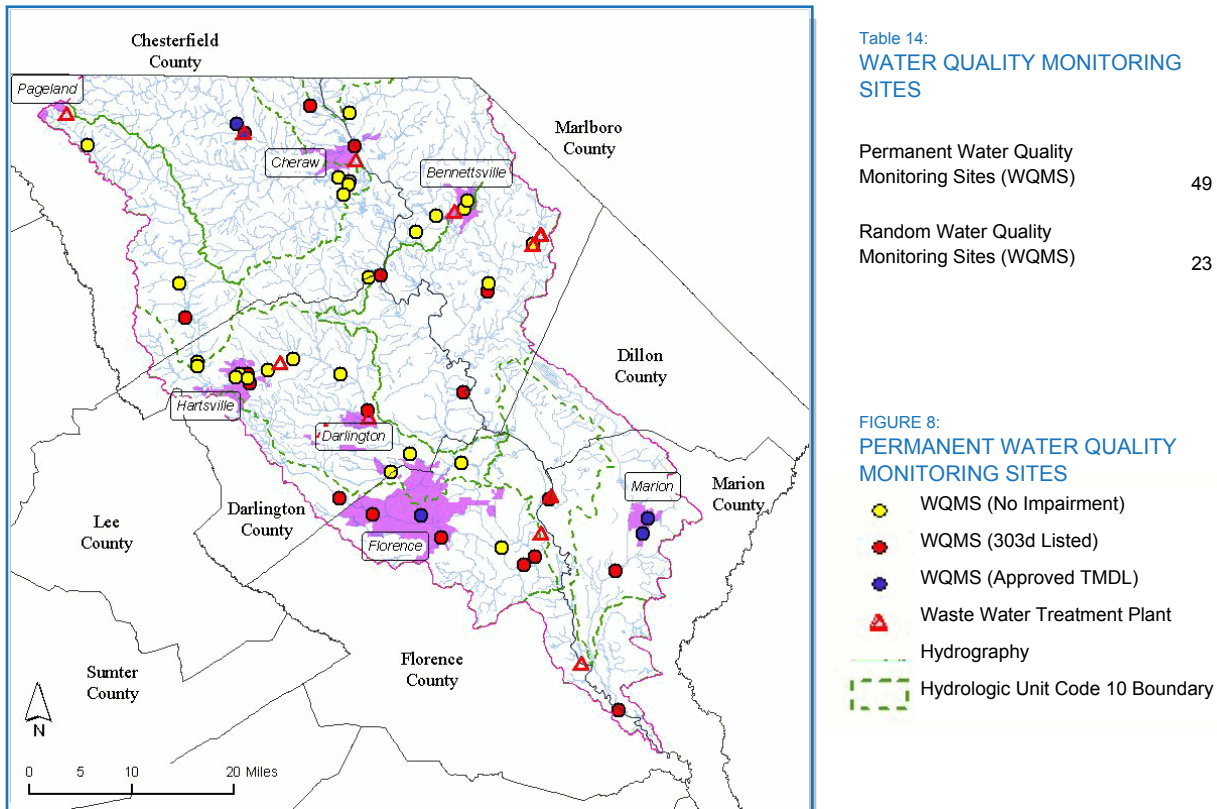


Table 15: NUMBER OF MONITORING SITES SHOWING SURFACE WATER QUALITY IMPAIRMENTS (See SCDHEC 2006 in References for the state 303(d) list.)

Recreational Use Standard		Fish Tissue Standard		Shellfish Harvest Standard	
Parameter	Impairments	Parameter	Impairments	Parameter	Impairments
Fecal Coliform	11	Mercury	11	Fecal Coliform	NA
		PCB's	0		
Aquatic Life Use Standard					
Parameter	Impairments	Parameter	Impairments	Parameter	Impairments
Biological	6	Dissolved Oxygen	10	Total Phosphorus	0
Chlorophyll A	0	Ammonia Nitrogen	1	pH	3
Chromium	0	Nickel	0	Turbidity	1
Copper	4	Total Nitrogen	0	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 (see Clemson Extension Forest Services 2003 in References) 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, tobacco, wheat and rye for grain and soybeans.

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.

In the sandhills, plants are a complex of xeric pine and pine-hardwood forest types adapted to sandy soils, typically found fluvial sand ridges. Historically, a canopy of longleaf pine and a sub canopy of turkey oak prevail, this was interspersed with scrub oak species and scrub-shrub cover. Management that includes burning encourages the development of longleaf pine-wiregrass communities.

Upland areas consist of forests dominated by hardwoods, primarily with oaks and hickories, and typically on fire-suppressed upland slopes near river floodplains or between rivers and tributaries. Vegetation composition is similar to oak-hickory forest in the Piedmont, where it is a major vegetation type. Representative canopy trees are: white oak (*Quercus alba*), black oak (*Quercus velutina*), post oak (*Quercus stellata*), mockernut hickory (*Carya tomentosa*), pignut hickory (*Carya glabra*), loblolly pine (*Pinustaeda*), flowering dogwood (*Cornus florida*) and black gum (*Nyssa sylvatica*).

In the river bottoms on the coastal plains, one frequently finds hardwood-dominated woodlands with moist soils that are usually associated with major river floodplains and creeks. Characteristic trees include: sweetgum (*Liquidambar styraciflua*), loblolly pine (*Pinus taeda*), water oak (*Quercus nigra*), willow oak (*Quercus phellos*), laurel oak (*Quercus laurifolia*), cherrybark oak (*Quercus pagoda*) and American holly (*Ilex opaca*).

Another common feature in this subbasin is the Carolina Bay. Carolina bays are isolated wetlands in natural shallow depressions that are largely fed by rain and shallow groundwater. These bays have an elliptical shape and generally a northwest to southeast orientation. Carolina bays vary but tend to host many different plant and animal species.

RESOURCE CONCERNS

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	Marlboro, Dillon, Darlington, Florence, Marion
All Wheat for grain	Chesterfield, Marlboro, Florence, Marion, Dillon, Darlington
Corn for grain	Chesterfield, Marlboro, Darlington, Dillon, Marion, Florence
Forage - land used for all hay and haylage, grass silage, and greenchop	Chesterfield, Darlington, Marlboro
Rye for grain	Chesterfield
Soybeans	Florence, Dillon, Darlington, Marlboro, Marion, Chesterfield
Tobacco	Florence, Marion, Dillon
Timber, Top 10 Rank in SC	Marion
Timber Revenues Exceed Ag. Revenues	Marion

Table 17:

FEDERALLY LISTED THREATENED AND ENDANGERED PLANT SPECIES IN WATERSHED

(See USFW 2006 in References section.)

Common Name	Latin Name	Status
Canby's dropwort	<i>Oxypolis canbyii</i>	Endangered
Chaff-seed	<i>Schwalbea americana</i>	Endangered
Rough-leaved loosestrife	<i>Lysimachia asperulaefolia</i>	Endangered

RESOURCE CONCERNS

Fish and Wildlife

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	<i>Picoides borealis</i>	Endangered
Wood stork	<i>Mycteria americana</i>	Endangered

Table 19:

FEDERALLY LISTED THREATENED AND ENDANGERED AQUATIC SPECIES IN WATERSHED

(See USFW 2006 in References section.)

Common Name	Latin Name	Status
Shortnose sturgeon	<i>Acipenser brevirostrum</i>	Endangered
Carolina heelsplitter	<i>Lasmigona decorata</i>	Endangered, Critical Habitat

ECONOMIC & SOCIAL FACTORS

Domestic Animals

Grazing animal populations tend to be more concentrated in Chesterfield County but are in general low compared to other parts of the state (Table 20). The general trend for confined livestock is that turkey and poultry operations are clustered mostly to the northern counties of Chesterfield, Marlboro and Darlington Counties where Chesterfield County ranks third in the state in turkey production. Swine operations tend to be more abundant in the eastern and southern parts of the subbasin (Figure 9).

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
Chesterfield	9,307	9,357	19
Darlington	4,462	2,358	(D)
Dillon	1,526	1,373	43
Florence	4,268	3,769	36
Marion	5,243	3,628	26
Marlboro	3,302	4,210	(D)

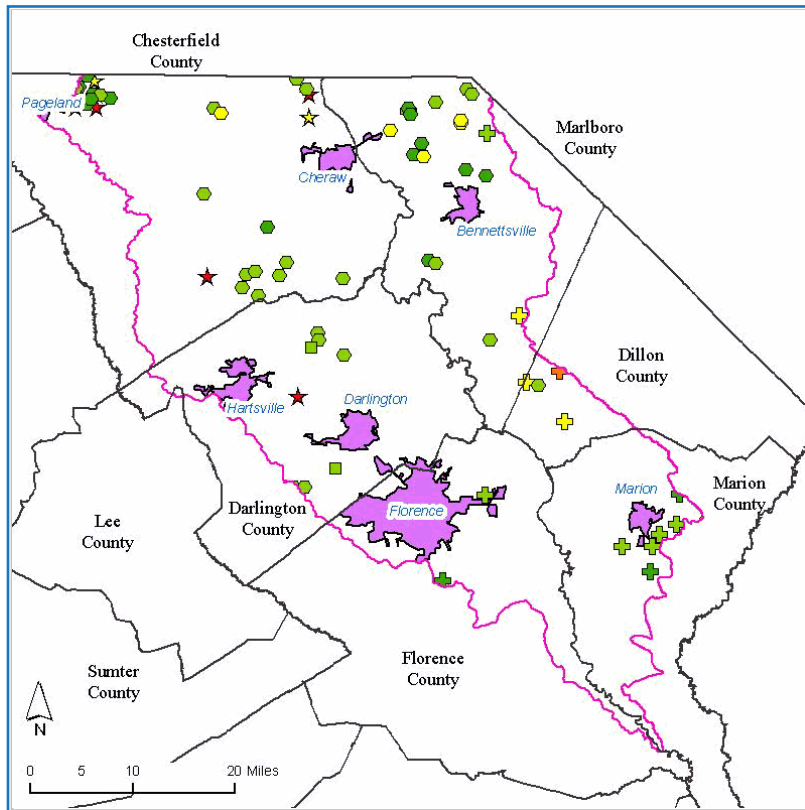


Table 21:
CONFINED ANIMAL POPULATION [As given by SCDHEC] (Au = Animal Unit = 1,000 lbs)

Beef Live Weight (Au)	-
Dairy Live Weight (Au)	560
Horse Live Weight (Au)	-
Poultry Live Weight (Au)	9,627
Swine Live Weight (Au)	4,532
Turkey Live Weight (Au)	15,633

FIGURE 9:
TYPE AND SIZE OF CONFINED ANIMAL OPERATION

Permit Design Count (Live Weight AU)	Symbol
0 - 163	Small Green Square
164 - 372	Medium Green Square
373 - 680	Large Green Square
681 - 1360	Yellow Square
1361 - 7076	Red Square
Beef	Asterisk (*)
Dairy	Solid Square
Other	Triangle
Poultry	Circle
Swine	Plus (+)
Turkey	Star

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

ECONOMIC & SOCIAL FACTORS

The number of full-time farmers is *higher* than the state average of 47% and farm sizes are *larger* than the state average of 197 ac (Table 22); both parameters suggest above average levels of participation in conservation programs. Farm sizes have remained on average constant between 1997 and 2002 compared to a 13% reduction of farm size across the state for the same period. Loss of cropland between 1997 and 2002 is estimated at 10%, somewhat higher than the SC average cropland loss 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)
Chesterfield	595	43%	29%	216
Darlington	361	53%	37%	447
Dillon	197	70%	50%	570
Florence	612	57%	29%	280
Marion	213	60%	36%	438
Marlboro	222	50%	48%	518
Weighted Avg*	382	51%	37%	396

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
Chesterfield	62,417	7,714	54,702	460
Darlington	39,579	18,866	20,712	219
Dillon	69,247	22,793	46,454	81
Florence	35,055	29,761	5,294	400
Marion	24,157	16,352	7,804	141
Marlboro	22,518	10,853	11,665	146
Weighted Avg*	38,970	15,570	23,399	258



REFERENCES

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
Chesterfield	28	14	(D)	22	16	(D)	37	(D)	21
Darlington	12	8	6	3	26	24	20	(D)	(D)
Dillon	9	3	4	2	(D)	(D)	42	-	42
Florence	6	7	2	10	7	(D)	26	(D)	19
Marion	13	13	3	12	31	38	40	-	36
Marlboro	19	(D)	11	1	39	35	(D)	-	45

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.
Chesterfield	4	3	19	30	33	16	26
Darlington	17	16	(D)	(D)	(D)	37	30
Dillon	7	12	43	-	1	(D)	(D)
Florence	27	25	36	(D)	15	(D)	33
Marion	26	23	26	-	12	(D)	(D)
Marlboro	22	21	(D)	-	(D)	(D)	41

REFERENCES

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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).

Middle Atlantic Coastal Plain (63)

The Middle Atlantic Coastal consists of low elevation, flat plains, with many swamps, marshes, and estuaries. Forest cover in the region, once dominated by longleaf pine in the Carolinas, is now mostly loblolly and some shortleaf pine, with patches of oak, gum, and cypress near major streams. Pine plantations for pulpwood and lumber are typical, with some areas of cropland. In South Carolina, the Middle Atlantic Coastal Plain is divided into three level IV ecoregions Carolinian Barrier Islands and Coastal Marshes (63g), Carolina Flatwoods (63h), Mid-Atlantic Floodplains and Low Terraces (63n).

Southeastern Plains (65)

The Southeastern Plains are irregular with broad interstream areas have a mosaic of cropland, pasture, woodland, and forest. In the past centuries, human activities (logging, agriculture and fire suppression) removed almost all of the longleaf pine forests. Elevations and relief are greater than in the Southern Coastal Plain (75), but generally less than in much of the Piedmont (45). The ecoregion has been divided into three level IV ecoregions within South Carolina: Sand Hills (65c), Atlantic Southern Loam Plains (65l), and Southeastern Floodplains and Low Terraces (65p). Note: The Atlantic Southern Loam Plains (65l) is a major agricultural zone, with deep, well-drained soils, and is characterized by high percentages of cropland.

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

APPENDIX

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.