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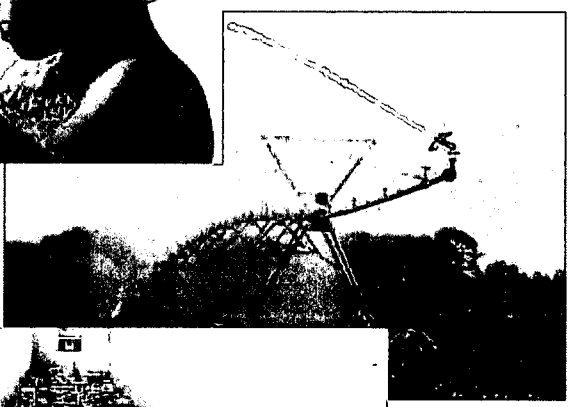
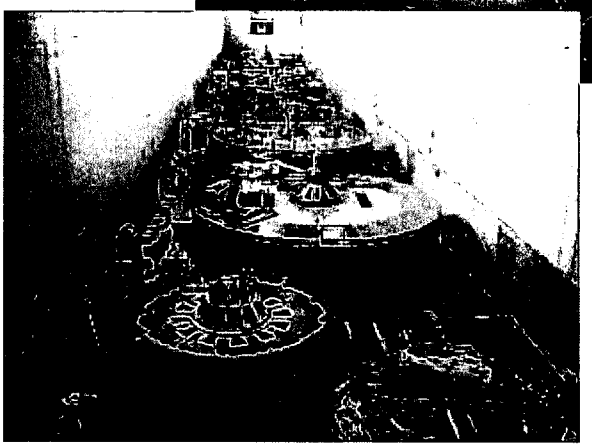
Bureau of Water

South Carolina Department of Health and Environmental Control

South Carolina Water Use Report
2005 Annual Summary





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South Carolina Water Use Report
2005 Summary

South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, SC 29201

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Bureau of Water
April 2006

Forward

The South Carolina Department of Health and Environmental Control (DHEC) is committed to the responsible management of South Carolina's water resources by encouraging continued conservation and reasonable use to ensure a sustainable supply for present and future demands. The South Carolina *Surface Water Withdrawal and Reporting Act*, §49-4-10 et. seq., and the South Carolina *Groundwater Use and Reporting Act*, §49-5-10 et. seq., require water users that withdraw three (3) million gallons or greater in any month to register with and report use annually to the Water Use Program at DHEC.

Water Use data is used by the State of South Carolina to better define the distribution and demand for our surface and groundwater resources across the state. Data from the Water Use Program at DHEC is shared between other local, state, and federal regulatory and scientific agencies to establish a common understanding of the demands placed upon our water resources. This common database has proven critical in water management decisions and water use conflict resolution.

Statistics utilized in this report represent data obtained from registered users of the Water Use Program. Consumptive use from private domestic wells, small surface water irrigation intakes, facilities that do not meet the reporting threshold, or data from facilities failing to report their annual water use are not included in this annual summary. For the year 2005, compliance of reporting facilities exceeded 99.9%, with eight (8) facilities failing to report water use prior to the writing of this report.

If you have questions about this or previous Annual Water Use Reports, or would like to obtain further information about reported water withdrawals in South Carolina, please contact:

Water Use Program
SCDHEC Bureau of Water
2600 Bull Street
Columbia, SC 29201
www.scdhec.net/water

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Introduction

South Carolinians have enjoyed an available fresh water supply that is clean, abundant, easily attainable and, for all practical purposes, inexhaustible. In South Carolina today, close to 1.2 million people rely on groundwater and 2.8 million people rely on surface water for their drinking water and sundry uses. According to the U.S. Census Bureau, South Carolina will increase its population by 600,000 people by 2025 and the U.S. Department of Agriculture reports development converts approximately 100,000 acres per year to urban uses. This growth and development in the state has placed increasing demand on our water supplies.

In conjunction with natural conditions, the continued impact to groundwater systems through human induced contamination (physical and chemical) or natural impact demonstrate the vulnerability of this finite resource and the continuing need to closely monitor, manage and preserve the resource in South Carolina for current and future generations. The state General Assembly declared that,

"...the groundwater resources of the State be put to beneficial use to the fullest extent to which they [are] capable and to provide and maintain conditions which are conducive to the development and use of all water resources."

Consistent and accurate data collection is requisite in establishing water use trends and implementing reasonable management strategies. Water use reporting outside of designated Capacity Use Areas has been historically voluntary. As of January 1, 2001, anyone withdrawing groundwater or surface water in excess of three (3) million gallons per month (in any month) must register and report that use annually to the South Carolina Department of Health and Environmental Control (Department). Registration and reporting is now a requirement of law and the Department has authority to take enforcement action against those not reporting.

Purpose and Methodology

The purpose of the annual *South Carolina Water Use Report* is to summarily present reported water use in South Carolina by county and use category during calendar year 2005. The Department maintains and continually updates the water use and facility databases utilized in this report. Water use data were collected by annual reporting of water use by registered users, as required and mandated by state law, and are reported in **million gallons** unless stated otherwise.

South Carolina Climate

The climate in South Carolina is affected by many factors, notably its location in the mid-latitudes and its proximity to the Appalachian Mountains and the Atlantic Ocean. During the summer, ocean current-driven air masses such as the Bermuda High routinely push tropical air from the Gulf of Florida upland from the coast. These warm, moist currents collide with cooler, drier air masses to generate rainfall, and at times, severe thunderstorms. In contrast, the Appalachian region in the northwest portion of the state experiences cooler temperatures, owing in part to orographic lifting of air masses and subsequent cooling effect provided by the increase in altitude. Altitude change also causes the additional phenomenon of down-slope heating as air masses from the mountains settle and compress over the eastern Blue Ridge and Piedmont region. During the winter months, the highlands of the Blue Ridge escarpment deflect northerly cold air to the southwest, often lessening the impact of major cold fronts and winter storms.

The vast majority of the state is classified as humid subtropical except in the Blue Ridge physiographic province, where it is humid continental. Average temperature varies from the mid-50s °F in the mountains to low-60s °F along the coast. The average annual precipitation is approximately 48 inches, with an annual total in the mountains of 70 to 80 inches, an annual total in the Midlands of 42 to 47 inches and an annual total along the coast of 50 to 52 inches. According to the South Carolina State Climatology Office, no month in South Carolina averages less than two inches of precipitation, regardless of location within the state. Measurable snowfall is rare, occurring one to three times a year with accumulations seldom remaining more than a day or two. Since 1900 severe droughts have occurred statewide in 1925, 1933, 1954, 1977, 1983, 1986, 1990, 1993, and most recently 1998. The latest multiyear drought was one of the most severe in South Carolina's history, with average precipitation, groundwater levels, and stream flows at or near record lows. In 2005 the average statewide temperature was 62.6°F, and the average rainfall for 2005 was 49.08 inches[1].

[1] Southeast Regional Climate Center, 1885-2006, "Monthly and Seasonal Climate Information"

South Carolina Geography and Hydrology

Geography and Physiography

South Carolina has a distinct natural beauty and an ecological diversity covering nearly 31,189 square miles, with approximately 30,111 square miles land area, 1,078 square miles inland or coastal waterways and 135 miles of coastline. The diversity we experience is resultant of climatic conditions, geology and three major physiographic regions: the Blue Ridge, the Piedmont and the Coastal Plain (**Figure 1**). The physiographic regions exhibit variations in topography, geology, hydrology and vegetation that directly affect the quantity, quality and availability of water resources in South Carolina.

Blue Ridge

The Blue Ridge physiographic province is located in the extreme northwest portion of Oconee and Pickens counties, and is distinguished from other parts of South Carolina by greater elevations (1,000 – 3,300 feet) and surface relief. Dissected mountains, rugged hills and thick forest regions characterize the land surface. Surface water in the Blue Ridge takes the form of high gradient creeks and streams and natural or man-made lakes, while groundwater occurs in the fractures of the bedrock and a thin veneer of soil and saprolite. In general, water quality of streams and groundwater is excellent in the Blue Ridge owing to the constant replenishment from abundant local rainfall.

Piedmont

The Piedmont physiographic province includes all counties, or portions of counties, northwest of and to the Fall Line, exclusive of those counties within the Blue Ridge province. Although similar to the Blue Ridge, the region demonstrates lower topographic relief, and therefore lower gradient streams, while elevations range from between 450 to 1000 feet above sea level. Counties in the Piedmont and Blue Ridge physiographic provinces depend primarily on the abundant regional rainfall that recharges lakes, reservoirs and major river systems. These surface water bodies constitute the primary source of water for public supply, industry, agriculture, and power production in the Piedmont Region. Similar to the Blue Ridge Province, groundwater occurs in the fractures of the bedrock and overlying soil and saprolite, and is also of good quality, except in locations where its chemical quality has been impacted by man.

Coastal Plain

The Coastal Plain physiographic province includes all counties, or portions of counties, extending from the Fall Line east to the Atlantic Ocean. Elevations of the exposed Coastal Plain range between 450 feet to sea level. Once below the Fall Line, rivers and streams assume a different character than found in the Piedmont. Where streams once rolled across exposed Piedmont rocks and tumbled down the occasional stretch of whitewater, the Coastal Plain dictates a slower pace and quiet meandering river channels with adjacent wetlands are common. Regional geology of the Coastal Plain is characterized by aquifers developed in layers of sands, silts, or high-permeability limestone confined by units of clay and silts or low-permeability limestone. The vast majority of South Carolina's water resources are contained as groundwater in the Coastal Plain, and in general, reliance on groundwater for irrigation, industrial uses, and public water supply increases dramatically east of the Fall Line (**Figure 7**). A generalized cross-section for the Coastal Plain aquifers is presented as **Figure 2**, and a brief outline of the major aquifers in South Carolina follows.

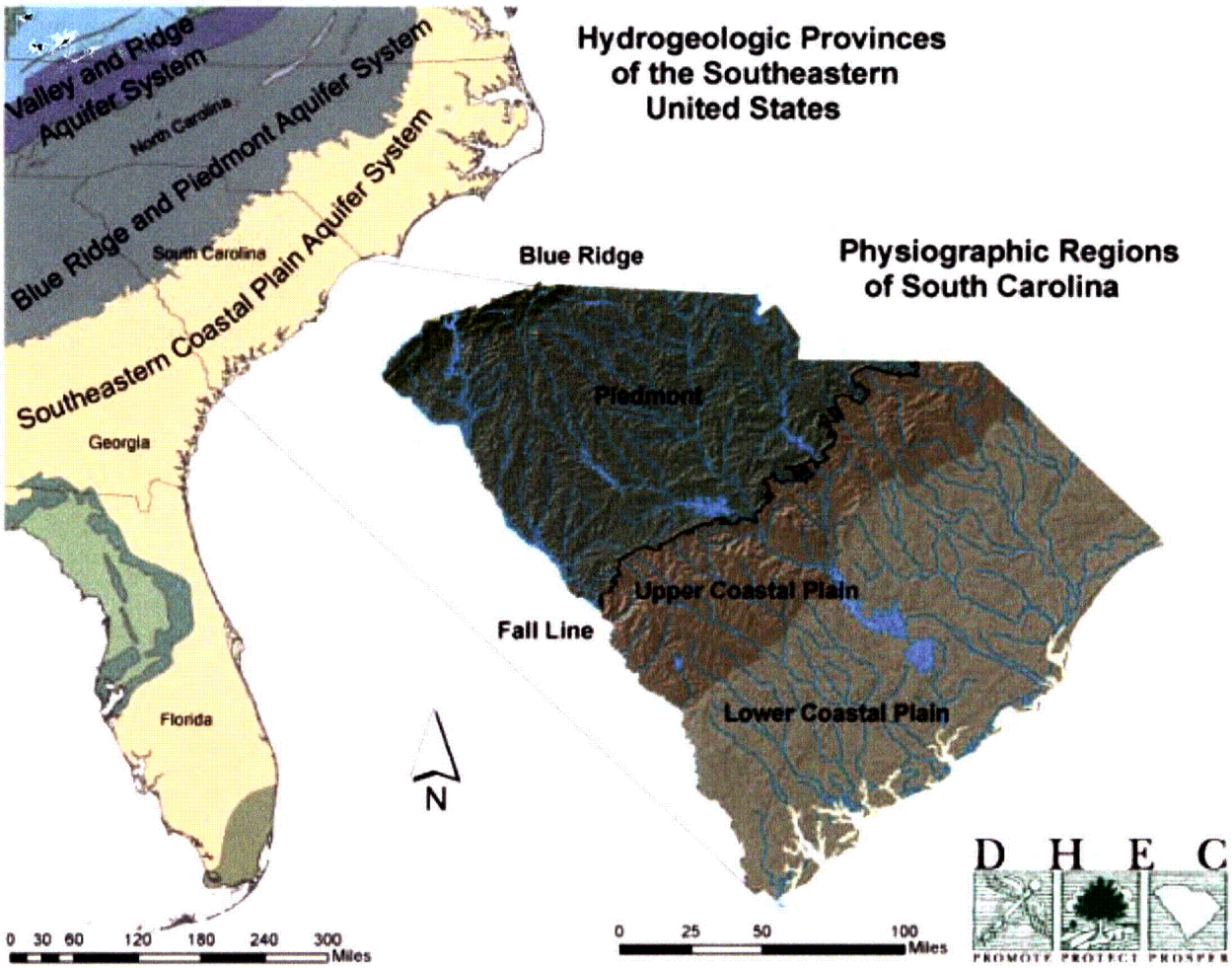

Figure 1: Hydrogeologic and Physiographic Setting for Water Use in South Carolina

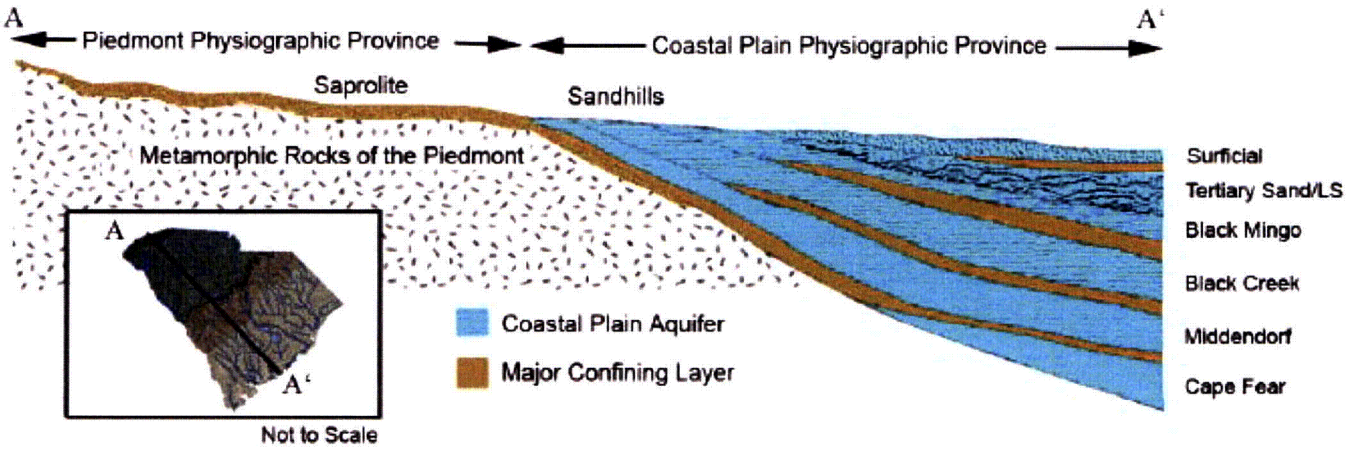

Figure 2: Generalized Hydrogeologic Cross-Section from the Blue Ridge through the Lower Coastal Plain in South Carolina

Groundwater Resources

Groundwater resources are found throughout the subsurface of South Carolina in varying quantities, qualities, and depths that reflect the nature of the geologic materials that host the respective aquifers. The following is a brief description of the State's major groundwater resources.

Crystalline Rock Aquifer System of the Blue Ridge and Piedmont

Geology of the Blue Ridge is typically characterized by clayey saprolite, ranging in depth from several feet to tens of feet, overlying metamorphic crystalline rock. The saprolite grades downward through a highly permeable transition zone to unaltered parent bedrock. Groundwater conditions of the bedrock are dependent on the number of fractures and degree of interconnection of the fracture systems. Groundwater moves slowly through the saprolite and discharges to surface water bodies, wells, or is released from storage to the underlying bedrock through fractures. Geology of the Piedmont is similar to that of the Blue Ridge, but the diminished relief allows for greater thickness of saprolite development. In general, wells in the Blue Ridge and Piedmont regions yield little water when compared to wells drilled in the Coastal Plain owing to the inherently low porosity and permeability of the crystalline rock present in the upstate.

Surficial Aquifer System

Shallow sands that comprise the Surficial aquifer are among the youngest of the Coastal Plain sediments and are found exclusively in the Lower Coastal Plain (**Figure 1**). This system is capable of producing water in modest amounts for irrigation and private drinking water supply, but is especially susceptible to contamination due to its shallow, unconfined nature. The Surficial sands are highly influenced by local precipitation and river stage and are especially prone to dramatic water level declines during times of drought.

Tertiary Limestone/Sand Aquifer System (Floridan Aquifer System)

In the southern half of the Coastal Plain, Tertiary aquifers consisting of sand grade southeastward into an ever thickening wedge of limestone. Development of the aquifer system is common in the Charleston, Dorchester, and Berkeley County area. Southwest of the Combahee and Salkehatchie Rivers, upper sections of the limestone become increasingly permeable owing to abundant voids created from dissolved marine fossils, and are capable of storing and supplying tremendous amounts of water. The majority of utilization of the aquifer occurs near the upper, highly permeable zone that supplies the majority of residential wells in Beaufort and Jasper Counties, and is the primary source of water for public supply, irrigation, and industry in the Low Country. This southern section of the Tertiary Limestone correlates regionally with the Upper Floridan Aquifer that extends from southern South Carolina to the southern keys of Florida.

Black Mingo Aquifer

Development of the Black Mingo is common in the vicinity of Charleston, Dorchester, and Berkeley counties, but has been largely overlooked south of Dorchester County owing to the increasingly prolific nature of the more shallow Tertiary Limestone (Floridan Aquifer System). Like the majority of Coastal Plain sediments, the nature of the aquifer differs dramatically from one area to the next. In the Charleston area, the aquifer is composed of permeable sand and limestone, while within the Upper Coastal Plain the Black Mingo is often a poorly producing aquifer composed of fine silt and clay, and therefore is unused in favor of the Middendorf or Tertiary Sand Aquifer.

Pee Dee Aquifer

The Pee Dee aquifer, where present, generally produces quality water at moderate rates. The aquifer matrix is composed of sand and silt separated by discontinuous intervals of clay. Development of the Pee Dee aquifer usually takes place in conjunction with the more prolific Black Creek aquifer and has become an excellent alternative to the often-overburdened Black

Creek for many uses, especially irrigation. The Pee Dee aquifer is most utilized in the northeast portion of the State, with the most demand centered between Florence and Horry Counties.

Black Creek Aquifer

Though present throughout much of the Coastal Plain, development of the Black Creek aquifer has been conducted primarily in the mid-to-northern portions of the Coastal Plain. The aquifer is composed of silt and fine sand with coarse sand in the Upper Coastal Plain. The Black Creek aquifer is an important source of water for public supply, irrigation, and industry from Marion County southeast to Georgetown County.

Middendorf Aquifer

The Middendorf Aquifer is a prolific source of water throughout the majority of the coastal plain and consists of coarse-grained fluvial sands near the Fall Line that grade to fine-grained marine sands and clay in the northern and eastern Lower Coastal Plain. The majority of the Pee Dee region, including Chesterfield, Darlington, Florence, and Marlboro Counties, as well as Orangeburg and Sumter Counties rely heavily on the Middendorf for irrigation, public supply, and industrial use. In the past decade, use of the Middendorf has increased along the southern coast in areas such as Charleston County.

Cape Fear Aquifer

Little published information exists from this deep sand aquifer owing to the few wells that have penetrated the formation. In general, water quality from the Cape Fear aquifer is poor over much of its extent owing to ancient, unflushed seawater and extensive mineralization. In South Carolina, the Cape Fear aquifer is largely unused.

Surface Water Resources

South Carolina's land surface is drained by eight (8) major river basins, all of which are critical to public water supply, irrigation, industry, and/or power generation. These major watersheds are shown as **Figure 3**, and a brief description of each major watershed follows.

Broad River Basin

The Broad River Watershed encompasses portions of North and South Carolina and drains the majority of Cherokee, Union, Spartanburg, and Greenville Counties. Portions of Chester, Fairfield, Richland and York counties are also included in the basin, and are drained by the Enoree, Pacolet, and Tyger Rivers, major tributary streams to the Broad River.

Catawba River Basin

Similar to the Broad River Basin, the watershed of the Catawba River drains counties in North and South Carolina east of a hydrologic divide in York, Chester, and Fairfield Counties. All or portions of the following counties lie within the basin: Chester, Fairfield, Kershaw, Lancaster, Richland, Sumter and York. The Catawba basin hosts Lake Wylie, Fishing Creek Reservoir, Lake Wateree, the Catawba and Wateree Rivers and associated tributary streams.

Edisto River Basin

The Edisto River Basin encompasses nearly all of Orangeburg County and portions of Aiken, Berkeley, Calhoun, Dorchester, and Lexington counties. The basin drains the central Coastal Plain and contains the North and South Forks of the Edisto River and tributaries, as well as numerous ecologically important wetland areas.

Pee Dee River Basin

The Pee Dee River Basin is the largest of South Carolina's watersheds and drains all or portions of Chesterfield, Darlington, Dillon, Georgetown, Horry, Kershaw, Lancaster, Lee, Marion, Marlboro, Williamsburg counties, and portions of southeastern North Carolina. The

Greater Pee Dee Watershed encompasses 5.1 million acres and includes the Pee Dee, Lynches, Waccamaw, and Sampit watersheds, as well as the Intracoastal Waterway and Winyah Bay.

Salkehatchie River Basin

The Salkehatchie basin is located entirely in the Coastal Plain and drains portions of Bamberg, Barnwell, Beaufort, Colleton, Hampton, and Jasper counties. The Coosawhatchie, Salkehatchie and Little Salkehatchie Rivers, along with their associated tributaries and local wetlands drain the basin and form tide-dominated distributary channels near the coast.

Saluda River Basin

The Saluda River Basin drains the central portion of South Carolina's Piedmont Region and encompasses major portions of Greenville and Pickens counties, as well as portions of Abbeville, Greenwood, Laurens, Lexington, Richland, and Saluda Counties. The basin includes all tributary streams to the Saluda River and Lakes Greenwood and Murray, the latter being a critical source for public water supply and hydroelectric power in central South Carolina.

Santee River Basin

The Santee River basin originates near the confluence of the Catawba and Broad River Basins and includes two of the State's largest reservoirs, Lake Marion and Lake Moultrie. These two major surface water resources are important power generating assets for the South Carolina. The basin drains Berkeley, Calhoun, Charleston, Clarendon, Dorchester, and small portions of Georgetown and Sumter Counties via tributaries of the Cooper, Santee and Ashley Rivers.

Savannah River Basin

The Savannah River Basin stretches from the Blue Ridge to the Atlantic Ocean and encompasses the border counties of South Carolina. The watershed drains major portions of Abbeville, Aiken, Allendale, Anderson, Edgefield, Greenwood, Hapton, McCormick, Oconee, and Pickens County, as well as adjacent counties in Georgia. The watershed includes the Savannah, Chatooga, Seneca, Little River, Stevens Creek, Rocky, and Tugaloo Rivers, and discharges approximately 8.0 billion gallons per day.

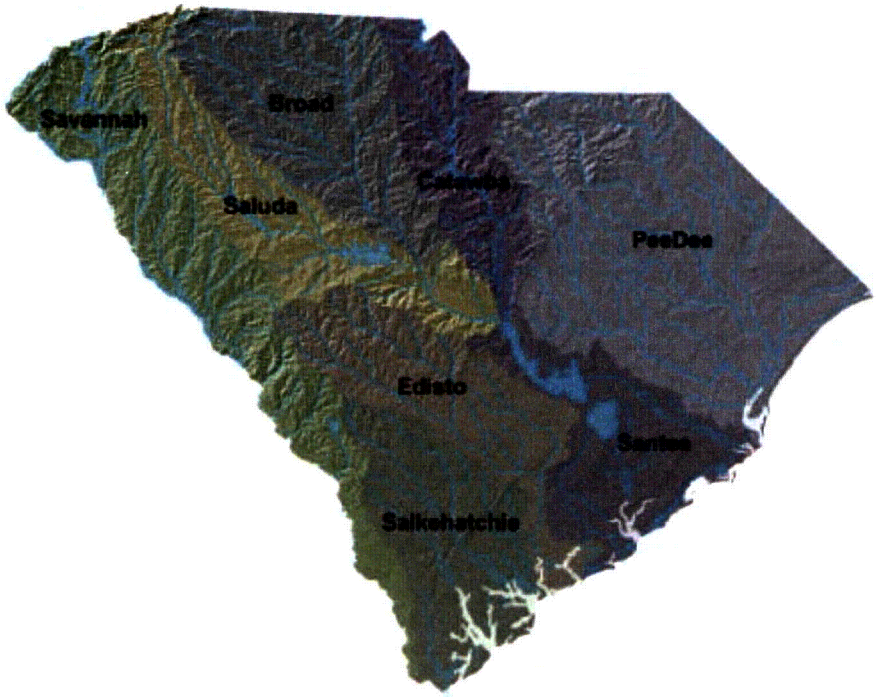

Figure 3: Major River Basins of South Carolina

Demographics

According to the 2000 Census, South Carolina's estimated population is 4,012,012. Approximately 54.6% of the population resides in an urban setting and approximately 45.4% reside in rural communities (**Figure 4**). South Carolina has approximately 25,000 farms, occupying 4,846,000 acres (7,572 square miles). Of this, approximately 2,270,000 acres (3,547 square miles) are cropland[2]. Major manufacturing industries are located along the I-26/I-85 corridor, specifically in the Greenville-Spartanburg Metropolitan Statistical Area (MSA), Columbia MSA, Charlotte-Gastonia-Rock Hill MSA and the Charleston MSA. Other manufacturing concentrations are located in the Augusta-Aiken MSA, and the Florence area[3]. South Carolina is served by 47 electric utilities and nine (9) generating utility companies with 51 power plants (206 generators) with a total rating capacity of 18,827.4 megawatts. Power production in the State (2005) totaled 94,363 million kilowatt hours[4].

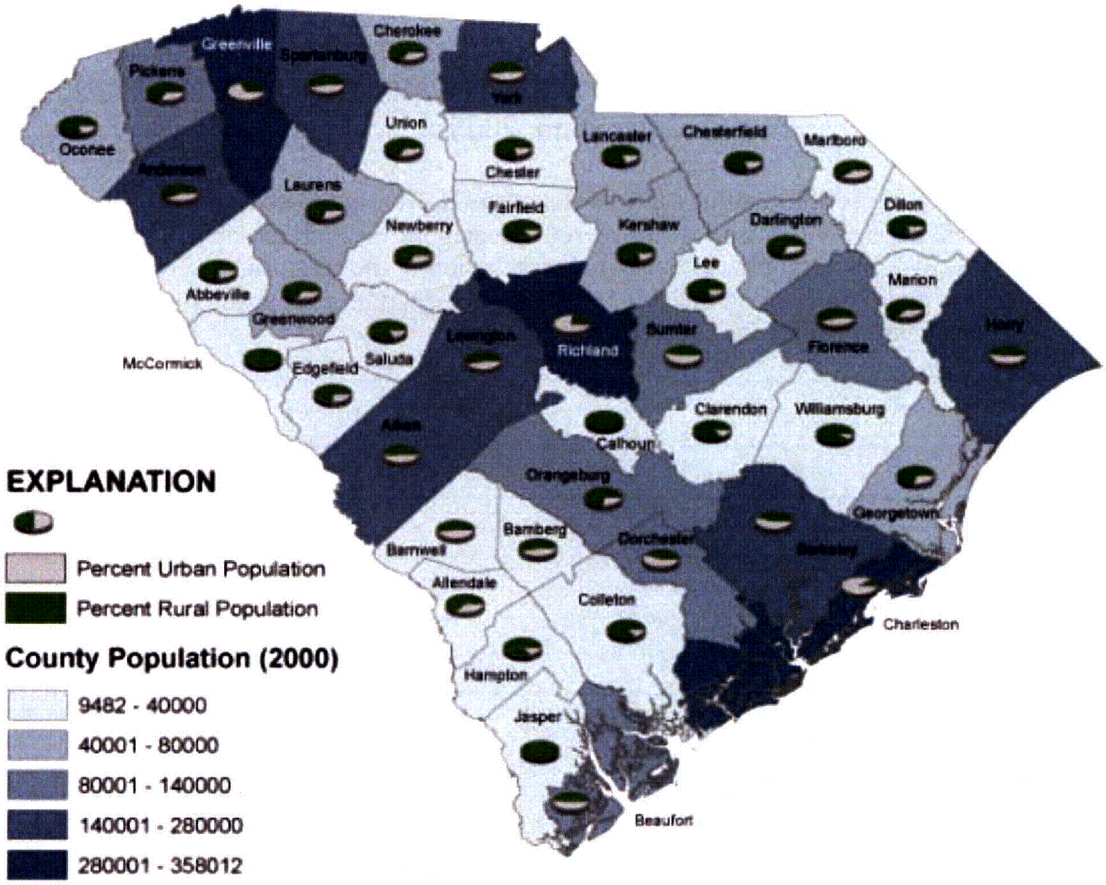

Figure 4: Population by County in South Carolina, 2000

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[2] 2002 Census of Agriculture, Volume 1 Geographic Area Series, Historical Highlights: "Table 1: 2002 and Earlier Census Years"

[3] S.C. Department of Commerce, 2000/2001 "South Carolina Industrial Directory."

[4] S.C. Budget and Control Board Statistical Abstract 2004

2005 Water Use Profile

Surface and Groundwater Use Summary by Category and County in South Carolina, 2005

The following section outlines all reported water use for the State of South Carolina for the calendar year 2005. Water use is summarized by category, and further tabulated on a county-by-county basis. Where appropriate, the spatial distribution of the magnitude of water use is demonstrated on an accompanying map with a breakdown chart of groundwater and surface water use as a percentage of total use for the category.

Reporting Water Withdrawers

For the reporting year 2005, South Carolina had registered 862 water withdrawers with 2,506 sources, 481 surface water facilities with 702 sources and 541 groundwater facilities with 1,804 sources.

Water Use Category	Facilities	GW Source	SW Source
Golf Course	248	262	272
Water Supply	223	770	78
Irrigation	222	491	237
Industrial	93	222	52
Hydroelectric	31	1	32
Thermoelectric	19	8	16
Mining	12	10	7
Aquaculture	9	11	8
Other	5	29	0
Total	862	1,804	702

Total Reported Water Use

Total water use reported for 2005 was more than 20 trillion gallons from 862 reporting facilities. Surface water withdrawal from 481 facilities accounted for approximately 20.4 trillion gallons, approximately 99.6% of total water use. Groundwater withdrawal from 541 reporting facilities accounted for approximately 72.1 billion gallons or approximately 0.4% of total use.

Water Use Category	Groundwater	Surface Water	Total	Percentage
Aquaculture	182.93	227.37	410.31	0.0020%
Golf Courses	3,099.41	8,808.68	11,908.10	0.0583%
Industrial	11,830.92	140,255.88	152,086.80	0.7445%
Irrigation	14,065.22	7,858.81	21,924.04	0.1073%
Mining	2,709.77	595.40	3,305.18	0.0162%
Other	105.63	NR	105.63	0.0005%
Hydroelectric	0.33	15,766,866.75	15,766,867.08	77.1793%
Thermoelectric	2,043.32	4,254,461.12	4,256,504.44	20.8357%
Water Supply	38,113.35	177,657.70	215,771.05	1.0562%

NR = None Reported

Water Use	2000	2001	2002	2003	2004	2005
Hydroelectric	10,281,681.91	9,796,267.91	11,415,081.44	18,958,207.77	15,203,000.521	15,766,867.08
Thermoelectric	2,240,508.37	1,624,984.88	2,467,042.32	3,558,474.88	3,232,104.071	4,256,504.44
Water Supply	148,265.21	193,525.29	212,402.79	197,088.27	209,464.303	215,771.05
Industrial	157,463.33	180,579.90	167,051.34	168,334.76	157,309.024	152,086.80
Irrigation	3,182.73	27,121.14	29,668.39	12,172.86	24,119.869	21,924.04
Golf Course	6,806.35	13,302.54	14,022.92	10,373.47	13,230.462	11,908.10
Mining	3,056.08	2,691.75	3,159.88	4,935.07	3,241.623	3,305.18
Aquaculture	13.67	865.17	2,283.95	1,451.98	1,355.631	410.31
Other	223.61	204.84	106.22	59.033	85.505	105.63
Total	12,841,201.26	11,839,543.42	14,310,819.25	22,911,098.09	18,843,911.009	20,428,882.61
Facilities	577	931	848	833	848	862

Water Use in Power Production

According to the 2001 Energy Use Profile, South Carolina has 9 power generating utility companies with 51 power plants containing 206 generators with a total rating capacity of 18,827.4 megawatts (2000). The type generators are as follows:

- 96- Hydraulic Turbine (conventional)
- 54- Gas Combustion Turbine
- 37- Steam Turbine (boiler)
- 16- Hydraulic Turbine (pump storage)
- 3- Internal Combustion (diesel)

The primary energy source for the generators is as follows:

- 112- Water
- 32- Diesel Fuel Oil
- 28- Coal
- 25- Natural Gas
- 7- Nuclear
- 2- Residual Fuel Oil

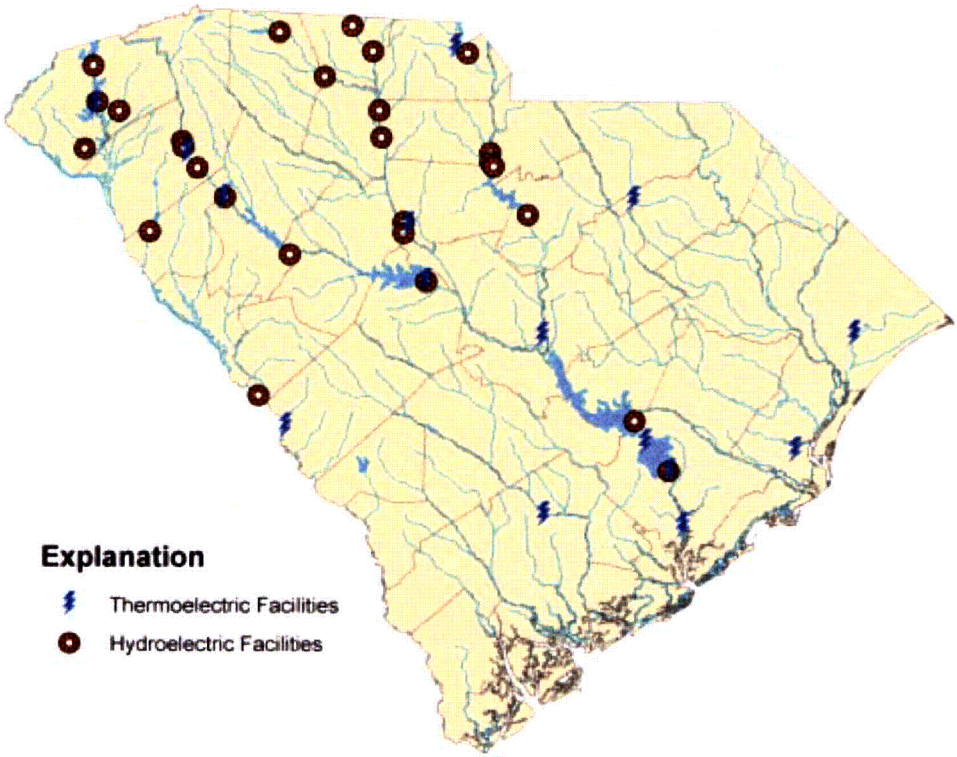


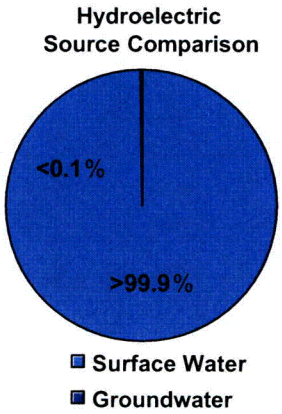
Figure 5: Distribution of Hydroelectric and Thermoelectric Facilities in South Carolina

Hydroelectric Water Use

Hydroelectric facilities employ energy from flowing water to generate electricity. Hydroelectric facilities utilize *impoundments* (reservoirs), *diversion* (run-of river), *or pumped storage* (reversible turbines). Water use is typically non-consumptive flow-through, with temporary diversion from down stream users. Reported water use for 31 hydroelectric sources accounted for approximately 15.766 trillion gallons, approximately 78.7% of reported water use for power production and 77.1% of total reported water use for the year.

County	Surface Water	Groundwater	County Total
Abbeville	37,686.0	NR	37,686.0
Anderson	191,000.0	NR	191,000.0
Berkeley	1,251,619.0	0.3	1,251,619.3
Cherokee	407,518.0	NR	407,518.0
Chester	2,067,474.0	NR	2,067,474.0
Edgefield	1,150,053.5	NR	1,150,053.5
Fairfield	2,944,701.1	NR	2,944,701.1
Greenwood	363,517.0	NR	363,517.0
Kershaw	1,242,431.0	NR	1,242,431.0
Lancaster	1,204,198.0	NR	1,204,198.0
Laurens	120,000.0	NR	120,000.0
Lexington	371,476.6	NR	371,476.6
Oconee	12,700.0	NR	12,700.0
Pickens	2,769,742.0	NR	2,769,742.0
Richland	469,660.9	NR	469,660.9
Spartanburg	17,962.7	NR	17,962.7
Union	186,662.0	NR	186,662.0
York	958,465.0	NR	958,465.0

NR = None Reported



	Surface Water	Groundwater
Source Total:	15,766,866.7	0.3

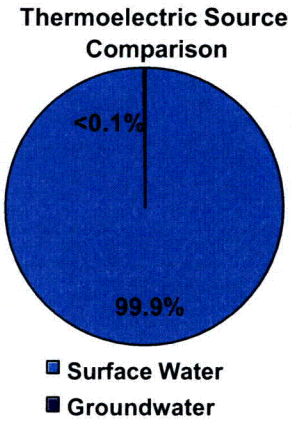
Total Hydro Power Use (million gallons):	**15,766,867.0**

Thermoelectric Water Use

Thermoelectric facilities generate electricity by superheating water to steam then passing the steam under pressure to turbines. Boilers are fired by coal, nuclear power or residual fuel oil. Large volumes of cooling water are required to condense the steam to the liquid state. Reported water use for 19 thermoelectric sources accounted for more than 4.254 trillion gallons, approximately 21.3% of reported water use for power production and 20.8% of total reported water use for the year.

County	Surface Water	Groundwater	County Total
Aiken	45,545.000	NR	45,545.000
Anderson	49,744.210	NR	49,744.210
Berkeley	12.283	NR	12.283
Berkeley	203,543.688	NR	203,543.688
Cherokee	NR	1.022	1.022
Colleton	0.677	NR	0.677
Colleton	1,484.532	NR	1,484.532
Darlington	277,346.000	362.284	277,708.284
Fairfield	561,069.950	NR	561,069.950
Georgetown	4,324.245	NR	4,324.245
Horry	44,742.870	NR	44,742.870
Lexington	56,018.900	NR	56,018.900
Oconee	2,814,848.000	NR	2,814,848.000
Orangeburg	NR	1,667.052	1,667.052
Richland	158,609.723	NR	158,609.723
York	37,184.000	NR	37,184.000

NR = None Reported



	Surface Water	Groundwater
Source Total:	4,254,474.08	2,030.36

Total Thermoelectric Use (million gallons):	**4,256,504.44**

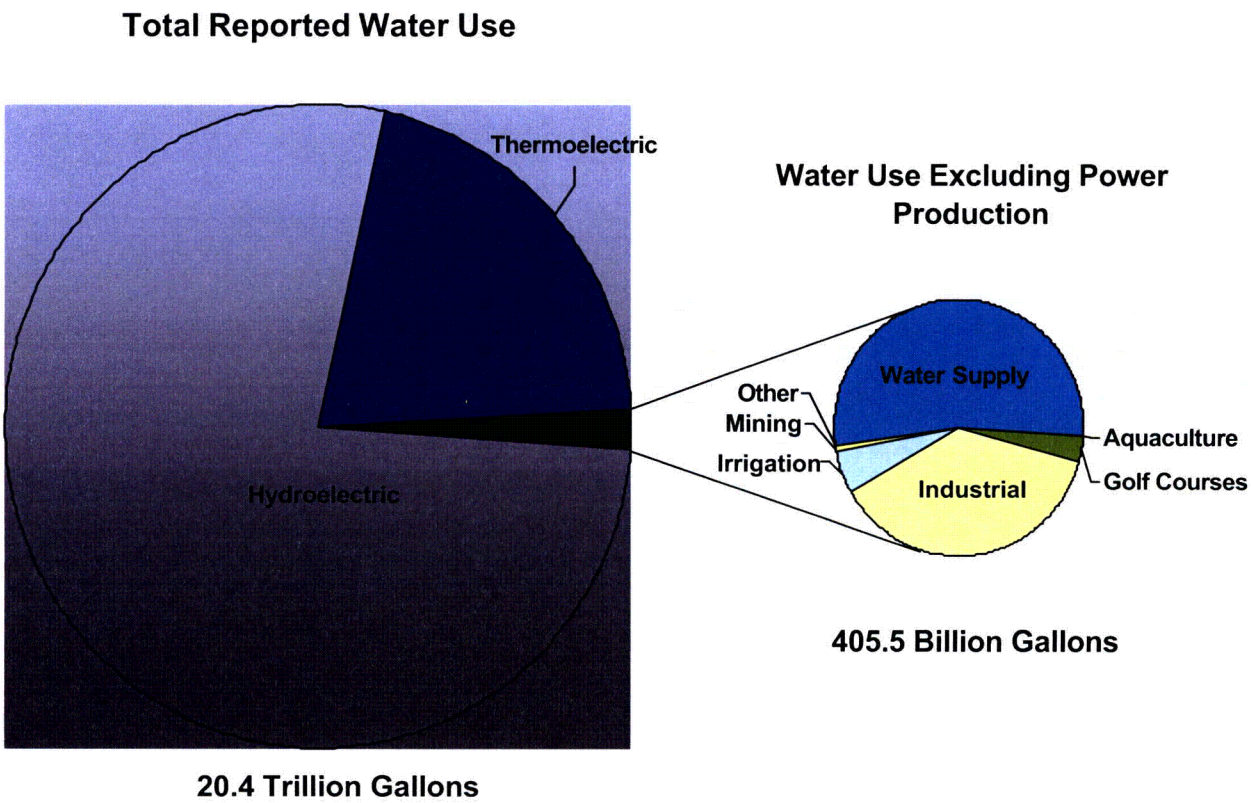


Figure 6: Reported Water Use by Category in South Carolina, 2005

Reported Water Use Excluding Power Production

During 2005, reported water use (excluding power production) totaled more than 405.5 billion gallons with surface water withdrawal accounting for 335.4 billion gallons or approximately 82.7%, and groundwater withdrawal accounting for 70.1 billion gallons or approximately 17.3%. Non-power production-oriented water use accounted for 1.9% of all reported water use in 2005.

	Groundwater	*Surface Water*	*Total*	*Percentage of Total Non-Power Use*
Aquaculture	182.93	227.37	410.31	0.10%
Golf Courses	3,099.41	8,808.68	11,908.10	2.94%
Industrial	11,830.92	140,255.88	152,086.80	37.50%
Irrigation	14,065.22	7,858.81	21,924.04	5.41%
Mining	2,709.77	595.40	3,305.18	0.82%
Other	105.63	NR	105.63	0.03%
Water Supply	38,113.35	177,657.70	215,771.05	53.21%

Total Non-Power Water Use	**405,511.10**	million gallons

NR = None Reported

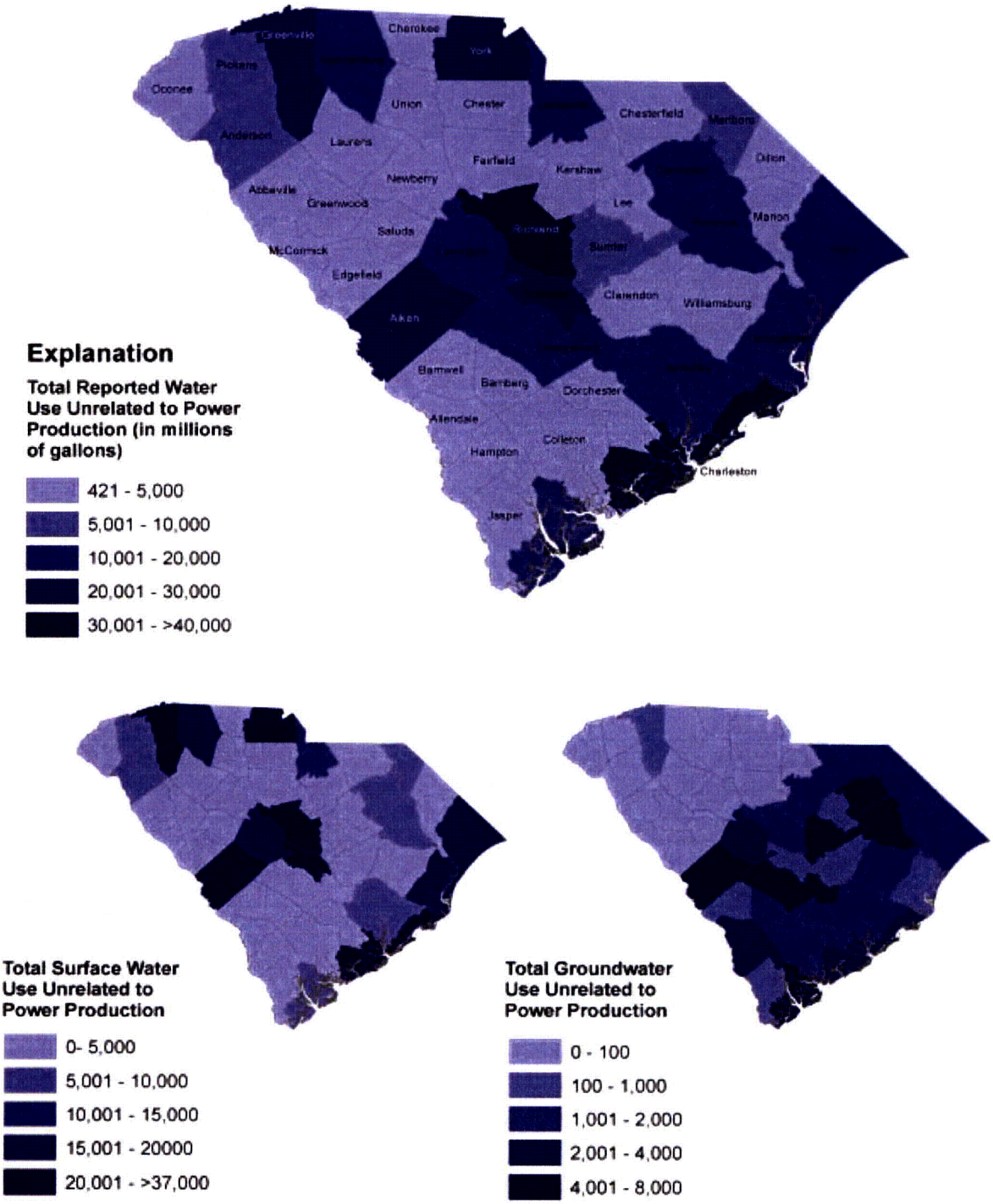


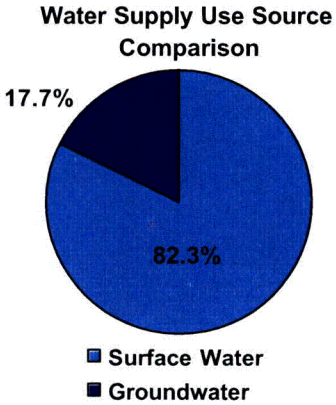
Figure 7: Distribution of Reported Water Usage Unrelated to Power Production, 2005. Figures in millions of gallons per year.

Water Supply

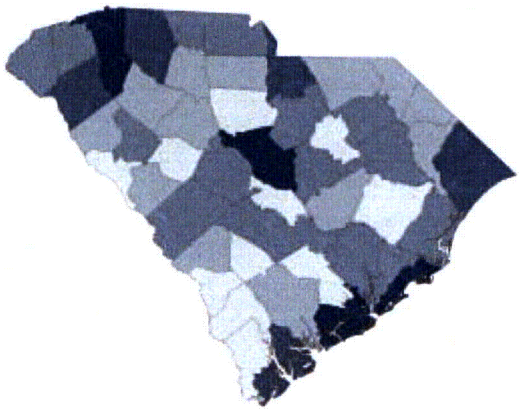
South Carolina has federally 1,551 defined public water systems, of which 685 are community water systems. The public water systems provide water to 3,450,928 citizens. Water withdrawal for public water supply from 223 reporting suppliers totaled 209.464 billion gallons, with 82 surface water sources accounting for 169.699 billion gallons and 745 groundwater sources accounting for 39.764 billion gallons.

County	Groundwater	Surface Water	County Total
Abbeville	3.31	1,033.64	1,036.95
Aiken	4,786.54	2,395.24	7,181.78
Allendale	383.40	NR	383.40
Anderson	NR	7,664.00	7,664.00
Bamberg	477.66	NR	477.66
Barnwell	830.31	NR	830.31
Beaufort	3,906.87	7,096.70	11,003.57
Berkeley	195.05	5,071.40	5,266.45
Calhoun	133.34	NR	133.34
Charleston	2,398.08	27,901.81	30,299.88
Cherokee	NR	2,561.60	2,561.60
Chester	NR	1,192.20	1,192.20
Chesterfield	851.34	768.53	1,619.87
Clarendon	695.59	NR	695.59
Colleton	731.80	NR	731.80
Darlington	2,361.41	NR	2,361.41
Dillon	1,594.17	NR	1,594.17
Dorchester	655.46	NR	655.46
Edgefield	NR	1,450.00	1,450.00
Fairfield	67.82	568.29	636.12
Florence	3,927.20	1,461.58	5,388.78
Georgetown	853.25	2,268.05	3,121.30
Greenville	34.71	24,125.50	24,160.21
Greenwood	7.93	4,496.20	4,504.13
Hampton	534.26	NR	534.26
Horry	782.16	14,890.15	15,672.31
Jasper	334.03	NR	334.03
Kershaw	624.70	1,711.02	2,335.72
Lancaster	NR	8,081.36	8,081.36
Laurens	NR	1,624.37	1,624.37
Lee	604.46	NR	604.46
Lexington	434.25	5,102.52	5,536.78
Marion	1,315.39	NR	1,315.39
Marlboro	956.03	0.00	956.03
McCormick	NR	388.65	388.65
Newberry	21.63	1,928.53	1,950.16
Oconee	53.88	3,557.52	3,611.40
Orangeburg	625.79	3,153.58	3,779.37
Pickens	NR	3,454.32	3,454.32
Richland	325.04	22,683.18	23,008.22
Saluda	79.02	NR	79.02
Spartanburg	24.85	14,045.89	14,070.74
Sumter	5,921.14	NR	5,921.14
Union	NR	1,200.99	1,200.99
Williamsburg	551.86	NR	551.86
York	29.63	5,780.89	5,810.52

NR = None Reported



Average daily use for any reporting water supply facility (223 total) in 2005 equaled 468,251 gallons of groundwater and 2,182,661 gallons of surface water per day.



Distribution of reported water supply water use in South Carolina, 2005. Darker shades indicate the highest use areas.

	Groundwater	Surface Water
Source Total:	38,113.35	177,657.70

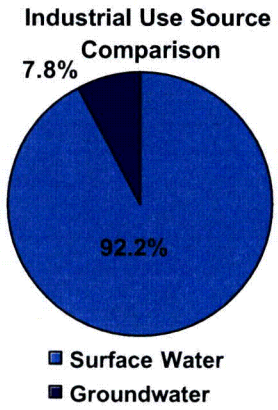
Total Water Supply Use (millions of gallons):	**215,771.05**

Industrial Use

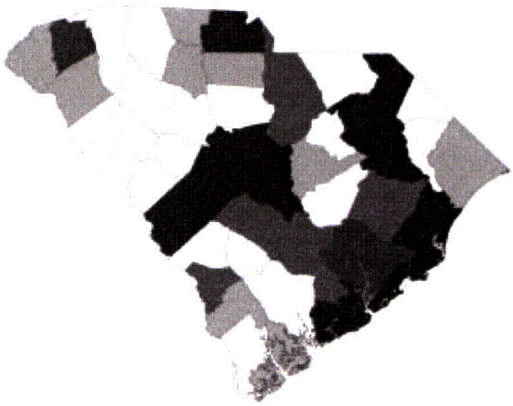
Water withdrawal for industrial use from 93 reporting industries totaled 152.086 billion gallons, with 52 surface water sources accounting for 140.255 billion gallons and 222 groundwater sources accounting for 11.830 billion gallons. Water use at industrial facilities is predominantly cooling water (contact and non-contact) with return to surface water systems through permitted NPDES discharges.

County	Groundwater	Surface Water	County Total
Aiken	1,323.157	20,847.091	22,170.248
Allendale	817.910	NR	817.910
Anderson	NR	89.900	89.900
Beaufort	139.794	NR	139.794
Berkeley	1,200.791	3,110.428	4,311.219
Calhoun	132.610	26,392.680	26,525.290
Charleston	42.456	8,873.806	8,916.262
Cherokee	NR	504.126	504.126
Chester	1.963	94.377	96.340
Darlington	1,488.859	7,036.072	8,524.931
Dorchester	998.879	54.703	1,053.582
Florence	718.343	7,652.703	8,371.046
Georgetown	112.980	12,294.862	12,407.842
Greenville	59.315	NR	59.315
Greenwood	8.000	53.600	61.600
Hampton	488.500	NR	488.500
Horry	160.116	15.880	175.996
Kershaw	499.542	978.150	1,477.692
Lancaster	NR	2,212.771	2,212.771
Lexington	409.109	9,691.832	10,100.941
Marion	NR	NR	0.000
Marlboro	280.237	7,609.400	7,889.637
Oconee	NR	583.026	583.026
Orangeburg	1,044.567	171.420	1,215.987
Pickens	NR	3,279.949	3,279.949
Richland	660.463	10,260.403	10,920.866
Spartanburg	13.673	NR	13.673
Sumter	318.687	NR	318.687
Union	2.780	571.500	574.280
Williamsburg	902.648	NR	902.648
York	5.539	17,877.200	17,882.739

NR = None Reported



Average daily use for any reporting industrial facility (93 total) in 2005 equaled 348,532 gallons of groundwater and 4,131,856 gallons of surface water per day.



	Groundwater	Surface Water
Source Total:	11,830.92	140,255.88

Total Industrial Use (millions of gallons):	**152,086.80**

Irrigation Use

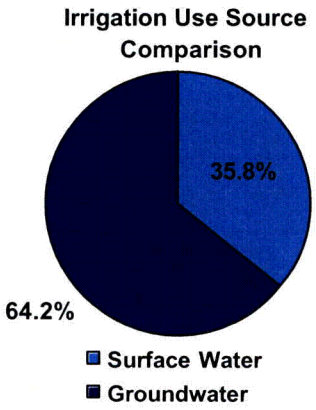
Water withdrawal for irrigation use from 222 reporting entities totaled 21.924 billion gallons, with 491 surface water sources accounting for 7.858 billion gallons and 413 groundwater sources accounting for 14.065 billion gallons.

County	Groundwater	Surface Water	County Total
Aiken	161.33	17.59	178.92
Allendale	2,791.02	156.01	2,947.03
Bamberg	744.07	493.16	1,237.24
Barnwell	112.83	83.84	196.67
Beaufort	659.45	18.29	677.74
Berkeley	0.24	1,110.14	1,110.38
Calhoun	541.10	113.13	654.22
Charleston	0.25	26.99	27.23
Chesterfield	230.03	23.23	253.26
Clarendon	44.83	49.03	93.86
Colleton	756.50	227.00	983.50
Darlington	5.13	221.68	226.80
Dillon	34.40	NR	34.40
Edgefield	21.00	456.05	477.05
Florence	253.64	7.20	260.84
Georgetown	21.80	2,025.72	2,047.52
Greenville	0.40	19.00	19.40
Greenwood	1.20	NR	1.20
Hampton	1,246.03	18.00	1,264.03
Horry	145.60	66.33	211.93
Jasper	425.15	0.00	425.15
Lee	79.86	7.00	86.86
Lexington	1,794.75	513.97	2,308.72
Marion	25.60	0.01	25.61
Marlboro	117.01	74.77	191.78
McCormick	NR	0.00	0.00
Newberry	55.23	122.50	177.73
Oconee	NR	287.75	287.75
Orangeburg	2,664.31	738.56	3,402.87
Pickens	NR	0.00	0.00
Richland	14.69	0.20	14.89
Saluda	NR	367.52	367.52
Spartanburg	NR	105.06	105.06
Sumter	1,117.81	504.40	1,622.22
Williamsburg	NR	2.15	2.15
York	NR	2.55	2.55

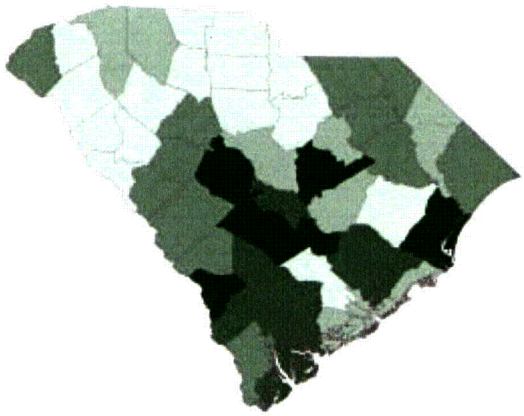
NR = None Reported

	Groundwater	Surface Water
Source Total:	14,065.22	7,858.81

Total Irrigation Use (millions of gallons):	**21,924.04**



Average daily use for any reporting irrigation facility (222 total) in 2005 equaled 173,580 gallons of groundwater and 96,986 gallons of surface water per day.

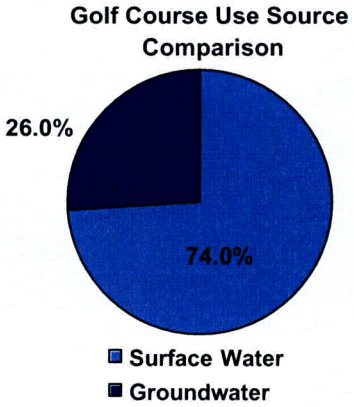


Distribution of reported irrigation water use in South Carolina, 2005. Darker shades indicate the highest use areas.

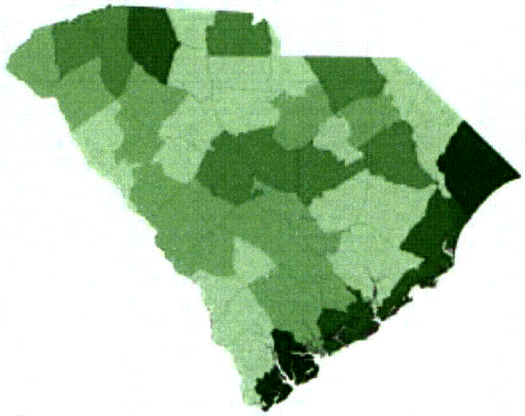
Golf Course Use

Water withdrawal from 248 reporting courses for golf course irrigation totaled 13.230 billion gallons, with 272 surface water sources accounting for 8.808 billion gallons and 262 groundwater sources accounting for 3.099 billion gallons.

County	Groundwater	Surface Water	County Total
Aiken	13.10	100.33	113.43
Anderson	NR	76.37	76.37
Barnwell	NR	59.62	59.62
Beaufort	1,115.37	1,418.36	2,533.73
Berkeley	19.20	6.42	25.62
Calhoun	28.30	41.10	69.40
Charleston	648.03	199.50	847.52
Chester	22.50	9.00	31.50
Chesterfield	NR	268.48	268.48
Clarendon	5.08	37.90	42.98
Colleton	63.03	1.37	64.40
Darlington	3.00	126.90	129.90
Dorchester	44.00	NR	44.00
Edgefield	43.61	39.00	82.61
Florence	128.95	61.41	190.37
Georgetown	0.00	775.90	775.90
Greenville	30.77	171.35	202.12
Greenwood	10.20	59.54	69.74
Hampton	34.75	NR	34.75
Horry	587.00	2,899.80	3,486.80
Kershaw	39.52	54.80	94.32
Lancaster	0.73	8.92	9.65
Laurens	NR	84.08	84.08
Lexington	28.95	173.59	202.54
Marion	0.00	21.31	21.31
McCormick	NR	32.65	32.65
Newberry	12.00	6.00	18.00
Oconee	NR	86.50	86.50
Orangeburg	18.67	90.77	109.45
Pickens	NR	229.76	229.76
Richland	24.53	320.87	345.40
Spartanburg	10.51	1,009.38	1,019.89
Sumter	120.57	175.31	295.87
Union	NR	9.00	9.00
York	47.06	153.41	200.47
		NR = None Reported	
	Groundwater	Surface Water	
Source Total:	3,099.41	8,808.68	
Total Golf Course Use (million gallons):		**11,908.10**	



Average daily use for any reporting golf course (248 total) in 2005 equaled 34,240 gallons of groundwater and 97,311 gallons of surface water per day.



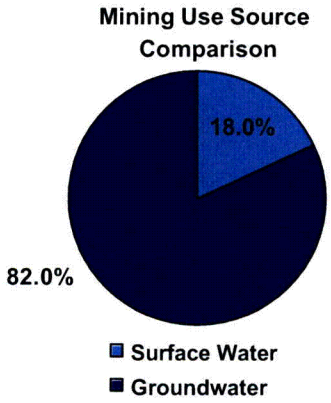
Distribution of reported golf course water use in South Carolina, 2005. Darker shades indicate the highest use areas.

Mining Use

Water withdrawal associated with mining activities at 12 reporting facilities totaled 3.305 billion gallons, with 10 surface water sources accounting for 595.40 million gallons and 7 groundwater sources accounting for 2.709.77 billion gallons.

County	Groundwater	Surface Water	County Total
Aiken	21.310	NR	21.310
Berkeley	2.982	NR	2.982
Colleton	NR	2.164	2.164
Horry	NR	177.600	177.600
Lexington	446.870	415.640	862.510
Orangeburg	1,909.200	NR	1,909.200
Richland	312.850	NR	312.850
York	16.560	NR	16.560

NR = None Reported



	Groundwater	Surface Water
Source Total:	2,709.772	595.404

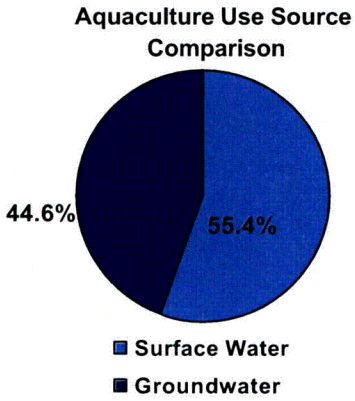
Total Irrigation Use (million gallons): **3,305.176**

Aquaculture Use

Water withdrawal from 9 reporting aquaculture-farming facilities totaled 0.410 billion gallons, with 8 surface water sources accounting for 227.37 million gallons and 11 groundwater sources accounting for 182.93 million gallons.

County	Groundwater	Surface Water	County Total
Beaufort	9.273	63.037	72.310
Berkeley	3.277	99.695	102.972
Charleston	NR	2.300	2.300
Dillon	35.600	NR	35.600
Hampton	122.283	NR	122.283
Richland	12.500	27.300	39.800
Spartanburg	NR	35.040	35.040

NR = None Reported



	Groundwater	Surface Water
Source Total:	182.933	227.372

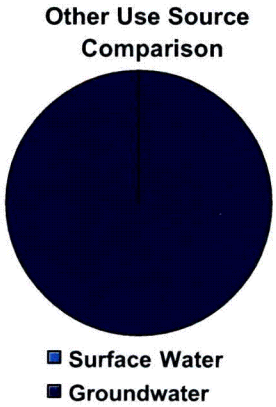
Total Aquaculture Use (million gallons): **410.305**

Other Use

Water withdrawal for other, non-specific use from 5 reporting facilities totaled 105.63 million gallons, with groundwater withdrawn from 29 sources accounting for all reported use.

County	Groundwater	Surface Water	County Total
Beaufort	34.760	NR	34.760
Charleston	1.564	NR	1.564
Darlington	0.465	NR	0.465
Dorchester	0.989	NR	0.989
Horry	67.856	NR	67.856

NR = None Reported



	Groundwater	Surface Water
Source Total:	105.634	NR

Total Other Use (million gallons): **105.634**

Appendix A: Surface and Groundwater Use Summary Tables

Surface Water Use Summary Table (Figures in Millions of Gallons)

County	County Total	Hydroelectric	Thermoelectric	Aquaculture	Golf Course	Industry	Irrigation	Mining	Water Supply
Abbeville	38,719.64	37,686.00	NR	NR	NR	NR	NR	NR	1,033.64
Aiken	68,905.24	NR	45,545.00	NR	100.33	20,847.09	17.59	NR	2,395.24
Allendale	156.01	NR	NR	NR	NR	NR	156.01	NR	NR
Anderson	248,574.47	191,000.00	49,744.21	NR	76.37	89.90	NR	NR	7,664.00
Bamberg	493.16	NR	NR	NR	NR	NR	493.16	NR	NR
Barnwell	143.46	NR	NR	NR	59.62	NR	83.84	NR	NR
Beaufort	8,596.38	NR	NR	63.04	1,418.36	NR	18.29	NR	7,096.70
Berkeley	1,464,560.78	1,251,619.01	203,543.69	99.70	6.42	3,110.43	1,110.14	NR	5,071.40
Calhoun	26,546.91	NR	NR	NR	41.10	26,392.68	113.13	NR	NR
Charleston	37,004.39	NR	NR	2.30	199.50	8,873.81	26.99	NR	27,901.81
Cherokee	410,583.73	407,518.00	NR	NR	NR	504.13	NR	NR	2,561.60
Chester	2,068,769.58	2,067,474.00	NR	NR	9.00	94.38	NR	NR	1,192.20
Chesterfield	1,060.24	NR	NR	NR	268.48	NR	23.23	NR	768.53
Clarendon	86.93	NR	NR	NR	37.90	NR	49.03	NR	NR
Colleton	1,715.07	NR	1,484.53	NR	1.37	NR	227.00	2.16	NR
Darlington	284,730.65	NR	277,346.00	NR	126.90	7,036.07	221.68	NR	NR
Dorchester	54.70	NR	NR	NR	0.00	54.70	NR	NR	NR
Edgefield	1,151,998.50	1,150,053.45	NR	NR	39.00	NR	456.05	NR	1,450.00
Fairfield	3,506,339.36	2,944,701.12	561,069.95	NR	NR	NR	NR	NR	568.29
Florence	9,182.90	NR	NR	NR	61.41	7,652.70	7.20	NR	1,461.58
Georgetown	21,688.77	NR	4,324.25	NR	775.90	12,294.86	2,025.72	NR	2,268.05
Greenville	24,315.85	0.00	NR	NR	171.35	NR	19.00	NR	24,125.50
Greenwood	368,126.34	363,517.00	0.00	NR	59.54	53.60	NR	NR	4,496.20
Hampton	18.00	NR	NR	NR	NR	NR	18.00	NR	NR
Horry	62,792.63	NR	44,742.87	NR	2,899.80	15.88	66.33	177.60	14,890.15
Jasper	0.00	NR	NR	NR	NR	NR	0.00	NR	NR
Kershaw	1,245,174.97	1,242,431.00	NR	NR	54.80	978.15	NR	NR	1,711.02
Lancaster	1,214,501.04	1,204,198.00	NR	NR	8.92	2,212.77	NR	NR	8,081.36
Laurens	121,708.45	120,000.00	NR	NR	84.08	NR	NR	NR	1,624.37
Lee	7.00	NR	NR	NR	NR	NR	7.00	NR	NR
Lexington	443,393.01	371,476.55	56,018.90	NR	173.59	9,691.83	513.97	415.64	5,102.52
Marion	21.31	NR	NR	NR	21.31	NR	0.01	NR	NR
Marlboro	7,684.17	NR	NR	NR	NR	7,609.40	74.77	NR	0.00
McCormick	421.30	NR	NR	NR	32.65	NR	0.00	NR	388.65
Newberry	2,057.03	NR	NR	NR	6.00	NR	122.50	NR	1,928.53
Oconee	2,832,062.80	12,700.00	2,814,848.00	NR	86.50	583.03	287.75	NR	3,557.52
Orangeburg	4,154.34	NR	0.00	NR	90.77	171.42	738.56	NR	3,153.58
Pickens	2,776,706.04	2,769,742.00	NR	NR	229.76	3,279.95	0.00	NR	3,454.32
Richland	661,562.56	469,660.89	158,609.72	27.30	320.87	10,260.40	0.20	NR	22,683.18
Saluda	367.52	NR	NR	NR	NR	NR	367.52	NR	NR
Spartanburg	33,158.09	17,962.72	NR	35.04	1,009.38	NR	105.06	NR	14,045.89
Sumter	679.71	NR	NR	NR	175.31	NR	504.40	NR	NR
Union	188,443.50	186,662.01	NR	NR	9.00	571.50	NR	NR	1,200.99
Williamsburg	2.15	NR	NR	NR	NR	NR	2.15	NR	NR
York	1,019,463.06	958,465.00	37,184.00	NR	153.41	17,877.20	2.55	NR	5,780.89
Grand Total:	**20,356,731.72**	**15,766,86.75**	**4,254,461.12**	**227.37**	**8,808.68**	**140,255.88**	**7,858.81**	**595.40**	**177,657.70**

NR = None Reported

Groundwater Use Summary Table (Figures in Millions of Gallons)

County	County Total	Hydroelectric	Thermoelectric	Aquaculture	Golf Course	Industry	Irrigation	Mining	Other	Water Supply
Abbeville	3.31	NR	NR	NR	NR	NR	NR	NR	NR	3.31
Aiken	6305.436	NR	NR	NR	13.1	1323.157	161.33	21.31	NR	4786.539
Allendale	3992.331	NR	NR	NR	NR	817.91	2791.018	NR	NR	383.403
Bamberg	1221.734	NR	NR	NR	NR	NR	744.073	NR	NR	477.661
Barnwell	943.142	NR	NR	NR	NR	NR	112.831	NR	NR	830.311
Beaufort	5865.52	NR	NR	9.273	1115.368	139.794	659.452	NR	34.76	3906.873
Berkeley	1434.151	0.329	12.283	3.277	19.2	1200.791	0.24	2.982	NR	195.049
Calhoun	835.351	NR	NR	NR	28.3	132.61	541.097	NR	NR	133.344
Charleston	3090.368	NR	NR	NR	648.027	42.456	0.245	NR	1.564	2398.076
Cherokee	1.022	NR	1.022	NR	NR	NR	NR	NR	NR	NR
Chester	24.463	NR	NR	NR	22.5	1.963	NR	NR	NR	NR
Chesterfield	1081.367	NR	NR	NR	NR	NR	230.032	0	NR	851.335
Clarendon	745.499	NR	NR	NR	5.08	NR	44.825	NR	NR	695.594
Colleton	1552.005	NR	0.677	NR	63.027	NR	756.5	NR	NR	731.801
Darlington	4221.139	NR	362.284	NR	3	1488.859	5.125	NR	0.465	2361.406
Dillon	1664.173	NR	NR	35.6	NR	NR	34.4	NR	NR	1594.173
Dorchester	1699.324	NR	NR	NR	44	998.879	NR	NR	0.989	655.456
Edgefield	64.605	NR	NR	NR	43.605	NR	21	NR	NR	NR
Fairfield	67.823	NR	NR	NR	NR	NR	NR	NR	NR	67.823
Florence	5028.126	NR	NR	NR	128.951	718.343	253.637	NR	NR	3927.195
Georgetown	988.028	NR	NR	NR	0	112.98	21.797	NR	NR	853.251
Greenville	125.195	NR	NR	NR	30.773	59.315	0.4	NR	NR	34.707
Greenwood	27.328	NR	NR	NR	10.2	8	1.2	NR	NR	7.928
Hampton	2425.814	NR	NR	122.283	34.75	488.5	1246.025	NR	NR	534.256
Horry	1742.73	NR	NR	NR	586.996	160.116	145.598	NR	67.856	782.164
Jasper	759.179	NR	NR	0	NR	NR	425.146	NR	NR	334.033
Kershaw	1163.758	NR	NR	NR	39.52	499.542	NR	NR	NR	624.696
Lancaster	0.734	NR	NR	NR	0.734	NR	NR	NR	NR	NR
Lee	684.318	NR	NR	NR	NR	NR	79.858	NR	NR	604.46
Lexington	3113.93	NR	NR	NR	28.95	409.109	1794.748	446.87	NR	434.253
Marion	1340.989	NR	NR	NR	0	NR	25.6	NR	NR	1315.389
Marlboro	1353.281	NR	NR	NR	NR	280.237	117.01	NR	NR	956.034
Newberry	88.853	NR	NR	NR	12	NR	55.228	NR	NR	21.625
Oconee	53.88	NR	NR	NR	NR	NR	NR	NR	NR	53.88
Orangeburg	7929.589	NR	1667.052	NR	18.672	1044.567	2664.31	1909.2	NR	625.788
Richland	1350.066	NR	NR	12.5	24.53	660.463	14.686	312.85	NR	325.037
Saluda	79.02	NR	NR	NR	NR	NR	NR	NR	NR	79.02
Spartanburg	49.032	NR	NR	NR	10.51	13.673	NR	NR	NR	24.849
Sumter	7478.204	NR	NR	NR	120.565	318.687	1117.811	NR	NR	5921.141
Union	2.78	NR	NR	NR	NR	2.78	NR	NR	NR	NR
Williamsburg	1454.508	NR	NR	NR	NR	902.648	NR	NR	NR	551.86
York	98.784	NR	NR	NR	47.055	5.539	NR	16.56	NR	29.63
Grand Total:	**72,150.89**	**0.33**	**2,043.32**	**182.93**	**3,099.41**	**11,830.92**	**14,065.22**	**2,709.77**	**105.63**	**38,113.35**

NR = None Report

Appendix B: Surface and Groundwater Use Summary by County in South Carolina, 2005

The following tables list reported surface water and groundwater withdrawals for the 2005 calendar year by county. Water usage data are shown by water use category, and in the case of power generation, include surface water use that is typically considered non-consumptive. As presented throughout this report, all water use figures presented are in millions of gallons.

Abbeville County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	NR
Industrial:	NR	Hydroelectric:	37,686.30
Irrigation:	NR	Industrial:	NR
Mining:	NR	Irrigation:	NR
Water Supply:	3.31	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**3.31**	Water Supply:	1,033.64
		Total:	**38,719.64**

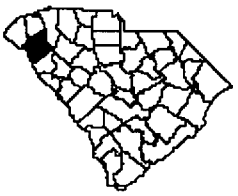
Aiken County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	13.10	Golf Course:	100.33
Industrial:	1323.16	Hydroelectric:	NR
Irrigation:	161.33	Industrial:	20,847.09
Mining:	21.31	Irrigation:	17.585
Water Supply:	4786.54	Mining:	NR
Other:	NR	Thermal Power:	45,545
Total:	**6,305.44**	Water Supply:	2,395.24
		Total:	**68,905.24**

Allendale County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	NR
Industrial:	817.91	Hydroelectric:	NR
Irrigation:	2,791.02	Industrial:	NR
Mining:	NR	Irrigation:	156.01
Water Supply:	383.40	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**3,992.33**	Water Supply:	NR
		Total:	**156.01**

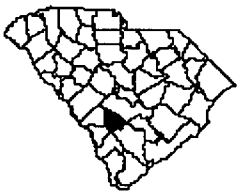
Anderson County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	76.37
Industrial:	NR	Hydroelectric:	191,000
Irrigation:	NR	Industrial:	89.9
Mining:	NR	Irrigation:	NR
Water Supply:	NR	Mining:	NR
Other:	NR	Thermal Power:	49,744.21
Total:	**NR**	Water Supply:	7,663.995
		Total:	**248,574.47**

NR = None Reported

Bamberg County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	NR
Industrial:	NR	Hydroelectric:	NR
Irrigation:	744.07	Industrial:	NR
Mining:	NR	Irrigation:	493.16
Water Supply:	477.661	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**1,221.73**	Water Supply:	NR
		Total:	**493.16**

Barnwell County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	59.62
Industrial:	NR	Hydroelectric:	NR
Irrigation:	112.83	Industrial:	NR
Mining:	NR	Irrigation:	83.84
Water Supply:	830.31	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**943.14**	Water Supply:	NR
		Total:	**143.46**

Beaufort County

Groundwater Use		Surface Water Use	
Aquaculture:	9.27	Aquaculture:	63.04
Golf Course:	1,115.37	Golf Course:	1,418.36
Industrial:	139.794	Hydroelectric:	NR
Irrigation:	659.45	Industrial:	NR
Mining:	NR	Irrigation:	18.29
Water Supply:	3906.87	Mining:	NR
Other:	34.76	Thermal Power:	NR
Total:	**5,865.52**	Water Supply:	7096.70
		Total:	**8,596.38**

Berkeley County

Groundwater Use		Surface Water Use	
Aquaculture:	3.28	Aquaculture:	99.70
Golf Course:	19.20	Golf Course:	6.42
Industrial:	1,200.79	Hydroelectric:	1,251,619.01
Irrigation:	0.24	Industrial:	3110.43
Mining:	2.98	Irrigation:	1110.14
Water Supply:	195.05	Mining:	NR
Hydroelectric:	0.33	Thermal Power:	203,543.69
Thermal Power:	12.28	Water Supply:	5,071.4
Total:	**1,434.15**	**Total:**	**1,464,560.78**

NR = None Reported

Calhoun County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	28.30	Golf Course:	41.10
Industrial:	132.61	Hydroelectric:	NR
Irrigation:	541.097	Industrial:	26,392.68
Mining:	NR	Irrigation:	113.125
Water Supply:	133.34	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**835.35**	Water Supply:	NR
		Total:	**26,546.91**

Charleston County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	2.30
Golf Course:	648.03	Golf Course:	199.49
Industrial:	42.46	Hydroelectric:	NR
Irrigation:	0.25	Industrial:	8,873.81
Mining:	NR	Irrigation:	26.99
Water Supply:	2398.07	Mining:	NR
Other:	1.56	Thermal Power:	NR
Total:	**3,090.37**	Water Supply:	27.901.80
		Total:	**37,004.39**

Cherokee County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	NR
Industrial:	NR	Hydroelectric:	407,518.00
Irrigation:	NR	Industrial:	504.13
Mining:	NR	Irrigation:	NR
Water Supply:	NR	Mining:	NR
Thermal Power	1.02	Thermal Power:	NR
Total:	**1.02**	Water Supply:	2,561.6
		Total:	**410,583.73**

Chester County

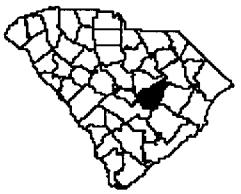
Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	22.50	Golf Course:	9.00
Industrial:	1.96	Hydroelectric:	2,067,474.00
Irrigation:	NR	Industrial:	94.38
Mining:	NR	Irrigation:	NR
Water Supply:	NR	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**24.46**	Water Supply:	1192.2
		Total:	**2,068,769.58**

NR = None Reported

Chesterfield County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	268.48
Industrial:	NR	Hydroelectric:	NR
Irrigation:	230.03	Industrial:	NR
Mining:	NR	Irrigation:	23.23
Water Supply:	851.34	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**1,081.37**	Water Supply:	768.53
		Total:	**1,060.24**

Clarendon County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	5.08	Golf Course:	37.90
Industrial:	NR	Hydroelectric:	NR
Irrigation:	44.83	Industrial:	NR
Mining:	NR	Irrigation:	49.03
Water Supply:	695.59	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**745.50**	Water Supply:	NR
		Total:	**86.93**

Colleton County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	63.03	Golf Course:	1.37
Industrial:	NR	Hydroelectric:	NR
Irrigation:	756.50	Industrial:	NR
Mining:	NR	Irrigation:	227.00
Water Supply:	731.80	Mining:	2.16
Thermal Power	0.68	Thermal Power:	1,484.53
Other:	NR	Water Supply:	NR
Total:	**1,552.01**	**Total:**	**1,715.07**

Darlington County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	3.00	Golf Course:	126.90
Industrial:	1,488.86	Hydroelectric:	NR
Irrigation:	5.13	Industrial:	7,036.07
Mining:	NR	Irrigation:	221.68
Nuclear Power:	362.28	Mining:	NR
Water Supply:	2505.969	Nuclear Power:	277,346.00
Other:	0.47	Water Supply:	NR
Total:	**4,221.14**	**Total:**	**284,730.65**

NR = None Reported

Dillon County

Groundwater Use		Surface Water Use	
Aquaculture:	35.60	Aquaculture:	NR
Golf Course:	NR	Golf Course:	NR
Industrial:	NR	Hydroelectric:	NR
Irrigation:	34.40	Industrial:	NR
Mining:	NR	Irrigation:	NR
Water Supply:	1,594.17	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**1,664.17**	Water Supply:	NR
		Total:	**NR**

Dorchester County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	44.00	Golf Course:	NR
Industrial:	998.88	Hydroelectric:	NR
Irrigation:	NR	Industrial:	54.70
Mining:	NR	Irrigation:	NR
Water Supply:	655.46	Mining:	NR
Other:	.99	Thermal Power:	NR
Total:	**1,699.32**	Water Supply:	NR
		Total:	**54.70**

Edgefield County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	43.61	Golf Course:	39.00
Industrial:	NR	Hydroelectric:	1,150,053.45
Irrigation:	21.000	Industrial:	NR
Mining:	NR	Irrigation:	456.05
Water Supply:	NR	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**64.61**	Water Supply:	1450.00
		Total:	**1,151,998.50**

Fairfield County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	NR
Industrial:	NR	Hydroelectric:	2,944,701.12
Irrigation:	NR	Industrial:	NR
Mining:	NR	Irrigation:	NR
Water Supply:	67.82	Mining:	NR
Other:	NR	Nuclear Power:	561,069.95
Total:	**67.82**	Water Supply:	568.29
		Total:	**3,506,339.36**

NR = None Reported

Florence County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	128.95	Golf Course:	61.41
Industrial:	718.34	Hydroelectric:	NR
Irrigation:	253.64	Industrial:	7,652.70
Mining:	NR	Irrigation:	7.20
Water Supply:	3,927.20	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**5,028.13**	Water Supply:	1,461.58
		Total:	**9,182.90**

Georgetown County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	775.90
Industrial:	112.98	Hydroelectric:	NR
Irrigation:	21.80	Industrial:	12,294.86
Mining:	NR	Irrigation:	2,025.72
Water Supply:	853.25	Mining:	NR
Other:	NR	Thermal Power:	4,324.25
Total:	**988.03**	Water Supply:	2,268.05
		Total:	**21,688.77**

Greenville County

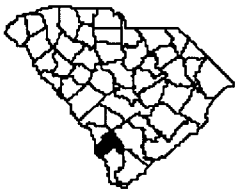
Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	30.77	Golf Course:	171.35
Industrial:	59.32	Hydroelectric:	NR
Irrigation:	NR	Industrial:	NR
Mining:	NR	Irrigation:	19.00
Water Supply:	34.70	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**125.20**	Water Supply:	24,125.5
		Total:	**24,315.85**

Greenwood County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	10.20	Golf Course:	59.54
Industrial:	8.00	Hydroelectric:	363,517.00
Irrigation:	1.200	Industrial:	53.60
Mining:	NR	Irrigation:	NR
Water Supply:	7.93	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**27.33**	Water Supply:	4,496.20
		Total:	**368,126.34**

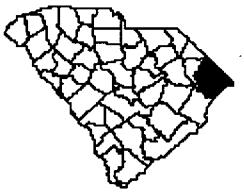
NR = None Reported

Hampton County



Groundwater Use		Surface Water Use	
Aquaculture:	122.28	Aquaculture:	NR
Golf Course:	34.75	Golf Course:	NR
Industrial:	488.50	Hydroelectric:	NR
Irrigation:	1,246.03	Industrial:	NR
Mining:	NR	Irrigation:	18.00
Water Supply:	534.26	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**2,425.81**	Water Supply:	NR
		Total:	**18.00**

Horry County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	586.00	Golf Course:	2,899.80
Industrial:	160.12	Hydroelectric:	NR
Irrigation:	145.60	Industrial:	15.88
Mining:	NR	Irrigation:	66.33
Water Supply:	782.164	Mining:	177.60
Other:	67.86	Thermal Power:	44,742.87
Total:	**1,742.73**	Water Supply:	14,890.15
		Total:	**62,792.63**

Jasper County

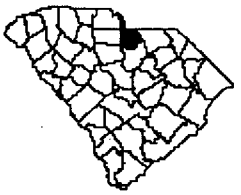
Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	NR
Industrial:	NR	Hydroelectric:	NR
Irrigation:	425.146	Industrial:	NR
Mining:	NR	Irrigation:	NR
Water Supply:	334.03	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**759.18**	Water Supply:	NR
		Total:	**NR**

Kershaw County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	39.52	Golf Course:	54.80
Industrial:	499.54	Hydroelectric:	1,242,431.00
Irrigation:	NR	Industrial:	978.15
Mining:	NR	Irrigation:	NR
Water Supply:	624.70	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**1,163.76**	Water Supply:	1,711.02
		Total:	**1,245,174.97**

NR = None Reported

Lancaster County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	0.73	Golf Course:	8.92
Industrial:	NR	Hydroelectric:	1,204,198.00
Irrigation:	NR	Industrial:	2,212.77
Mining:	NR	Irrigation:	NR
Water Supply:	NR	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**0.73**	Water Supply:	8,081.36
		Total:	**1,214,501.04**

Laurens County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	84.08
Industrial:	NR	Hydroelectric:	120,000
Irrigation:	NR	Industrial:	NR
Mining:	NR	Irrigation:	NR
Water Supply:	NR	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**NR**	Water Supply:	1,624.37
		Total:	**121,708.45**

Lee County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	NR
Industrial:	NR	Hydroelectric:	NR
Irrigation:	79.86	Industrial:	NR
Mining:	NR	Irrigation:	7.00
Water Supply:	604.46	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**684.32**	Water Supply:	NR
		Total:	**7.00**

Lexington County

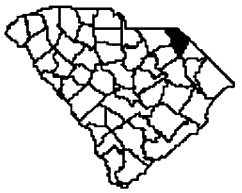
Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	28.95	Golf Course:	173.59
Industrial:	409.11	Hydroelectric:	371,476.55
Irrigation:	1,794.75	Industrial:	9,691.83
Mining:	446.87	Irrigation:	513.97
Water Supply:	434.25	Mining:	415.64
Other:	NR	Thermal Power:	56018.9
Total:	**3,113.93**	Water Supply:	5,102.52
		Total:	**443,393.01**

NR = None Reported

Marion County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	21.31
Industrial:	NR	Hydroelectric:	NR
Irrigation:	25.60	Industrial:	NR
Mining:	NR	Irrigation:	0.001
Water Supply:	1,315.39	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**1,340.99**	Water Supply:	NR
		Total:	**21.31**

Marlboro County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	NR
Industrial:	280.24	Hydroelectric:	NR
Irrigation:	117.01	Industrial:	7,609.4
Mining:	NR	Irrigation:	74.77
Water Supply:	956.03	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**1,353.28**	Water Supply:	NR
		Total::	**7,684.17**

McCormick County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	32.65
Industrial:	NR	Hydroelectric:	NR
Irrigation:	NR	Industrial:	NR
Mining:	NR	Irrigation:	NR
Water Supply:	NR	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**NR**	Water Supply:	388.65
		Total:	**421.30**

Newberry County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	12.00	Golf Course:	6.00
Industrial:	NR	Hydroelectric:	NR
Irrigation:	55.23	Industrial:	NR
Mining:	NR	Irrigation:	122.50
Water Supply:	21.63	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**88.85**	Water Supply:	1,928.53
		Total:	**2,057.03**

NR = None Reported

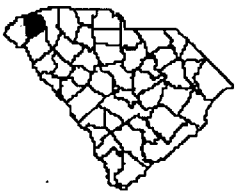
Oconee County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	86.50
Industrial:	NR	Hydroelectric:	12,700.00
Irrigation:	NR	Industrial:	583.03
Mining:	NR	Irrigation:	287.75
Water Supply:	53.88	Mining:	NR
Other:	NR	Nuclear Power:	2,814,848.00
Total:	**53.88**	Water Supply:	3,557.52
		Total:	**2,832,062.80**

Orangeburg County

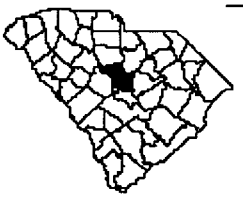
Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	18.67	Golf Course:	90.77
Industrial:	1,044.57	Hydroelectric:	12,700.00
Irrigation:	2,664.31	Industrial:	171.42
Mining:	1,909.20	Irrigation:	738.56
Thermal Power:	1,667.05	Mining:	NR
Water Supply:	625.79	Thermal Power:	NR
Other:	NR	Water Supply:	3,153.58
Total:	**7,929.59**	**Total:**	**4,154.34**

Pickens County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	229.76
Industrial:	NR	Hydroelectric:	2,769,742.00
Irrigation:	NR	Industrial:	3,279.95
Mining:	NR	Irrigation:	NR
Water Supply:	NR	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**NR**	Water Supply:	3,454.32
		Total:	**2,776,706.04**

Richland County



Groundwater Use		Surface Water Use	
Aquaculture:	12.50	Aquaculture:	27.30
Golf Course:	24.53	Golf Course:	320.87
Industrial:	660.46	Hydroelectric:	469,660.89
Irrigation:	14.69	Industrial:	10,260.40
Mining:	312.85	Irrigation:	0.20
Water Supply:	325.04	Mining:	NR
Other:	NR	Thermal Power:	158,609.72
Total:	**1,350.07**	Water Supply:	22,683.18
		Total:	**661,562.56**

NR = None Reported

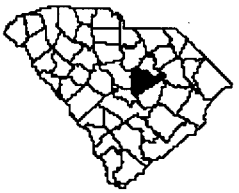
Saluda County

Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	NR
Industrial:	NR	Hydroelectric:	NR
Irrigation:	NR	Industrial:	NR
Mining:	NR	Irrigation:	367.52
Water Supply:	79.02	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**79.02**	Water Supply:	NR
		Total:	**367.52**

Spartanburg County

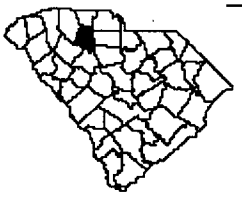
Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	35.04
Golf Course:	10.51	Golf Course:	1,009.375
Industrial:	13.67	Hydroelectric:	17,962.72
Irrigation:	NR	Industrial:	NR
Mining:	NR	Irrigation:	105.06
Water Supply:	24.85	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**49.03**	Water Supply:	14,045.89
		Other:	**33,158.09**

Sumter County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	120.56	Golf Course:	175.31
Industrial:	318.69	Hydroelectric:	NR
Irrigation:	1,117.81	Industrial:	NR
Mining:	NR	Irrigation:	504.40
Water Supply:	5,921.14	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**7,478.20**	Water Supply:	NR
		Total:	**679.71**

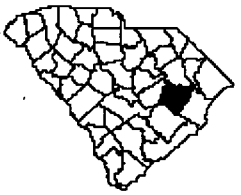
Union County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	9.00
Industrial:	2.78	Hydroelectric:	186,662.01
Irrigation:	NR	Industrial:	571.5
Mining:	NR	Irrigation:	NR
Water Supply:	NR	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**NR**	Water Supply:	1200.99
		Total:	**188,443.50**

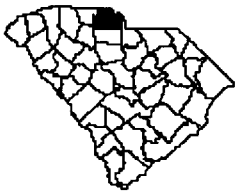
NR = None Reported

Williamsburg County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	NR	Golf Course:	NR
Industrial:	902.65	Hydroelectric:	NR
Irrigation:	NR	Industrial:	NR
Mining:	NR	Irrigation:	2.15
Water Supply:	551.86	Mining:	NR
Other:	NR	Thermal Power:	NR
Total:	**1,454.51**	Water Supply:	NR
		Total:	**2.15**

York County



Groundwater Use		Surface Water Use	
Aquaculture:	NR	Aquaculture:	NR
Golf Course:	47.06	Golf Course:	153.41
Industrial:	5.54	Hydroelectric:	958,465.00
Irrigation:	NR	Industrial:	17,877.20
Mining:	16.56	Irrigation:	2.55
Water Supply:	29.63	Mining:	NR
Other:	NR	Nuclear Power:	37,184.00
Total:	**98.78**	Water Supply:	5,780.89
		Total:	**1,019,463.06**

NR = None Reported

Appendix C: Population by County

Population and Projections by County

County	2000	2005	2010	2015	2020	2025
Abbeville	26,167	26,740	27,610	28,480	29,350	30,210
Aiken	142,552	153,900	163,950	174,000	184,060	194,110
Allendale	11,211	11,820	11,960	12,110	12,260	12,400
Anderson	165,740	172,120	180,280	188,440	196,590	204,750
Bamberg	16,658	16,130	15,740	15,340	14,950	14,560
Barnwell	23,478	24,350	25,390	26,440	27,490	28,540
Beaufort	120,937	132,760	146,440	160,110	173,790	187,460
Berkeley	142,651	156,610	167,520	178,420	189,330	200,230
Calhoun	15,185	15,570	16,350	17,130	17,910	18,690
Charleston	309,969	320,080	328,570	337,070	345,560	354,060
Cherokee	52,537	54,770	57,860	60,960	64,050	67,140
Chester	34,068	34,630	35,500	36,370	37,240	38,110
Chesterfield	42,768	43,100	44,310	45,520	46,730	47,940
Clarendon	32,502	33,300	34,650	35,990	37,330	38,680
Colleton	38,264	39,910	41,590	43,260	44,940	46,610
Darlington	67,394	67,910	69,260	70,610	71,960	73,310
Dillon	30,722	30,220	30,280	30,340	30,400	30,460
Dorchester	96,413	106,590	115,430	124,280	133,130	141,980
Edgefield	24,595	25,490	27,400	29,320	31,230	33,150
Fairfield	23,454	24,260	25,010	25,770	26,520	27,280
Florence	125,761	130,140	134,510	138,870	143,230	147,590
Georgetown	55,797	58,300	61,770	65,240	68,710	72,190
Greenville	379,616	397,580	421,210	444,840	468,470	492,100
Greenwood	66,271	68,590	71,170	73,750	76,330	78,910
Hampton	21,386	21,810	22,690	23,570	24,450	25,330
Horry	196,629	215,850	239,020	262,190	285,360	308,530
Jasper	20,678	21,390	23,000	24,610	26,220	27,830
Kershaw	52,647	55,300	58,880	62,460	66,040	69,620
Lancaster	61,351	61,940	63,940	65,950	67,950	69,950
Laurens	69,567	72,800	77,190	81,580	85,960	90,350
Lee	20,119	20,540	21,010	21,480	21,960	22,430
Lexington	216,014	233,060	252,580	272,090	291,600	311,120
McCormick	9,958	10,670	11,290	11,910	12,530	13,150
Marion	35,466	35,930	36,390	36,840	37,300	37,760
Marlboro	28,818	28,100	27,460	26,820	26,170	25,530
Newberry	36,108	37,270	38,530	39,790	41,050	42,320
Oconee	66,215	70,910	75,470	80,040	84,600	89,160
Orangeburg	91,582	94,260	96,890	99,510	102,140	104,770
Pickens	110,757	119,040	127,110	135,190	143,260	151,330
Richland	320,677	331,810	345,660	359,520	373,370	387,220
Saluda	19,181	19,400	20,090	20,790	21,480	22,180
Spartanburg	253,791	267,390	280,590	293,790	306,990	320,190
Sumter	104,646	112,030	116,100	120,180	124,260	128,330
Union	29,881	29,720	29,480	29,240	29,010	28,770
Williamsburg	37,217	36,960	36,820	36,680	36,540	36,400
York	164,614	177,420	192,290	207,160	222,030	236,900
South Carolina:	4,012,012	4,218,460	4,446,240	4,674,050	4,901,810	5,129,630

Appendix D: Glossary

Aquifer – A geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs. An alternate definition includes saturated material capable of providing economically viable amounts of water to wells or springs.

Aquaculture water use (water use category) – Water used for raising, farming and/or harvesting of organisms that live in water, such as fish, shrimp and other shellfish and vegetal matter (seaweed).

Consumptive water use – The amount of water withdrawn that is evaporated, transpired, incorporated into products or crops, consumed by humans or livestock, or otherwise removed from the immediate water environment.

Effluent (wastewater) – Water conveyed out of a wastewater treatment facility or other works used for the purpose of treating, stabilizing, or holding wastewater. Effluent is often highly treated and is an excellent option for reuse of wastewater for irrigation.

Evapotranspiration – Collective term, including water discharged to the atmosphere as a result of evaporation from the soil and surface-water bodies and plant transpiration.

Fall Line – The geologic and physiographic surface boundary separating the sedimentary deposits of the Coastal Plain from the metamorphic and igneous rocks of the Piedmont.

Farm – Any operation from which $1000.00 or more of agricultural products were sold or normally would be sold during the year.

Golf course irrigation (water use category) – Water applied to maintain golf course turf, including tee boxes, fairways, putting greens, associated practice areas and periphery aesthetic landscaping.

Groundwater – Generally, all subsurface water as distinct from surface water; specifically, that part of the subsurface water in the saturated zone.

Hydroelectric water use (water use category) – Water used in generating electricity where turbine generators are driven by falling water.

Industrial water use (water use category) – Water used for commercial and industrial purposes, including fabrication, processing, washing, in-plant conveyance and cooling.

Irrigated acreage – Acreage capable of being irrigated, with regard to availability of water, suitable soils and topography of land.

Irrigation water use (water use category) – Water that is used for agricultural and landscaping purposes including turf farming and livestock management.

Mining water use (water use category) – Water that is used for in conjunction with surface or subsurface mining of minerals or natural materials

Other use (water use category) – Any use of surface water or groundwater not specifically identified in any of the other categories.

Reclaimed water – Wastewater treatment plant effluent that has been diverted, intercepted, or otherwise conveyed for use before it reaches a natural waterway or aquifer.

Surface water – Water flowing or stored on the earth's surface such as a stream, lake, or reservoir.

Thermoelectric water use (water use category) – Water used in generating electricity from fossil fuel (coal, oil, natural gas), geothermal, biomass, solid waste, or nuclear energy.

Water supply (water use category) – Water withdrawn by public and private water suppliers and conveyed to users or groups of users. Water suppliers provide water for a variety of uses including domestic, commercial, industrial and public water use.

Water usage rates – As utilized in this report, measurements to quantitatively represent volumetric withdrawals per unit of time; as in gallons per minute (gpm), gallons per day (gpd) and gallons per year (gpy). Unless otherwise stated, figures in this report are presented in millions of gallons per year.

Water use – Generally, water that is used for a specific purpose (i.e., domestic use, industrial, etc.). Broadly, human interaction with and influence on the hydrologic cycle, and includes water withdrawal, distribution, consumptive use, wastewater collection and return flow.

Withdrawal – The removal of surface water or groundwater from its current setting in the natural hydrologic system for use, including, but not limited to, water supply, industrial use, commercial use, domestic use, irrigation, livestock, power generation

Sec 9.3 Ref 27

Shortnose Sturgeon

Description

Shortnose sturgeon *(Acipenser brevirostrum)*

Sturgeons are fish of an ancient lineage easily recognized by five rows of scutes (bony plates) along their bodies: one row along the mid-back, one along the middle, and one along the lower body on each side. Sturgeons have heterocercal tails; that is, the top lobe of the caudal fin is larger than the bottom one. Coloration varies from yellowish pink to yellowish brown on the fish's back and creamy white below. Sturgeons, the largest of the bony fishes, are bottom dwellers that use chin barbels to locate food on the substrate. The barbels on the shortnose sturgeon are rather small, less than one half the width of the mouth. Sturgeons have protrusible, inferior mouths used to suck in benthic insects, crustaceans, and other food items. The shortnose sturgeon is smaller than the common Atlantic sturgeon, *Acipenser oxyrinchus,* and has a shorter, uncurved snout. It is also known as the blunt-nosed, round-nosed and small sturgeon, and it may grow up to 143 cm (56 in).

Habitat and Biology

Shortnose sturgeons are found from the Saint John River, Canada (New Brunswick), to the St. Johns River, Florida. They inhabit estuarine and riverine habitats and are typically not found offshore. In South Carolina they inhabit Winyah Bay Rivers, those that drain into Lake Marion, the Santee, Cooper and Savannah rivers, and the ACE Basin. In the latter, shortnose sturgeon are typically found at the freshwater-saltwater interface. Adult and sub-adult shortnose sturgeon are known to inhabit this area during spring through fall. Spawning may take place well upriver; however, the existence of a spawning stock in the ACE Basin is yet to be determined.

Shortnose sturgeons are semi-anadromous; they migrate from the estuary into rivers to spawn. Adults migrate upstream in early spring and forage in the lower reaches of rivers at the fresh tidal water and estuarine water interface. This area is also an important nursery habitat for juveniles, which do not usually migrate. Migration of shortnose sturgeons and the extent to which they utilize freshwater habitats vary throughout the species' range. For instance, in northern latitudes, sturgeon make use of freshwater habitats more extensively than in southern regions, and some do not frequent estuarine habitats at all throughout the year. Sturgeons can live more than 50 years and typically grow very slowly. Growth and age at sexual maturity vary with latitude. Fish from southern locations grow faster and mature at a younger age than fish in the north. Male sturgeons inhabiting South Carolina waters become mature at approximately age 4 and females at age 6-7. Male sturgeons reproduce 1-2 years after reaching maturity. However, females may not spawn until 5 years after becoming mature. In South Carolina, the age at which female sturgeons first spawn ranges from 7 to 14 years. Spawning periodicity varies among individuals, but spawning rarely takes place in consecutive years. A female typically produces 27,000 to 208,000 eggs and can carry an egg mass of over 1 million eggs, depending on her body size. Spawning in South Carolina occurs from February to April over gravel or rubble bottoms. High current velocity and adequate substrate for the attachment of eggs are important factors in spawning site selection. Sturgeons are benthic feeders preferring mollusks and crustaceans as adults and insects and small crustaceans as juveniles.

A related species, the Atlantic sturgeon, is anadromous, spawning in freshwater rivers and spending the rest of its life in estuarine and nearshore waters. Females may spawn only every 2-6 years. Spawning in South Carolina begins in February and continues through the spring, with a second spawning migration possibly occurring in the fall. Spawning populations of Atlantic sturgeon in South Carolina are found in the Savannah River, one or more of the rivers in the ACE Basin, the Santee River, Winyah Bay and its river systems, and possibly the Cooper River. Although definitive spawning locations have not been identified, spawning is believed to occur in tidal freshwater, in deep areas with high water flow rates. A "marl hole" approximately 15 meters (50 ft) deep above Givhans Ferry on the Edisto River may be one of these locations. Females may release between 400,000 and 3.7 million eggs during a spawning period. As the eggs are released, they are fertilized externally by a male and then sink to the bottom. Sturgeon eggs are sticky and will adhere to rocks, plants, and other solid material. The eggs hatch within a week or so. Within three weeks, juvenile sturgeon have absorbed their yolk sac and begun to feed on bottom-dwelling organisms such as small shrimp, worms, clams, snails, and small demersal fish. Juvenile Atlantic sturgeon spend their first few years in rivers and estuaries with some movement along the coast. Tagging studies in South Carolina indicate that higher growth rates occur during the winter, spring and fall, with slower growth rates during the summer. As the juvenile sturgeon reach 0.6 to 0.9 meters (2-3 ft) in length (age of 1-6 years) , they begin to move into oceanic waters and join the adult population, remaining there until sexual maturity (7-19 years and nearly 2 meters or 6-7 ft in length). Atlantic sturgeon may undergo long migrations up and down the coast.

Species Significance

Worldwide, sturgeons are commercially valuable as a source of high-grade caviar, and their meat is popular both smoked and

fresh. In the past, both Atlantic and shortnose sturgeons were reported in the landings for sturgeon. In the United States, Atlantic sturgeon supported a commercial fishery; however, landings have not exceeded 300,000 lbs. since 1920, and all Atlantic states have closed their fisheries in recent years. The sturgeon fishery was closed in South Carolina in 1985 following precipitous declines in numbers landed in the early 1980s. Shortnose sturgeons are currently of no commercial value because of their status as an endangered species. There is no recreational fishery for this species in the United States.

Shortnose sturgeon were listed as endangered throughout their range under the Endangered Species Conservation Act of 1969. In 1967, the U. S. Fish and Wildlife Service cited pollution and overharvesting as primary factors for the decline in numbers of shortnose sturgeon. Other sources contributing to population declines include incidental catch in shad gillnet fisheries, dam and bridge construction, dredging, entrapment in power plant water intake screens, and reservoir operations. In South Carolina, the primary factors affecting populations of this species are habitat alteration, due to dredging and dam construction, and pollution. Construction of dams has the potential to reduce suitable spawning sites, and disturbance associated with dredging activities impacts the food supply for juvenile sturgeon.

References

Collins, M.R. and T.I.J. Smith. 1993. Characteristics of the adult segment of the Savannah River population of shortnose sturgeon. Proceedings of the Annual Conference of the Southeastern Association of Fish and Wildlife Agencies 47:485-491.

Dadswell, M.J., B.D. Taubert, T.S. Squires, D. Marchette, and J. Buckley. 1984. Synopsis of biological data on shortnose sturgeon, *Acipenser brevirostrum*. Technical Report 14. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Seattle, WA.

Hall, J.W., T.I.J. Smith, S.D. Lamprecht. 1991. Movements and habitats of shortnose sturgeon, *Acipenser brevirostrum*, in the Savannah river. Copeia 1991(3):695-702.

Leland, J.G., III. 1968. A survey of the sturgeon fishery of South Carolina. Bears Bluff Laboratory Contribution No. 47. Bears Bluff Laboratory, Wadmalaw, SC.

Murphy, S. H. and G. Barnette (eds.). South Carolina's endangered species portfolio. South Carolina Department of Natural Resources, Wildlife Diversity Section, Columbia, SC.

Shortnose sturgeon recovery team. 1997. Recovery plan for the shortnose sturgeon-public review draft. Office of Protected Resources, National Marine Fisheries Service. National Oceanic and Atmospheric Administration, Silver Spring, MD.

Taub, S.H. 1990. Fishery management plan for Atlantic sturgeon. Fisheries Management Report 17. Atlantic States Marine Fisheries Commission, Washington, DC.

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Last updated

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WATER RESOURCES DATA FOR SOUTH CAROLINA 2000 – 2001

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STATE OF SOUTH CAROLINA
DEPARTMENT OF NATURAL RESOURCES

LAND, WATER AND
CONSERVATION DIVISION
WATER RESOURCES REPORT 31

2004

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The Honorable Mark Sanford, Governor

South Carolina Department of Natural Resources

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WATER RESOURCES DATA FOR SOUTH CAROLINA 2000 – 2001

By

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ABSTRACT

Ground-water levels observed in 2000 and 2001 reflect a drought that began in June 1998 and continued through 2002. Seasonal water-level fluctuations typically were superimposed upon a 2-year decline of 2 to 3 feet in most of South Carolina, and, at many observation wells, the lowest water levels for the period of record were observed during 2001.

The greatest declines were seen near outcrop areas and near areas of ground-water use. Declines exceeded 3 ft in 6 of 11 Middendorf aquifer-system wells, mainly near the system's outcrop area between Lexington and Dillon Counties. About 3 ft of decline occurred at Hilton Head Island after the area's first Middendorf production well went on line. Declines of 1.4 to 4 ft were measured in the Black Creek aquifer system wells, with the greatest changes observed in Allendale County. Water-level declines in the Tertiary-sand and Floridan aquifer systems averaged 2.7 ft, with 3- to 7-ft declines observed in Allendale and Berkeley Counties and with declines generally less than 2.5 ft in the lower Coastal Plain. Crystalline-rock aquifers in the Piedmont and Blue Ridge provinces showed 2- to 3-ft declines, except where influenced by surface-water levels.

Deep aquifers, where not subject to pumping interference, were little affected by drought. Crystalline-rock aquifer system well CTF-81, at Cheraw State Park, declined about 1 ft—roughly equal to its seasonal water-level range. Cape Fear system wells near Allendale and at Calabash, N.C., declined less than 0.5 ft. Levels observed in the lower part of the Middendorf declined about 1.5 ft at Jackson, in Aiken County, and less than 1 ft at Calabash, N.C.

Floridan aquifer well BFT-101, at Hilton Head Island, recovered 1 ft as withdrawals from the aquifer there were supplemented, in part, by water from the Savannah River, the Middendorf aquifer system, and effluent reuse. A recovery to near predrought levels, Statewide, is likely to require several years of normal rainfall.

INTRODUCTION

The South Carolina Department of Natural Resources (DNR) gathers ground-water level, stream-stage, water-quality, and climate data for water-resources assessment and management. These data are used to identify long-term changes in ground-water levels and storage; to correlate climate conditions, streamflows, and ground-water levels; and to determine relationships between saltwater intrusion and water levels or stream stage. Ground-water data are collected through a network of DNR-maintained water-level and specific-conductance observation sites and through U.S. Geological Survey (USGS) maintained sites that are cooperatively funded by DNR or other agencies. Most stream-stage monitoring is carried out by the USGS with cooperative funding. DNR also operates several stream- and climate-monitoring sites in support of education programs and for departmental research projects.

The base DNR network includes 56 wells measured hourly or bimonthly to provide data for annual hydrographs. An additional 600 wells are measured at 5-year intervals for construction of potentiometric maps of the three principal aquifer systems in South Carolina's Coastal Plain. Two well sites are equipped with fluid-conductivity sensors for long-term saltwater intrusion monitoring. Three stations on the North Santee and South Santee Rivers monitor stage and seawater intrusion. Most monitoring stations have been installed since 1999, although a number of stations have been in operation since 1995.

PURPOSE AND SCOPE OF REPORT

This report is the first in an annual series of water-data summaries prepared by the Land, Water and Conservation Division of the DNR. It is complementary to DNR's potentiometric-map series for the principal aquifer systems of the South Carolina Coastal Plain. It is supplementary to the Water-Data Report series published annually by the USGS and partially funded by DNR.

Selected ground-water level and water-quality data are presented for calendar years 2000 and 2001. Ground-water hydrographs have been constructed from average daily recorded water levels and periodic manual measurements of 56 Piedmont and Coastal Plain wells. Hydrographs and specific-conductance graphs are included for two Floridan aquifer system wells at Edisto Island. Specific-conductance graphs also are presented for miles 6.7 and 7.9 on the South Santee River and mile 3.6 on the North Santee River.

Ground-water data are organized by physiographic province, by aquifer system (in ascending order), and by county well number (in alphanumeric order). The hydrogeologic-unit designations used in the report are the crystalline-rock, Cape Fear, Middendorf, Black Creek, Tertiary-sand, Floridan, and shallow aquifer systems. The nature and distribution of each aquifer system are discussed with their respective data sets. Aquifer-system delineations for the Coastal Plain province are based on the hydrogeologic framework of Aucott and others (1987); fractured-rock aquifers of the Blue Ridge province, the Piedmont province, and Coastal Plain province at the Fall Line are designated as the crystalline-rock aquifer system; and the water-yielding saprolite and alluvium of the Piedmont and the unconsolidated water-table aquifers of the Coastal Plain are designated as units of the shallow aquifer system. Figure 1 shows the distribution of surface-water and ground-water monitoring stations. Table 1 cross-references DNR observation sites by county and includes county well numbers, DNR grid numbers, and aquifer-system names. Surface-water observations of the Santee River delta follow the ground-water data section.

PREVIOUS WATER-DATA REPORTS

The USGS has published water-resources data for South Carolina since 1940 (Table 2). Data between 1940 and 1973 were published as Water-Supply Papers entitled "Water levels and artesian pressures in observation wells in the United States in (year) – Part 2. Southeastern states." The earliest publications included water-level data for calendar year intervals; the Water-Supply Paper series after 1955 included yearly data published every fifth year. The newest publication series, referred to as Water-Data Reports and entitled "Water resources data – South Carolina, water year xxxx," began in 1971. Water-Data Reports present extensive information on ground-water levels and surface-water stage, flow, and quality for each water year (October 1 to September 31). The report of T. W. Cooney and others (2002) is the most recent in the series.

DNR has published a water-level and potentiometric map series for the major Coastal Plain aquifer systems. Potentiometric levels for the Middendorf aquifer system in 1996 and 2001 were presented by Hockensmith and Waters (1998) and Hockensmith (2003a), respectively. Potentiometric levels for the Black Creek aquifer system in 1995 and 2001 were presented

by Hockensmith (1997) and Hockensmith (2003b), respectively. Floridan aquifer system levels for 1998 were published by Hockensmith (2001). The South Carolina Department of Health and Environmental Control (DHEC) monitors water levels in the upper Floridan aquifer in Beaufort, Jasper, Hampton, and Colleton Counties and also has published a 1997 potentiometric map for those counties (Ransom and others, 2000).

Intermittent and periodic water-level measurements of 16 Piedmont province wells and 266 Coastal Plain province wells were published by Waters (2003). The report presents 282 hydrographs and is the most extensive compilation of historical South Carolina ground-water level data to date. Hydrograph records range from 6 to 50 years, and about one-third of the record sets span periods greater than 20 years.

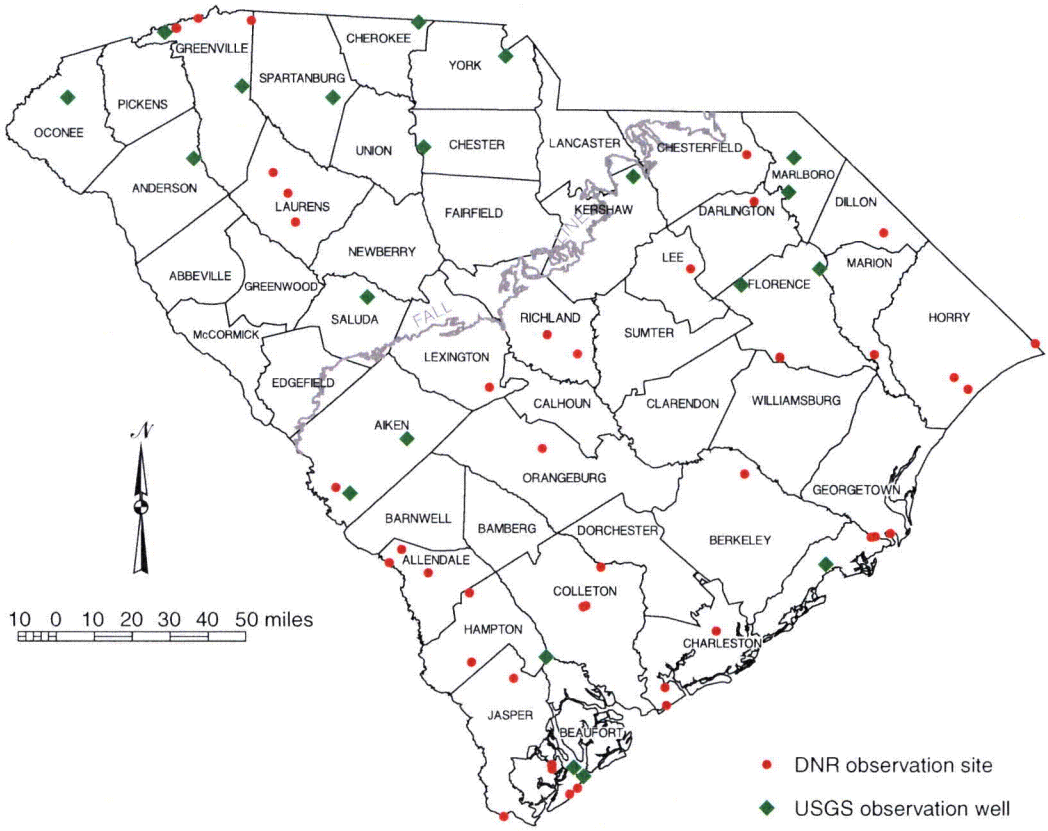


Figure 1. Locations of DNR ground-water and surface-water observation sites and USGS observation wells.

Table 1. South Carolina Department of Natural Resources observation wells: 2000 – 2001

County	County number	Grid number	Owner/location/use	Aquifer system	Page number
Aiken	AIK-2378	40W-q2	DNR well cluster at Jackson	Black Creek	44
Aiken	AIK-2379	40W-q3	DNR well cluster at Jackson	Black Creek	45
Aiken	AIK-2380	40W-q4	DNR well cluster at Jackson	Middendorf	29
Allendale	ALL-347	35AA-q2	DNR well cluster at Appleton	Middendorf	30
Allendale	ALL-348	35AA-q3	DNR well cluster at Appleton	Cape Fear	26
Allendale	ALL-358	37Z-t3	DNR well cluster at Martin	Middendorf	31
Allendale	ALL-363	37Z-t4	DNR well cluster at Martin	Floridan	61
Allendale	ALL-364	37Z-t5	DNR well cluster at Martin	Floridan	62
Allendale	ALL-366	37Z-t7	DNR well cluster at Martin	Tertiary-sand	63
Allendale	ALL-367	37Z-t8	DNR well cluster at Martin	Black Creek	46
Allendale	ALL-371	35AA-q4	DNR well cluster at Appleton	Floridan	64
Allendale	ALL-372	35AA-q5	DNR well cluster at Appleton	Shallow	55
Allendale	ALL-373	35AA-q6	DNR well cluster at Appleton	Floridan	65
Allendale	ALL-375	35AA-q8	DNR well cluster at Appleton	Tertiary-sand	56
Allendale	ALL-376	35AA-q9	DNR well cluster at Appleton	Black Creek	47
Allendale	ALL-377	35AA-q10	DNR well cluster at Appleton	Middendorf	32
Beaufort	BFT-101	27KK-y1	USGS test well at Hilton Head Island	Floridan	66
Beaufort	BFT-429	28JJ-y1	Victoria Bluff Wildlife Mgmt. Area, Bluffton	Floridan	67
Beaufort	BFT-1845	28JJ-p6	Lower Floridan well at Waddell Center	Floridan	68
Beaufort	BFT-2055	27KK-r14	Town of Hilton Head Island test well	Middendorf	33
Berkeley	BRK-644	18W-b2	DNR test well at St. Stephen Middle School	Floridan	69
Brunswick, N. C.	BRW-1863	2Q-j4	N.C. Dept. of Envir. and Nat. Res. - Calabash	Black Creek	48
Brunswick, N. C.	BRW-1865	2Q-j6	N.C. Dept. of Envir. and Nat. Res. - Calabash	Middendorf	34
Brunswick, N. C.	BRW-1878	2Q-j2	N.C. Dept. of Envir. and Nat. Res. - Calabash	Cape Fear	26
Charleston	CHN-44	19DD-o1	U.S. Dept. of Agriculture, U.S. 17 south	Floridan	70
Charleston	CHN-484	22GG-d1	Salinity monitor at Blue House Plantation	Floridan	71
Charleston	CHN-803	11Z-b1	DNR test well at Santee Coastal Reserve	Floridan	72
Chesterfield	CTF-81	17H-f1	DNR test well at Cheraw State Park	Crystalline-rock	12
Colleton	COL-16	26CC-f1	City of Walterboro - unused municipal well	Floridan	73
Colleton	COL-30	27CC-j1	City of Walterboro - unused municipal well	Black Creek	49

Table 1. South Carolina Department of Natural Resources observation wells: 2000 – 2001 (cont.)

County	County number	Grid number	Owner/location/use	Aquifer system	Page number
Colleton	COL-97	26AA-k1	DNR test well at Canadys	Floridan	74
Colleton	COL-301	22GG-w4	Salinity monitor at Edisto Beach State Park	Floridan	75
Darlington	DAR-228	17J-m1	DNR test well at Lake Darpo	Middendorf	35
Dillon	DIL-121	10L-c2	DNR test well at Little Pee Dee State Park	Middendorf	36
Florence	FLO-274	16Q-s1	USGS well at Lake City Airport	Middendorf	37
Florence	FLO-276	16Q-s2	USGS well at Lake City Airport	Black Creek	50
Greenville	GRV-2543	49B-o2	Former public supply for Jones Gap State Park	Crystalline-rock	13
Greenville	GRV-3333	48B-d3	Observation well near Gap Creek Road	Crystalline-rock	14
Greenville	GRV-3335	49B-o4	Former public supply for Jones Gap State Park	Crystalline-rock	15
Greenville	GRV-3336	49B-o5	Former public supply for Jones Gap State Park	Shallow	20
Greenville	GRV-3341	45B-d1	Observation well at Oak Grove Road Fire Station	Shallow	21
Greenville	GRV-3342	45B-d2	Observation well at Oak Grove Road Fire Station	Crystalline-rock	16
Hampton	HAM-50	33EE-v1	Private well (former Southern R.R.) – Furman	Tertiary-sand	57
Hampton	HAM-228	33BB-s1	Former domestic supply – Brunson	Floridan	76
Horry	HOR-309	6R-q3	DNR test well near Perry Road, Conway	Black Creek	51
Jasper	JAS-425	30FF-o1	DNR well pair – Gillisonville	Floridan	77
Laurens	LRN-1705	43J-c2	Well/weather station at Adair Outdoor Ed. Center	Shallow	22
Laurens	LRN-1706	44I-b1	Unused domestic well at Big Knob Fire Tower	Crystalline-rock	17
Laurens	LRN-1707	43K-k1	Unused domestic well - Mountville	Crystalline-rock	18
Lee	LEE-75	21M-k1	DNR test well at Lee State Park	Middendorf	38
Lexington	LEX-844	32S-b4	DNR test-well cluster at Swansee Primary School	Middendorf	39
Orangeburg	ORG-393	29U-v1	Well/weather station – Clark Middle School	Black Creek	53
Orangeburg	ORG-430	29U-v2	Well/weather station – Clark Middle School	Tertiary-sand	58
Orangeburg	ORG-431	29U-v3	Well/weather station – Clark Middle School	Floridan	78
Richland	RIC-543	27Q-m1	DNR test well at Webber School	Middendorf	40
Richland	RIC-585	29P-t4	DNR test well at Horrell Hill Elementary School	Middendorf	41

Table 2. U.S. Geological Survey periodic water-data reports for South Carolina

Data period	Report Number	Author(s)	Year published
1940	WSP-907	Fishel, V.C., in Meinzer, O.E., and Wenzel, L.K.	1942
1941	WSP-937	Meinzer, O.E., and Wenzel, L.K.	1943
1942	WSP-945	Warren, M.A., and Ireland, D.M. in Meinzer, O.E., and Wenzel, L.K.	1944
1943	WSP-987	Warren, M.A., in Meinzer, O.E., and Wenzel, L.K.	1945
1944	WSP-1017	Sayer, A.N., and others (No S.C. section)	1947
1945	WSP-1024	Paulsen, C.G. (ed.) (No S.C. section)	1948
1946	WSP-1072	Siple, G.E., in Paulsen, C.G. (ed.)	1950
1947	WSP-1097	Siple, G.E., in Paulsen, C.G. (ed.)	1951
1948	WSP-1127	Siple, G.E., in Paulsen, C.G. (ed.)	1951
1949	WSP-1157	Siple, G.E., in Paulsen, C.G. (ed.)	1952
1950	WSP-1166	Siple, G.E., in Paulsen, C.G (ed.)	1953
1951	WSP-1192	Siple, G.E., in Sayer, A.N. (ed.)	1954
1952	WSP-1222	Siple, G.E., in Sayer, A.N. (ed.)	1955
1953	WSP-1266	Siple, G.E., in Sayer, A.N. (ed.)	1956
1954	WSP-1322	Siple, G.E., in Sayer, A.N. (ed.)	1956
1955	WSP-1405	Siple, G.E., in Sayer, A.N. (ed.)	1957
1956-1958	WSP-1538	Siple, G.E., in Hackett, O.M. (ed.)	1962
1959-1963	WSP-1803	Siple, G.E., in Hackett, O.M. (ed.)	1965
1964-1968	WSP-1978	U.S. Geological Survey	1971
1969-1973	WSP-2171	U.S. Geological Survey	1975
1971	SC-71-1	USGS-WRD-SC	1972
1972	SC-72-1	USGS-WRD-SC	1973
1973	SC-73-1	USGS-WRD-SC	1974
1974	SC-74-1	USGS-WRD-SC	1975
1975	SC-75-1	USGS-WRD-SC	1976
1976	SC-76-1	USGS-WRD-SC	1977
1977	SC-77-1	USGS-WRD-SC	1978
1978	SC-78-1	USGS-WRD-SC	1979
1979	SC-79-1	USGS-WRD-SC	1980
1980	SC-80-1	USGS-WRD-SC	1981
1981	SC-81-1	USGS-WRD-SC	1982
1982	SC-82-1	Bennett, C.S., and others	1983
1983	SC-83-1	Bennett, C.S., and others	1984
1984	SC-84-1	Bennett, C.S., and others	1985
1985	SC-85-1	Bennett, C.S., and others	1986
1986	SC-86-1	Bennett, C.S., and others	1987
1987	SC-87-1	Bennett, C.S., and others	1988
1988	SC-88-1	Bennett, C.S., and others	1989

WSP, Water-Supply Paper
SC-XX-X, Water-Data Report

Table 2. U.S. Geological Survey periodic water-data reports for South Carolina (cont.)

Data period	Report Number	Author(s)	Year published
1989	SC-89-1	Bennett, C.S., and others	1990
1990	SC-90-1	Bennett, C.S., and others	1991
1991	SC-91-1	Bennett, C.S., and others	1992
1992	SC-92-1	Bennett, C.S., and others	1993
1993	SC-93-1	Bennett, C.S., and others	1994
1994	SC-94-1	Cooney, T.W., and others	1995
1995	SC-95-1	Cooney, T.W., and others	1996
1996	SC-96-1	Cooney, T.W., and others	1997
1997	SC-97-1	Cooney, T.W., and others	1998
1998	SC-98-1	Cooney, T.W., and others	1999
1999	SC-99-1	Cooney, T.W., and others	2000
2000	SC-00-1	Cooney, T.W., and others	2001
2001	SC-01-1	Cooney, T.W., and others	2002

WELL-NUMBERING SYSTEMS

Wells are identified by a county well number and also by a location-grid number. The county well number consists of a county-name abbreviation and a sequential number that is assigned by, or in coordination with, the USGS. For example, HAM-50 represents the fiftieth well inventoried by the USGS, DNR, or DHEC in Hampton County.

Well files also are assigned a South Carolina Grid System number. Wells are located to the nearest minute of latitude and longitude and assigned a sequential number within that 1-minute grid. Thus, HAM-50 has grid number 33EE-v1, which places it in southwestern Hampton County (Fig. 2.)

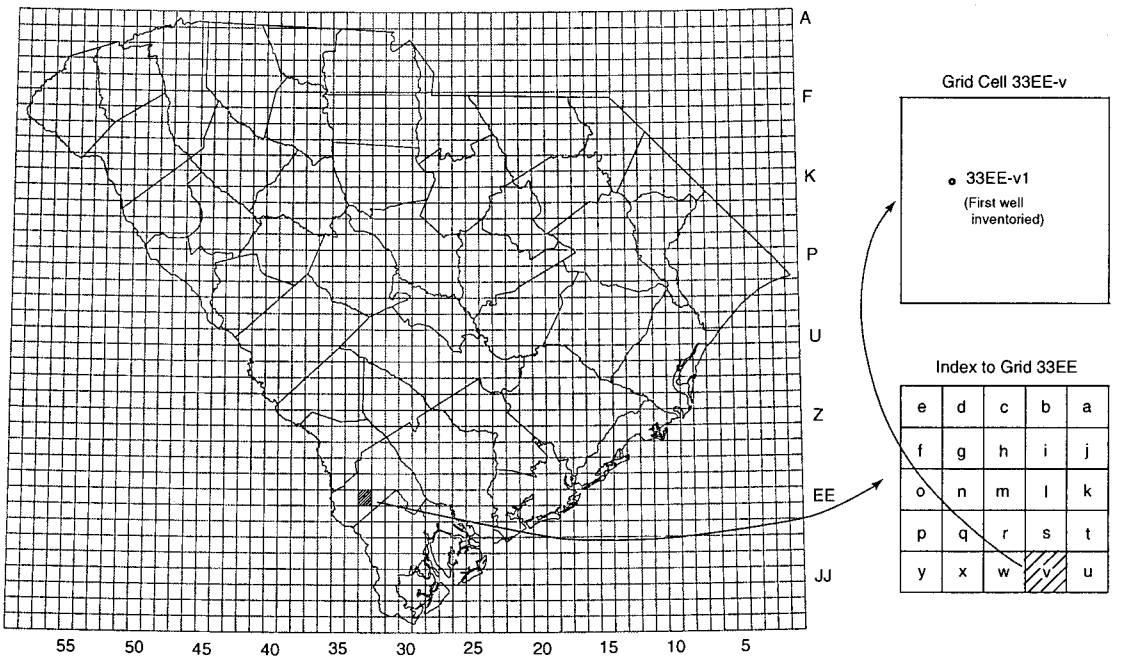


Figure 2. Illustration of the DNR well-numbering system.

DATA COLLECTION

Ground-water level data are presented in feet above or below land surface. Measurements and sensor settings are made relative to a specified measurement point, and the methods used generally follow those of USGS Stand Alone Procedure Documents (Table 3) and the Department of Natural Resources procedures manual. Land-surface and measuring-point elevations are surveyed from USGS or South Carolina Geodetic Survey benchmarks at 28 well sites and are reported to the nearest tenth or hundredth of a foot. Elevations at the remaining sites are taken from USGS topographic quadrangles, are estimated to the nearest foot, and are considered accurate to one-half the map contour interval. Station locations are fixed by GPS (Global Positioning Satellite) measurements.

Manual Measurements

Flowing artesian wells are manually measured with 0–30, 0–60, and 0–100 psi (pounds per square inch) range Bourdon-type test gages. The gages are calibrated annually by a commercial testing laboratory and are rated to ¼ percent of their respective measurement ranges. In practice, accuracy will be diminished by errors from gage-zero adjustment, parallax, readings near the extremes of gage range, and mechanical degradation subsequent to calibration. Table 4 summarizes the manufacturer-rated accuracies and the authors' assumptions for measurement accuracies under field conditions.

Tape measurements typically are made with electric tapes, and tape readings periodically are compared to a master tape. Both steel and electric tapes are capable of 0.01-ft accuracy, but visibility, thermal expansion and contraction, and tape sinuosity diminish measurement accuracy in field conditions. Their accuracies, therefore, are assumed to be no better than 0.05 ft in practice: less accuracy is likely where depth to water is greater than 100 ft.

Automated Measurements

The water-level sensors used for automated monitoring stations include shaft encoders and pressure transducers whose readings are calibrated to manual measurements. Shaft encoders measure depth to water and consist of a pulley that is optically read or that controls a potentiometer, and a cable, float, and counterweight assembly. They have a rated accuracy and resolution of 0.01 ft. The sensor reading is set in reference to a manual tape measurement; however well plumb, casing joints, and cable disturbances can affect subsequent readings. Measurements within 0.10 ft of a concurrent manual measurement are accepted, along with the corresponding records. The records are excluded if successive sensor and manual measurements differ by more than 0.10 ft and if there is no clear means to adjust the record for cable slip, float snags, or other error. Corrections, if applied, are noted in the remarks that accompany the hydrograph.

Table 3. USGS Stand Alone Documents applied to the DNR monitoring program

Document number	Title
GWPD-1	Water-level measurement using graduated steel tape
GWPD-3	Establishing a permanent measuring point
GWPD-4	Water-level measurement using an electric tape
GWPD-5	Locating a well
GWPD-12	Water-level measurement in a flowing well

Table 4. Ranges and accuracies of ¼-percent precision test gages used by DNR

Gage range, in psi	Rated gage accuracy, in psi	Rated gage accuracy, in feet	Measurement accuracy, in feet
0 – 30	0.075	0.17	0.4
0 – 60	0.150	0.34	0.5
0 – 100	0.250	0.57	0.8

Pressure transducers measure the height of water above a semiconductor strain gage: electrical resistance to an input voltage, and therefore voltage output, change as varying water pressure deforms the crystalline lattice of the gage's silicon diaphragm (piezoresistive effect). There is a near-linear correlation between the sensor's pressure range and output-voltage range, and water depth is computed from the voltage measurement. The transducers used by DNR have 0 – 5 meter (0 – 16.2 ft) and 0 – 10 meter (0 – 32.4 ft) ranges, and accuracy and resolution are 1 percent of full scale and 0.1 percent of full scale, respectively. The sums of the transducer measurement (depth above probe) and corresponding taped measurement (depth to water) recorded at each site visit are compared to determine transducer performance. Where the sum of measurements is found to differ by more than 2 percent of range (0.32 and 0.64 ft) from previous measurements, a potential instrument fault may exist, but no record correction is applied. Where the specifications are exceeded repeatedly, instrument failure is confirmed, the transducer is replaced, and the associated records are excluded from the hydrograph.

Water-Quality Measurements

Two physical characteristics of water, specific conductance and temperature, are monitored at a number of Lower Coastal Plain stations. Specific-conductance measurements are used to calculate salinity, total dissolved-solids concentrations, and chloride concentrations. Conductance sensors include the induction type and graphite-electrode type. Induction-based sensors measure the electrical current generated as water passes through an encased wire coil and have an accuracy of 20 µS/cm (microSiemens/centimeter). The graphite-electrode type measures current between pairs of immersed electrodes, with accuracies of 0.5 or 1 percent. The induction-type sensors are bulky, but they exhibit good signal stability and are unaffected by biological growth. Electrode sensors are compact and suited for use in small-diameter observation and stilling wells. By convention, specific conductance is the electrical conductance adjusted to the standard temperature of 25° C. The algorithms used to calculate specific conductance vary with the instrument manufacturer, but the differences in results are insignificant for most purposes.

Temperature data, provided by thermistor-equipped conductivity sensors, are logged at salinity-monitoring stations and are used to calculate specific conductance. They are additionally useful as an indication of water mixing where saltwater intrusion occurs. The pressure probes used for ground-water monitoring also can provide temperature measurements. These data are useful in assessing transducer performance and for fault identification; however, ground-water temperature varies little, and the continual data have small utility with respect to resource assessment – thus ground-water temperature data are not stored permanently. Surface-water temperature data are not reported here but are permanently stored by DNR.

Data Storage and Quality

Logged measurements are stored in both raw-data and processed-data tables. The raw-data table reflects the readings of various sensor types and the performance of monitoring hardware as they were originally stored in data loggers. Raw data are stored mainly "as is" and are archive-preserved for insight into hardware conditions and for quality assurance. Processed-data tables are winnowed of measurement anomalies and logged hardware failures. The winnowed data principally consist of spikes and dropouts caused by lightning and electromagnetic interference and of measurements characteristic of hardware faults. The data that remain, and are used for the preparation of hydrographs, reflect the less accurate of the tape, gage, or sensor used.

STATISTICAL DATA

The statistical data presented for each observation site include graphs of average-daily measurements and the corresponding tables of monthly and yearly minimums, maximums, and means. Average daily water level and specific conductance are calculated and plotted for each day having 17 or more hourly measurements. Monthly minimums, maximums, and means are calculated for each month having 5 or fewer days of missing record, and the yearly statistics include the minimum, maximum, and mean for each calendar year having 10 or more months of record.

PIEDMONT WATER LEVELS

CRYSTALLINE-ROCK AQUIFER SYSTEM

The crystalline-rock aquifer system consists of intrusive-igneous and metamorphic rock that transmits ground water through fractures and faults. It is exposed or thinly covered in the Piedmont and Blue Ridge physiographic provinces, where it is the principal source of ground water. It also extends beneath the Coastal Plain, but rarely is used there owing to greater permeability and water availability in the overlying sedimentary rock. The principal crystalline-rock units of the Piedmont include those of the Inner Piedmont terrane, Laurens thrust stack, Charlotte and Eastern Charlotte terranes, and Carolina Slate Belt. The rocks of the Chauga Belt and Blue Ridge terrane are the main units in the Blue Ridge province (Fig. 3).

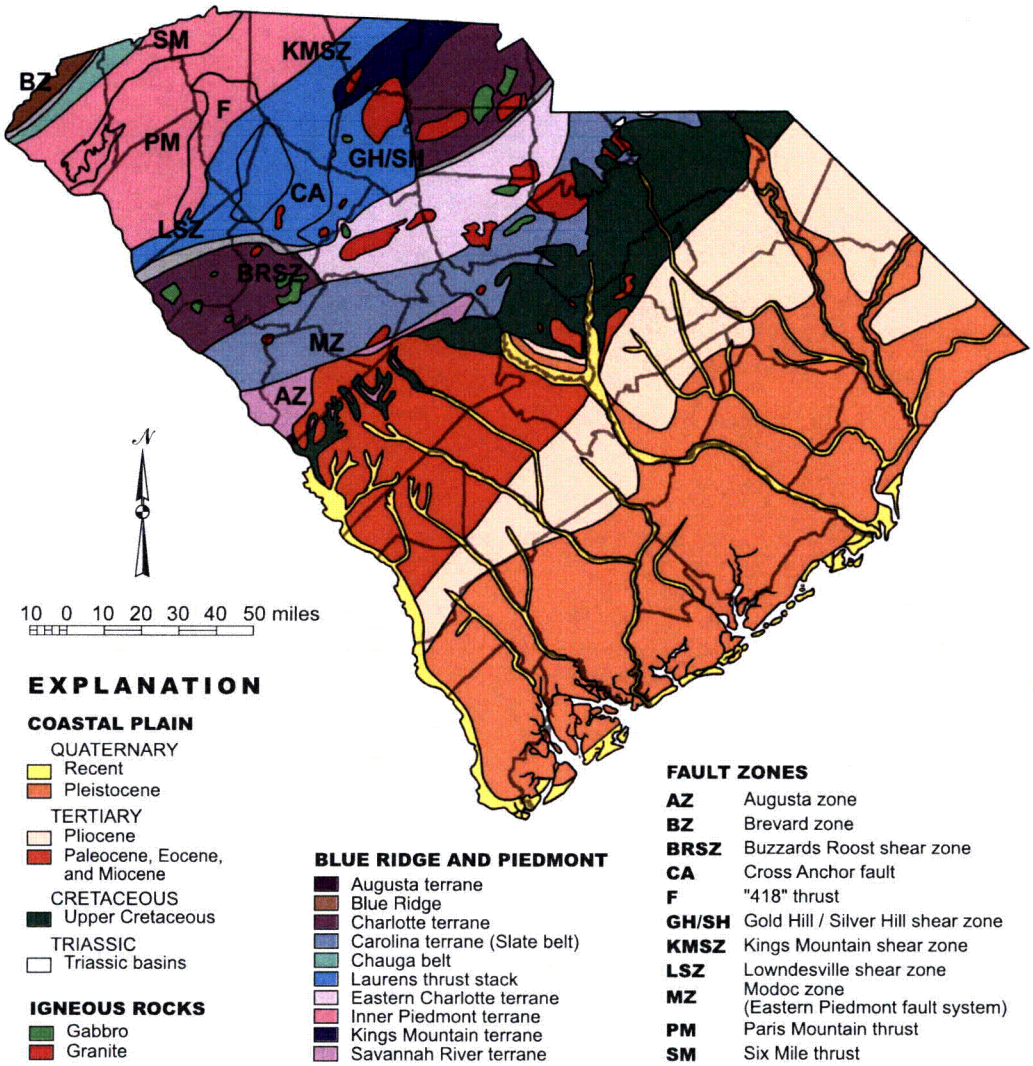


Figure 3. Geologic map of South Carolina (South Carolina Geological Survey, 1997).

The crystalline rock is complex lithologically and structurally. It includes rocks formed deep in the earth's crust through numerous mountain-building events. They are cut by fracture systems formed not only by pressure during mountain building but by later tension during the formation of the Atlantic Ocean and by release of pressure as overlying rocks were eroded. The result is a complex network of fractures, sparse in some areas and dense in others, especially along fault zones. The size, number, and extent of fractures diminish with increasing depth, and most crystalline-rock wells are less than 400 feet deep. Over 70 percent of reported well yields are less than 20 gpm (gallons per minute), and almost half are less than 10 gpm. Contractors rarely guarantee well yield, owing to the chance of drilling a dry hole. Nonetheless, yields greater than 100 gpm have been reported, and the probability of obtaining such yields increases where well-site selection is guided by geologic and geophysical investigation.

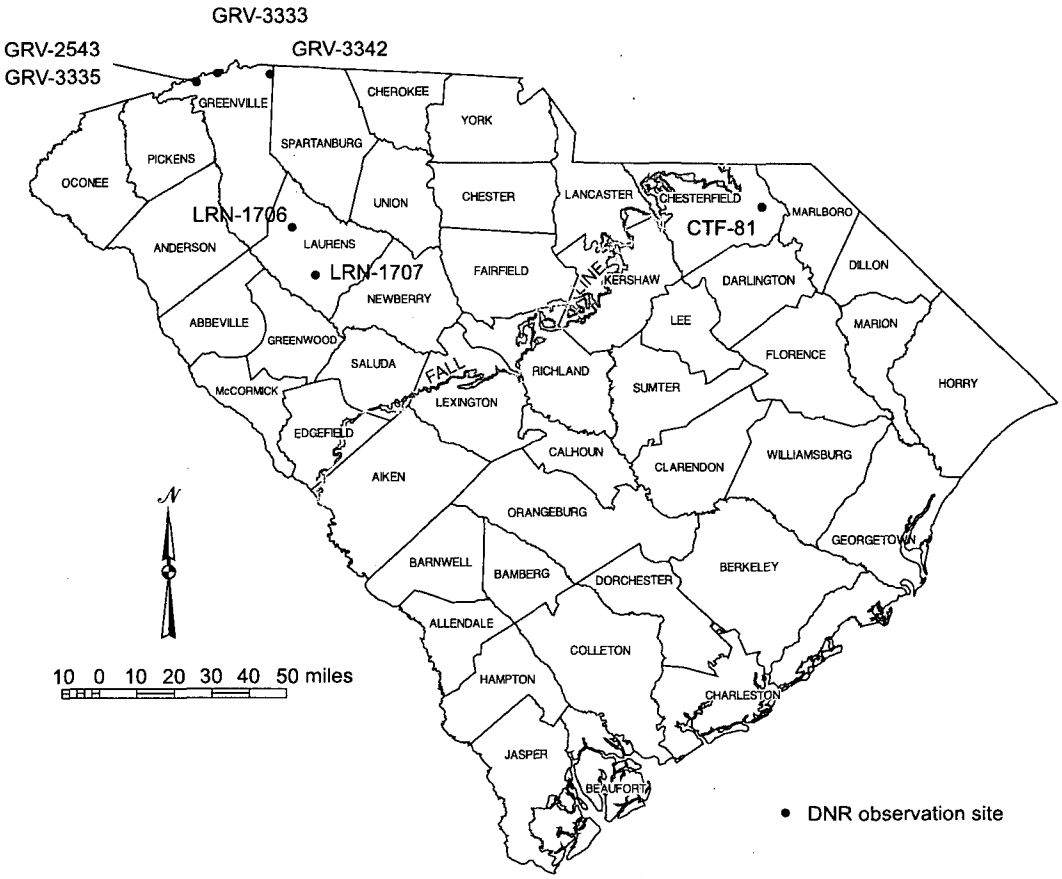
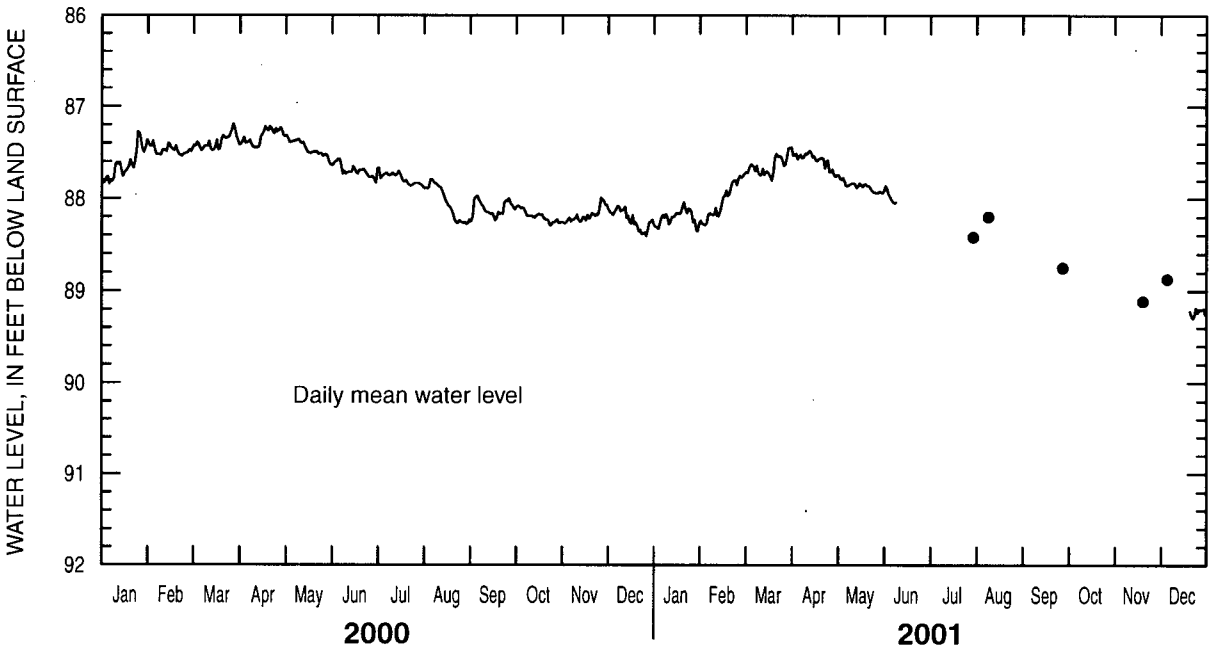


Figure 4. Locations of crystalline-rock aquifer system observation wells.

CHESTERFIELD COUNTY

WELL NUMBER: CTF-81 GRID NUMBER: 17H-f1
LATITUDE: 34°38'35" LONGITUDE: 79°54'41"
LOCATION: Cheraw State Park, Cheraw.
AQUIFER: Slate.
WELL CHARACTERISTICS: 2-inch diameter observation well. Depth: 244 ft. Screened from 231 to 244 ft.
DATUM: Land surface is 190 ft (map estimate) above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 1.80 ft above land surface datum.
PERIOD OF RECORD: October 1999 to current year.
EXTREMES: Highest water level: 87.19 ft below land surface, March 28, 2000.
Lowest water level: 89.30 ft below land surface, December 22, 2001.
REMARKS: Drilled and cored for DNR/USGS aquifer delineation project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	87.28	87.38	87.19	87.22	87.32	87.57	87.67	87.79	87.97	88.08	87.99	88.08
MEAN	87.63	87.48	87.39	87.33	87.46	87.70	87.78	88.05	88.11	88.20	88.18	88.23
LOW	87.84	87.54	87.48	87.45	87.63	87.83	87.87	88.28	88.25	88.29	88.27	88.41

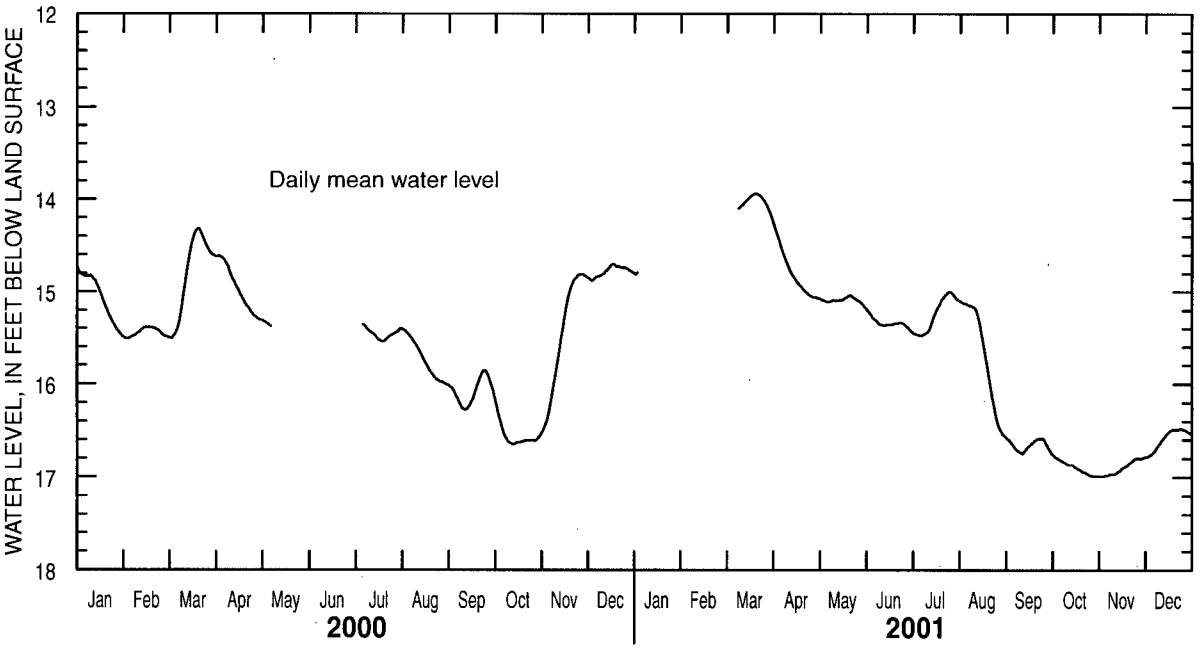
SUMMARY FOR 2000 HIGH 87.19 (Mar.1, 2000) MEAN 87.80 LOW 88.41 (Dec. 26, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	88.04	87.75	87.45	87.44	87.74	87.86	--	--	--	--	--	89.18
MEAN	88.21	88.02	87.65	87.57	87.86	--	--	--	--	--	--	--
LOW	88.36	88.29	87.80	87.76	87.94	88.05	--	--	--	--	--	89.30

SUMMARY FOR 2001 HIGH 87.44 (Apr.1, 2001) MEAN -- LOW 89.30 (Dec. 22, 2001)

GREENVILLE COUNTY

WELL NUMBER: GRV-2543 GRID NUMBER: 49B-o2
LATITUDE: 35°07'34" LONGITUDE: 82°34'17"
LOCATION: N of Middle Saluda River in Jones Gap State Park, at head of Hospital Rock Trail.
AQUIFER: Metamorphic rock and/or transition zone.
WELL CHARACTERISTICS: 6-inch diameter unused well. Depth: 40 ft. Open interval unknown.
DATUM: Land surface is 1,328.7 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Instrument platform, 1.32 ft above land surface datum.
PERIOD OF RECORD: October 1997 to current year.
EXTREMES: Highest water level: 12.19 ft below land surface, March 11, 1998.
Lowest water level: 17.07 ft below land surface, September 26, 1999.
REMARKS: Former fish hatchery well. Near present park public supply well, and shows minor pumping effects. Located at the foot of a major cliff, the Blue Ridge Escarpment.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	14.73	15.39	14.32	14.61	15.31	--	15.36	15.41	15.86	16.20	14.81	14.70
MEAN	15.06	15.45	14.81	14.96	15.35	--	15.46	15.75	16.08	15.56	15.43	14.78
LOW	15.49	15.51	15.51	15.31	15.38	--	15.54	16.01	16.28	16.65	16.50	14.88

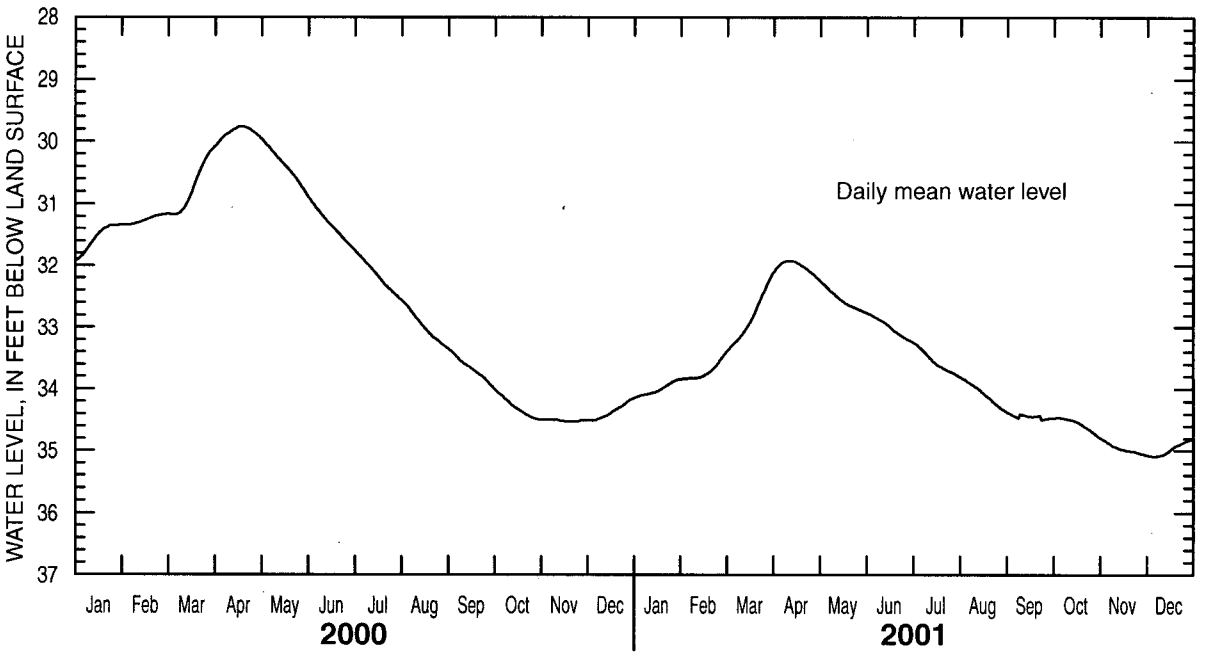
SUMMARY FOR 2000 HIGH 14.32 (Mar. 20, 2000) MEAN 15.43 LOW 16.65 (Oct. 12, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	14.77	--	13.94	14.25	15.04	15.19	15.00	15.10	16.58	16.76	16.79	16.48
MEAN	14.79	--	14.03	14.79	15.09	15.34	15.25	15.70	16.66	16.90	16.90	16.58
LOW	14.81	--	14.20	15.07	15.17	15.43	15.48	16.57	16.75	16.99	16.99	16.78

SUMMARY FOR 2001 HIGH 13.94 (Mar. 20, 2001) MEAN 15.76 LOW 16.99 (Oct. 27, 2001)

GREENVILLE COUNTY

WELL NUMBER: GRV-3333 GRID NUMBER: 48B-d3
LATITUDE: 35°09'57" LONGITUDE: 82°28'17"
LOCATION: Intersection of Gap Creek Road and US Highway 25, ½ mile south of North Carolina line.
AQUIFER: Metamorphic rock.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 260 ft. Open hole below 58 ft.
DATUM: Land surface is 1,868.6 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 1.24 ft below land surface datum.
PERIOD OF RECORD: August 1997 to current year.
EXTREMES: Highest water level: 26.18 ft below land surface, May 8, 1998.
Lowest water level: 35.09 ft below land surface, December 12, 2001.
REMARKS: 6-inch steel casing from 1 to 20 feet below land surface; 4-inch PVC casing from 1 to 58 feet below land surface datum; K-packer at 58 feet. Large fracture at 50 ft apparently captured all cuttings from below that level. No significant fractures below 58 feet; low water production.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	31.34	31.17	30.11	29.76	29.95	30.89	31.75	32.56	33.37	34.01	34.50	34.15
MEAN	31.56	31.26	30.77	29.86	30.37	31.33	32.15	32.99	33.67	34.30	34.51	34.36
LOW	31.92	31.34	31.17	30.08	30.85	31.73	32.54	33.35	33.99	34.50	34.53	34.51

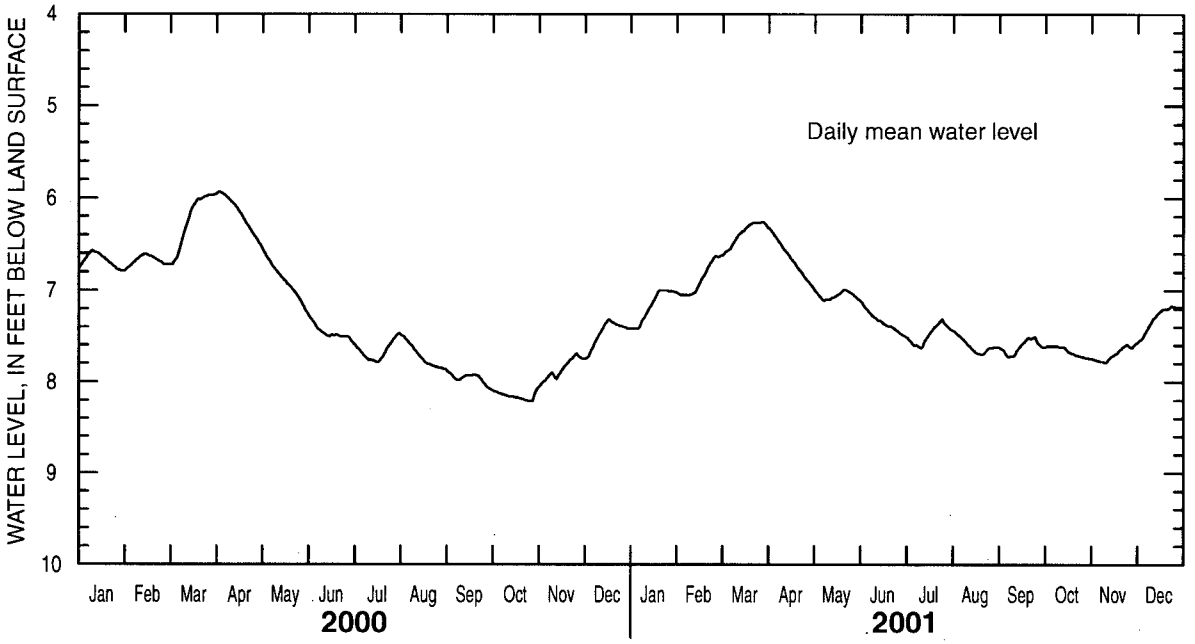
SUMMARY FOR 2000 HIGH 29.76 (Apr. 17, 2000) MEAN 32.27 LOW 34.53 (Nov. 16, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	33.85	33.45	32.16	31.92	32.23	32.76	33.24	33.81	34.38	34.46	34.80	34.81
MEAN	34.00	33.74	32.88	32.02	32.54	32.99	33.55	34.08	34.44	34.57	34.97	34.97
LOW	34.14	33.84	33.42	32.21	32.75	33.23	33.80	34.36	34.50	34.79	35.07	35.09

SUMMARY FOR 2001 HIGH 31.92 (Apr. 10, 2001) MEAN 33.73 LOW 35.09 (Dec. 4, 2001)

GREENVILLE COUNTY

WELL NUMBER: GRV-3335 GRID NUMBER: 49B-o4
LATITUDE: 35°07'30" LONGITUDE: 82°34'26"
LOCATION: South bank of the Middle Saluda River in Jones Gap State Park.
AQUIFER: Metamorphic bedrock.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 110 ft. Cased to 62 ft. Open hole.
DATUM: Land surface is 1,351.6 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Sanitary seal, 1.06 ft above land surface datum.
PERIOD OF RECORD: August 1997 to current year.
EXTREMES: Highest water level: 4.49 ft below land surface, January 7, 1998.
Lowest water level: 8.97 ft below land surface, September 24, 1999.
REMARKS: Fractures at 96 ft and 104 ft; the latter separates granitic gneiss from amphibolite gneiss, suggesting a significant fault displacement.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	6.57	6.61	5.96	5.93	6.53	7.27	7.47	7.49	7.89	8.06	7.69	7.32
MEAN	6.68	6.68	6.25	6.16	6.89	7.46	7.67	7.72	7.97	8.16	7.86	7.46
LOW	6.79	6.78	6.72	6.50	7.24	7.57	7.79	7.87	8.09	8.21	8.04	7.75

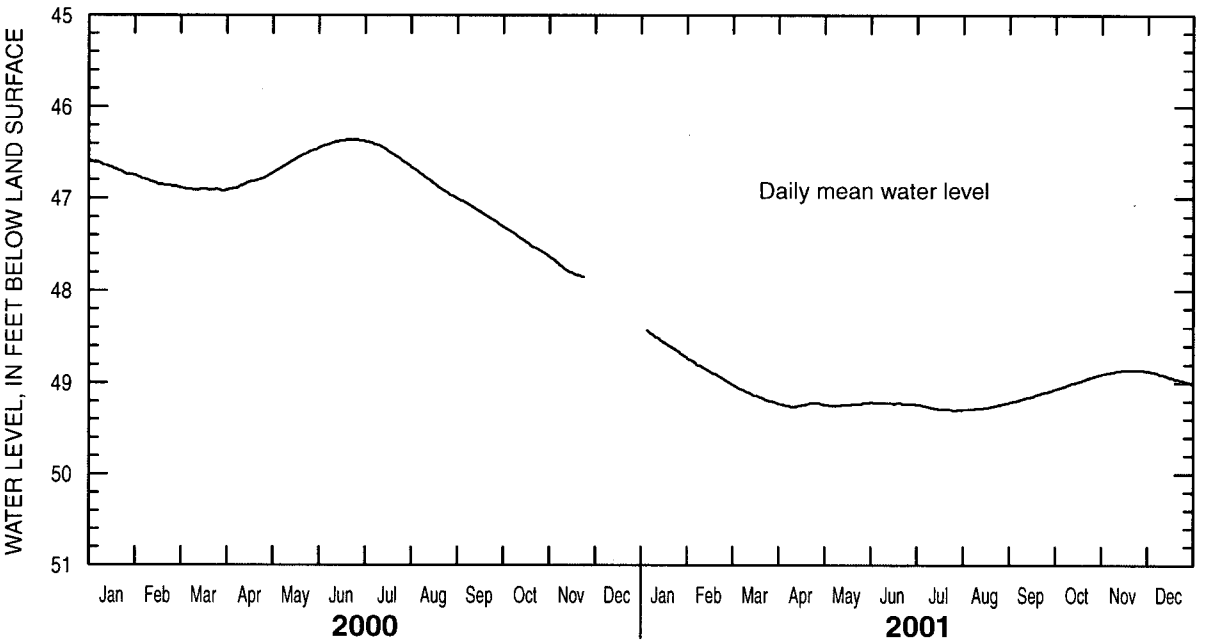
SUMMARY FOR 2000 HIGH 5.93 (Apr. 3, 2000) MEAN 7.25 LOW 8.21 (Oct. 24, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	7.00	6.63	6.26	6.32	6.97	7.11	7.31	7.44	7.51	7.61	7.58	7.17
MEAN	7.16	6.89	6.39	6.63	7.05	7.33	7.48	7.60	7.62	7.67	7.69	7.29
LOW	7.42	7.05	6.62	6.95	7.11	7.50	7.63	7.70	7.73	7.75	7.79	7.57

SUMMARY FOR 2001 HIGH 6.26 (Mar. 28, 2001) MEAN 7.24 LOW 7.79 (Oct. 9, 2001)

GREENVILLE COUNTY

WELL NUMBER: GRV-3342 GRID NUMBER: 45B-d2
LATITUDE: 35°09'38" LONGITUDE: 82°13'29"
LOCATION: Oak Grove Road Fire Station of Glassy Mountain Fire District, 8 ft north of GRV-3341.
AQUIFER: Metamorphic rock.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 334 ft. Open interval 132 to 334 ft.
DATUM: Land surface is 1,029.6 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: North edge of outer security box, 2.69 ft above land surface datum.
PERIOD OF RECORD: May 1998 to current year.
EXTREMES: Highest water level: 40.08 ft below land surface, June 30, 1998.
Lowest water level: 49.30 ft below land surface, July 25, 2001.
REMARKS: No obvious fractures encountered during drilling. Water production less than 1 gpm.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	46.58	46.75	46.88	46.74	46.46	46.36	46.37	46.66	47.01	47.31	47.64	--
MEAN	46.67	46.83	46.90	46.84	46.58	46.39	46.49	46.84	47.15	47.47	47.77	--
LOW	46.75	46.88	46.92	46.91	46.73	46.45	46.64	47.00	47.30	47.63	47.86	--

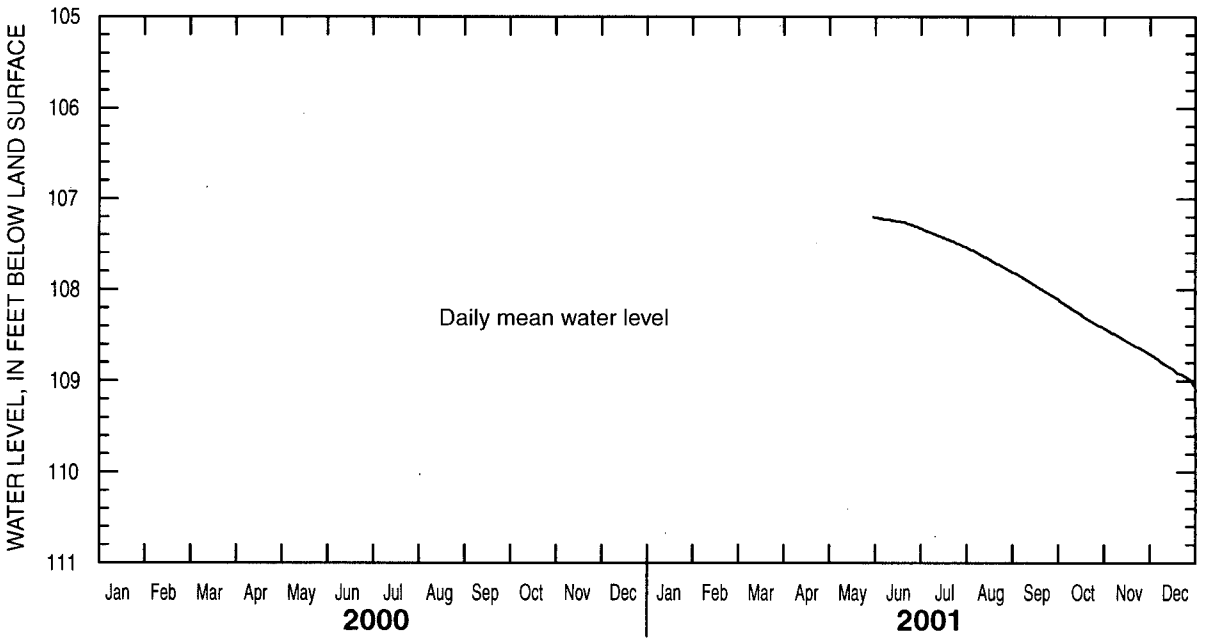
SUMMARY FOR 2000 HIGH 46.36 (June 19, 2000) MEAN 46.88 LOW 47.86 (Nov. 24, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	48.43	48.75	49.01	49.22	49.22	49.21	49.24	49.22	49.07	48.91	48.86	48.87
MEAN	48.58	48.87	49.13	49.24	49.24	49.22	49.28	49.26	49.15	48.99	48.87	48.94
LOW	48.74	49.00	49.22	49.26	49.25	49.23	49.30	49.29	49.21	49.07	48.90	49.01

SUMMARY FOR 2001 HIGH 48.43 (Jan. 4, 2001) MEAN 49.07 LOW 49.30 (July 25, 2001)

LAURENS COUNTY

WELL NUMBER: LRN-1706 GRID NUMBER: 44I-b1
LATITUDE: 34°34'14" LONGITUDE: 82°06'50"
LOCATION: Big Knob Fire Tower, west of Gray Court.
AQUIFER: Metamorphic rock.
WELL CHARACTERISTICS: 6-inch diameter unused domestic well. Depth: 168 ft. Open interval unknown.
DATUM: Land surface is 840 ft (map estimate) above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Sanitary seal, flush with concrete pad at land surface datum.
PERIOD OF RECORD: October 2000 to current year.
EXTREMES: Highest water level: 104.51 ft below land surface, October 13, 2000.
Lowest water level: 109.06 ft below land surface, December 31, 2001.
REMARKS: On the side of a prominent hill on a major fault zone (see Laurens North geologic quadrangle).

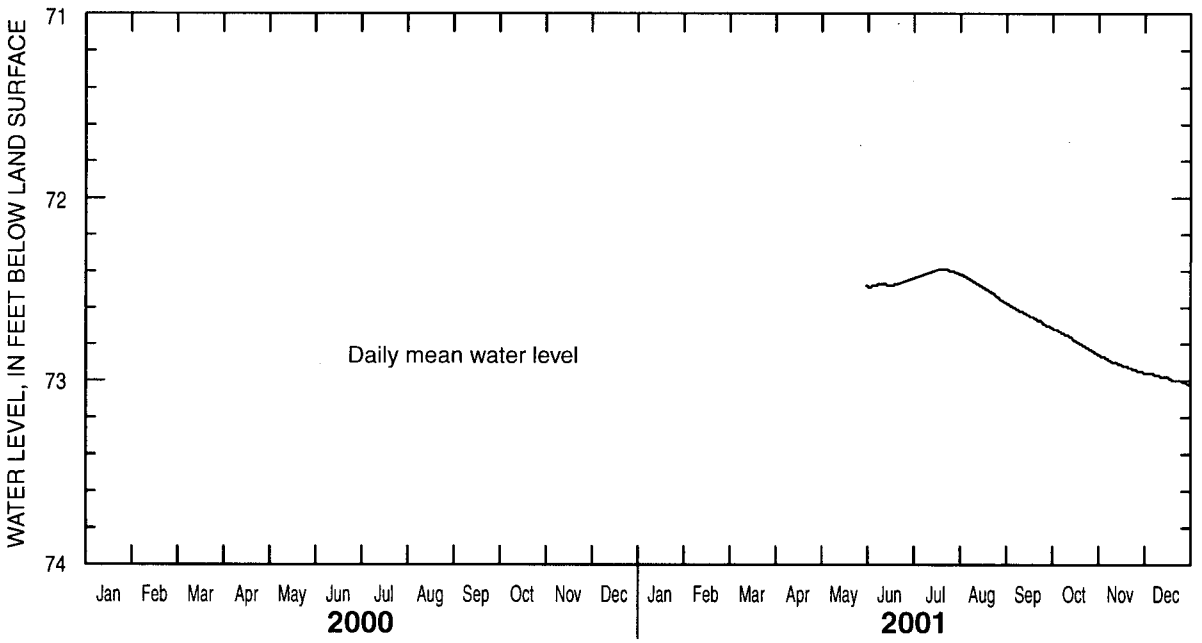


2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	--	--	--	107.20	107.21	107.33	107.54	107.82	108.11	108.43	108.71
MEAN	--	--	--	--	107.20	107.25	107.43	107.67	107.96	108.27	108.56	108.87
LOW	--	--	--	--	107.20	107.32	107.53	107.81	108.10	108.42	108.70	109.06

SUMMARY FOR 2001 HIGH 107.20 (May 31, 2001) MEAN -- LOW 109.06 (Dec. 31, 2001)

LAURENS COUNTY

WELL NUMBER: LRN-1707 GRID NUMBER: 43K-k1
LATITUDE: 34°22'52" LONGITUDE: 82°00'23"
LOCATION: Site of former Mountville Fire Tower, NW of Mountville.
AQUIFER: Metamorphic rock.
WELL CHARACTERISTICS: 6-inch diameter unused domestic well. Depth: 223 ft. Open interval unknown.
DATUM: Land surface is 660 ft (map estimate) above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Sanitary seal, flush with concrete pad, 0.75 ft above land surface datum.
PERIOD OF RECORD: May 2001 to current year.
EXTREMES: Highest water level: 72.39 ft below land surface, July 18, 2001.
Lowest water level: 73.02 ft below land surface, December 29, 2001.
REMARKS: Topography flat.



2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	--	--	--	72.48	72.47	72.39	72.42	72.58	72.71	72.86	72.96
MEAN	--	--	--	--	72.48	72.48	72.40	72.49	72.64	72.78	72.91	72.99
LOW	--	--	--	--	72.48	72.49	72.41	72.57	72.71	72.86	72.96	73.02

SUMMARY FOR 2001 HIGH 72.39 (July 18, 2001) MEAN -- LOW 73.02 (Dec. 29, 2001)

SHALLOW AQUIFER SYSTEM

"Shallow aquifer system" is a term of convenience applied to the complex of materials between land surface and the major aquifer systems of the Blue Ridge, Piedmont, and Coastal Plain. Northwest of the Fall Line, the system comprises saprolite and scattered alluvial deposits: there the lithologic and hydrologic contrast between bedrock and overlying formations simplifies distinction of the shallow aquifer system.

The shallow aquifer system in the Blue Ridge and Piedmont consists of porous materials overlying the fractured crystalline-rock aquifer system. Saprolite, the residual material from the weathering of bedrock, forms the most geographically extensive shallow unit above the Fall Line. The saprolite typically is 35 to 100 ft thick, but is thin to absent in some mountainous areas and well over 100 ft in some lower areas. It is usually rich in clay, except where the parent rock is mainly quartz. It is a source of water to bored wells—augered or dug wells that must be constructed with large diameters owing to low permeability and the consequent need to store large volumes of water. Such wells may yield ground water from the clay-rich saprolite, from relict bedrock fractures and intrusive rock, and from the transition zone, a zone of fractured but relatively unweathered rock debris just above the unaltered parent rock. Sustained yields typically are no more than a few gallons per minute; however, the saprolite is the main source of ground-water storage in the region and the main source of ground water in the underlying crystalline-rock aquifer system. Where the saprolite is thick, water levels usually respond slowly to precipitation because the low permeability of clay inhibits recharge. Water levels also respond slowly to drought because clay will store large volumes of water and release it slowly.

Shallow aquifers above the Fall Line also include modern and relict alluvial deposits. These alluvial aquifers commonly are unconfined, widely dispersed, and small in areal extent. Because of the energy of their source streams, Blue Ridge and Piedmont alluvial aquifers tend to be coarser but less isotropic than their Coastal Plain counterparts. Consequently, well yields can vary widely, even within distances of a few hundred feet.

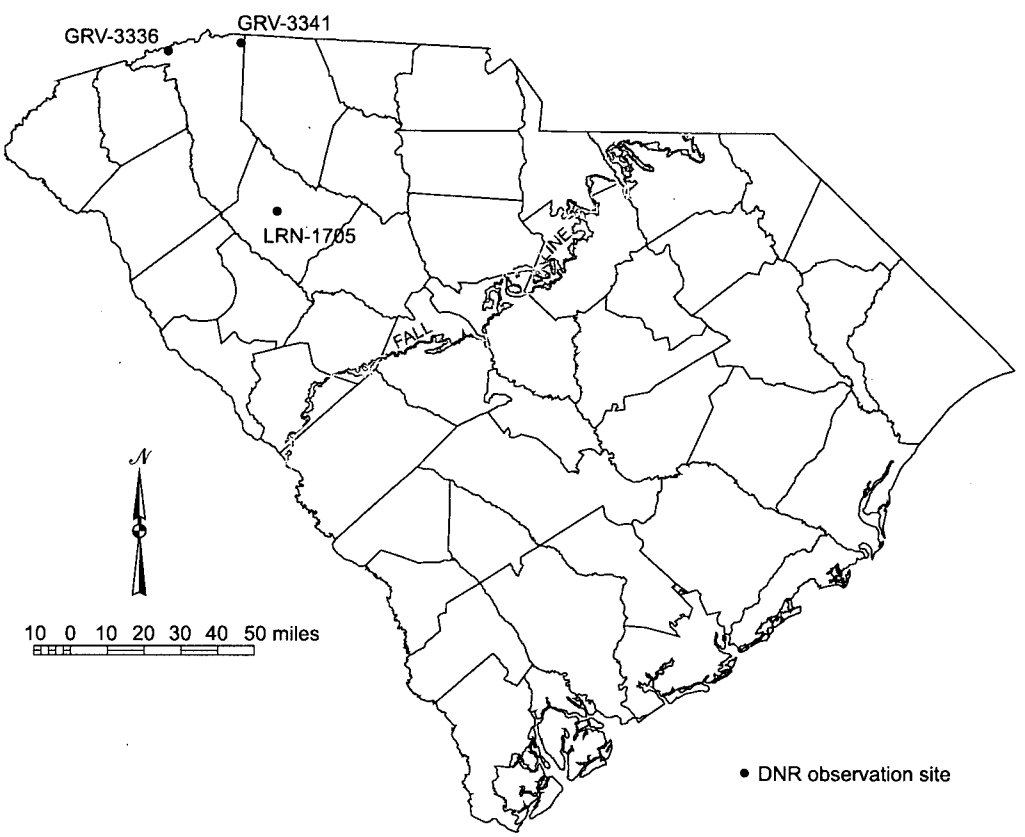
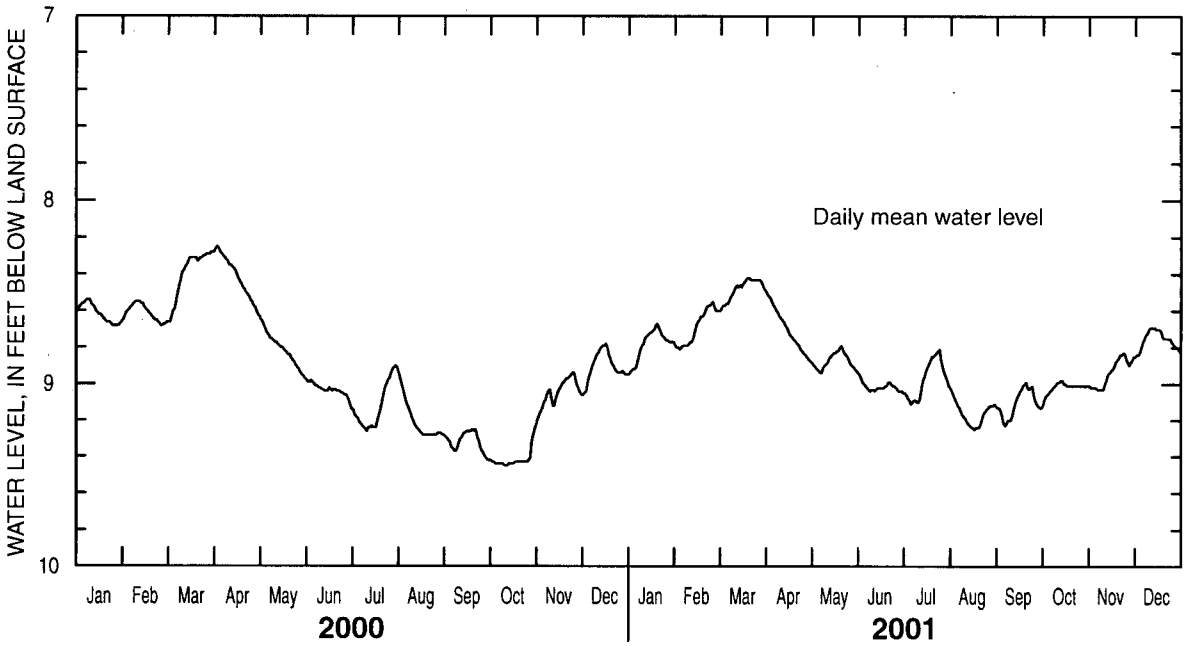


Figure 5. Locations of shallow aquifer system observation wells in the Piedmont province.

GREENVILLE COUNTY

WELL NUMBER: GRV-3336 GRID NUMBER: 49B-o5
LATITUDE: 35°07'30" LONGITUDE: 82°34'26"
LOCATION: South bank of the Middle Saluda River in Jones Gap State Park, 9 ft east of GRV-3335.
AQUIFER: Saprolite.
WELL CHARACTERISTICS: 4-inch diameter observation well. Depth: 19 ft. Open interval, 4-in PVC screen, 14 to 19 ft, with filter sand, 12 to 19 ft.
DATUM: Land surface is 1351.4 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Sanitary seal, 2.08 ft above land surface datum.
PERIOD OF RECORD: August 1997 to current year.
EXTREMES: Highest water level: 6.31 ft below land surface, January 7, 1998.
Lowest water level: 10.04 ft below land surface, September 17, 1999.
REMARKS: The saprolite in which the well is screened underlies blocks of granitic gneiss, probably placed during the construction of the adjacent roadbed.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	8.54	8.55	8.28	8.25	8.63	8.98	8.90	8.94	9.25	9.22	8.94	8.78
MEAN	8.62	8.61	8.40	8.41	8.81	9.03	9.13	9.20	9.32	9.41	9.04	8.90
LOW	8.68	8.68	8.66	8.62	8.97	9.12	9.26	9.28	9.42	9.45	9.19	9.06

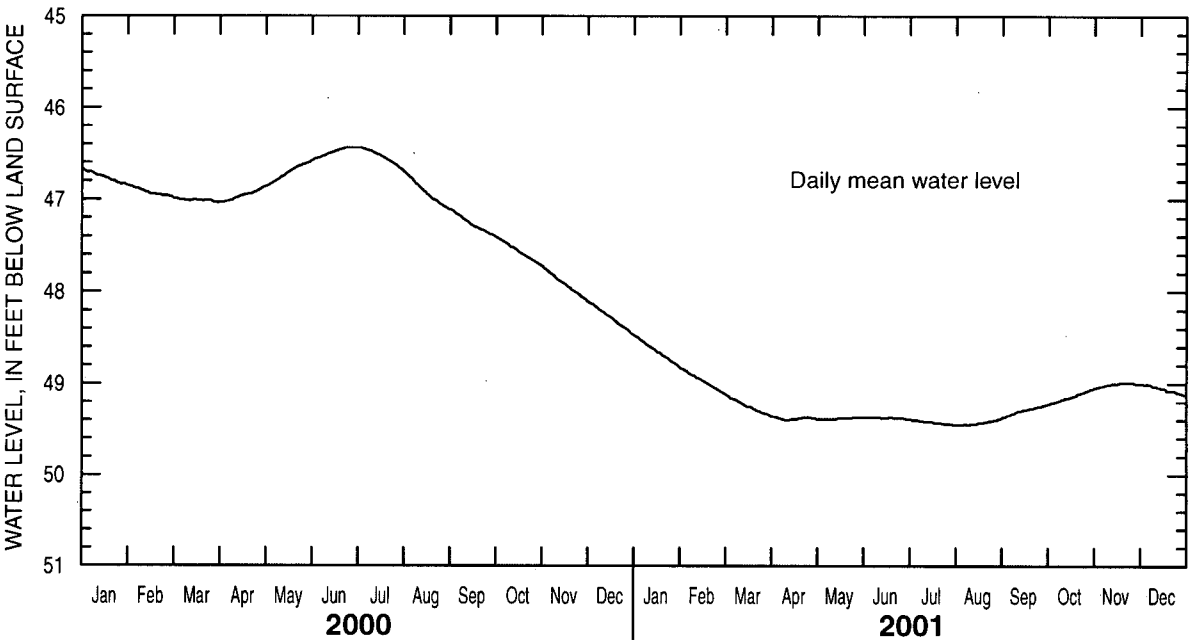
SUMMARY FOR 2000 HIGH 8.25 (Apr. 3, 2000) MEAN 8.91 LOW 9.45 (Oct. 10, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	8.67	8.55	8.42	8.49	8.79	8.94	8.81	9.02	8.99	8.98	8.83	8.69
MEAN	8.78	8.69	8.48	8.69	8.87	9.01	8.98	9.16	9.11	9.02	8.94	8.76
LOW	8.94	8.81	8.60	8.87	8.94	9.04	9.11	9.25	9.23	9.12	9.03	8.85

SUMMARY FOR 2001 HIGH 8.42 (Mar. 20, 2001) MEAN 8.87 LOW 9.25 (Aug. 17, 2001)

GREENVILLE COUNTY

WELL NUMBER: GRV-3341 GRID NUMBER: 45B-d1
LATITUDE: 35°09'38" LONGITUDE: 82°13'29"
LOCATION: Oak Grove Road Fire Station of Glassy Mountain Fire District.
AQUIFER: Saprolite.
WELL CHARACTERISTICS: 4-inch diameter observation well. Depth: 80 ft. Open interval 70 to 80 ft PVC screen, with filter sand 50 to 80 feet.
DATUM: Land surface is 1,029.6 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Sanitary seal, 2.72 ft above land surface datum.
PERIOD OF RECORD: May 1998 to current year.
EXTREMES: Highest water level: 40.02 ft below land surface, June 30, 1998.
Lowest water level: 49.45 ft below land surface, July 30, 2001.
REMARKS: Total saprolite thickness 132 ft.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	46.67	46.85	46.98	46.87	46.59	46.44	46.44	46.70	47.11	47.41	47.73	48.11
MEAN	46.76	46.92	47.01	46.96	46.72	46.49	46.53	46.92	47.27	47.57	47.92	48.28
LOW	46.85	46.97	47.04	47.03	46.86	46.58	46.68	47.11	47.40	47.72	48.10	48.47

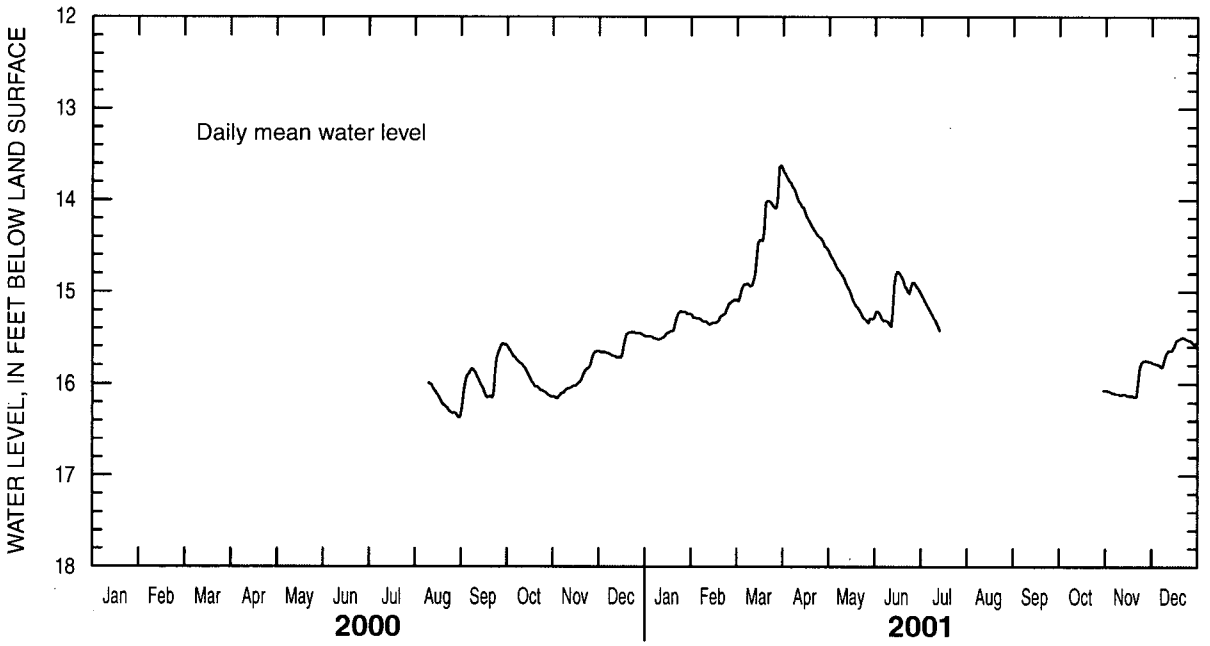
SUMMARY FOR 2000 HIGH 46.44 (June 23, 2000) MEAN 47.11 LOW 48.47 (Dec. 31, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	48.48	48.84	49.11	49.36	49.37	49.37	49.39	49.38	49.23	49.05	48.99	49.00
MEAN	48.65	48.97	49.24	49.38	49.38	49.38	49.42	49.43	49.29	49.14	49.01	49.06
LOW	48.83	49.10	49.35	49.40	49.39	49.39	49.45	49.45	49.37	49.22	49.05	49.12

SUMMARY FOR 2001 HIGH 48.48 (Jan. 1, 2001) MEAN 49.20 LOW 49.45 (July 30, 2001)

LAURENS COUNTY

WELL NUMBER: LRN-1705 GRID NUMBER: 43J-c2
LATITUDE: 34°29'26" LONGITUDE: 82°02'35"
LOCATION: Joe R. Adair Outdoor Education Center, Laurens.
AQUIFER: Quaternary alluvium.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 39 ft. Open interval 29 to 39 feet, 6-inch PVC screen.
DATUM: Land surface is 641 ft (map estimate) above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Instrument platform, 2.82 ft above land surface datum.
PERIOD OF RECORD: August 2000 to current year.
EXTREMES: Highest water level: 13.62 ft below land surface, March 31, 2001.
Lowest water level: 16.37 ft below land surface, August 30, 2000.
REMARKS: In body of well-sorted sand, at least 40 feet deep, of unknown extent.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	--	--	--	--	--	--	15.99	15.57	15.59	15.65	15.44
MEAN	--	--	--	--	--	--	--	16.21	15.92	15.91	15.96	15.58
LOW	--	--	--	--	--	--	--	16.37	16.26	16.14	16.16	15.72

SUMMARY FOR 2000 HIGH 15.44 (Dec. 21, 2000) MEAN -- LOW 16.37 (Aug. 30, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	15.21	15.09	13.62	16.64	14.54	14.78	15.25	--	--	--	15.75	15.50
MEAN	15.39	15.27	14.51	14.11	14.99	15.07	15.35	--	--	--	16.02	15.63
LOW	15.52	15.36	15.10	14.52	15.34	15.38	15.45	--	--	--	16.14	15.82

SUMMARY FOR 2001 HIGH 13.62 (Mar. 31, 2001) MEAN -- LOW 16.14 (Nov. 19, 2001)

COASTAL PLAIN WATER LEVELS

CAPE FEAR AQUIFER SYSTEM

The Cape Fear aquifer system consists principally of the Cape Fear Formation and is the basal aquifer system of the South Carolina Coastal Plain formations. It generally consists of sand and gravel beds separated by thick sections of silt and clay. It is thought to occur mainly in the Lower Coastal Plain and eastern part of the Upper Coastal Plain. The type locality of the Cape Fear Formation is in North Carolina, and no part of the formation crops out in South Carolina. Structure contours on the top of the aquifer system are shown in Figure 6.

Few wells penetrate the system, hence hydraulic and water-quality data are scarce. In general, the system is thought to be much less permeable and productive than the overlying Middendorf aquifer system, and it is likely to contain more highly mineralized water.

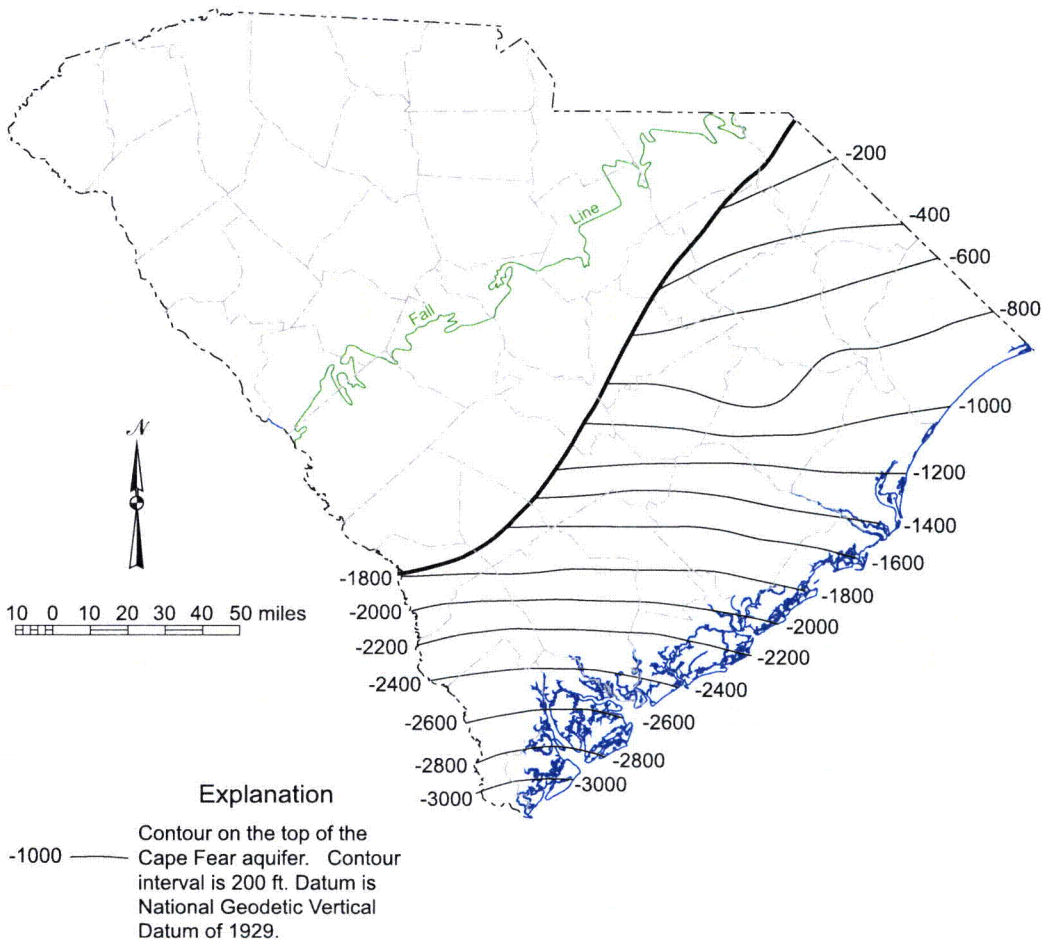


Figure 6. Contours on top of the Cape Fear aquifer system (from Aucott and others, 1987).

ALL-348 and BRN-1878 are the only observation wells known to be completed solely in the Cape Fear (Fig.7). Owing to its great depth and to lack of development by water users, the Cape Fear system experiences only small seasonal water-level fluctuations and shows little response to drought. Well BFT-2055, at Hilton Head Island, is screened in both the Cape Fear and Middendorf systems, and measurements therefore reflect composite water levels. They are presumed to more closely reflect Middendorf water levels, owing to that system's greater thickness and hydraulic conductivity. Consequently, BFT-2055 measurements are presented with Middendorf aquifer system data.

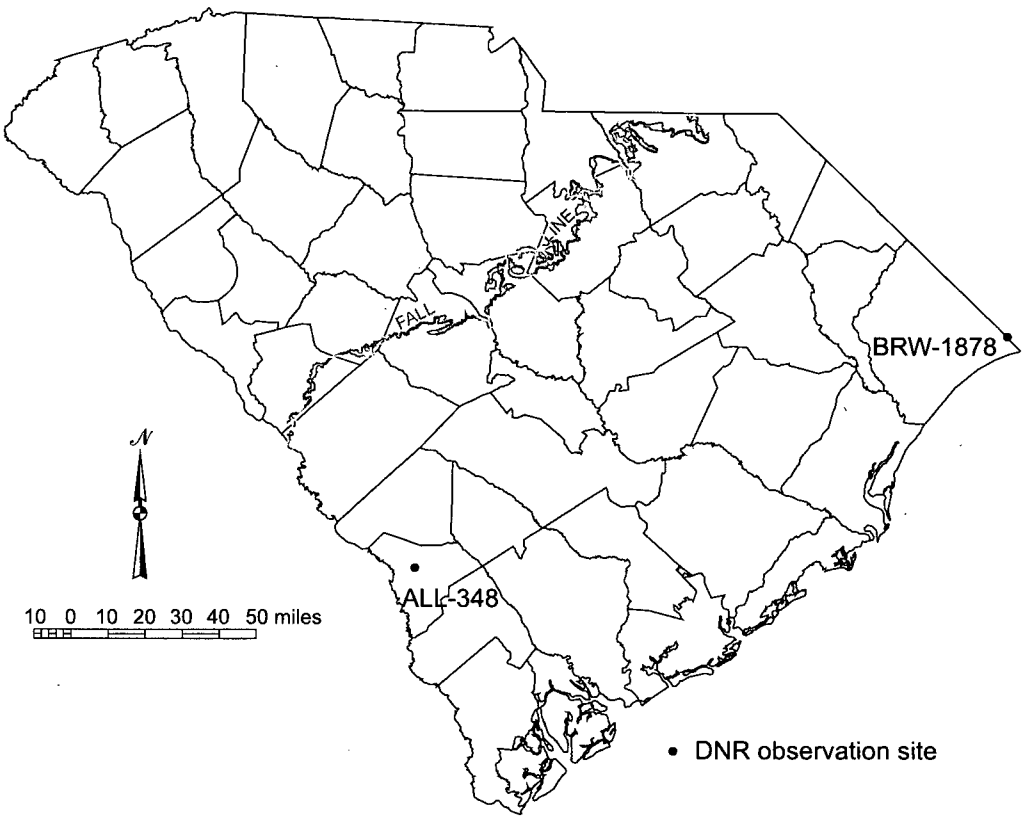
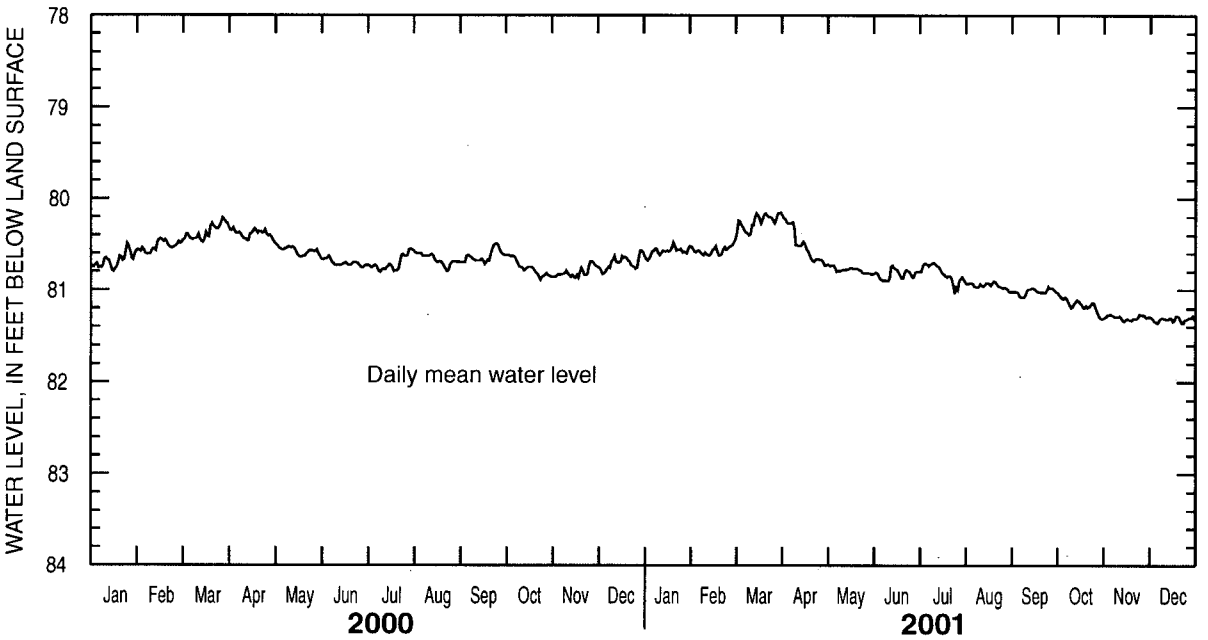


Figure 7. Locations of Cape Fear aquifer system observation wells.

ALLENDALE COUNTY

WELL NUMBER: ALL-348 GRID NUMBER: 35AA-q3
LATITUDE: 33°01'29" LONGITUDE: 81°23'05"
LOCATION: Appleton Fire Tower.
AQUIFER: Cape Fear.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 1,600 ft. Screened from 1,575 to 1,600 ft.
DATUM: Land surface is 280.50 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 2.80 ft above land surface datum.
PERIOD OF RECORD: October 1996 to current year.
EXTREMES: Highest water level: 79.05 ft below land surface, February 5, 1998.
Lowest water level: 81.36 ft below land surface, December 6, 2001.
REMARKS: One of nine wells drilled on site for Department of Energy project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	80.49	80.44	80.21	80.31	80.48	80.63	80.55	80.57	80.49	80.62	80.69	80.57
MEAN	80.68	80.53	80.37	80.38	80.57	80.71	80.72	80.67	80.63	80.76	80.81	80.71
LOW	80.80	80.61	80.48	80.46	80.64	80.76	80.81	80.80	80.72	80.89	80.87	80.83

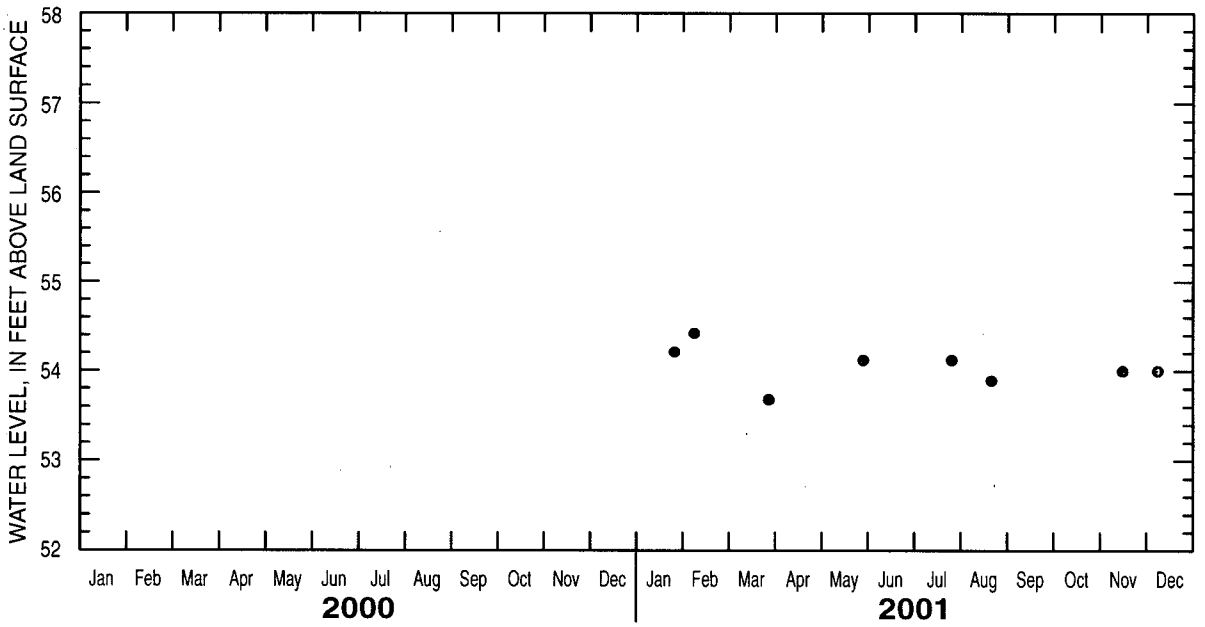
SUMMARY FOR 2000 HIGH 80.21 (Mar. 28, 2000) MEAN 80.63 LOW 80.89 (Oct. 24, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	80.48	80.51	80.16	80.15	80.72	80.73	80.70	80.90	80.96	81.03	81.26	81.28
MEAN	80.58	80.57	80.27	80.48	80.78	80.83	80.81	80.95	81.01	81.16	81.29	81.32
LOW	80.68	80.62	80.48	80.73	80.83	80.90	81.04	81.02	81.08	81.31	81.34	81.36

SUMMARY FOR 2001 HIGH 80.15 (Apr. 1, 2001) MEAN 80.84 LOW 81.36 (Dec. 6, 2001)

BRUNSWICK COUNTY, N. C.

WELL NUMBER: BRW-1878 GRID NUMBER: 2Q-j2
LATITUDE: 33°53'35" LONGITUDE: 78°35'20"
LOCATION: N. C. Department of Environment and Natural Resources well cluster, Calabash.
AQUIFER: Cape Fear.
WELL CHARACTERISTICS: 4-inch diameter observation well. Depth: 1,140 ft. Screened from 1,042 to 1,052 ft.
DATUM: Land surface is 48.27 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 2.30 ft above land surface datum.
PERIOD OF RECORD: January 2001 to current year.
EXTREMES: Highest water level: 54.4 ft above land surface, February 7, 2001.
Lowest water level: 53.7 ft above land surface, March 28, 2001.
REMARKS: Flowing well.



MIDDENDORF AQUIFER SYSTEM

The Middendorf aquifer system is composed mostly of Middendorf Formation sediments, but locally it includes parts of adjacent formations. In the updip areas, the aquifer is interbedded sand and clay lenses that were deposited in an upper delta plain environment. Near the coast, the system encompasses thin- to thick-bedded sand and clay deposited in marginal marine or lower delta plain environments. In general, the Middendorf aquifer has coarser sand and less clay in the western part of the Coastal Plain than in the eastern part.

The Middendorf crops out along the Fall Line from Chesterfield County to Edgefield County, except for some areas of Aiken County where it not exposed (Fig. 8). Its outcrop is narrowest in southwestern Edgefield County and widest in Chesterfield County. The aquifer dips southeastward near the Fall Line and southward along the coast. The top of the aquifer is at elevation 100, -700, and -1,700 ft msl (mean sea level) at Aiken, Little River, and Charleston, respectively. Thickness ranges from 0 at the Fall Line to more than 300 ft in Dorchester County.

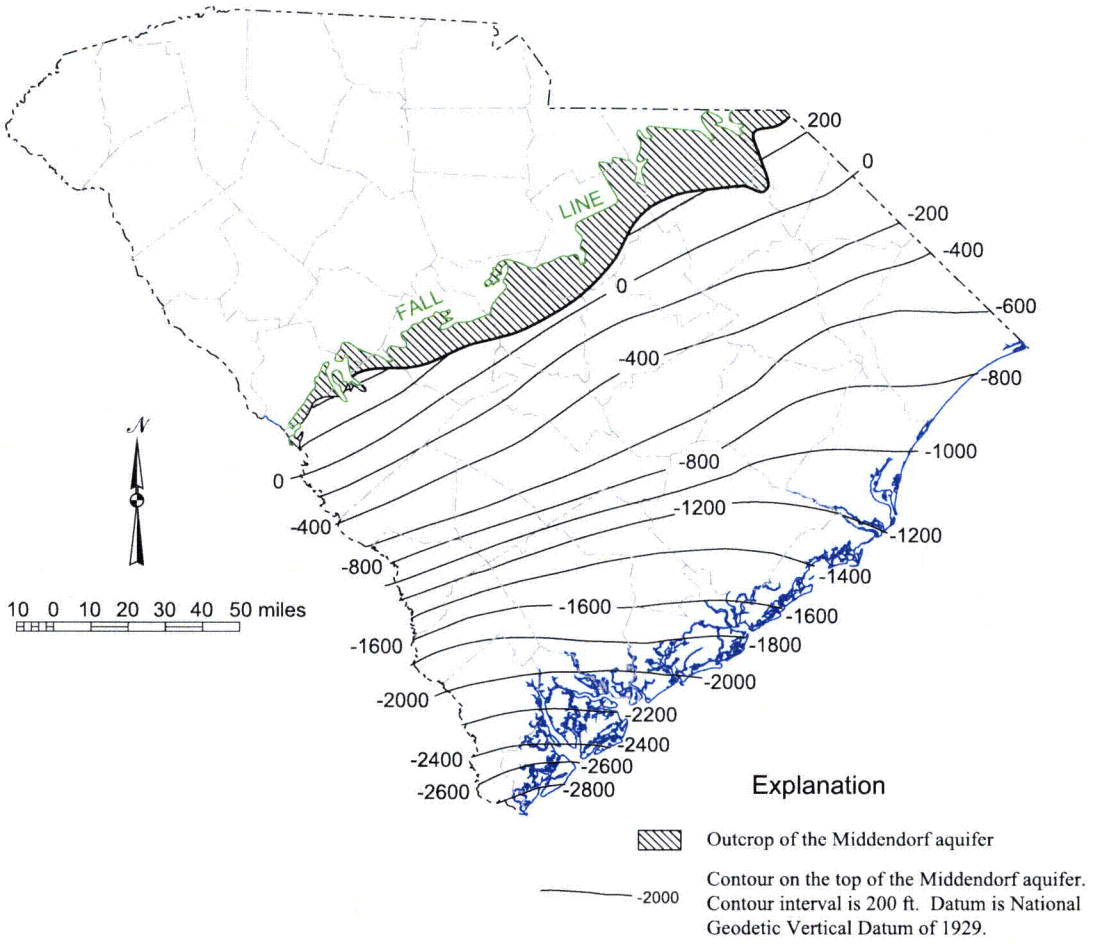


Figure 8. Contours on top of the Middendorf aquifer system (from Aucott and others, 1987).

Wells that tap the Middendorf system can be found in nearly all of South Carolina's Coastal Plain counties, and it is the State's most widely used artesian system. Well depths range from a few tens of feet in its outcrop and subcrop areas, where locally it is unconfined, to more than 2,700 ft in Beaufort County. Individual well yields that locally exceed 2,000 gpm and commonly exceed 500 gpm were reported by Newcome (2000). He reported transmissivities of up to 400,000 gpd/ft, (gallons per day per foot) and specific capacities as great as 75 gpm/ft (gallons per minute per foot of drawdown). Coarse sand and gravel formations occur in the system in its subcrop area and, where incised by stream erosion, substantially contribute to the base flow of both Upper Coastal Plain and through-flowing streams.

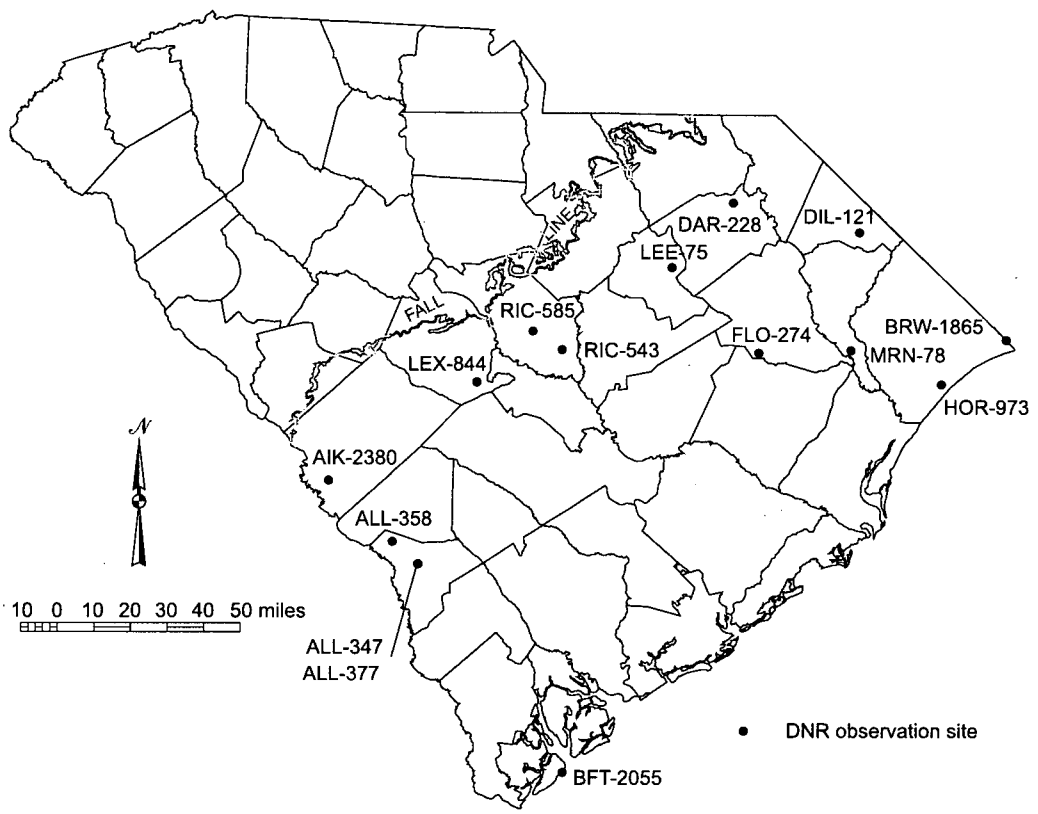
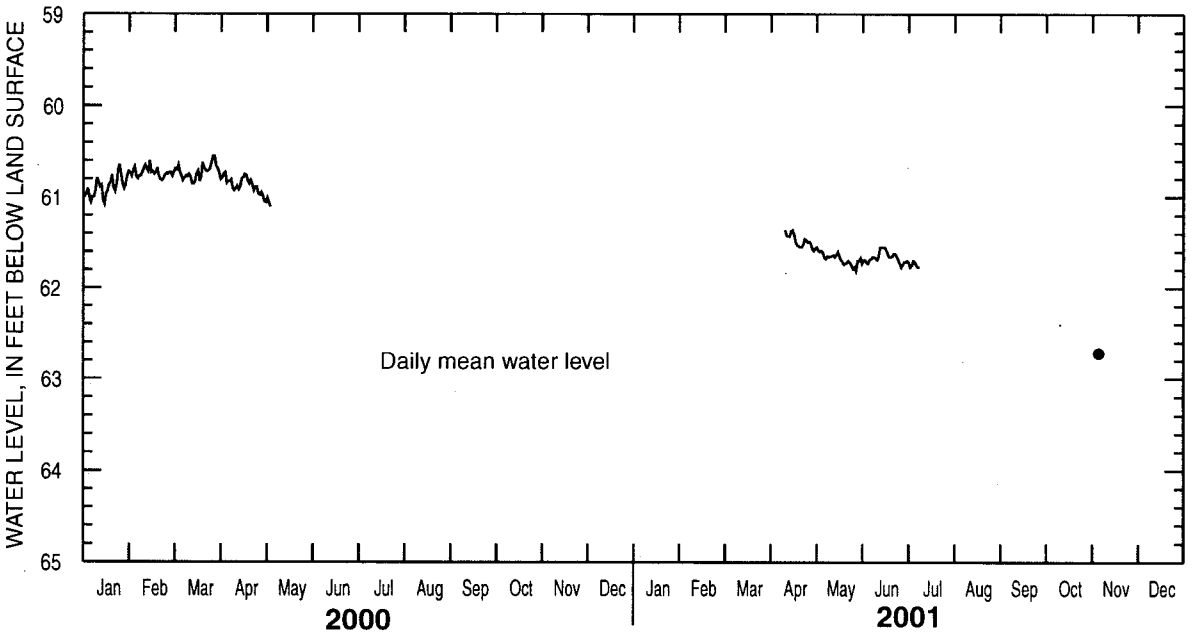


Figure 9. Locations of Middendorf aquifer system observation wells.

AIKEN COUNTY

WELL NUMBER: AIK-2380 GRID NUMBER: 40W-q4
LATITUDE: 33°21'12" LONGITUDE: 81°48'32"
LOCATION: 1.0 mile north of Jackson.
AQUIFER: Middendorf.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 385 ft. Screened from 370 to 380 ft.
DATUM: Land surface is 228.25 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of tee, 2.68 ft above land surface datum.
PERIOD OF RECORD: December 1995 to July 2001.
EXTREMES: Highest water level: 59.08 ft below land surface, April 2, 1996.
Lowest water level: 62.75 ft below land surface, November 5, 2001.
REMARKS: One of four wells drilled on site for Department of Energy project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	60.64	60.60	60.55	60.73	61.01	--	--	--	--	--	--	--
MEAN	60.89	60.74	60.73	60.87	--	--	--	--	--	--	--	--
LOW	61.08	60.82	60.86	61.05	61.12	--	--	--	--	--	--	--

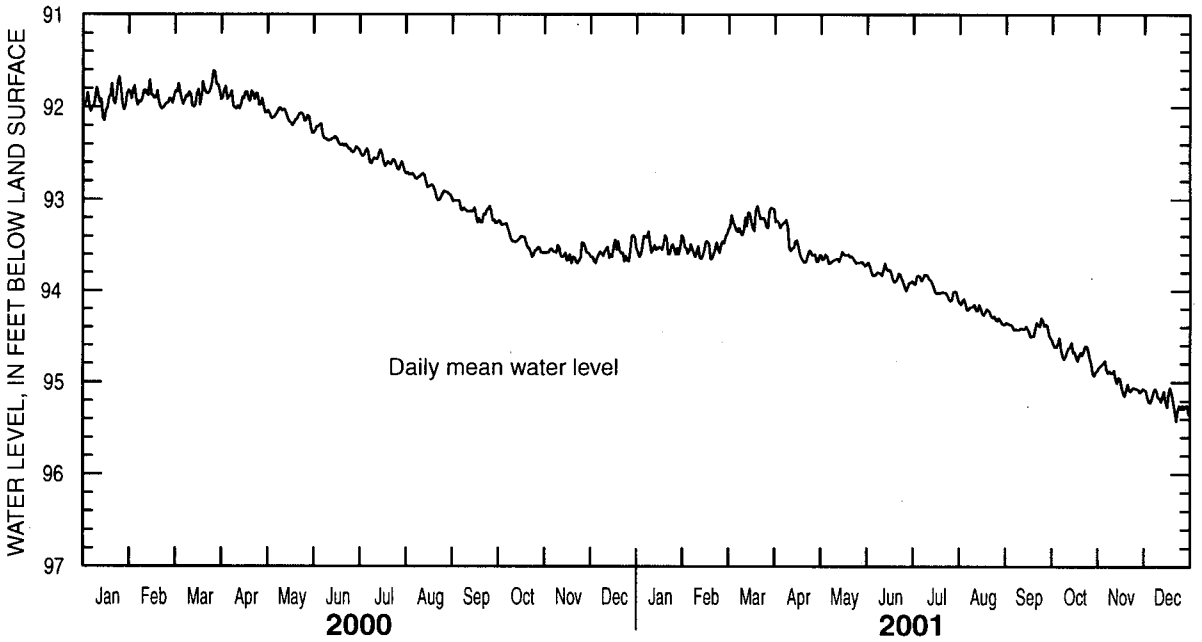
SUMMARY FOR 2000 HIGH 60.55 (Mar. 27, 2000) MEAN -- LOW 61.12 (May 5, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	--	--	61.31	61.55	61.55	61.70	--	--	--	--	--
	--	--	--	--	61.67	61.66	--	--	--	--	--	--
LOW	--	--	--	61.59	61.81	61.77	61.77	--	--	--	--	--

SUMMARY FOR 2001 HIGH 61.31 (Apr. 10, 2001) MEAN -- LOW 62.75 (Nov. 5, 2001)

ALLENDALE COUNTY

WELL NUMBER: ALL-347 GRID NUMBER: 35AA-q2
LATITUDE: 33°01'29" LONGITUDE: 81°23'03"
LOCATION: Appleton Fire Tower.
AQUIFER: Middendorf.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 1,423 ft. Screened from 1,408 to 1,418 ft.
DATUM: Land surface is 281.64 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 2.25 ft above land surface datum.
PERIOD OF RECORD: October 1996 to current year.
EXTREMES: Highest water level: 88.16 ft below land surface, March 14, 1997.
Lowest water level: 95.42 ft below land surface, December 22, 2001.
REMARKS: One of nine wells drilled on site for Department of Energy project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	91.68	91.71	91.61	91.78	92.01	92.18	92.45	92.71	93.01	93.23	93.47	93.39
MEAN	91.93	91.90	91.85	91.92	92.11	92.36	92.57	92.84	93.14	93.44	93.59	93.57
LOW	92.15	92.02	92.00	92.06	92.28	92.49	92.70	93.01	93.26	93.63	93.70	93.70

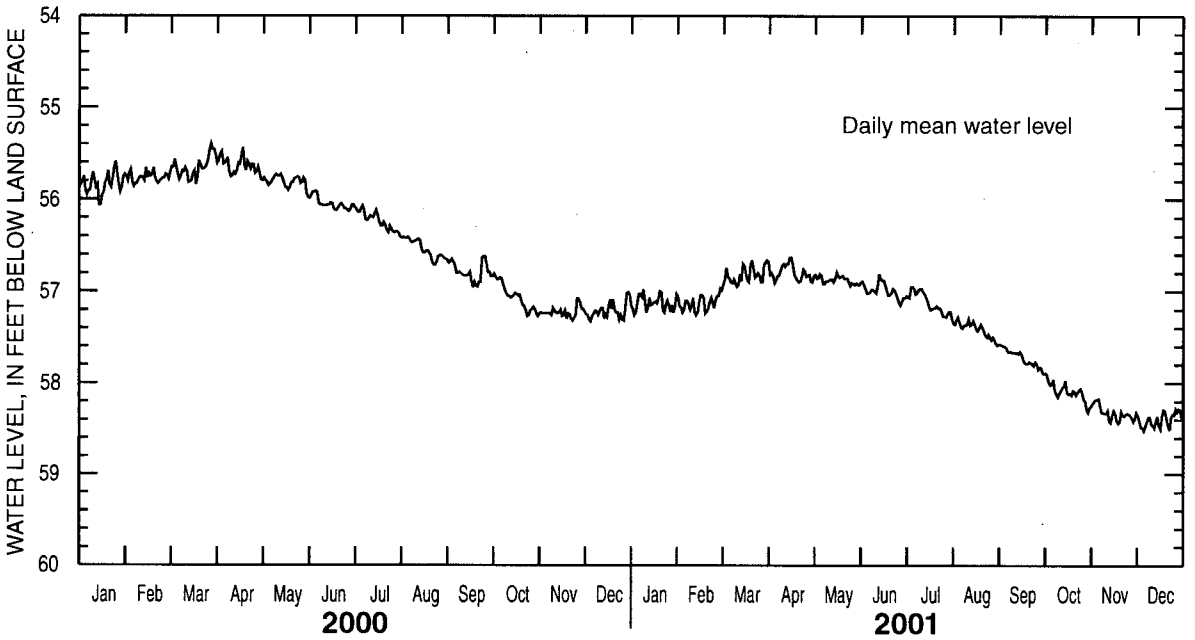
SUMMARY FOR 2000 HIGH 91.57 (Mar. 27, 2000) MEAN 92.60 LOW 93.70 (Nov. 22, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	93.35	93.40	93.07	93.10	93.57	93.69	93.82	94.09	94.30	94.52	94.77	95.06
MEAN	93.51	93.54	93.24	93.47	93.65	93.83	93.96	94.23	94.41	94.69	94.98	95.20
LOW	93.63	93.65	93.39	93.69	93.73	94.00	94.11	94.37	94.52	94.93	95.15	95.42

SUMMARY FOR 2001 HIGH 54.69 (Apr. 10, 2001) MEAN 94.06 LOW 95.42 (Dec. 22, 2001)

ALLENDALE COUNTY

WELL NUMBER: ALL-358 GRID NUMBER: 37Z-t3
LATITUDE: 33°06'47" LONGITUDE: 81°30'22"
LOCATION: Rolling Hills Road, Millet.
AQUIFER: Middendorf.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 1,123 ft. Screened from 1,108 to 1,118 ft.
DATUM: Land surface is 243.12 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 2.67 ft above land surface datum.
PERIOD OF RECORD: November 1995 to current year.
EXTREMES: Highest water level: 52.57 ft below land surface, March 19, 1996.
Lowest water level: 58.52 ft below land surface, December 5, 2001.
REMARKS: One of nine wells drilled on site for Department of Energy project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	55.59	55.66	55.40	55.44	55.73	55.91	56.07	56.41	56.62	56.81	57.08	57.01
MEAN	55.83	55.77	55.66	55.64	55.81	56.05	56.24	56.54	56.79	57.07	57.23	57.21
LOW	56.06	55.86	55.84	55.79	55.98	56.13	56.41	56.71	56.96	57.27	57.32	57.33

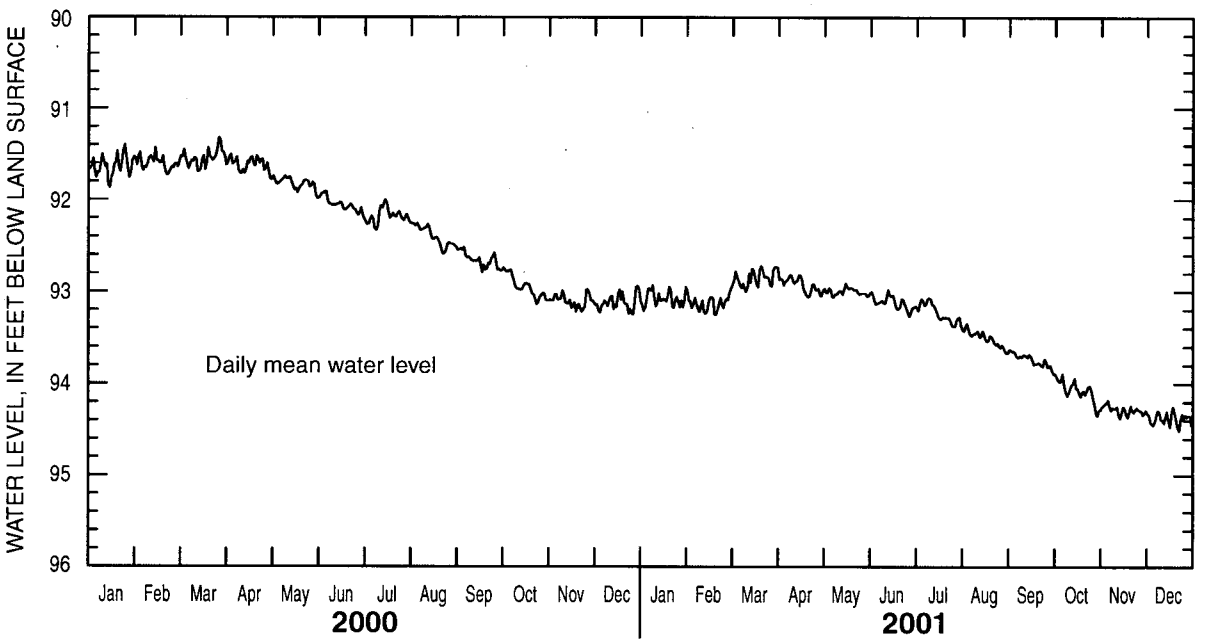
SUMMARY FOR 2000 HIGH 55.40 (Mar. 28, 2000) MEAN 56.32 LOW 57.33 (Dec. 4, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	56.98	56.97	56.66	56.63	56.79	56.81	56.95	57.28	57.58	57.89	58.17	58.28
MEAN	57.13	57.14	56.83	56.80	56.87	56.99	57.12	57.42	57.73	58.10	58.33	58.40
LOW	57.26	57.26	56.99	56.91	56.94	57.15	57.30	57.59	57.90	58.32	58.44	58.52

SUMMARY FOR 2001 HIGH 56.63 (Apr. 15, 2001) MEAN 57.40 LOW 58.52 (Dec. 5, 2001)

ALLENDALE COUNTY

WELL NUMBER: ALL-377 GRID NUMBER: 35AA-q10
LATITUDE: 33°01'28" LONGITUDE: 81°23'04"
LOCATION: Appleton Fire Tower.
AQUIFER: Middendorf.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 1,199 ft. Screened from 1,174 to 1,194 ft.
DATUM: Land surface is 281.52 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 3.52 ft above land surface datum.
PERIOD OF RECORD: October 1996 to current year.
EXTREMES: Highest water level: 88.12 ft below land surface, March 14, 1997.
Lowest water level: 94.51 ft below land surface, December 22, 2001.
REMARKS: One of nine wells drilled on site for Department of Energy project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	91.40	91.43	91.32	91.50	91.74	91.91	92.00	92.26	92.52	92.74	92.98	92.94
MEAN	91.63	91.60	91.54	91.61	91.82	92.05	92.18	92.40	92.66	92.95	93.10	93.12
LOW	91.87	91.73	91.69	91.77	91.99	92.17	92.33	92.59	92.79	93.14	93.22	93.25

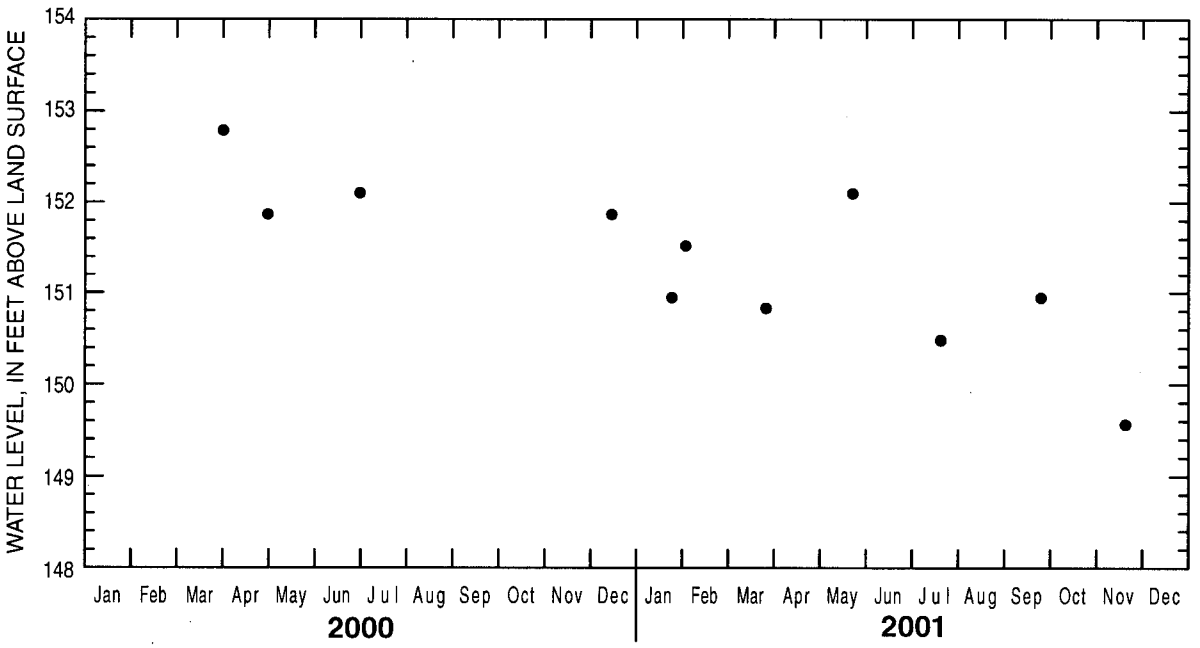
SUMMARY FOR 2000 HIGH 91.32 (Mar. 27, 2000) MEAN 92.23 LOW 93.25 (Dec. 26, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	92.93	93.01	92.72	92.74	92.91	92.98	93.07	93.35	93.63	93.89	94.18	94.25
MEAN	93.08	93.14	92.86	92.92	93.00	93.12	93.23	93.51	93.74	94.08	94.28	94.38
LOW	93.21	93.25	93.00	93.06	93.06	93.27	93.38	93.67	93.89	94.35	94.38	94.51

SUMMARY FOR 2001 HIGH 92.72 (Mar. 21, 2001) MEAN 93.45 LOW 94.51 (Dec. 22, 2001)

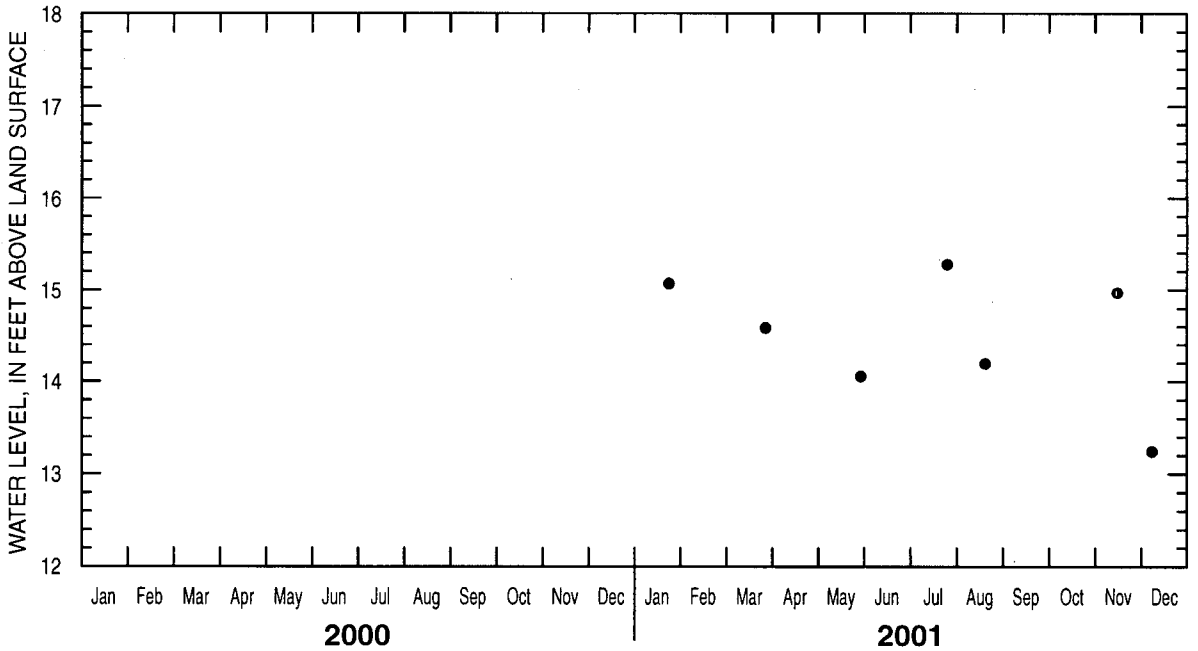
BEAUFORT COUNTY

WELL NUMBER: BFT-2055 GRID NUMBER: 27KK-r14
LATITUDE: 32°11'29" LONGITUDE: 80°42'14"
LOCATION: Near Singleton Beach, Hilton Head Island.
AQUIFER: Middendorf and Cape Fear.
WELL CHARACTERISTICS: 8-inch diameter test well. Depth: 3,700 ft. Screened from 2,782 to 3,688 ft.
DATUM: Land surface is 12 ft (map estimate) above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of 8-inch blind flange, 3.90 ft above concrete pad at land surface datum.
PERIOD OF RECORD: April 2000 to current year.
EXTREMES: Highest water level: 152.6 ft above land surface, April 1, 2000.
Lowest water level: 149.4 ft below land surface, November 19, 2001.
REMARKS: Flowing well measured with 0 –100 psi gage. Water levels are tide influenced. May and July 2000 readings estimated from data-logger record.



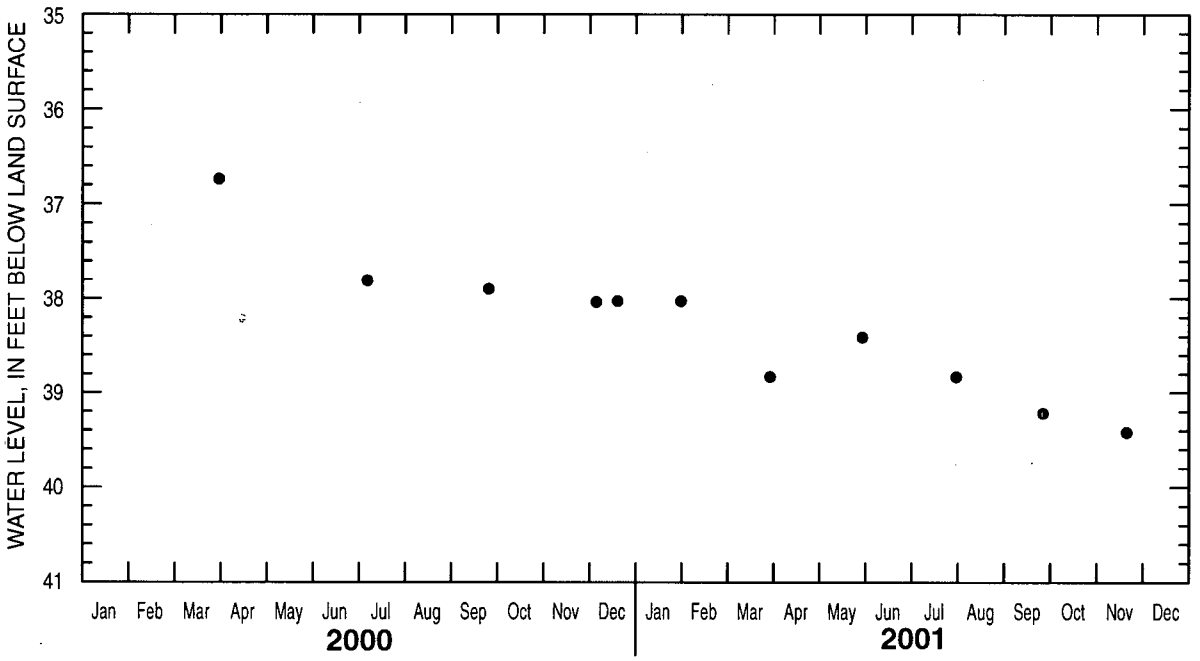
BRUNSWICK COUNTY, N. C.

WELL NUMBER: BRW-1865 GRID NUMBER: 2Q-j6
LATITUDE: 33°53'33" LONGITUDE: 78°35'23"
LOCATION: N.C. Department of Environment and Natural Resources well cluster, Calabash.
AQUIFER: Middendorf.
WELL CHARACTERISTICS: 4-inch diameter observation well. Depth: 904 ft. Screened from 810 to 820 ft.
DATUM: Land surface is 47.56 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 2.88 ft above land surface datum.
PERIOD OF RECORD: January 2001 to current year.
EXTREMES: Highest water level: 15.3 ft above land surface, July 26, 2001.
Lowest water level: 13.2 ft above land surface, December 7, 2001.
REMARKS: Flowing well.



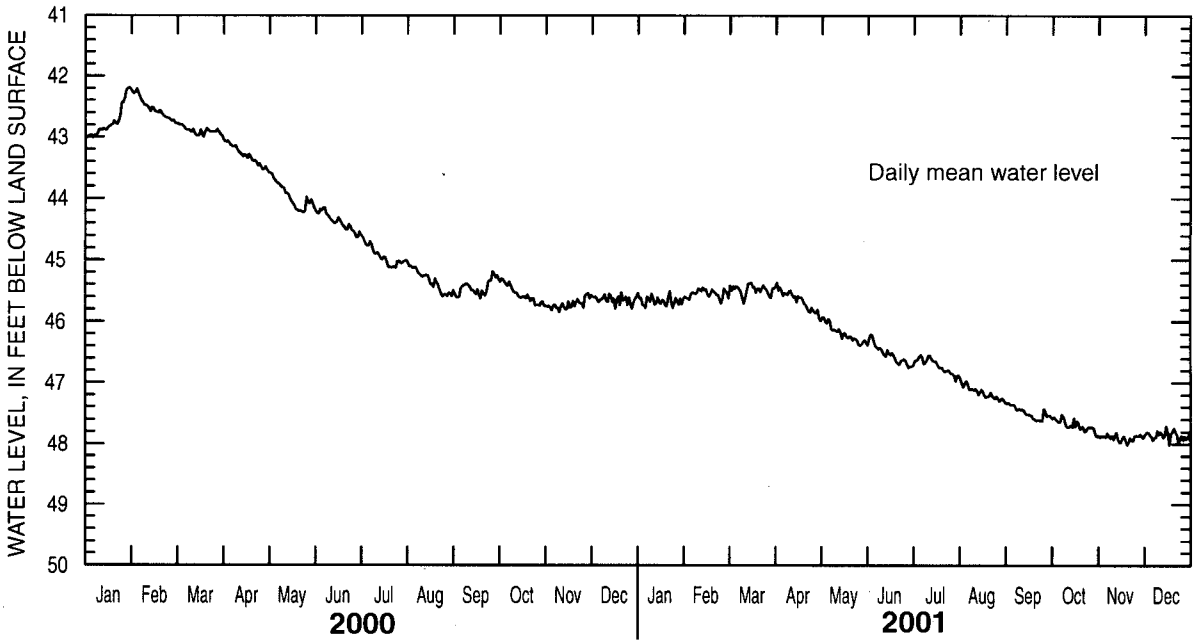
DARLINGTON COUNTY

WELL NUMBER: DAR-228 GRID NUMBER: 17J-m1
LATITUDE: 34°27'32" LONGITUDE: 79°52'48"
LOCATION: Lake Darpo, near Society Hill.
AQUIFER: Middendorf.
WELL CHARACTERISTICS: 2-inch diameter observation well. Depth: 186 ft. Screened from 175 to 185 ft.
DATUM: Land surface is 170 ft (map estimate) above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 1.64 ft above land surface datum.
PERIOD OF RECORD: October 1999 to current year.
EXTREMES: Highest water level: 36.74 ft below land surface, March 30, 2000.
Lowest water level: 39.42 ft below land surface, November 19, 2001.
REMARKS: Drilled and cored for DNR/USGS aquifer delineation project.



DILLON COUNTY

WELL NUMBER: DIL-121 GRID NUMBER: 10L-c2
LATITUDE: 34°19'58" LONGITUDE: 79°16'48"
LOCATION: Little Pee Dee State Park, near Dillon.
AQUIFER: Middendorf.
WELL CHARACTERISTICS: 2-inch diameter observation well. Depth: 294 ft. Screened from 269 to 284 ft.
DATUM: Land surface is 95 ft (map estimate)above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 2.98 ft above land surface datum.
PERIOD OF RECORD: December 1999 to current year.
EXTREMES: Highest water level: 42.19 ft below land surface, January 30, 2000.
Lowest water level: 48.02 ft below land surface, November 11, 2001.
REMARKS: Drilled and cored for DNR/USGS aquifer delineation project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	42.19	42.21	42.77	43.03	43.58	44.15	44.59	45.05	45.19	45.31	45.54	45.53
MEAN	42.75	42.53	42.90	43.29	43.96	44.38	44.93	45.35	45.45	45.57	45.72	45.64
LOW	43.03	42.76	43.00	43.54	44.23	44.63	45.13	45.60	45.63	45.75	45.85	45.79

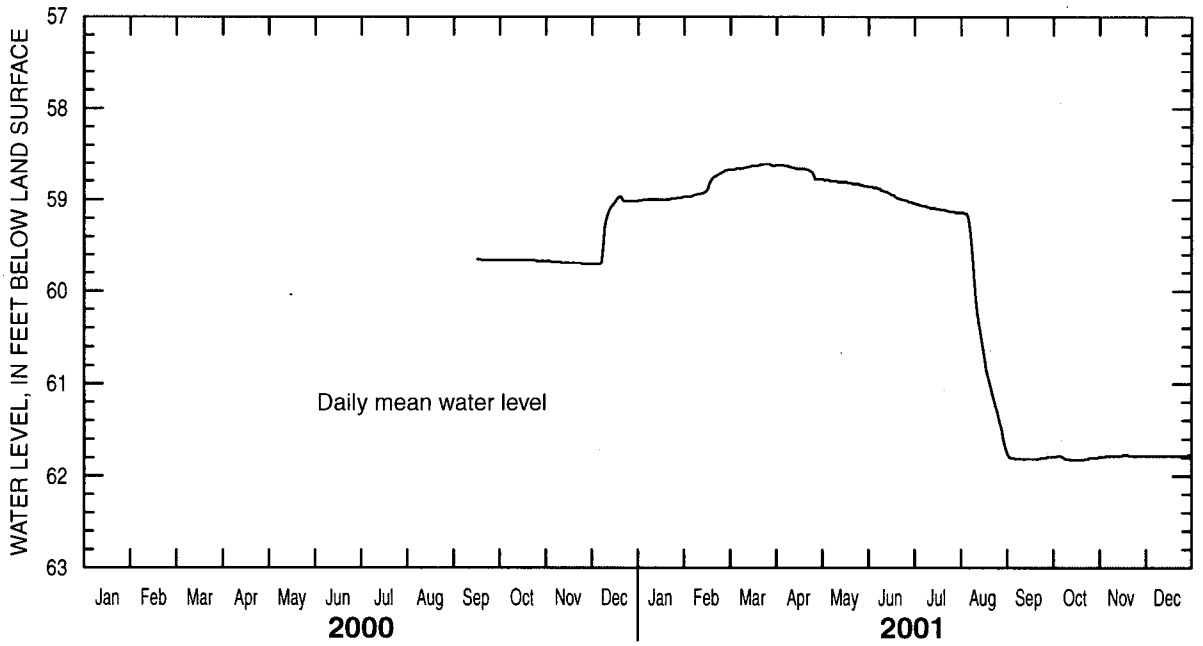
SUMMARY FOR 2000 HIGH 42.19 (Jan. 30, 2000) MEAN 44.38 LOW 45.85 (Nov. 9, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	45.51	45.45	45.37	45.37	45.93	46.21	46.54	46.94	47.33	47.52	47.81	47.71
MEAN	45.67	45.55	45.49	45.65	46.19	46.53	46.72	47.16	47.49	47.70	47.90	47.86
LOW	45.78	45.71	45.71	45.96	46.39	46.75	46.98	47.34	47.63	47.88	48.02	48.02

SUMMARY FOR 2001 HIGH 45.37 (Mar. 16, 2001) MEAN 46.66 LOW 48.02 (Nov. 19, 2001)

FLORENCE COUNTY

WELL NUMBER: FLO-274 GRID NUMBER: 16Q-s1
LATITUDE: 33°51'20" LONGITUDE: 79°45'59"
LOCATION: Lake City Airport.
AQUIFER: Middendorf.
WELL CHARACTERISTICS: 4-inch diameter observation well. Depth: 1,090 ft. Screened from 540 to 560 ft.
DATUM: Land surface is 78.53 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 1.34 ft above land surface datum.
PERIOD OF RECORD: September 2000 to current year.
EXTREMES: Highest water level: 58.61 ft below land surface, March 23, 2001.
Lowest water level: 61.82 ft below land surface, October 12, 2001.
REMARKS: Drilled and cored for USGS Regional Aquifer System Analysis project. Possible collapsed well screen.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	--	--	--	--	--	--	--	59.65	59.66	59.67	58.97
MEAN	--	--	--	--	--	--	--	--	59.66	59.66	59.69	59.21
LOW	--	--	--	--	--	--	--	--	59.66	59.67	59.70	59.70

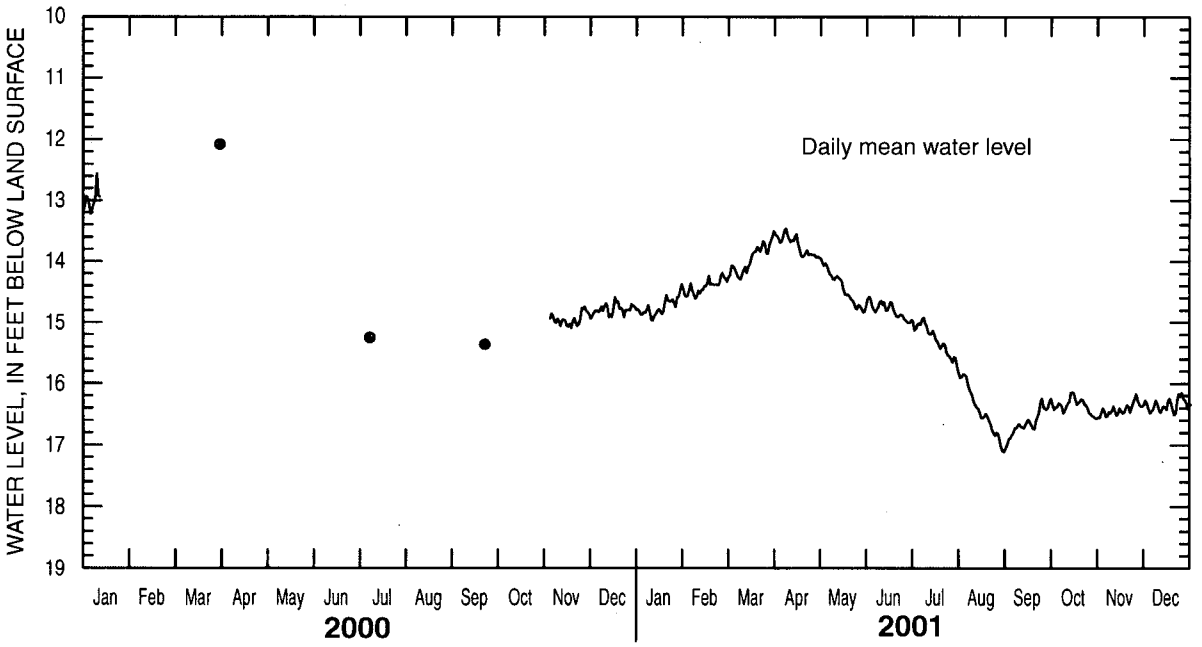
SUMMARY FOR 2000 HIGH 58.97 (Dec. 19. 2000) MEAN -- LOW 59.70 (Nov. 24, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	58.97	58.68	58.61	58.62	58.78	58.86	59.04	59.14	61.76	61.78	61.77	61.77
MEAN	59.00	58.85	58.64	58.67	58.81	58.94	59.09	60.45	61.80	61.80	61.78	61.78
LOW	59.01	58.97	58.67	58.78	58.85	59.03	59.14	61.72	61.81	61.82	61.79	61.78

SUMMARY FOR 2001 HIGH 58.61 (Mar. 23, 2001) MEAN 59.97 LOW 61.82 (Oct. 12, 2001)

LEE COUNTY

WELL NUMBER: LEE-75 GRID NUMBER: 21M-k1
LATITUDE: 34°12'08" LONGITUDE: 80°10'30"
LOCATION: Lee State Park, near Bishopville.
AQUIFER: Middendorf.
WELL CHARACTERISTICS: 2-inch diameter observation well. Depth: 356 ft. Screened from 306 to 356 ft.
DATUM: Land surface is 195 ft (map estimate) above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 3.55 ft above land surface datum.
PERIOD OF RECORD: December 1999 to current year.
EXTREMES: Highest water level: 12.08 ft below land surface, March 30, 2000.
Lowest water level: 17.11 ft below land surface, August 31, 2001.
REMARKS: Drilled and cored for DNR/USGS aquifer delineation project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	12.56	--	--	--	--	--	--	--	--	--	14.74	14.59
MEAN	--	--	--	--	--	--	--	--	--	--	14.95	14.79
LOW	13.22	--	--	--	--	--	--	--	--	--	15.09	14.94

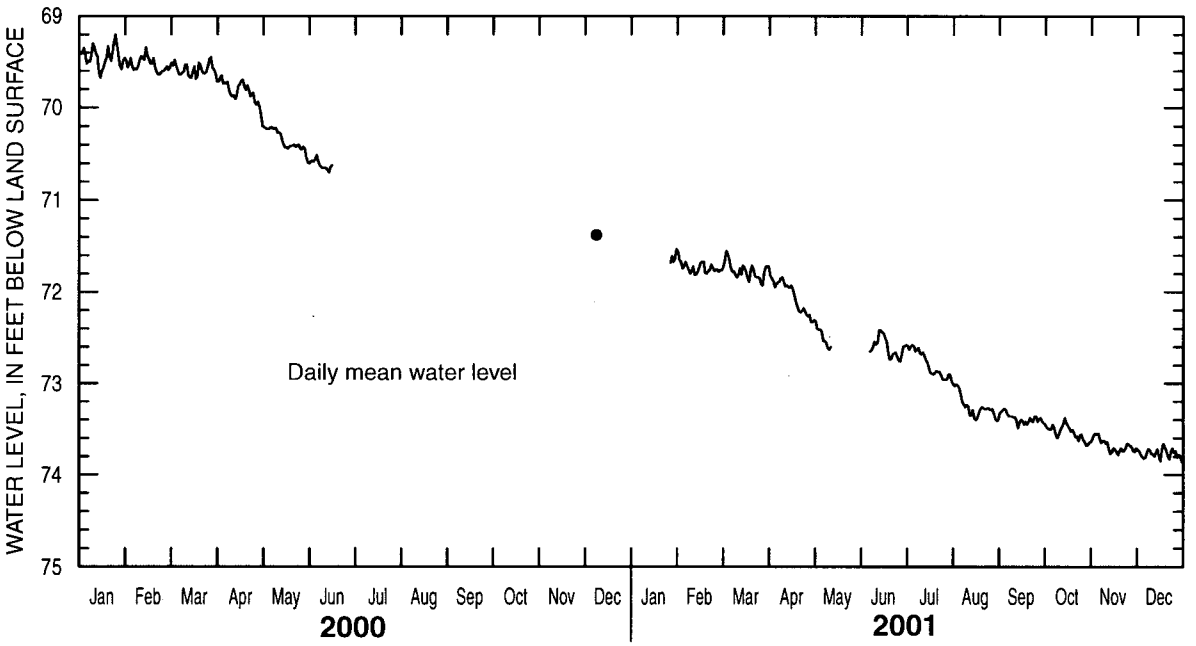
SUMMARY FOR 2000 HIGH 12.08 (Mar. 30, 2000) MEAN -- LOW 15.36 (Sept. 22, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	14.37	14.19	13.59	13.46	13.94	14.58	14.92	15.83	16.25	16.14	16.17	16.15
MEAN	14.74	14.42	13.99	13.73	14.41	14.79	15.27	16.44	16.64	16.36	16.42	16.35
LOW	14.97	14.61	14.33	13.94	14.83	15.01	15.71	17.11	17.06	16.57	16.56	16.51

SUMMARY FOR 2001 HIGH 13.46 (Apr. 9, 2001) MEAN 15.30 LOW 17.11 (Aug. 31, 2001)

LEXINGTON COUNTY

WELL NUMBER: LEX-844 GRID NUMBER: 32S-b4
LATITUDE: 33°44'45" LONGITUDE: 81°06'27"
LOCATION: Swansea Primary School, Swansea.
AQUIFER: Middendorf.
WELL CHARACTERISTICS: 2-inch diameter observation well. Depth: 522 ft. Screened from 392 to 502 ft.
DATUM: Land surface is 360 ft (map estimate) above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 3.35 ft above land surface datum.
PERIOD OF RECORD: October 1999 to current year.
EXTREMES: Highest water level: 68.89 ft below land surface, October 27, 1999.
Lowest water level: 73.87 ft below land surface, December 31, 2001.
REMARKS: Drilled and cored for DNR/USGS aquifer delineation project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	69.20	69.34	69.45	69.65	70.20	70.51	--	--	--	--	--	--
MEAN	69.45	69.53	69.58	69.82	70.35	70.62	--	--	--	--	--	--
LOW	69.68	69.64	69.69	70.06	70.59	70.70	--	--	--	--	--	--

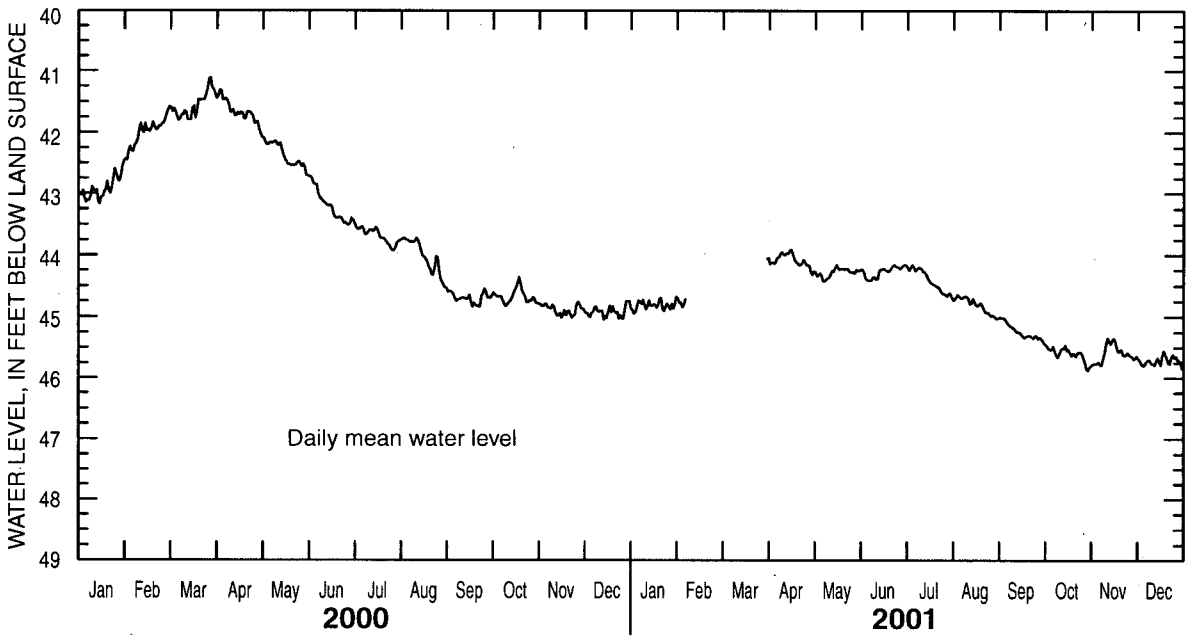
SUMMARY FOR 2000 HIGH 69.20 (Jan. 25, 2000) MEAN -- LOW 71.38 (Dec. 8, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	71.53	71.65	71.55	71.72	72.31	72.42	72.58	73.01	73.28	73.38	73.55	73.66
MEAN	71.62	71.74	71.77	72.03	72.48	72.61	72.78	73.26	73.38	73.54	73.68	73.77
LOW	71.68	71.81	71.93	72.33	72.63	72.76	72.97	73.41	73.49	73.68	73.78	73.87

SUMMARY FOR 2001 HIGH 71.53 (Jan. 30, 2001) MEAN 72.83 LOW 73.87 (Dec. 31, 2001)

RICHLAND COUNTY

WELL NUMBER: RIC-543 GRID NUMBER: 27Q-m1
LATITUDE: 33°52'30" LONGITUDE: 80°42'08"
LOCATION: Webber School, Eastover.
AQUIFER: Middendorf.
WELL CHARACTERISTICS: 2-inch diameter observation well. Depth: 420 ft. Screened from 370 to 410 ft.
DATUM: Land surface is 183.82 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 3.44 ft above land surface datum.
PERIOD OF RECORD: October 1996 to current year.
EXTREMES: Highest water level: 41.11 ft below land surface, March 28, 2000.
Lowest water level: 45.88 ft below land surface, October 29, 2001.
REMARKS: Drilled and cored for DNR/USGS aquifer delineation project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	42.46	41.63	41.11	41.31	42.08	42.72	43.48	43.72	44.55	44.36	44.76	44.75
MEAN	42.92	42.01	41.56	41.65	42.36	43.20	43.68	44.03	44.70	44.68	44.89	44.92
LOW	43.17	42.45	41.80	42.02	42.71	43.51	43.92	44.54	44.84	44.83	45.02	45.05

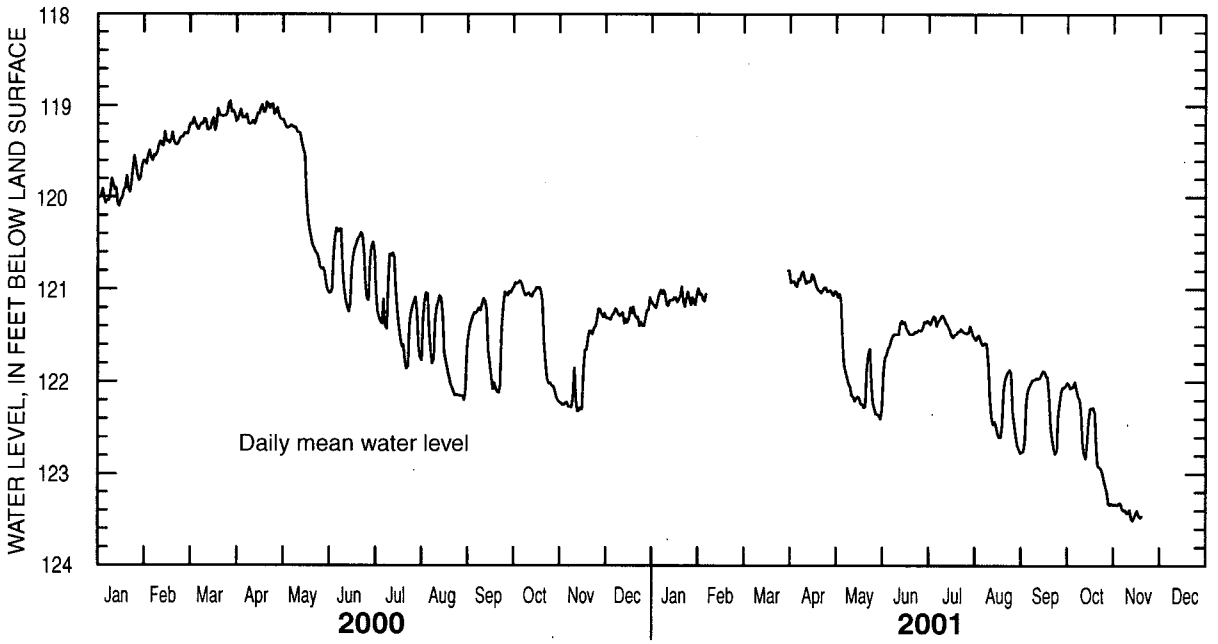
SUMMARY FOR 2000 HIGH 41.11 (Mar. 28, 2000) MEAN 43.39 LOW 45.05 (Dec. 13, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	44.68	44.72	--	43.91	44.16	44.16	44.16	44.64	45.01	45.45	45.34	45.55
MEAN	44.81	--	--	44.08	44.28	44.40	44.40	44.82	45.24	45.60	45.60	45.72
LOW	44.95	44.84	--	44.32	44.42	44.69	44.69	45.03	45.43	45.88	45.79	45.86

SUMMARY FOR 2001 HIGH 43.91 (Apr. 16, 2001) MEAN 44.88 LOW 45.88 (Oct. 29, 2001)

RICHLAND COUNTY

WELL NUMBER: RIC-585 GRID NUMBER: 29P-t4
LATITUDE: 33°56'56" LONGITUDE: 80°50'27"
LOCATION: Horrell Hill Elementary School, Horrell Hill.
AQUIFER: Middendorf.
WELL CHARACTERISTICS: 2-inch diameter observation well. Depth: 403 ft. Screened from 263 to 293 ft.
DATUM: Land surface is 328.04 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 4.50 ft above land surface datum.
PERIOD OF RECORD: September 1997 to current year.
EXTREMES: Highest water level: 115.45 ft below land surface, May 8, 1998.
Lowest water level: 123.51 ft below land surface, November 13, 2001.
REMARKS: Drilled and cored for DNR/USGS aquifer delineation project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	119.55	119.28	118.95	118.96	119.15	120.34	120.60	121.04	121.00	120.91	121.21	121.09
MEAN	119.89	119.43	119.15	119.09	119.91	120.72	121.25	121.69	121.43	121.36	121.83	121.28
LOW	120.10	119.64	119.27	119.20	121.01	121.24	121.86	122.20	122.12	122.22	122.32	121.40

SUMMARY FOR 2000 HIGH 118.95 (Mar. 28, 2000) MEAN 120.59 LOW 122.32 (Nov. 12, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	120.97	121.05	--	120.80	121.02	121.34	121.28	121.50	121.88	122.00	123.32	--
MEAN	121.10	--	--	120.94	121.93	121.52	121.41	122.10	122.21	122.60	--	--
LOW	121.20	121.13	--	121.07	122.40	122.30	121.52	122.77	122.78	123.34	123.51	--

SUMMARY FOR 2001 HIGH 120.80 (Mar. 31, 2001) MEAN -- LOW 123.51 (Nov. 13, 2001)

BLACK CREEK AQUIFER SYSTEM

Aucott, Davis, and Speiran (1987) delineated the Black Creek aquifer system on the basis of geologic data (primarily geophysical well logs), water-level data, water-chemistry data, and previous investigations. The Black Creek is the youngest of the Cretaceous aquifer systems in the region. It is composed mostly of permeable sediments of the Black Creek Formation but locally includes sediments of underlying Tertiary-age formations and the overlying Peedee Formation. The aquifer encompasses thin- to thick-bedded sand and clay beds that were deposited in marginal marine or delta plain environments. The coarsest sand and least clay content are found in the western part of the Coastal Plain.

The aquifer crops out in the eastern Coastal Plain along a narrow band extending from Lexington County to Sumter County, thence along a wider area from Sumter County to Dillon County. It dips southeastward toward the coast. The top of the aquifer is at elevation 300, -250, and -1,000 ft msl at Aiken, Little River, and Charleston, respectively. Thickness ranges from about 100 ft near Aiken to more than 400 ft at the coast. Its subcrop area and its structure, contoured in feet above msl, are delineated in Figure 10.

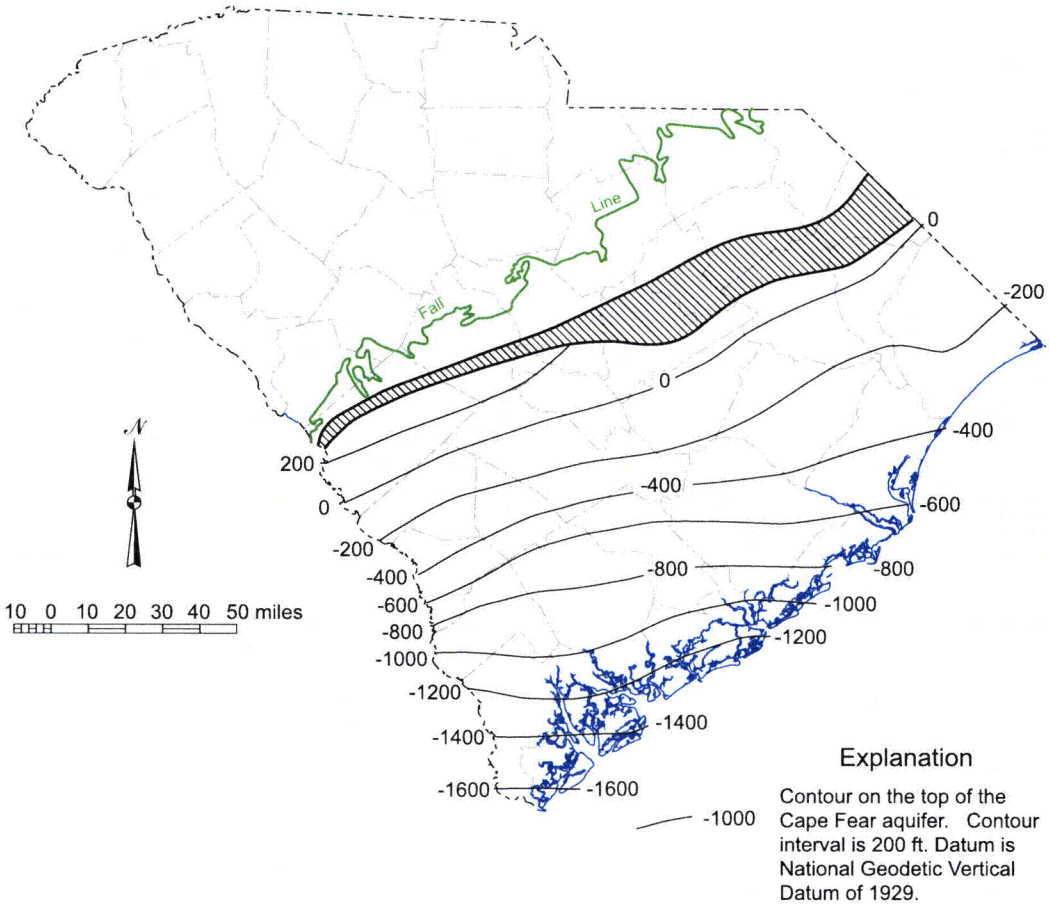


Figure 10. Contours on top of the Black Creek aquifer system (from Aucott and others, 1987).

The Black Creek aquifer system is an important source of water supply. Well yields are greatest in the counties of the Upper and Middle Coastal Plain and are least in the coastal counties of Charleston and Beaufort. Where the highest possible well yields are desired, the Black Creek system is screened in conjunction with the underlying Middendorf aquifer system. These multi-aquifer wells are commonly used by major industrial and public-supply systems in Sumter, Florence, Horry, and Georgetown Counties. The locations of Black Creek system wells are shown in Figure 11.

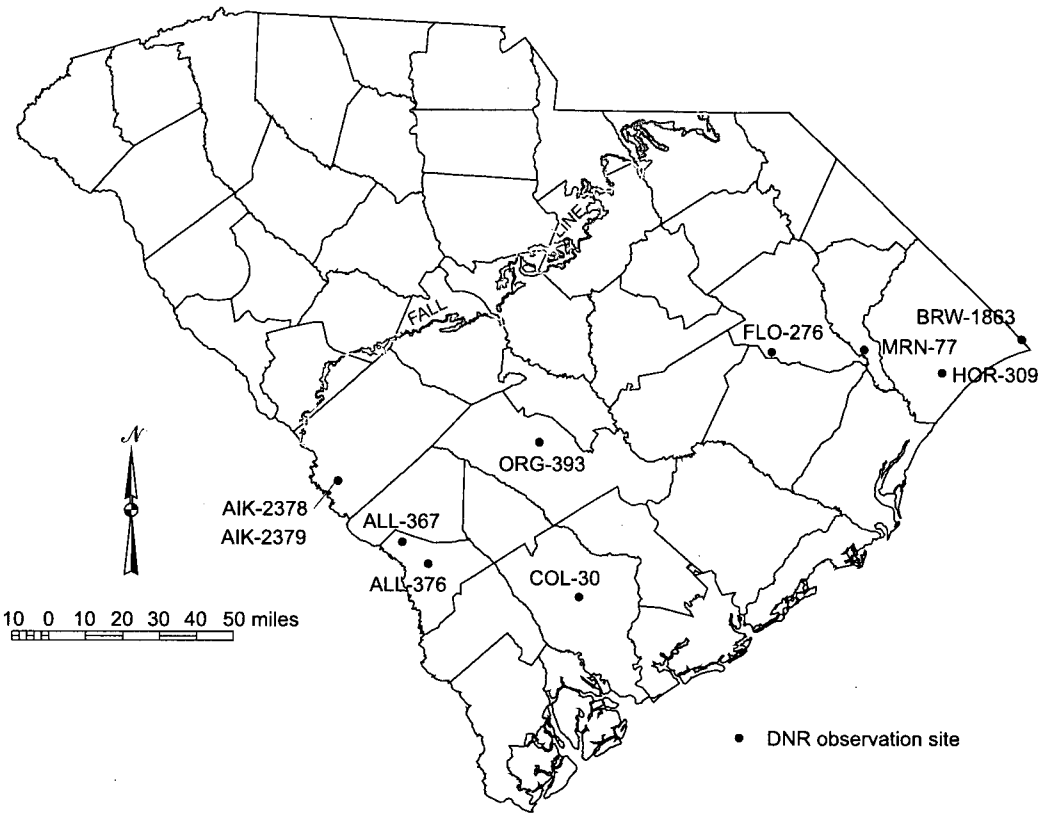
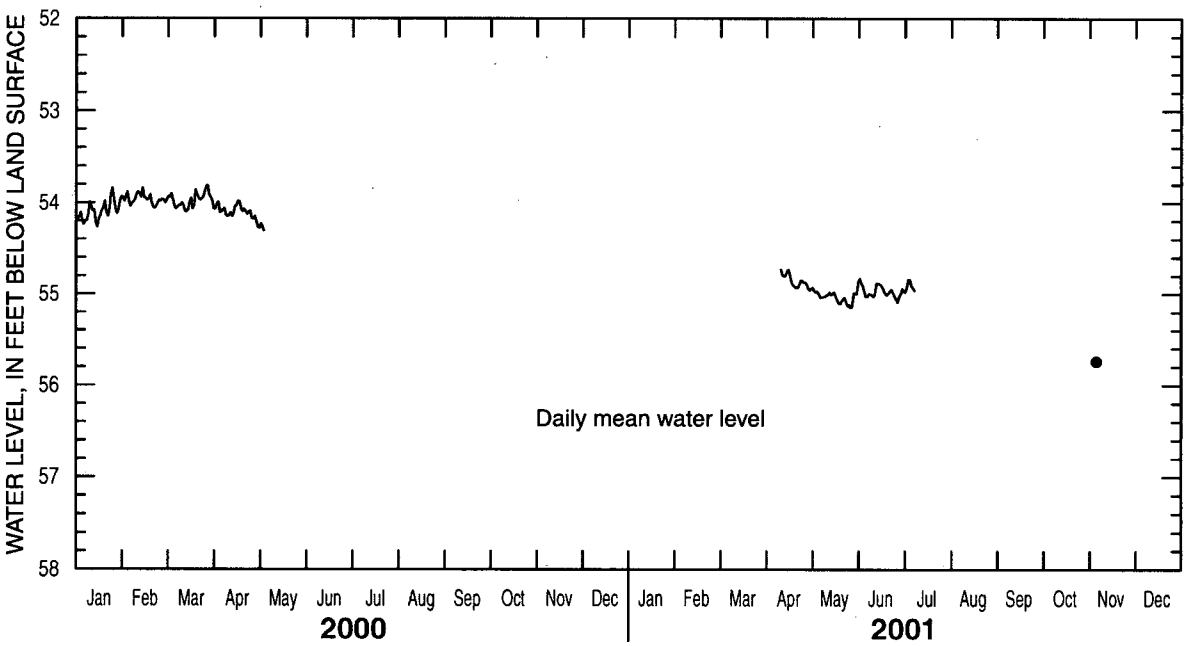


Figure 11. Locations of Black Creek aquifer system observation wells.

AIKEN COUNTY

WELL NUMBER: AIK-2378 GRID NUMBER: 40W-q2
LATITUDE: 33°21'11" LONGITUDE: 81°48'32"
LOCATION: 1.0 mile north of Jackson.
AQUIFER: Black Creek.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 185 ft. Screened from 170 to 180 ft.
DATUM: Land surface is 220.25 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of tee, 1.93 ft above land surface datum.
PERIOD OF RECORD: December 1995 to July 2001.
EXTREMES: Highest water level: 52.24 ft below land surface, March 19, 1996.
Lowest water level: 55.74 ft below land surface, November 5, 2001.
REMARKS: One of four wells drilled on site for Department of Energy project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	53.84	53.84	53.81	53.98	--	--	--	--	--	--	--	--
MEAN	54.09	53.96	53.97	--	--	--	--	--	--	--	--	--
LOW	54.19	54.06	54.10	54.27	--	--	--	--	--	--	--	--

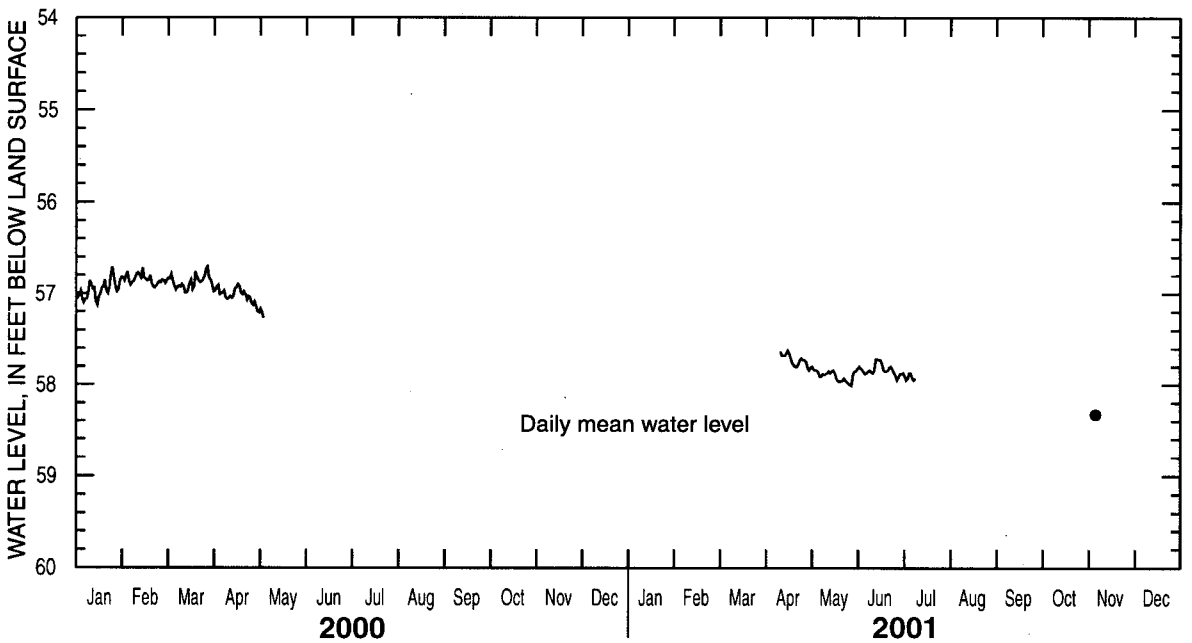
SUMMARY FOR 2000 HIGH 53.81 (Mar. 28, 2000) MEAN -- LOW 54.27 (Apr. 30, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	--	--	54.69	54.93	54.83	54.78	--	--	--	--	--
MEAN	--	--	--	--	55.03	54.97	--	--	--	--	--	--
LOW	--	--	--	54.96	55.15	55.09	54.98	--	--	--	--	--

SUMMARY FOR 2001 HIGH 54.69 (Apr. 10, 2001) MEAN -- LOW 55.74 (Nov. 5, 2001)

AIKEN COUNTY

WELL NUMBER: AIK-2379 GRID NUMBER: 40W-q3
LATITUDE: 33°21'12" LONGITUDE: 81°48'32"
LOCATION: 1.0 mile north of Jackson.
AQUIFER: Black Creek.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 266 ft. Screened from 251 to 261 ft.
DATUM: Land surface is 223.68 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of tee, 2.83 ft above land surface datum.
PERIOD OF RECORD: December 1995 to July 2001.
EXTREMES: Highest water level: 55.07 ft below land surface, April 2, 1996.
Lowest water level: 58.33 ft below land surface, November 5, 2001.
REMARKS: One of four wells drilled on site for Department of Energy project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	56.71	56.72	56.71	56.90	57.17	--	--	--	--	--	--	--
MEAN	56.96	56.85	56.87	57.02	--	--	--	--	--	--	--	--
LOW	57.13	56.94	56.99	57.20	57.31	--	--	--	--	--	--	--

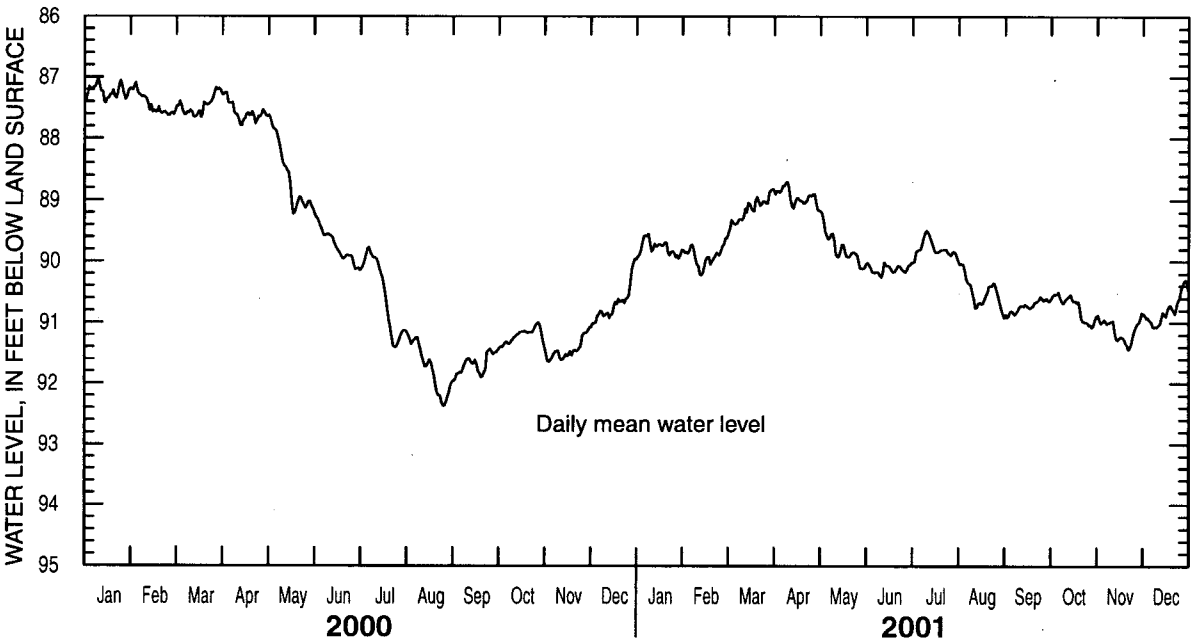
SUMMARY FOR 2000 HIGH 56.71 (Jan. 25, 2000) MEAN -- LOW 57.31 (May 5, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	--	--	57.60	57.80	57.72	57.87	--	--	--	--	--
MEAN	--	--	--	--	57.90	57.84	--	--	--	--	--	--
LOW	--	--	--	57.84	58.01	57.95	57.95	--	--	--	--	--

SUMMARY FOR 2001 HIGH 57.60 (Apr. 10, 2001) MEAN -- LOW 58.33 (Nov. 5, 2001)

ALLENDALE COUNTY

WELL NUMBER: ALL-367 GRID NUMBER: 37Z-t8
LATITUDE: 33°06'47" LONGITUDE: 81°30'22"
LOCATION: Rolling Hills Road, Millet.
AQUIFER: Black Creek.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 566 ft. Screened from 551 to 561 ft.
DATUM: Land surface is 245.74 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 3.44 ft above land surface datum.
PERIOD OF RECORD: November 1995 to current year.
EXTREMES: Highest water level: 81.75 ft below land surface, May 8, 1998.
Lowest water level: 92.37 ft below land surface, August 25, 2000.
REMARKS: One of nine wells drilled on site for Department of Energy project



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	87.02	87.09	87.17	87.25	87.62	89.21	89.77	91.16	91.43	91.00	91.08	89.96
MEAN	87.24	87.44	87.47	87.56	88.58	89.73	90.53	91.76	91.69	91.22	91.45	90.68
LOW	87.42	87.63	87.66	87.79	89.23	90.13	91.40	92.37	91.96	91.42	91.65	91.07

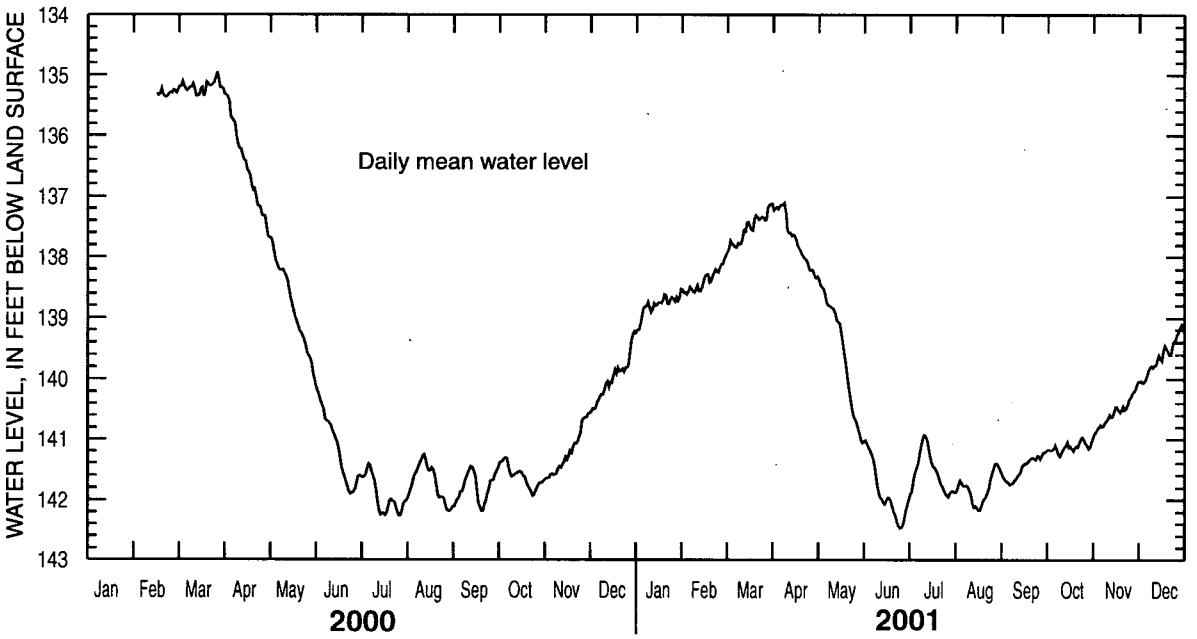
SUMMARY FOR 2000 HIGH 87.02 (Jan. 10, 2000) MEAN 89.92 LOW 92.37 Aug. 25, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	89.55	89.62	88.82	88.70	89.17	90.01	89.49	90.01	90.57	90.50	90.84	90.30
MEAN	89.78	89.92	89.17	88.93	89.75	90.12	89.80	90.48	90.73	90.74	91.12	90.78
LOW	89.95	90.22	89.62	89.15	90.12	90.25	90.02	90.92	90.92	91.08	91.44	91.08

SUMMARY FOR 2001 HIGH 88.70 (April 10, 2001) MEAN 90.11 LOW 91.44 (Nov. 21, 2001)

ALLENDALE COUNTY

WELL NUMBER: ALL-376 GRID NUMBER: 35AA-q9
LATITUDE: 33°01'28" LONGITUDE: 81°23'05"
LOCATION: Appleton Fire Tower.
AQUIFER: Black Creek.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 994 ft. Screened from 784 to 989 ft.
DATUM: Land surface is 282.23 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 3.33 ft above land surface datum.
PERIOD OF RECORD: August 1996 to current year.
EXTREMES: Highest water level: 129.61 ft below land surface, May 8, 1998.
Lowest water level: 142.47 ft below land surface, June 25, 2001.
REMARKS: One of nine wells drilled on site for Department of Energy project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	135.22	134.95	135.31	137.68	140.12	141.41	141.26	141.45	141.31	140.56	139.22
MEAN	--	135.30	135.19	136.47	138.77	141.14	141.94	141.73	141.79	141.62	141.21	139.97
LOW	--	135.36	135.35	137.65	140.02	141.90	142.26	142.18	142.18	141.93	141.65	140.55

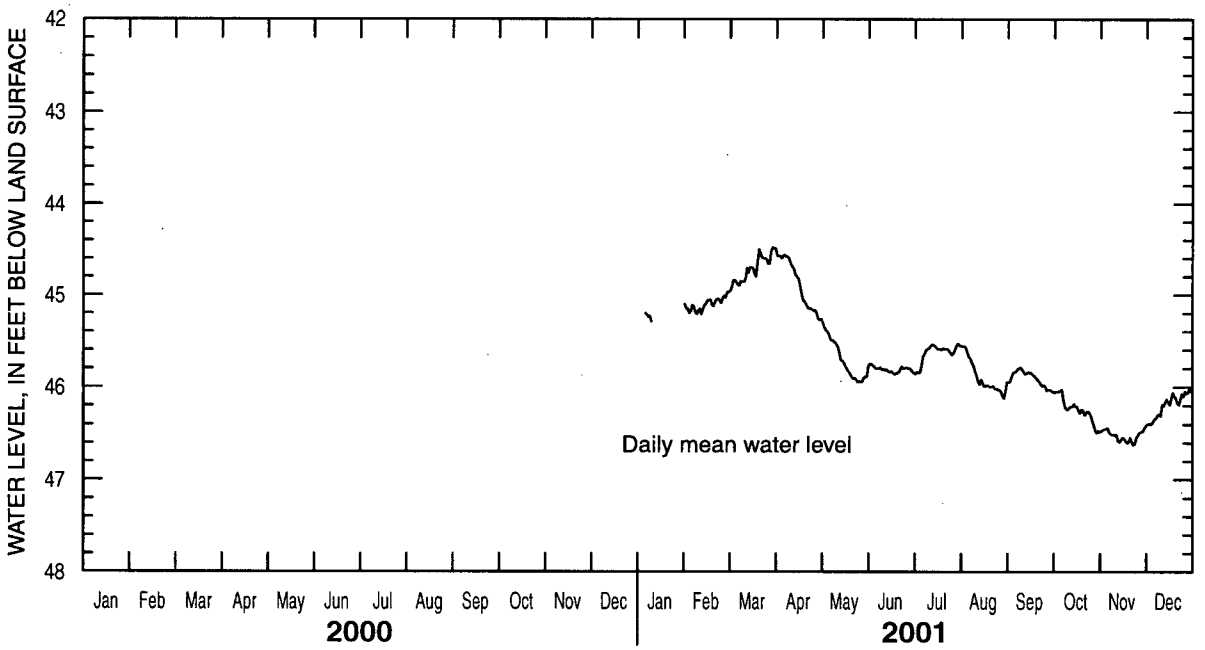
SUMMARY FOR 2000 HIGH 134.95 (Mar. 27, 2000) MEAN 139.76 LOW 142.26 (July 26, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	138.52	138.03	137.13	137.11	138.32	141.02	140.93	141.40	141.20	140.97	140.05	139.11
MEAN	138.78	138.39	137.55	137.67	139.50	141.86	141.55	141.81	141.47	141.13	140.53	139.62
LOW	139.20	138.61	137.98	138.34	141.06	142.47	141.98	142.17	141.75	141.29	140.91	140.06

SUMMARY FOR 2001 HIGH 137.11 (Apr. 9, 2001) MEAN 140.00 LOW 142.47 (June 25, 2001)

BRUNSWICK COUNTY, N. C.

WELL NUMBER: BRW-1863 GRID NUMBER: 2Q-j4
LATITUDE: 33°53'33" LONGITUDE: 78°35'2"
LOCATION: N.C. Department of Environment and Natural Resources well cluster, Calabash.
AQUIFER: Black Creek.
WELL CHARACTERISTICS: 4-inch diameter observation well. Depth: 516 ft. Screened from 496 to 506 ft.
DATUM: Land surface is 47.73 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 2.42 ft above land surface datum.
PERIOD OF RECORD: January 2001 to current year.
EXTREMES: Highest water level: 44.48 ft below land surface, March 30, 2001.
Lowest water level: 46.62 ft below land surface, November 22, 2001.
REMARKS: None.

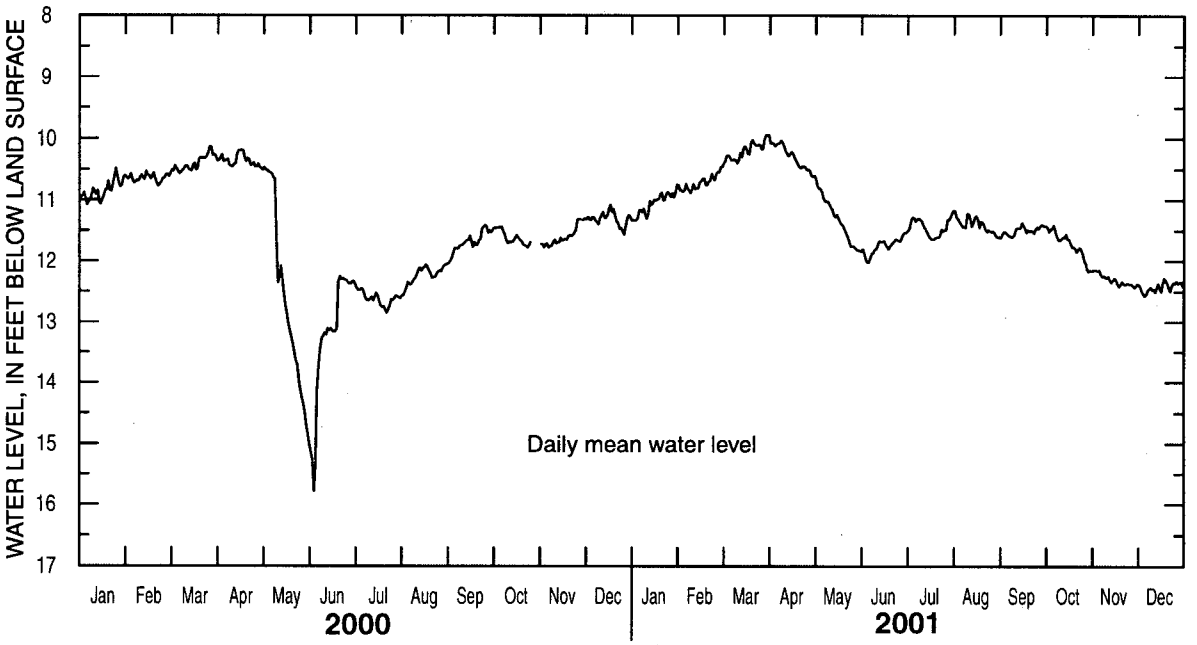


2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	44.97	44.48	44.49	45.26	45.75	45.53	45.56	45.79	46.03	46.42	46.01
MEAN	--	45.11	44.73	44.86	45.69	45.81	45.64	45.89	45.91	46.24	46.52	46.19
LOW	--	45.21	44.97	45.27	45.95	45.86	45.86	46.12	46.05	46.49	46.62	46.40

SUMMARY FOR 2001 HIGH 44.48 (Mar. 30, 2001) MEAN 45.68 LOW 46.62 (Nov. 22, 2001)

COLLETON COUNTY

WELL NUMBER: COL-30 GRID NUMBER: 27CC-j1
LATITUDE: 32°53'45" LONGITUDE: 80°40'40"
LOCATION: Kline Street, Walterboro.
AQUIFER: Black Creek.
WELL CHARACTERISTICS: 6-inch diameter unused public-supply well. Depth: 1,340 ft. Unknown open interval.
DATUM: Land surface is 61.30 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of sanitary seal, 0.30 ft above land surface datum.
PERIOD OF RECORD: November 1995 to current year.
EXTREMES: Highest water level: 8.52 ft below land surface, May 8, 1998.
Lowest water level: 15.79 ft below land surface, June 4, 2000.
REMARKS: None.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	10.48	10.53	10.13	10.19	10.47	12.25	12.38	12.05	11.41	11.44	11.30	11.08
MEAN	10.85	10.65	10.41	10.36	12.52	13.28	12.61	12.24	11.68	11.62	11.60	11.31
LOW	11.08	10.78	10.57	10.48	14.87	15.79	12.85	12.57	12.04	11.78	11.78	11.57

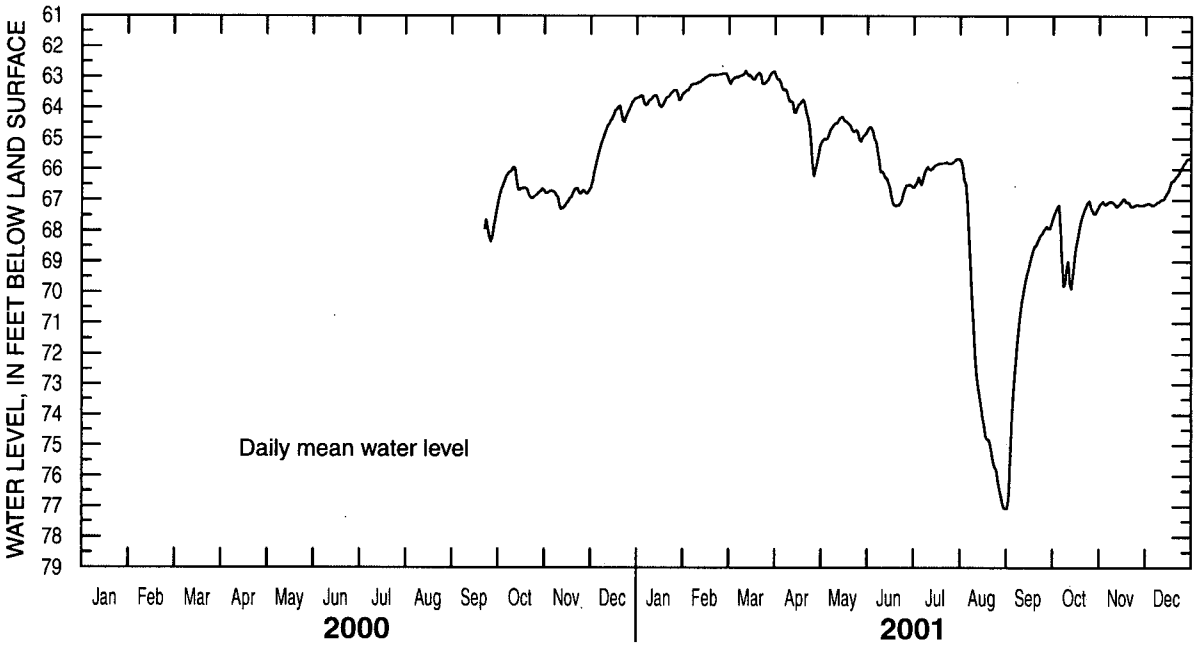
SUMMARY FOR 2000 HIGH 10.13 (Mar. 27, 2000) MEAN 11.60 LOW 15.79 (June 4, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	10.75	10.47	9.94	9.94	10.60	11.53	11.22	11.17	11.37	11.41	12.14	12.28
MEAN	11.05	10.73	10.21	10.28	11.29	11.76	11.45	11.40	11.50	11.73	12.31	12.42
LOW	11.34	10.89	10.46	10.62	11.83	12.02	11.64	11.61	11.62	12.17	12.43	12.57

SUMMARY FOR 2001 HIGH 9.94 (Mar. 30, 2001) MEAN 11.35 LOW 12.57 (Dec. 5, 2001)

FLORENCE COUNTY

WELL NUMBER: FLO-276 GRID NUMBER: 16Q-s2
LATITUDE: 33°51'22" LONGITUDE: 79°46'00"
LOCATION: Lake City Airport.
AQUIFER: Black Creek.
WELL CHARACTERISTICS: 4-inch diameter observation well. Depth: 250 ft. Screened from 230 to 250 ft.
DATUM: Land surface is 79.00 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 1.31 ft above land surface datum.
PERIOD OF RECORD: September 2000 to current year.
EXTREMES: Highest water level: 62.81 ft below land surface, March 13, 2001.
Lowest water level: 77.07 ft below land surface, August 31, 2001.
REMARKS: Drilled and cored for DNR/USGS aquifer delineation project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	--	--	--	--	--	--	--	67.32	65.93	66.62	63.70
MEAN	--	--	--	--	--	--	--	--	--	66.57	66.86	64.65
LOW	--	--	--	--	--	--	--	--	68.35	67.06	67.29	66.58

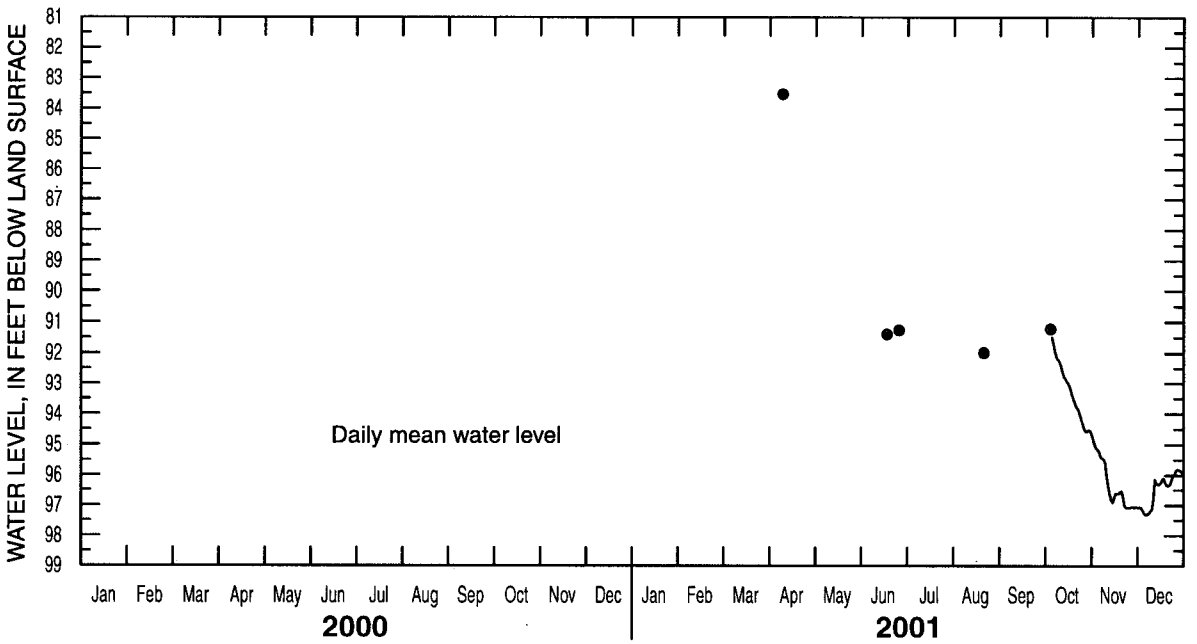
SUMMARY FOR 2000 HIGH 63.70 (Dec. 31, 2000 MEAN -- LOW 68.35 (Sept. 26, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	63.43	62.89	62.81	62.83	64.30	64.63	65.66	65.66	67.78	67.03	66.96	65.62
MEAN	63.69	63.10	63.01	64.10	64.74	66.16	66.01	72.63	70.24	68.06	67.11	66.54
LOW	63.98	63.50	63.23	66.23	65.26	67.18	66.59	77.07	77.07	69.88	67.21	67.16

SUMMARY FOR 2001 HIGH 62.81 (Mar. 13, 2001) MEAN 66.30 LOW 77.07 (Aug. 31, 2001)

HORRY COUNTY

WELL NUMBER: HOR-309 GRID NUMBER: 6R-q3
LATITUDE: 33°46'05" LONGITUDE: 78°57'59"
LOCATION: US Highway 501, near Conway.
AQUIFER: Black Creek.
WELL CHARACTERISTICS: 4-inch diameter observation well. Depth: 375 ft. Screened from 360 to 375 ft.
DATUM: Land surface is 42.84 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 4.00 ft above land surface datum.
PERIOD OF RECORD: April 2001 to current year.
EXTREMES: Highest water level: 83.53 ft below land surface, April 10, 2001.
Lowest water level: 97.32 ft below land surface, December 6, 2001.
REMARKS: None.

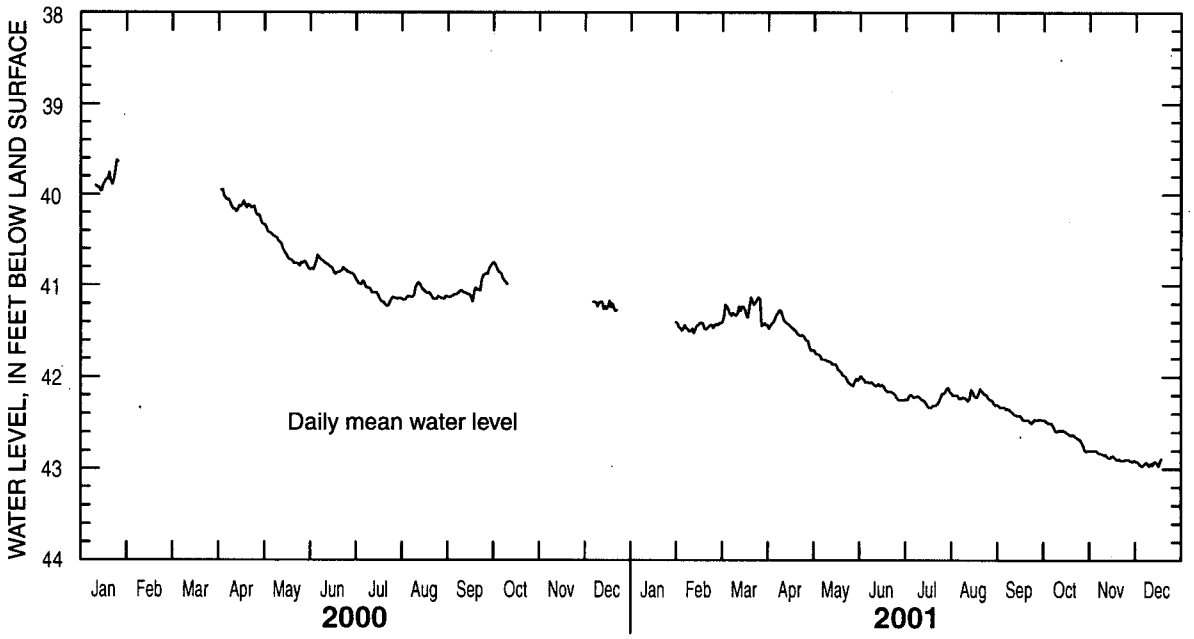


2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	--	--	--	--	--	--	--	--	91.26	94.82	95.82
MEAN	--	--	--	--	--	--	--	--	--	93.24	96.33	96.48
LOW	--	--	--	--	--	--	--	--	--	94.66	97.09	97.32

SUMMARY FOR 2001 HIGH 83.53 (Apr. 10, 2001) MEAN -- LOW 97.32 (Dec. 6, 2001)

MARION COUNTY

WELL NUMBER: MRN-77 GRID NUMBER: 10Q-p1
LATITUDE: 33°51'42" LONGITUDE: 79°19'50"
LOCATION: Brittons Neck fire tower, US Highway 378.
AQUIFER: Black Creek.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 356 ft. Screened from 325 to 355 ft.
DATUM: Land surface is 30 ft (map estimate) above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 2.15 ft above land surface datum.
PERIOD OF RECORD: August 1982 to current year.
EXTREMES: Highest water level: 10.88 ft below land surface, March 28, 1983.
Lowest water level: 42.97 ft below land surface, December 5, 2001.
REMARKS: Monitored continually by USGS until December 2001.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	39.62	--	--	39.95	40.33	40.67	40.92	40.97	40.76	40.75	--	41.17
MEAN	--	--	--	40.13	40.61	40.81	41.09	41.10	41.03	--	--	--
LOW	39.96	--	--	40.31	40.82	40.89	41.23	41.16	41.18	41.00	--	41.32

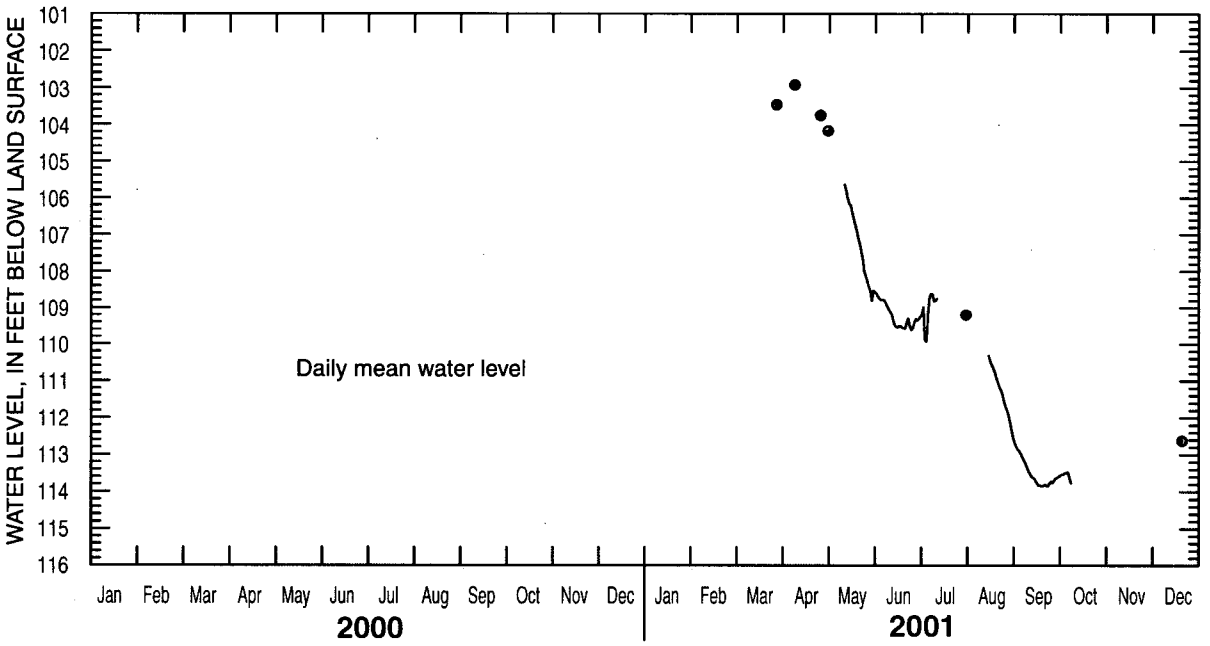
SUMMARY FOR 2000 HIGH 39.62 (Jan. 25, 2000) MEAN -- LOW 41.32 (Dec. 23, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	41.40	41.41	41.13	41.27	41.70	41.99	42.12	42.13	42.31	42.47	42.80	42.89
MEAN	--	41.45	41.28	41.47	41.90	42.12	42.24	42.22	42.42	42.62	42.87	42.94
LOW	41.41	41.52	41.44	41.71	42.10	42.25	42.33	42.31	42.50	42.81	42.92	42.97

SUMMARY FOR 2001 HIGH 41.13 (Mar. 21, 2001) MEAN 42.08 LOW 42.97 (Dec. 5, 2001)

ORANGEBURG COUNTY

WELL NUMBER: ORG-393 GRID NUMBER: 29U-v1
LATITUDE: 33°30'29" LONGITUDE: 80°51'53"
LOCATION: Clark Middle School, Orangeburg.
AQUIFER: Black Creek.
WELL CHARACTERISTICS: 5-inch diameter observation well. Depth: 463 ft. Screened from 423 to 463 ft.
DATUM: Land surface is 256 ft (map estimate) above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of 2-inch extension casing, 3.51 ft above land surface datum.
PERIOD OF RECORD: March 2001 to current year.
EXTREMES: Highest water level: 102.92 ft below land surface, April 9, 2001.
Lowest water level: 113.85 ft below land surface, September 19, 2001.
REMARKS: Drilled and cored for DNR/USGS aquifer delineation project.



2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	--	--	--	105.54	108.57	108.62	110.19	112.67	113.47	--	--
MEAN	--	--	--	--	--	109.21	--	--	113.50	--	--	--
LOW	--	--	--	--	108.81	109.61	109.93	112.53	113.85	113.84	--	--

SUMMARY FOR 2001 HIGH 102.92 (Apr. 9, 2001) MEAN -- LOW 113.85 (Sept. 19, 2001)

TERTIARY-SAND AQUIFER SYSTEM

Aucott, Davis and Speiran (1987) divided the Tertiary-sand aquifer system into two parts. The upper part consists of fine- to coarse-grained sand of the Barnwell Group, McBean Formation, and Congaree Formation. They are the sand-facies equivalent of the Floridan aquifer system and extend from the vicinity of the Fall Line to the updip limit of the Floridan aquifer system. In Allendale, Bamberg, Barnwell, and Aiken Counties the Congaree Formation is the principal water-bearing unit, and the Barnwell Group and McBean Formation tend to be poorly productive and more significant as confining units. Logan and Euler (1989) reported individual wells completed in the Congaree yield up to 660 gpm and have specific capacities of about 10 gpm/ft.

The lower part of the Tertiary-sand system underlies all of the Floridan aquifer system, extends westward into the middle Coastal Plain, and consists principally of the Paleocene-age Black Mingo Formation. The upper 50 to 100 ft of the formation consists of interbedded fine- to medium-grained sand and silty sand, carbonaceous and silty clay, sandstone, and sandy limestone. The section is the only significant water-bearing unit in the Tertiary-sand aquifer system east of its outcrop area. In conjunction with the overlying Floridan aquifer system, this unit is widely used in Berkeley, Charleston, Dorchester, Colleton, and eastern Hampton Counties. Open-hole Floridan/Tertiary-sand wells there commonly yield several hundred gallons per minute and locally may produce more than 500 gpm. Wells open only to the Black Mingo Formation are rare and usually produce less than 300 gpm. Because its transmissivity is low, that formation is used mainly where the overlying Floridan aquifer system is poorly productive.

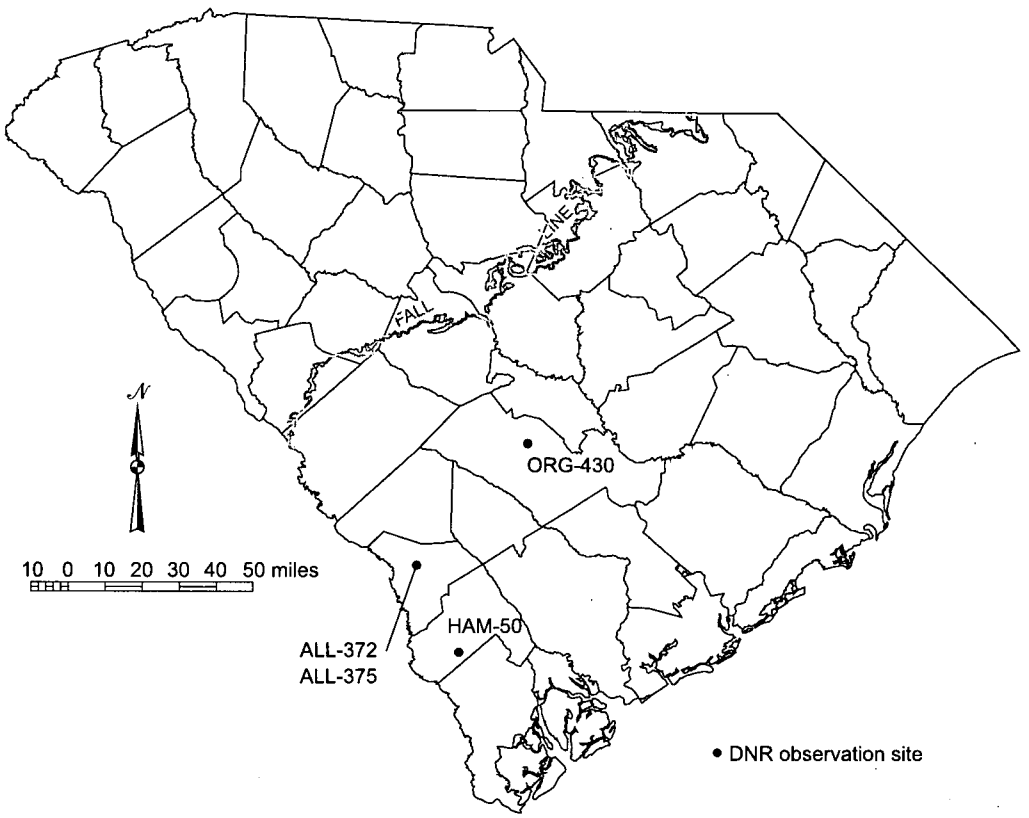
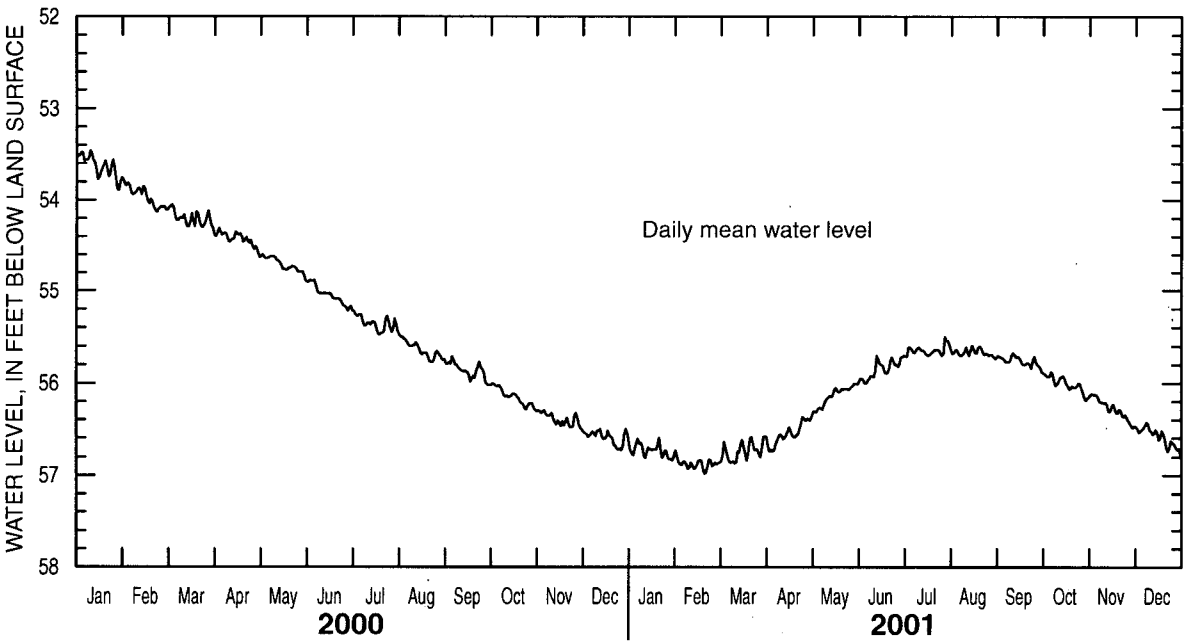


Figure 12. Locations of Tertiary-sand aquifer system observation wells.

ALLENDALE COUNTY

WELL NUMBER: ALL-372 GRID NUMBER: 35AA-q5
LATITUDE: 33°01'28" LONGITUDE: 81°23'04"
LOCATION: Appleton Fire Tower.
AQUIFER: Tertiary sand.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 155 ft. Screened from 140 to 150 ft.
DATUM: Land surface is 282.04 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 2.96 ft above land surface datum.
PERIOD OF RECORD: October 1996 to current year.
EXTREMES: Highest water level: 38.14 ft below land surface, June 3, 1998.
Lowest water level: 56.98 ft below land surface, February 19, 2001.
REMARKS: One of nine wells drilled on site for Department of Energy project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	53.46	53.78	54.05	54.31	54.60	54.88	55.22	55.48	55.71	56.00	56.30	56.50
MEAN	53.63	53.96	54.20	54.42	54.71	55.05	55.35	55.64	55.87	56.15	56.40	56.59
LOW	53.89	54.13	54.31	54.59	54.88	55.22	55.48	55.77	56.02	56.31	56.51	56.73

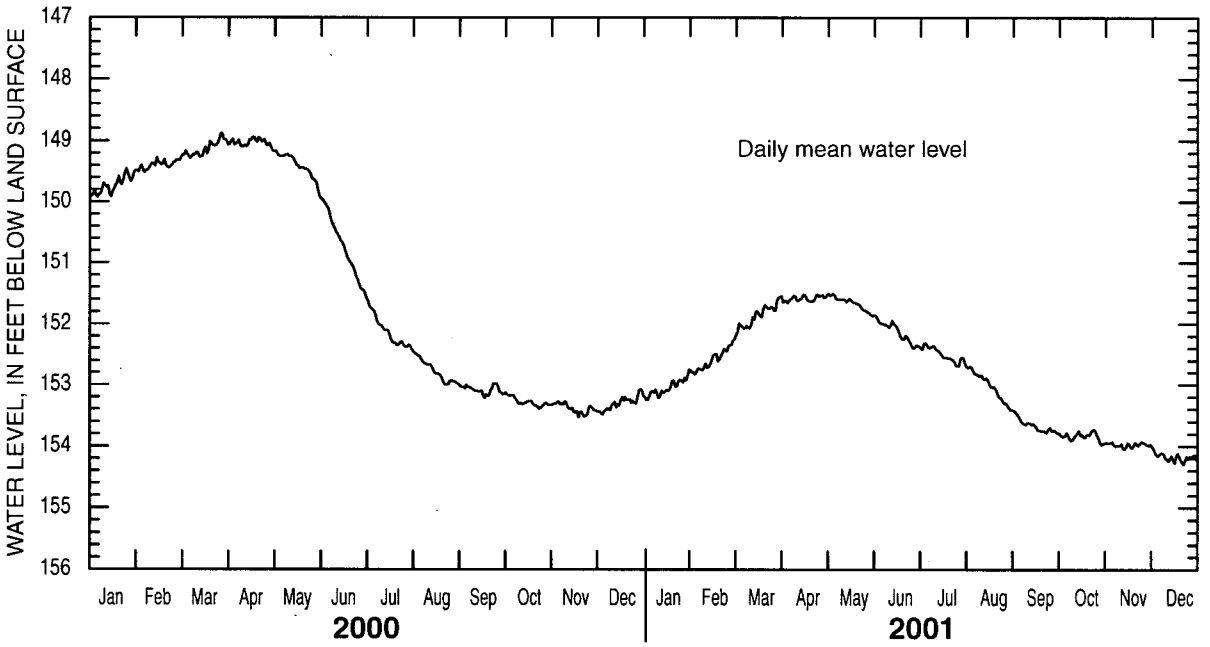
SUMMARY FOR 2000 HIGH 53.46 (Jan. 10, 2000) MEAN 55.17 LOW 56.73 (Dec. 26, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	56.60	56.80	56.58	56.37	56.00	55.70	55.50	55.59	55.67	55.88	56.12	56.43
MEAN	56.73	56.88	56.74	56.56	56.14	55.85	55.64	55.67	55.76	56.01	56.28	56.59
LOW	56.84	56.98	56.87	56.74	56.36	56.00	55.71	55.73	55.88	56.19	56.49	56.80

SUMMARY FOR 2001 HIGH 55.50 (July 28, 2001) MEAN 56.23 LOW 56.98 (Feb. 19, 2001)

ALLENDALE COUNTY

WELL NUMBER: ALL-375 GRID NUMBER: 35AA-q8
LATITUDE: 33°01'28" LONGITUDE: 81°23'06"
LOCATION: Appleton Fire Tower.
AQUIFER: Tertiary sand.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 583 ft. Screened from 453 to 578 ft.
DATUM: Land surface is 282.89 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 3.46 ft above land surface datum.
PERIOD OF RECORD: October 1996 to current year.
EXTREMES: Highest water level: 145.98 ft below land surface, May 8, 1998.
Lowest water level: 154.29 ft below land surface, December 22, 2001.
REMARKS: One of nine wells drilled on site for Department of Energy project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	149.45	149.27	148.88	148.94	149.16	149.95	151.58	152.46	152.98	153.13	153.27	153.07
MEAN	149.73	149.40	149.13	149.03	149.40	150.72	152.12	152.78	153.09	153.28	153.39	153.30
LOW	149.93	149.52	149.28	149.15	149.91	151.51	152.42	153.00	153.22	153.40	153.53	153.49

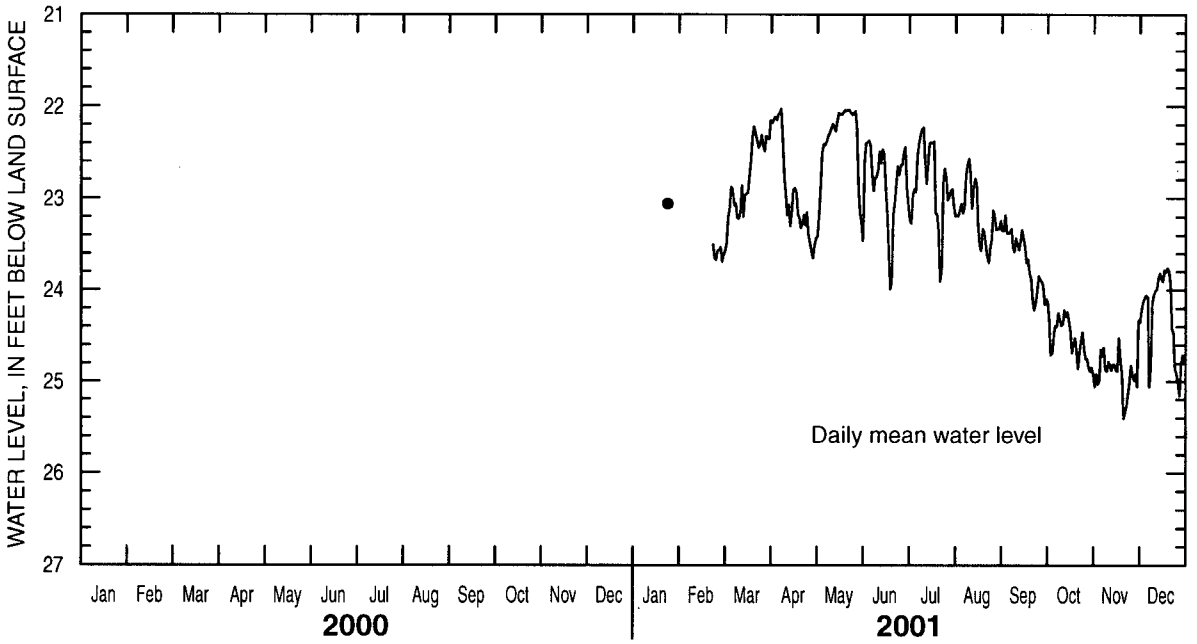
SUMMARY FOR 2000 HIGH 148.88 (Mar. 27, 2000) MEAN 151.29 LOW 153.53 (Nov.18, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	152.75	152.27	151.56	151.58	151.51	151.86	152.31	152.70	153.42	153.73	153.93	154.00
MEAN	153.05	152.59	151.88	151.58	151.65	152.12	152.49	153.02	153.66	153.84	153.97	154.17
LOW	153.25	152.83	152.25	151.66	151.87	152.40	152.69	153.41	153.79	153.98	154.05	154.29

SUMMARY FOR 2001 HIGH 151.51 (May 2, 2001) MEAN 152.84 LOW 154.29 (Dec. 22, 2001)

HAMPTON COUNTY

WELL NUMBER: HAM-50 GRID NUMBER: 33EE-v1
LATITUDE: 32°40'47" LONGITUDE: 80°11'13"
LOCATION: US Highway 601, Furman.
AQUIFER: Tertiary sand.
WELL CHARACTERISTICS: 8-inch diameter unused public supply well. Depth: 986 ft. Open interval unknown.
DATUM: Land surface is 115 ft (map estimate) above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of 4-inch casing, 2.41 ft above land surface datum.
PERIOD OF RECORD: February 2001 to current year.
EXTREMES: Highest water level: 22.03 ft below land surface, April 8, 2001.
Lowest water level: 25.41 ft below land surface, November 20, 2001.
REMARKS: None.

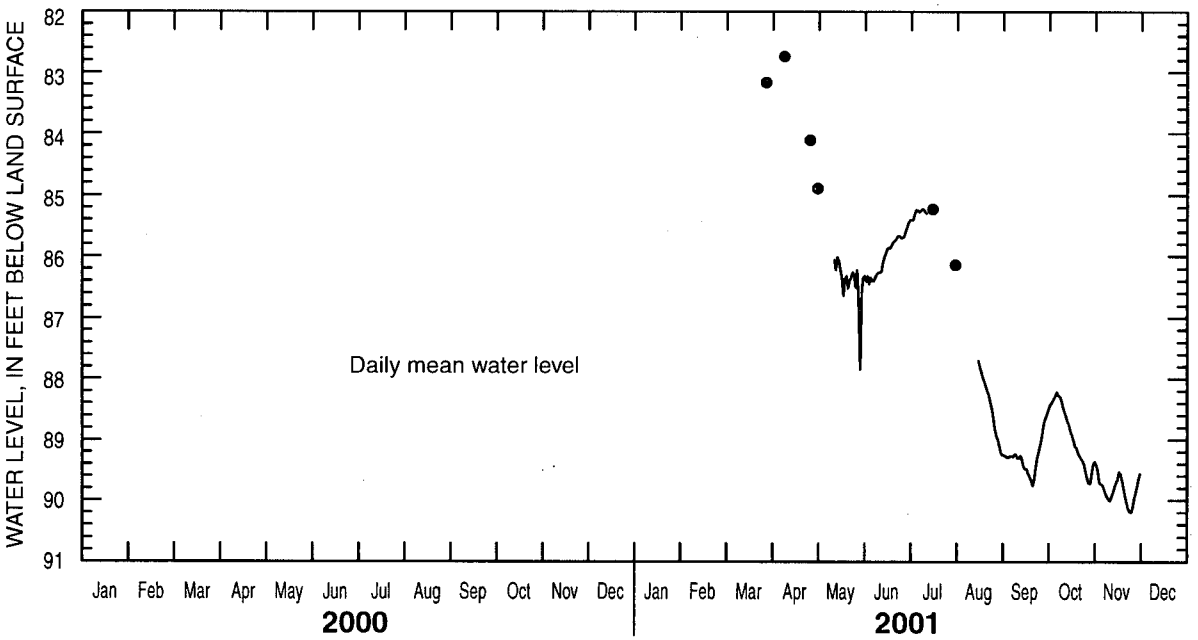


2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	23.50	22.22	22.03	22.04	22.37	22.23	22.57	23.18	24.13	24.33	23.76
MEAN	--	--	22.81	22.89	22.41	22.82	22.85	23.19	23.67	24.54	24.90	24.31
LOW	--	23.70	23.61	23.65	23.43	23.99	23.91	23.70	24.22	24.93	25.41	25.16

SUMMARY FOR 2001 HIGH 22.03 (Apr. 8, 2001) MEAN 23.44 LOW 25.41 (Nov. 20, 2001)

ORANGEBURG COUNTY

WELL NUMBER: ORG-430 GRID NUMBER: 29U-v2
LATITUDE: 33°30'29" LONGITUDE: 80°51'53"
LOCATION: Clark Middle School, Orangeburg.
AQUIFER: Tertiary sand.
WELL CHARACTERISTICS: 2-inch diameter observation well. Depth: 275 ft. Screened from 205 to 265 ft.
DATUM: Land surface is 256 ft (map estimate) above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 3.25 ft above land surface datum.
PERIOD OF RECORD: March 2001 to current year.
EXTREMES: Highest water level: 82.74 ft below land surface, April 9, 2001.
Lowest water level: 90.20 ft below land surface, November 24, 2001.
REMARKS: Drilled and cored for DNR/USGS aquifer delineation project.



2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	--	--	--	86.01	85.45	85.23	87.65	88.53	88.22	89.42	--
MEAN	--	--	--	--	--	85.99	--	--	89.26	88.92	89.82	--
LOW	--	--	--	--	87.85	86.45	85.41	89.25	89.76	89.72	90.20	--

SUMMARY FOR 2001 HIGH 82.74 (Apr. 9, 2001) MEAN -- LOW 90.20 (Nov. 24, 2001)

FLORIDAN AQUIFER SYSTEM

The Floridan aquifer system in South Carolina is the northernmost part of one of the most extensive and prolific ground-water sources in North America. It primarily consists of the Middle Eocene Santee Limestone and, in southern and southwestern South Carolina, the Upper Eocene Ocala Limestone. It also encompasses, and is confined by, the Oligocene Cooper Formation in Charleston, Berkeley, Dorchester, and Colleton Counties. The top of the system occurs within 100 ft of land surface, except in southernmost Beaufort and Jasper Counties. Typically, more than 80 percent of the Floridan's thickness is relatively impermeable owing to the widespread occurrence of impure, clayey to sandy limestone and of limestone having interstitial-calcite precipitate; however, sections of clean, permeable, bioclastic limestone are found throughout the Floridan's range of occurrence. These permeable sections almost everywhere yield adequate water for domestic use, small public-supply systems, and light industry, and, locally, they can yield 1 to 3 million gallons per day to individual wells.

The Floridan aquifer system outcrops along the Santee River and Wateree River valleys and from eastern Orangeburg County through western Allendale County. The limestone there commonly exceeds 95-percent calcium carbonate, has enlarged secondary porosity owing to dissolution, and locally exhibits cavern and sinkhole formation. The surface of the Santee Limestone and Ocala Limestone components, and the permeable units associated with them, dip gently southeastward from 100 ft msl to -200 ft msl. The low-permeability, arenaceous limestone of the Oligocene Cooper Formation overlies the Santee in most of Charleston, Berkeley, and Dorchester Counties, grades into the Ocala Limestone to the southeast, and thickens to more than 250 ft in southern Charleston County. Owing to this geologic complexity, four important and distinct permeable zones occur in the Floridan aquifer system.

Limestone in the outcrop area forms the inlandmost permeable zone and is a major avenue for recharge: there, meteoric water has circulated through the pure limestone at shallow depth, secondary porosity is common and well developed, hydraulic conductivity is high, and water-table to poorly confined conditions predominate. The limestone downdip of the subcrop region becomes increasingly arenaceous and confining, and ground water typically is obtained from two thin and well-separated permeable zones.

The northern zone, underlying Charleston, Berkeley, Dorchester, Colleton, and eastern Hampton Counties, occurs near the base of the Santee Limestone at 50 to -500 ft msl: it typically is 5 to 20 ft thick, is moderately permeable, and, in conjunction with underlying sand of the Tertiary-sand system, yields 100 to 400 gpm to individual wells. The southern zone, underlying Jasper County, western Hampton County, and southern Beaufort County, occurs at the top of the Santee Limestone at 0 to -500 ft msl: it typically is 20 to 40 ft thick, has transmissivities as great as 200,000 gpd/ft, and can provide up to 1,000 gpm to individual wells. The geographic distribution of the southern zone roughly coincides with the upper permeable zone of the Ocala Limestone.

The upper permeable zone is the principal source of ground-water supply in Beaufort, Jasper, Hampton, and Allendale Counties. It occurs within the upper 100 ft of the Ocala Limestone, and the top of the unit ranges from -20 ft msl at Beaufort to -250 ft msl near Savannah, Ga. It is as much as 100 ft thick in southern Jasper County and has transmissivities up to 450,000 gpd/ft. Yields as great as 3,000 gpm are reported, and those exceeding 500 gpm are common.

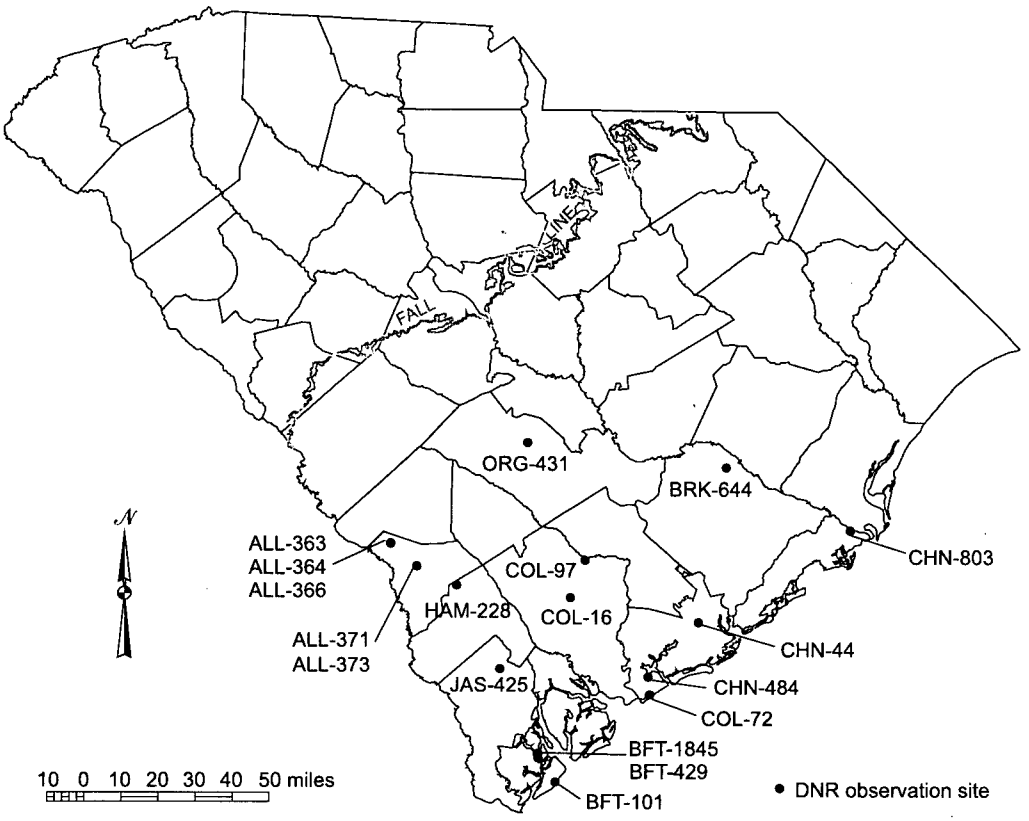
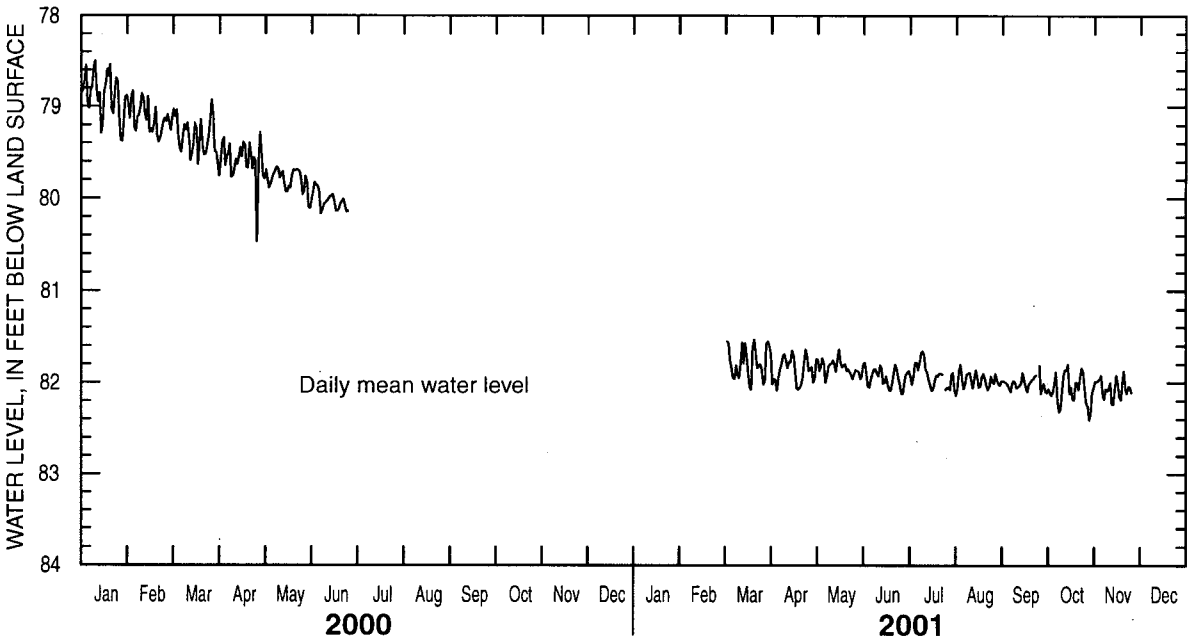


Figure 13. Locations of Floridan aquifer system observation wells.

ALLENDALE COUNTY

WELL NUMBER: ALL-363 GRID NUMBER: 37Z-t4
LATITUDE: 33°06'48" LONGITUDE: 81°30'22"
LOCATION: Rolling Hills Road, Millet.
AQUIFER: Floridan.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 105 ft. Screened from 90 to 100 ft.
DATUM: Land surface is 246.13 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 2.96 ft above land surface datum.
PERIOD OF RECORD: November 1995 to current year.
EXTREMES: Highest water level: 68.34 ft below land surface, June 14, 1998.
Lowest water level: 82.41 ft below land surface, December 21, 2001.
REMARKS: One of nine wells drilled on site for Department of Energy project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	78.50	78.83	78.93	79.28	79.66	79.83	--	--	--	--	--	--
MEAN	78.88	79.13	79.32	79.59	79.81	80.08	--	--	--	--	--	--
LOW	79.38	79.39	79.63	80.47	80.11	80.17	--	--	--	--	--	--

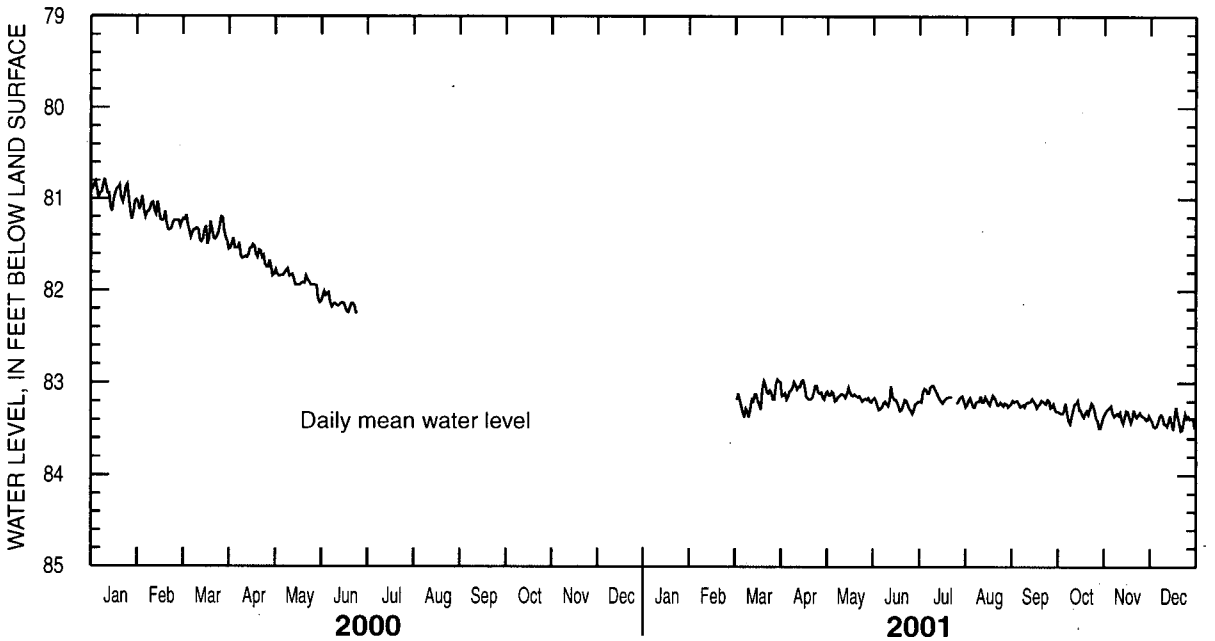
SUMMARY FOR 2000 HIGH 78.50 (Jan. 10, 2000) MEAN -- LOW 80.47 (Apr. 26, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	--	81.45	81.64	81.64	81.78	81.66	81.8	81.81	81.8	81.87	--
MEAN	--	--	81.77	81.86	81.84	81.94	81.92	81.98	82.01	82.08	82.06	--
LOW	--	--	82.08	82.09	82.00	82.12	82.09	82.14	82.12	82.41	82.24	--

SUMMARY FOR 2001 HIGH 81.45 (Mar. 2, 2001) MEAN -- LOW 82.41 (Oct. 28, 2001)

ALLENDALE COUNTY

WELL NUMBER: ALL-364 GRID NUMBER: 37Z-t5
LATITUDE: 33°06'48" LONGITUDE: 81°30'22"
LOCATION: Rolling Hills Road, Millet.
AQUIFER: Floridan.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 225 ft. Screened from 210 to 220 ft.
DATUM: Land surface is 245.17 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 3.22 ft above land surface datum.
PERIOD OF RECORD: November 1995 to current year.
EXTREMES: Highest water level: 71.90 ft below land surface, May 8, 1998.
Lowest water level: 83.52 ft below land surface, December 21, 2001.
REMARKS: One of nine wells drilled on site for Department of Energy project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	80.78	80.97	81.18	81.43	81.76	82.01	--	--	--	--	--	--
MEAN	80.95	81.18	81.35	81.60	81.89	82.15	--	--	--	--	--	--
LOW	81.23	81.34	81.50	81.84	82.13	82.24	--	--	--	--	--	--

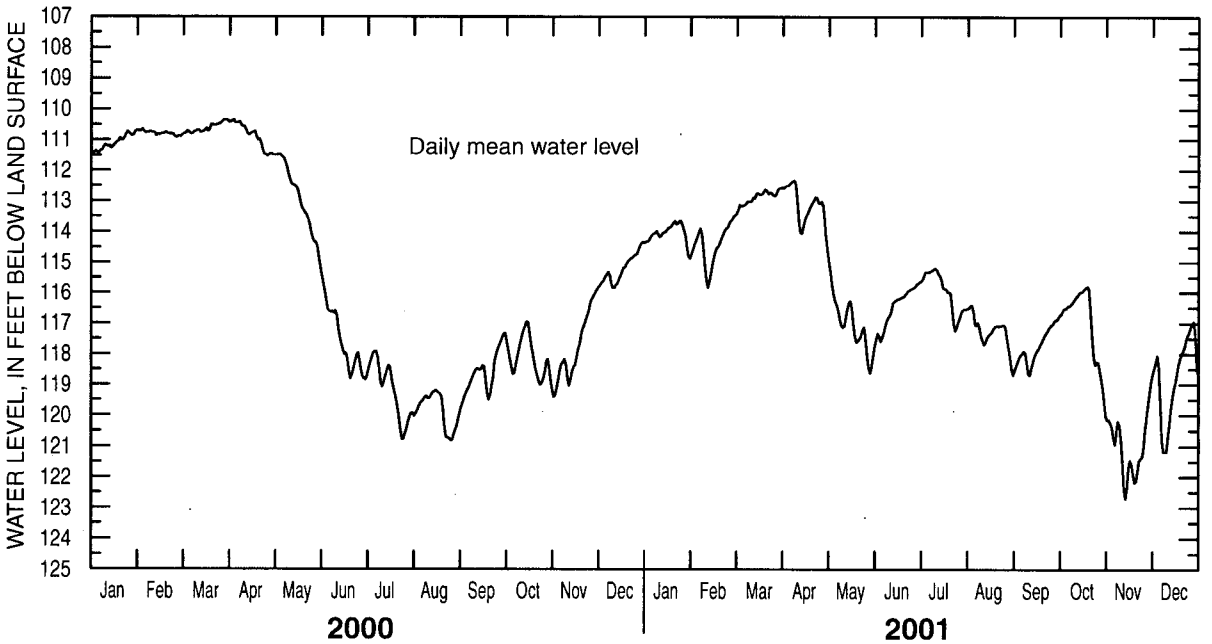
SUMMARY FOR 2000 HIGH 80.78 (Jan. 10, 2000) MEAN -- LOW 82.24 (June 19, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	--	82.96	82.97	83.05	83.03	83.03	83.13	83.17	83.19	83.25	83.26
MEAN	--	--	83.17	83.09	83.14	83.23	83.14	83.21	83.23	83.32	83.35	83.41
LOW	--	--	83.37	83.18	83.21	83.33	83.22	83.26	83.31	83.49	83.44	83.52

SUMMARY FOR 2001 HIGH 82.96 (Mar. 30, 2001) MEAN -- LOW 83.52 (Dec. 21, 2001)

ALLENDALE COUNTY

WELL NUMBER: ALL-366 GRID NUMBER: 37Z-t7
LATITUDE: 33°06'47" LONGITUDE: 81°30'22"
LOCATION: Rolling Hills Road, Millet.
AQUIFER: Floridan.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 400 ft. Screened from 385 to 395 ft.
DATUM: Land surface is 243.50 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 3.16 ft above land surface datum.
PERIOD OF RECORD: November 1995 to current year.
EXTREMES: Highest water level: 108.34 ft below land surface, May 8, 1998.
Lowest water level: 122.71 ft below land surface, November 13, 2001.
REMARKS: One of nine wells drilled on site for Department of Energy project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	110.68	110.64	110.35	110.35	111.47	115.40	117.91	119.20	117.33	116.96	115.86	114.33
MEAN	111.10	110.78	110.62	110.86	112.87	117.54	119.17	119.87	118.61	118.15	117.75	115.19
LOW	111.43	110.92	110.84	111.52	115.09	118.84	120.77	120.82	119.74	119.23	119.42	115.85

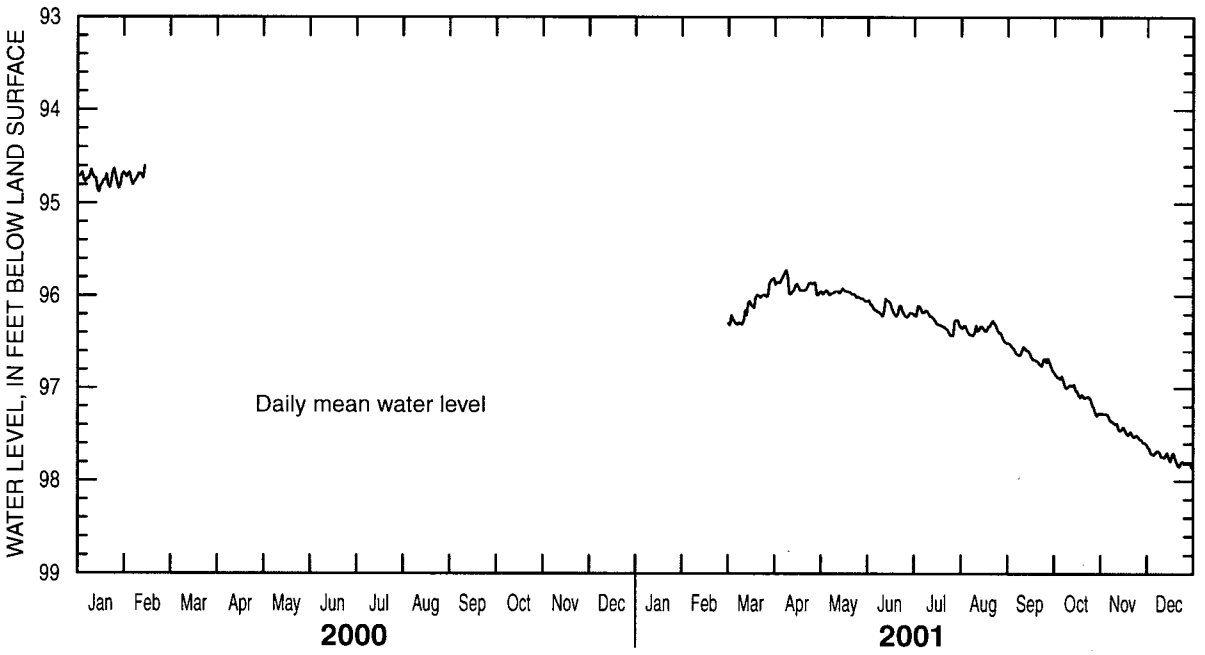
SUMMARY FOR 2000 HIGH 110.35 (Mar. 29, 2000) MEAN 115.22 LOW 120.82 (Aug. 26, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	113.65	113.51	112.58	112.33	114.67	115.68	115.21	116.40	116.81	115.79	118.91	116.94
MEAN	114.07	114.43	112.91	113.07	116.93	116.51	115.95	117.26	117.76	117.02	120.99	118.73
LOW	114.87	115.83	113.48	114.19	118.63	117.77	117.25	118.69	118.69	120.05	122.71	121.17

SUMMARY FOR 2001 HIGH 112.33 (Apr. 9, 2001) MEAN 116.31 LOW 122.71 (Nov. 13, 2001)

ALLENDALE COUNTY

WELL NUMBER: ALL-371 GRID NUMBER: 35AA-q4
LATITUDE: 33°01'28" LONGITUDE: 81°23'05"
LOCATION: Appleton fire tower.
AQUIFER: Floridan.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 217 ft. Screened from 192 to 212 ft.
DATUM: Land surface is 282.23 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 3.00 ft above land surface datum.
PERIOD OF RECORD: August 1996 to current year.
EXTREMES: Highest water level: 85.46 ft below land surface, May 10, 1998.
Lowest water level: 97.86 ft below land surface, December 30, 2001.
REMARKS: One of nine wells drilled on site for Department of Energy project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	94.63	94.60	--	--	--	--	--	--	--	--	--	--
MEAN	94.74	--	--	--	--	--	--	--	--	--	--	--
LOW	94.88	94.80	--	--	--	--	--	--	--	--	--	--

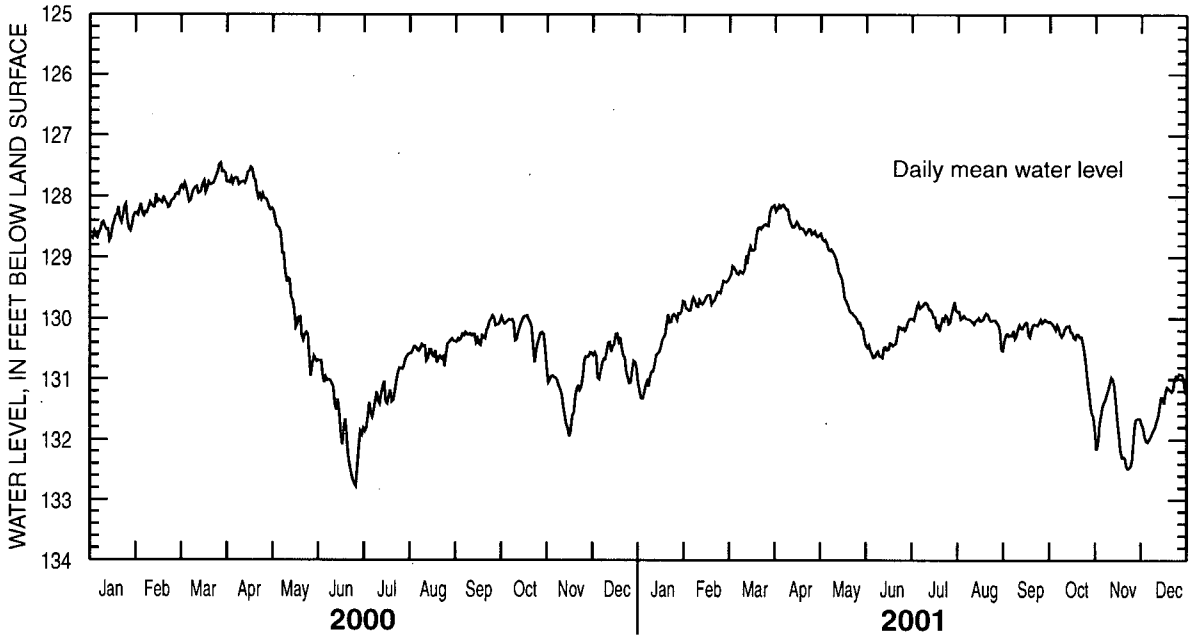
SUMMARY FOR 2000 HIGH 94.60 (Feb. 14, 2000) MEAN -- LOW 94.88 (Jan. 15, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	--	95.82	95.72	95.92	96.03	96.11	96.27	96.51	96.83	97.27	97.63
MEAN	--	--	--	95.88	95.98	96.15	96.26	96.37	96.65	97.05	97.44	97.75
LOW	--	--	96.32	95.99	96.06	96.23	96.43	96.51	96.81	97.30	97.60	97.86

SUMMARY FOR 2001 HIGH 95.72 (Apr. 9, 2001) MEAN -- LOW 97.86 (Dec. 30, 2001)

ALLENDALE COUNTY

WELL NUMBER: ALL-373 GRID NUMBER: 35AA-q6
LATITUDE: 33°01'28" LONGITUDE: 81°23'03"
LOCATION: Appleton fire tower.
AQUIFER: Floridan.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 372 ft. Screened from 327 to 367 ft.
DATUM: Land surface is 279.67 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 2.74 ft above land surface datum.
PERIOD OF RECORD: August 1996 to current year.
EXTREMES: Highest water level: 119.71 ft below land surface, May 8, 1998.
Lowest water level: 132.77 ft below land surface, June 26, 2000.
REMARKS: One of nine wells drilled on site for Department of Energy project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	128.13	127.95	127.46	127.52	128.20	130.69	130.59	130.33	129.95	129.95	130.56	130.25
MEAN	128.47	128.13	127.80	127.82	129.65	131.64	131.23	130.54	130.23	130.20	131.15	130.66
LOW	128.73	128.32	128.10	128.22	130.95	132.77	131.87	130.79	130.44	130.81	131.95	131.07

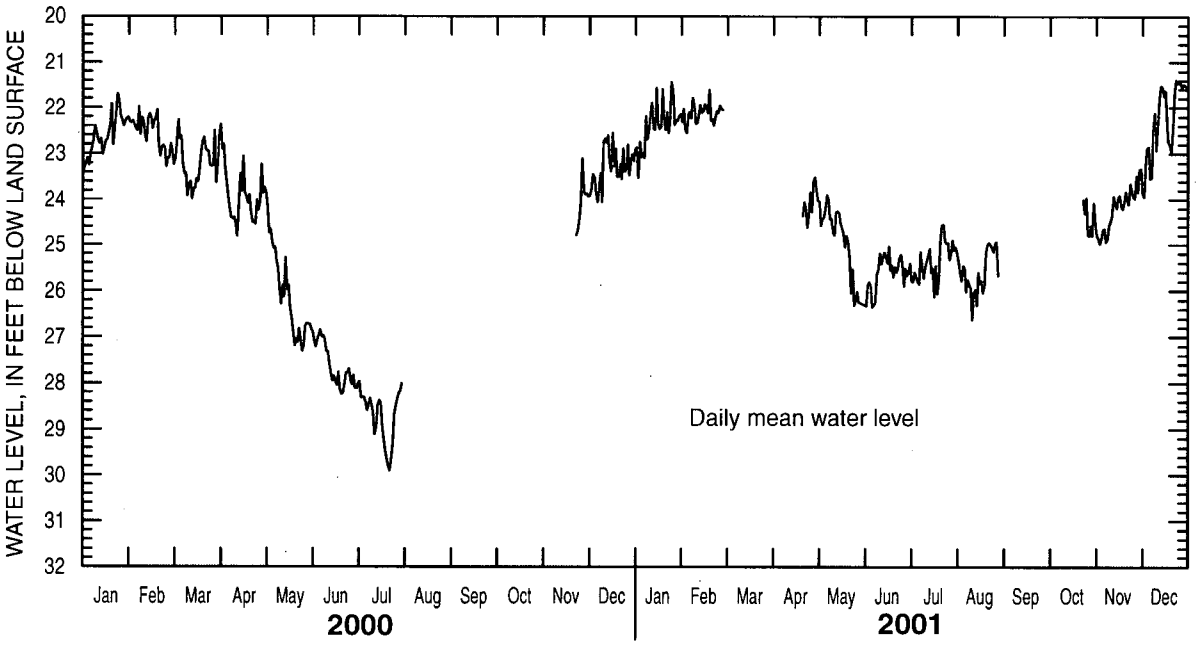
SUMMARY FOR 2000 HIGH 127.46 (Mar. 28, 2000) MEAN 129.80 LOW 132.77 (June 26, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	129.72	129.39	128.17	128.14	128.61	130.01	129.73	129.88	130.02	130.05	130.97	130.91
MEAN	130.46	129.67	128.86	128.42	129.41	130.41	129.93	130.05	130.17	130.48	131.77	131.42
LOW	131.33	129.87	129.39	128.66	130.33	130.65	130.21	130.53	130.37	131.88	132.48	132.04

SUMMARY FOR 2001 HIGH 128.14 (Apr. 7, 2001) MEAN 130.09 LOW 132.48 (Nov. 22, 2001)

BEAUFORT COUNTY

WELL NUMBER: BFT-101 GRID NUMBER: 27KK-y1
LATITUDE: 32°10'05" LONGITUDE: 80°44'26"
LOCATION: US Highway 278, Hilton Head Island.
AQUIFER: Upper Floridan.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 745 ft. Open hole from 129 to 470 ft.
DATUM: Land surface is 14.31 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of 1-1/2-inch casing, 1.80 ft above land surface datum.
PERIOD OF RECORD: January 1955 to current year.
EXTREMES: Highest water level: 12.29 ft above land surface, July 5, 1961.
Lowest water level: 30.42 ft below land surface, July 11, 1990.
REMARKS: Monitored continuously by USGS until September 2001.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	21.69	21.99	22.27	22.36	23.85	26.84	27.96	--	--	--	23.11	22.56
MEAN	22.60	22.55	23.19	23.90	26.06	27.62	28.68	--	--	--	--	23.29
LOW	23.43	23.28	23.98	24.82	27.31	28.24	29.90	--	--	--	24.80	24.06

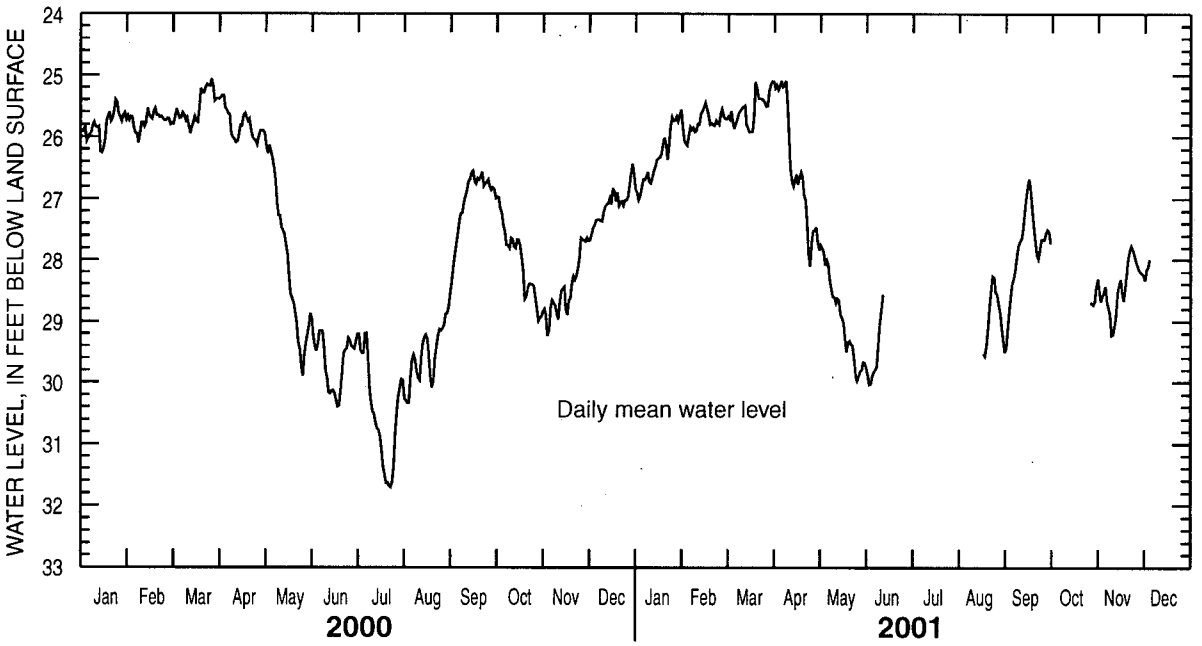
SUMMARY FOR 2000 HIGH 21.69 (Jan. 24, 2000) MEAN -- LOW 29.90 (July 22, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	21.44	21.61	--	23.51	23.90	25.04	24.56	24.94	--	23.23	23.32	21.39
MEAN	22.37	22.12	--	--	24.83	25.61	25.37	25.59	--	--	24.20	22.28
LOW	23.52	22.56	--	24.62	26.32	26.35	26.12	26.62	--	24.81	24.98	23.94

SUMMARY FOR 2001 HIGH 21.44 (Jan. 24, 2001) MEAN -- LOW 26.62 (Aug. 11, 2001)

BEAUFORT COUNTY

WELL NUMBER: BFT-429 GRID NUMBER: 28JJ-y1
LATITUDE: 32°15'50" LONGITUDE: 80°49'11"
LOCATION: Victoria Bluff Wildlife Management Area, Bluffton.
AQUIFER: Upper Floridan.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 300 ft. Cased to 119 ft. Open hole.
DATUM: Land surface is 21.56 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of plywood platform, 1.85 ft above land surface datum.
PERIOD OF RECORD: August 1970 to current year.
EXTREMES: Highest water level: 21.71 ft below land surface, September 10, 1971.
Lowest water level: 31.71 ft below land surface, July 23, 2000.
REMARKS: Monitored continuously by USGS until September 2001.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	25.40	25.54	25.06	25.33	25.95	28.96	29.19	28.56	26.55	26.97	27.64	26.44
MEAN	25.82	25.74	25.53	25.79	27.95	29.65	30.47	29.54	27.01	28.04	28.45	27.09
LOW	26.26	26.10	25.95	26.13	29.90	30.40	31.71	30.34	28.38	28.99	29.24	27.68

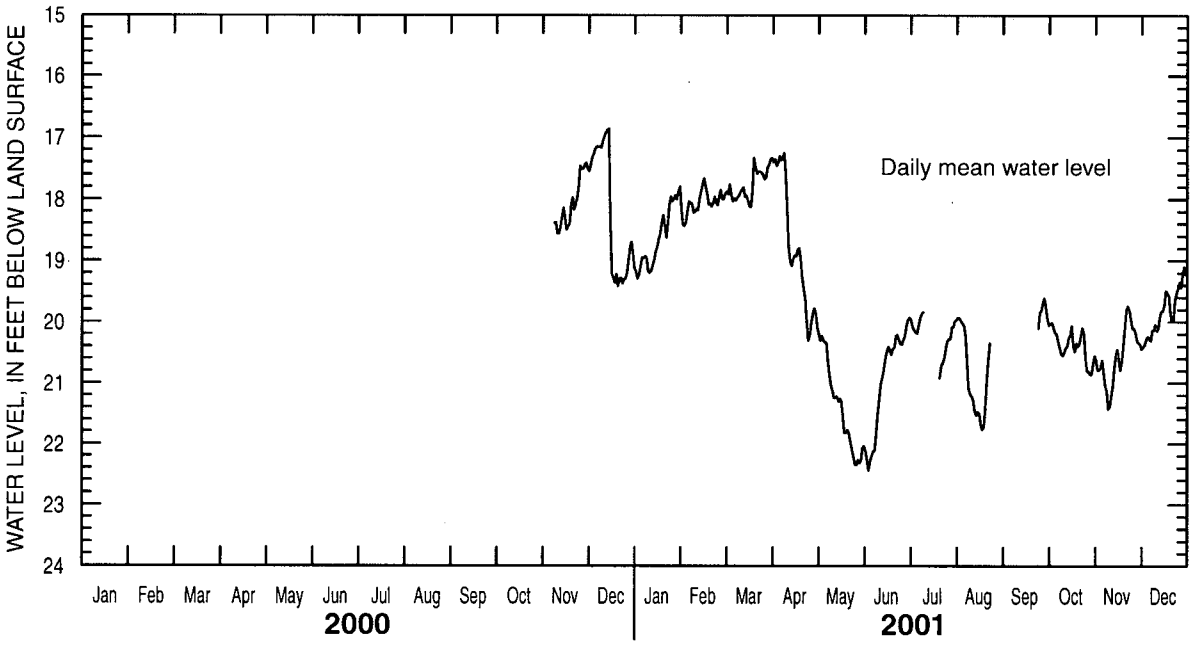
SUMMARY FOR 2000 HIGH 25.06 (Mar. 27, 2000) MEAN 27.60 LOW 31.71 (July 23, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	25.56	25.45	25.10	25.09	27.76	28.51	--	28.27	26.67	28.08	27.77	27.99
MEAN	26.29	25.77	25.56	26.44	28.93	--	--	--	27.78	--	28.43	--
LOW	27.02	26.14	25.92	28.11	29.97	30.04	--	29.57	29.44	28.73	29.23	28.34

SUMMARY FOR 2001 HIGH 25.09 (Apr. 6, 2001) MEAN -- LOW 30.04 (June 3, 2001)

BEAUFORT COUNTY

WELL NUMBER: BFT-1845 GRID NUMBER: 28JJ-p5
LATITUDE: 32°16'49" LONGITUDE: 80°49'17"
LOCATION: Waddell Mariculture Center, Bluffton.
AQUIFER: Middle Floridan.
WELL CHARACTERISTICS: 8-inch diameter observation well. Depth: 600 ft. Cased to 320 ft. Open hole.
DATUM: Land surface is 12.27 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 1.48 ft above land surface datum.
PERIOD OF RECORD: March 1994 to March 1998 and September 2000 to current year.
EXTREMES: Highest water level: 15.97 ft below land surface, February 4, 1998.
Lowest water level: 22.44 ft below land surface, June 4, 2001.
REMARKS: Water levels are tide influenced.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	--	--	--	--	--	--	--	--	--	17.41	16.86
MEAN	--	--	--	--	--	--	--	--	--	--	18.07	18.23
LOW	--	--	--	--	--	--	--	--	--	--	18.56	19.42

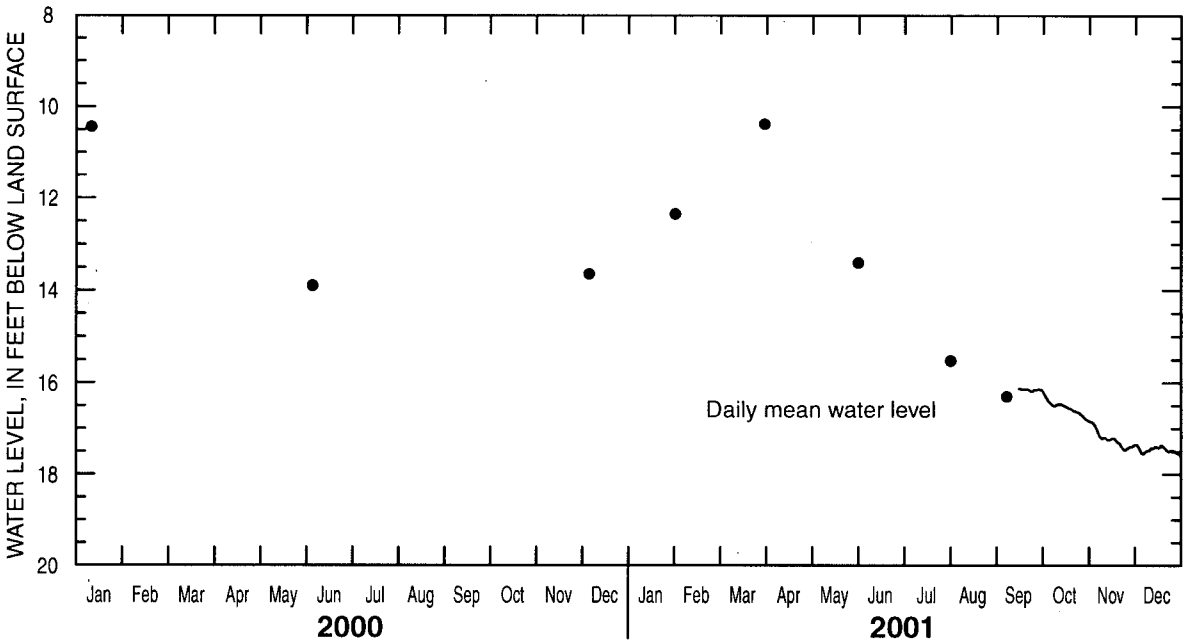
SUMMARY FOR 2000 HIGH 16.86 (Dec. 14, 2000) MEAN -- LOW 19.42 (Dec. 20, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	17.80	17.66	17.33	17.25	20.09	19.96	19.84	19.93	19.61	20.02	19.74	19.10
MEAN	18.62	18.06	17.78	18.69	21.32	21.01	--	--	--	20.39	20.56	19.83
LOW	19.30	18.44	18.13	20.31	22.35	22.44	21.05	21.77	20.26	20.86	21.43	20.45

SUMMARY FOR 2001 HIGH 17.25 (Apr. 9, 2001) MEAN 19.78 LOW 22.44 (June 4, 2001)

BERKELEY COUNTY

WELL NUMBER: BRK-644 GRID NUMBER: 18W-b2
LATITUDE: 33°24'16" LONGITUDE: 79°56'03"
LOCATION: St. Stephen Middle School, St. Stephen.
AQUIFER: Floridan.
WELL CHARACTERISTICS: 4-inch diameter observation well. Depth: 93 ft. Screened from 53 to 93 ft.
DATUM: Land surface is 75 ft (map estimate) above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 2.92 ft above land surface datum.
PERIOD OF RECORD: January 2000 to current year.
EXTREMES: Highest water level: 10.38 ft below land surface, March 30, 2001.
Lowest water level: 17.61 ft below land surface, December 31, 2001.
REMARKS: Drilled and cored for DNR/USGS aquifer delineation project.

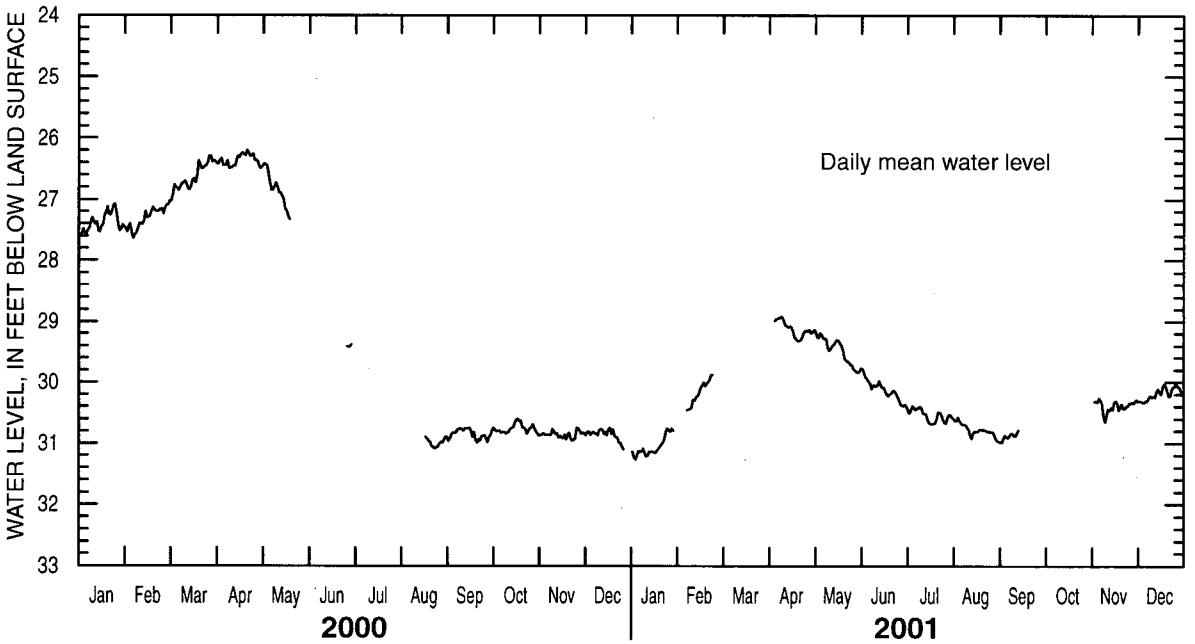


2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	--	--	--	--	--	--	--	16.13	16.19	16.85	17.36
MEAN	--	--	--	--	--	--	--	--	--	16.54	17.23	17.46
LOW	--	--	--	--	--	--	--	--	16.19	16.84	17.47	17.61

SUMMARY FOR 2001 HIGH 10.38 (Mar. 30, 2001) MEAN -- LOW 17.61 (Dec. 31, 2001)

CHARLESTON COUNTY

WELL NUMBER: CHN-44 GRID NUMBER: 19DD-o1
LATITUDE: 33°47'47" LONGITUDE: 80°04'12"
LOCATION: US Department of Agriculture site, US Highway 17.
AQUIFER: Floridan.
WELL CHARACTERISTICS: 8-inch diameter observation well. Depth: 434 ft. Cased to 180 ft. Open hole.
DATUM: Land surface is 9.4 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of plywood platform, 0.65 ft above land surface datum.
PERIOD OF RECORD: October 1980 to current year.
EXTREMES: Highest water level: 13.54 ft below land surface, March 18, 1983.
Lowest water level: 31.27 ft below land surface, January 3, 2001.
REMARKS: Monitored continuously by USGS until November 2001.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	27.07	27.08	26.29	26.20	26.42	--	--	30.90	30.75	30.60	30.75	30.75
MEAN	27.39	27.32	26.64	26.37	--	--	--	--	30.85	30.77	30.86	30.86
LOW	27.59	27.64	27.02	26.50	27.87	--	--	31.09	30.99	30.88	30.96	31.10

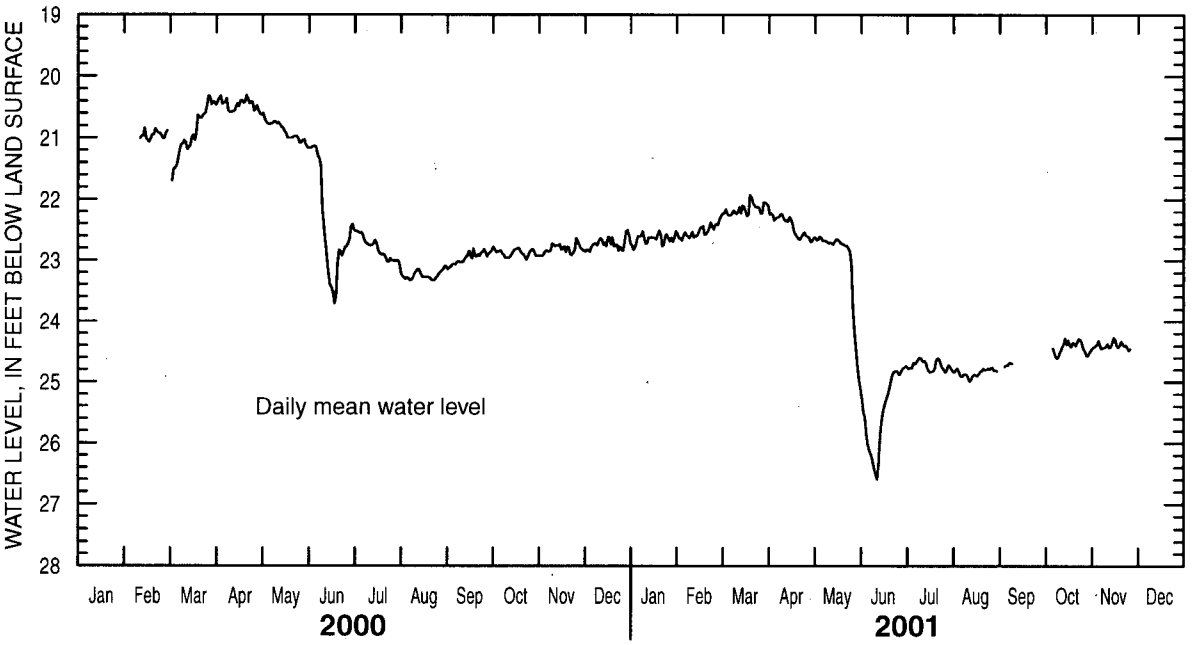
SUMMARY FOR 2000 HIGH 26.20 (Apr. 21, 2000) MEAN -- LOW 31.10 (Dec. 26, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	30.76	29.88	--	28.92	29.14	29.77	30.39	30.57	30.79	--	30.26	30.02
MEAN	31.06	--	--	29.12	29.47	30.11	30.53	30.78	--	--	30.39	30.19
LOW	31.27	30.46	--	29.32	29.84	30.39	30.68	30.97	30.98	--	30.65	30.34

SUMMARY FOR 2001 HIGH 28.92 (Apr. 9, 2001) MEAN -- LOW 31.27 (Jan. 3, 2001)

CHARLESTON COUNTY

WELL NUMBER: CHN-484 GRID NUMBER: 22GG-d1
LATITUDE: 32°34'55" LONGITUDE: 80°18'22"
LOCATION: Blue House Plantation, Edisto Island.
AQUIFER: Floridan.
WELL CHARACTERISTICS: 12-inch diameter unused domestic well. Depth: 560 ft. Cased to 280 ft. Open hole.
DATUM: Land surface is 14.45 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of 6-inch casing extension, 2.07 ft above land surface datum.
PERIOD OF RECORD: February 2000 to current year.
EXTREMES: Highest water level: 20.31 ft below land surface, April 21, 2000.
Lowest water level: 26.59 ft below land surface, June 12, 2001.
REMARKS: Water levels are tide influenced. Specific conductance is also measured at this site.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	20.84	20.32	20.31	20.60	21.13	22.50	23.09	22.81	22.78	22.64	22.50
MEAN	--	--	20.95	20.46	20.89	22.42	22.80	23.24	22.96	22.88	22.82	22.73
LOW	--	21.10	21.96	20.61	21.15	23.71	23.04	23.33	23.15	22.99	22.93	22.86

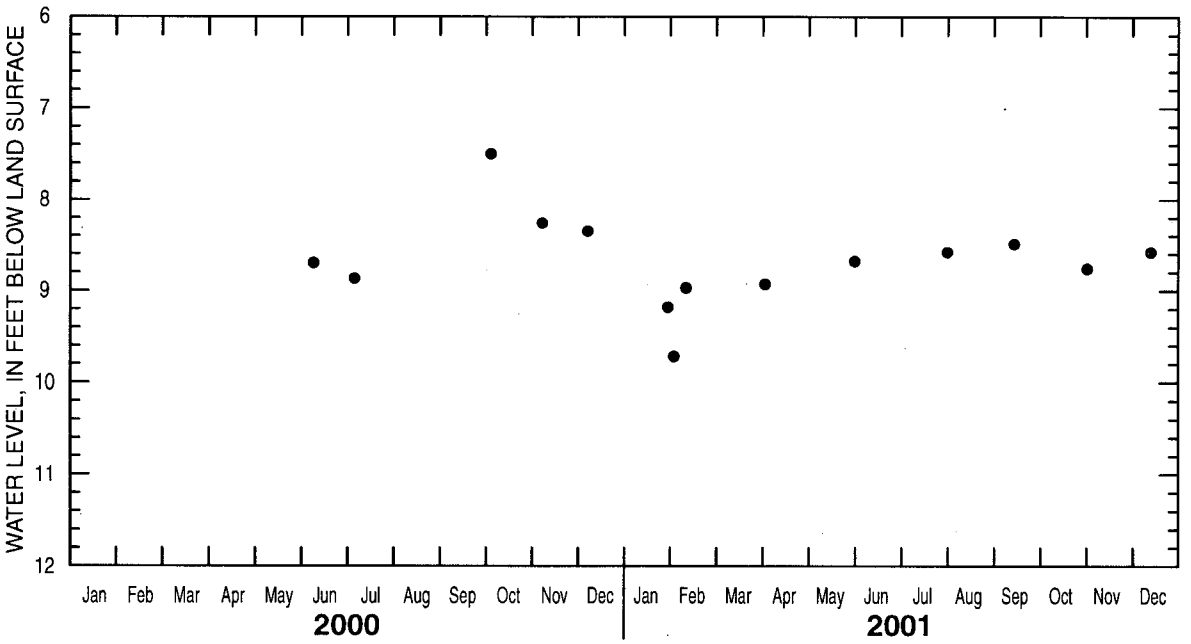
SUMMARY FOR 2000 HIGH 20.31 (Apr. 21, 2000) MEAN 22.14 LOW 23.71 (June 18, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	22.51	22.32	21.93	22.10	22.61	24.76	24.60	24.76	24.68	24.28	24.27	--
MEAN	22.65	22.53	22.16	22.43	22.99	25.48	24.73	24.85	--	24.44	24.40	--
LOW	22.83	22.68	22.28	22.70	24.96	26.59	24.84	24.99	24.93	24.61	24.48	--

SUMMARY FOR 2001 HIGH 21.93 (Mar. 20, 2001) MEAN 23.69 LOW 26.59 (June 12, 2001)

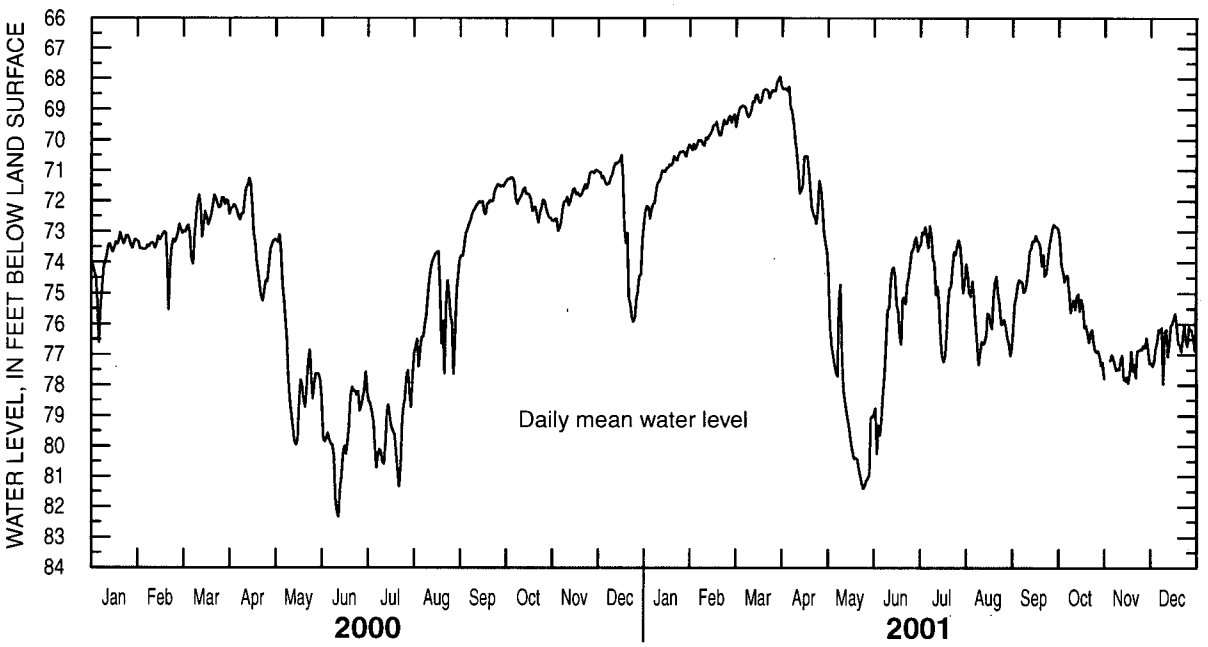
CHARLESTON COUNTY

WELL NUMBER: CHN-803 GRID NUMBER: 11Z-b1
LATITUDE: 33°09'10" LONGITUDE: 79°21'30"
LOCATION: Santee Coastal Reserve, South Santee River.
AQUIFER: Santee/Floridan.
WELL CHARACTERISTICS: 5-inch diameter observation well. Depth: 113 ft. Screened from 48 to 113 ft.
DATUM: Land surface is 10.89 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 2.46 ft above land surface datum.
PERIOD OF RECORD: June 2000 to current year.
EXTREMES: Highest water level: 7.50 ft below land surface, October 3, 2000.
Lowest water level: 9.72 ft below land surface, February 2, 2001.
REMARKS: Drilled and cored for DNR/USGS aquifer delineation project. Tide influenced.



COLLETON COUNTY

WELL NUMBER: COL-16 GRID NUMBER: 26CC-f1
LATITUDE: 32°53'55" LONGITUDE: 80°39'57"
LOCATION: Water plant, Walterboro.
AQUIFER: Floridan.
WELL CHARACTERISTICS: 6-inch diameter unused public supply well. Depth: 528 ft. Cased to 68 ft. Open hole.
DATUM: Land surface is 61.50 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of sanitary seal, 1.61 ft above land surface datum.
PERIOD OF RECORD: February 1996 to current year.
EXTREMES: Highest water level: 64.42 ft below land surface, February 16, 1996.
Lowest water level: 82.33 ft below land surface, June 12, 2000.
REMARKS: Multiple screens in Tertiary-sand and Floridan systems.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	73.03	72.77	71.80	71.26	73.09	77.57	77.52	73.65	71.42	71.24	70.99	70.50
MEAN	73.82	73.43	72.53	73.06	77.16	79.56	79.36	75.49	72.23	71.97	71.84	72.60
LOW	76.61	75.54	74.05	75.25	79.97	82.33	81.34	77.64	73.79	72.71	72.98	75.93

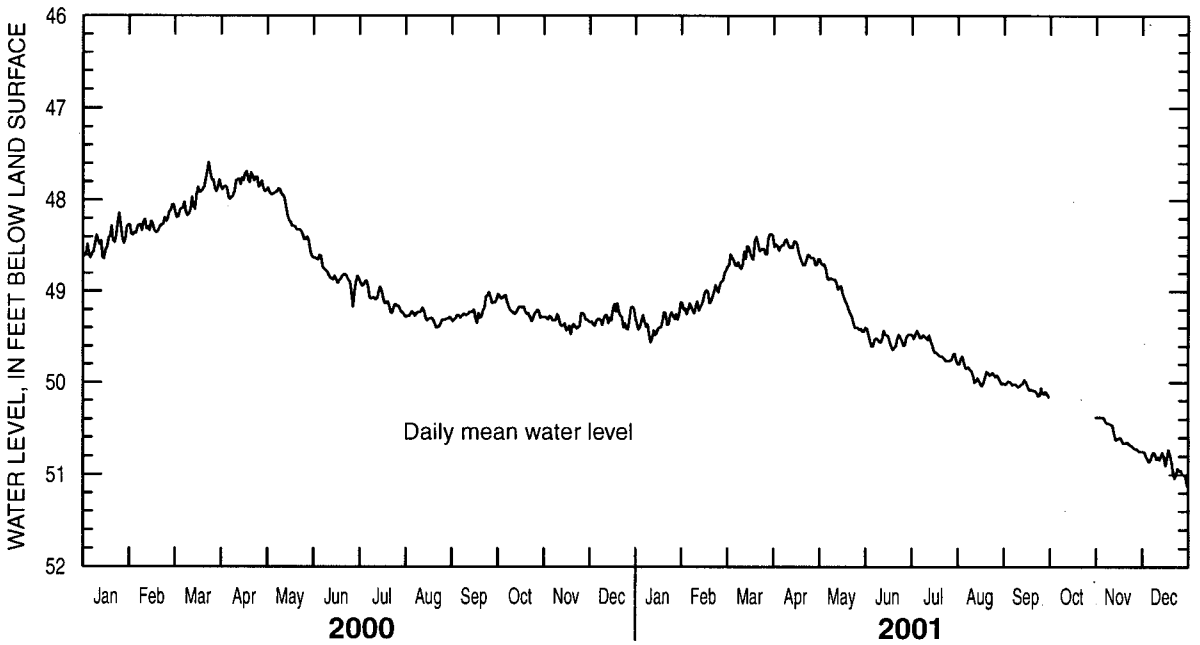
SUMMARY FOR 2000 HIGH 70.50 (Dec. 16, 2000) MEAN 74.43 LOW 82.33 (June 12, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	70.15	69.21	67.93	68.23	73.66	73.18	72.81	74.05	72.76	72.93	76.45	74.56
MEAN	71.10	69.77	68.71	70.72	78.71	75.91	74.39	75.82	73.98	75.66	77.27	76.45
LOW	72.59	70.34	69.57	73.35	81.41	80.25	77.24	77.34	76.08	77.80	78.10	77.97

SUMMARY FOR 2001 HIGH 67.93 (Mar. 31, 2001) MEAN 74.06 LOW 81.41 (May 25, 2001)

COLLETON COUNTY

WELL NUMBER: COL-97 GRID NUMBER: 26AA-k1
LATITUDE: 33°02'51" LONGITUDE: 80°35'51"
LOCATION: SC Highway 61, near Canadys.
AQUIFER: Floridan.
WELL CHARACTERISTICS: 4-inch diameter observation well. Depth: 342 ft. Cased to 134 ft. Open hole.
DATUM: Land surface is 84 ft (map estimate) above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of plywood platform, 1.67 ft above land surface datum.
PERIOD OF RECORD: August 1977 to current year.
EXTREMES: Highest water level: 36.79 ft below land surface, January 25, 1978.
Lowest water level: 51.14 ft below land surface, December 31, 2001.
REMARKS: Monitored continuously by USGS until November 2001.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	48.14	48.05	47.59	47.69	47.87	48.60	48.86	49.18	49.01	49.03	49.24	49.13
MEAN	48.45	48.27	47.96	47.83	48.16	48.82	49.08	49.29	49.21	49.19	49.34	49.29
LOW	48.64	48.38	48.19	47.99	48.61	49.17	49.26	49.40	49.35	49.33	49.47	49.42

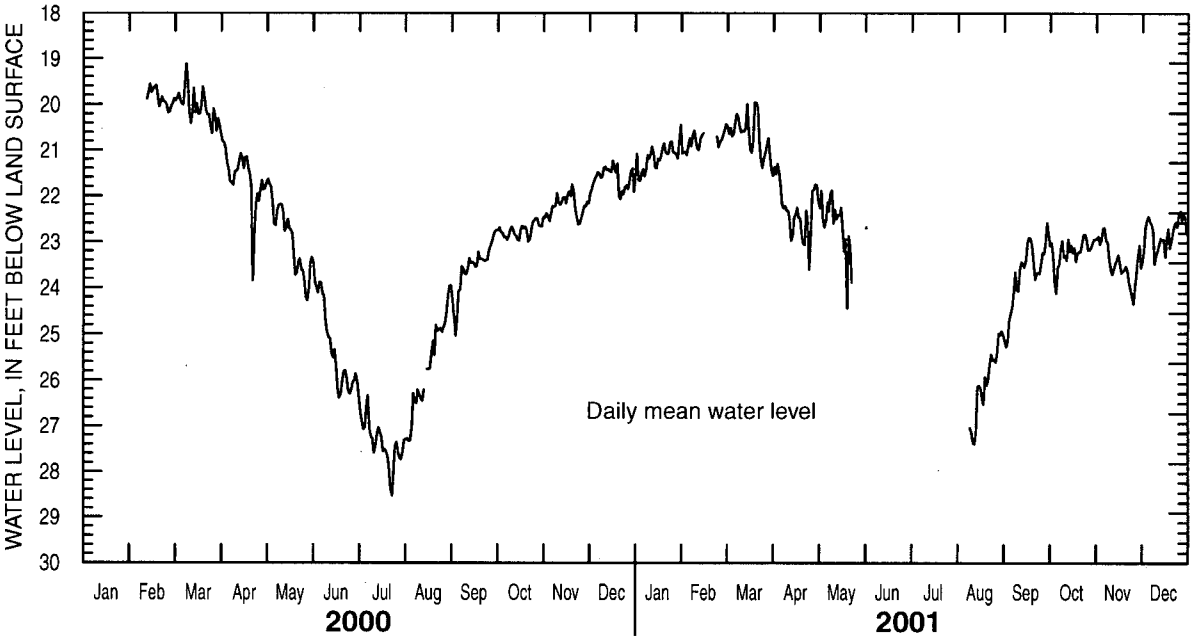
SUMMARY FOR 2000 HIGH 47.59 (Mar. 24, 2000) MEAN 48.74 LOW 49.47 (Nov. 18, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	49.12	48.80	48.37	48.39	48.64	49.40	49.43	49.71	49.97	--	50.38	50.73
MEAN	49.34	49.08	48.59	48.56	49.05	49.53	49.61	49.91	50.06	--	50.57	50.88
LOW	49.56	49.25	48.77	48.71	49.44	49.64	49.76	50.04	50.16	--	50.75	51.14

SUMMARY FOR 2001 HIGH 48.37 (Mar. 30, 2001) MEAN 49.57 LOW 51.14 (Dec. 31, 2001)

COLLETON COUNTY

WELL NUMBER: COL-301 GRID NUMBER: 22GG-w4
LATITUDE: 32°30'42" LONGITUDE: 80°17'58"
LOCATION: Edisto Beach State Park, Edisto Beach.
AQUIFER: Floridan.
WELL CHARACTERISTICS: 6-inch diameter unused public supply well. Depth: 545 ft. Screened from 516 to 545 ft.
DATUM: Land surface is 9.96 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of 6-inch casing, 2.61 ft above land surface datum.
PERIOD OF RECORD: February 2000 to current year.
EXTREMES: Highest water level: 19.12 ft below land surface, March 9, 2000.
Lowest water level: 28.54 ft below land surface, July 23, 2000.
REMARKS: Water levels are tide influenced. Specific conductance is also measured at this site.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	19.56	19.12	20.64	21.64	23.44	26.34	23.96	22.75	22.46	21.76	21.23
MEAN	--	--	20.04	21.59	22.89	25.28	27.35	25.72	23.57	22.75	22.23	21.63
LOW	--	20.17	20.63	23.86	24.28	26.39	28.54	27.33	25.04	23.00	22.63	22.08

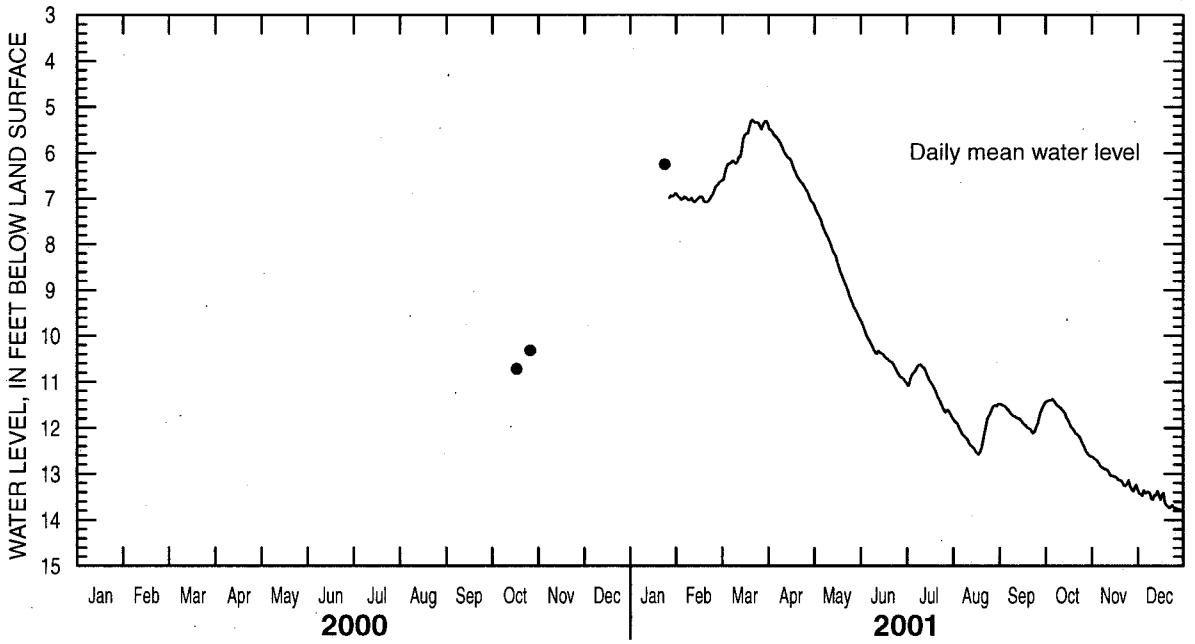
SUMMARY FOR 2000 HIGH 19.12 (Mar. 9, 2000) MEAN 23.11 LOW 28.54 (July 23, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	20.44	20.42	19.96	21.31	21.88	--	--	24.93	22.59	22.83	22.69	22.33
MEAN	21.14	--	20.65	22.28	--	--	--	--	23.71	23.21	23.44	22.83
LOW	21.68	21.11	21.45	23.61	24.45	--	--	27.39	25.28	24.12	24.35	23.49

SUMMARY FOR 2001 HIGH 19.96 (Mar. 20, 2001) MEAN -- LOW 27.39 (Aug. 12, 2001)

HAMPTON COUNTY

WELL NUMBER: HAM-228 GRID NUMBER: 33BB-s1
LATITUDE: 32°56'52" LONGITUDE: 80°11'50"
LOCATION: McMillan Road, near Brunson.
AQUIFER: Upper Floridan.
WELL CHARACTERISTICS: 4-inch diameter unused domestic well. Depth: 85 ft.
Open interval unknown.
DATUM: Land surface is 128 ft (map estimate) above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 0.98 ft above land surface datum.
PERIOD OF RECORD: January 2001 to current year.
EXTREMES: Highest water level: 5.29 ft below land surface, March 22, 2001.
Lowest water level: 13.82 ft below land surface, December 31, 2001.
REMARKS: None.

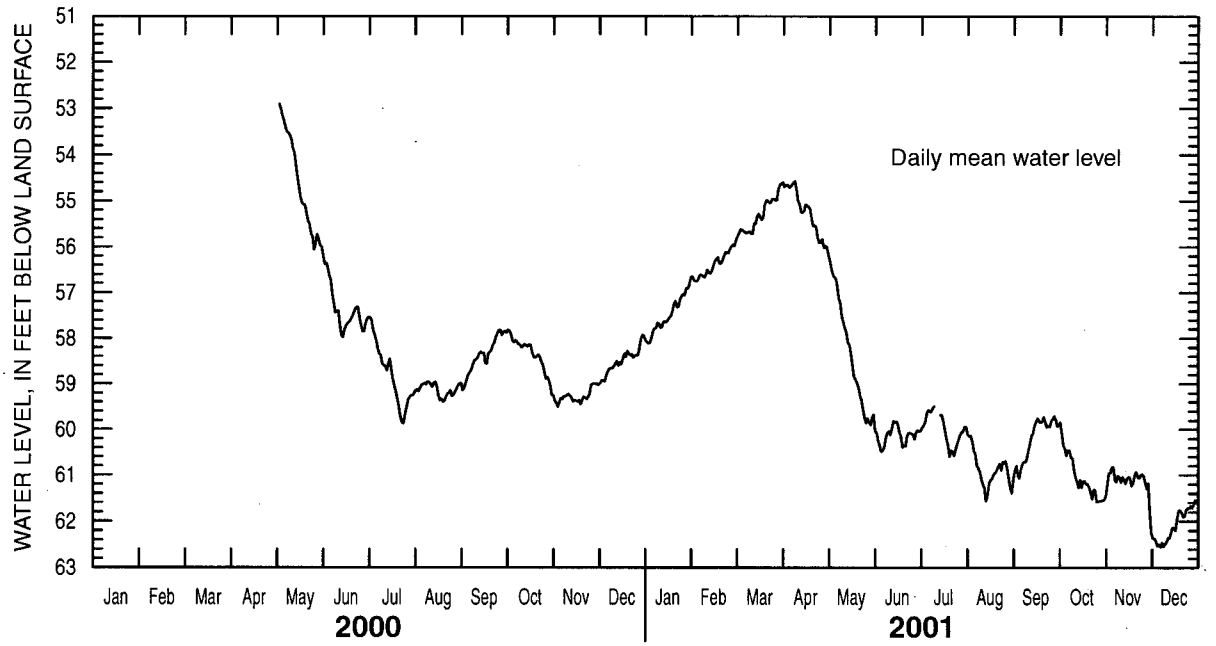


2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	6.89	6.65	5.29	5.35	7.10	9.64	10.63	11.48	11.48	11.37	12.63	13.34
MEAN	--	6.97	5.84	6.18	8.33	10.39	11.10	12.06	11.78	11.89	13.03	13.56
LOW	6.99	7.08	6.63	7.07	9.58	10.95	11.73	12.58	12.12	12.62	13.38	13.82

SUMMARY FOR 2001 HIGH 5.29 (Mar. 22, 2001) MEAN 10.07 LOW 13.82 (Dec. 31, 2001)

JASPER COUNTY

WELL NUMBER: JAS-425 GRID NUMBER: 30FF-o1
LATITUDE: 32°37'03" LONGITUDE: 80°59'44"
LOCATION: US Highway 278, Gillisonville.
AQUIFER: Upper Floridan.
WELL CHARACTERISTICS: 6-inch diameter observation well. Depth: 225 ft. Cased to 150 ft. Open hole.
DATUM: Land surface is 65.24 ft above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of casing, 2.02 ft above land surface datum.
PERIOD OF RECORD: April 2000 to current year.
EXTREMES: Highest water level: 52.91 ft below land surface, May 3, 2000.
Lowest water level: 62.55 ft below land surface, December 6, 2001.
REMARKS: One of two wells drilled on site for Department of Energy project.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	--	--	--	52.68	56.18	57.54	58.95	57.83	57.82	59.00	57.93
MEAN	--	--	--	--	54.57	57.35	58.79	59.13	58.36	58.38	59.27	58.48
LOW	--	--	--	--	56.07	57.98	59.87	59.40	59.14	59.25	59.51	59.00

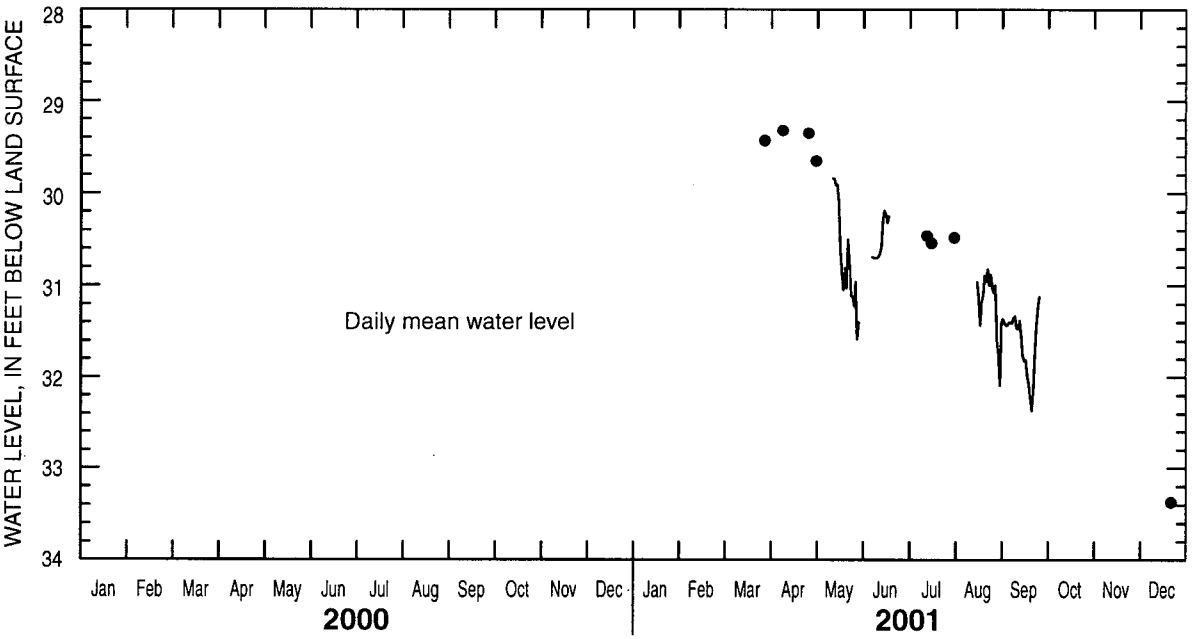
SUMMARY FOR 2000 HIGH 52.91 (May 3, 2000) MEAN -- LOW 59.87 (July 24, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	56.64	55.95	54.65	54.58	56.16	59.81	59.49	60.12	59.70	59.84	60.82	61.54
MEAN	57.45	56.40	55.33	55.21	58.28	60.13	59.98	60.89	60.19	61.05	61.13	62.07
LOW	58.12	56.76	55.86	56.02	59.91	60.49	60.60	61.57	61.07	61.58	62.25	62.55

SUMMARY FOR 2001 HIGH 54.58 (Apr. 9, 2001) MEAN 59.03 LOW 62.55 (Dec. 6, 2001)

ORANGEBURG COUNTY

WELL NUMBER: ORG-431 GRID NUMBER: 29U-v3
LATITUDE: 33°30'29" LONGITUDE: 80°51'53"
LOCATION: Clark Middle School, Orangeburg.
AQUIFER: Middle Floridan.
WELL CHARACTERISTICS: 2-inch diameter observation well. Depth: 93 ft. Screened from 83 to 88 ft.
DATUM: Land surface is 256 ft (map estimate) above National Geodetic Vertical Datum of 1929.
MEASURING POINT: Top of 2-inch casing, 3.13 ft above land surface datum.
PERIOD OF RECORD: March 2001 to current year.
EXTREMES: Highest water level: 29.32 ft below land surface, April 9, 2001.
Lowest water level: 33.37 ft below land surface, December 20, 2001.
REMARKS: Drilled and cored for DNR/USGS aquifer delineation project.



2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
HIGH	--	--	--	--	29.84	30.19	--	30.82	31.25	--	--	--
MEAN	--	--	--	--	--	--	--	--	31.62	--	--	--
LOW	--	--	--	--	31.58	30.70	--	32.09	32.37	--	--	--

SUMMARY FOR 2001 HIGH 29.32 (Apr. 9, 2001) MEAN -- LOW 33.37 (Dec. 20, 2001)

SALTWATER-INTRUSION MONITORING

Ground Water

DNR designed a network to observe ground-water quality changes caused by saltwater intrusion. Conditions that lead to this form of ground-water contamination are common in South Carolina's Lower Coastal Plain, and the most common mechanism is the capture of subsurface brackish water and saltwater by wells. The area of most immediate concern is in southern Beaufort County where pumping from the Floridan aquifer system there and at Savannah, Ga., has induced the southward migration of saltwater at rates that locally exceed 100 ft per year. Contamination there also occurs by the downward migration of modern seawater where confining material above the Floridan system is thin or absent. USGS operates a DNR-funded, real-time water-level and fluid-conductivity monitoring site at the northwest end of Hilton Head Island, and DHEC runs an extensive network of project-related monitoring sites throughout southern Beaufort County.

Along the coast of Charleston County, lateral intrusion occurs where pumping from the Middendorf aquifer system captures the brackish water that lies in that system offshore. Intrusion is a less severe problem there because of the system's low hydraulic conductivity and because of the broad, diffuse nature of the brackish-water front. Slow, lateral intrusion also is likely in part of the Floridan aquifer system at Charleston, where a shallow cone of depression has existed for many years.

Saltwater upconing is a potential problem in southern Charleston County, and DNR operates water-level and specific-conductance monitoring stations at Blue House Plantation (CHN-484) and Edisto Beach State Park (COL-301), see figure 14. Most of the water used in the area is pumped from a 10- to 40-ft permeable zone in the Floridan aquifer system, and brackish water in the underlying rock may be moving upward as heads in shallower aquifers decline. Data from the Blue House Plantation and Edisto Beach stations are included in this section.

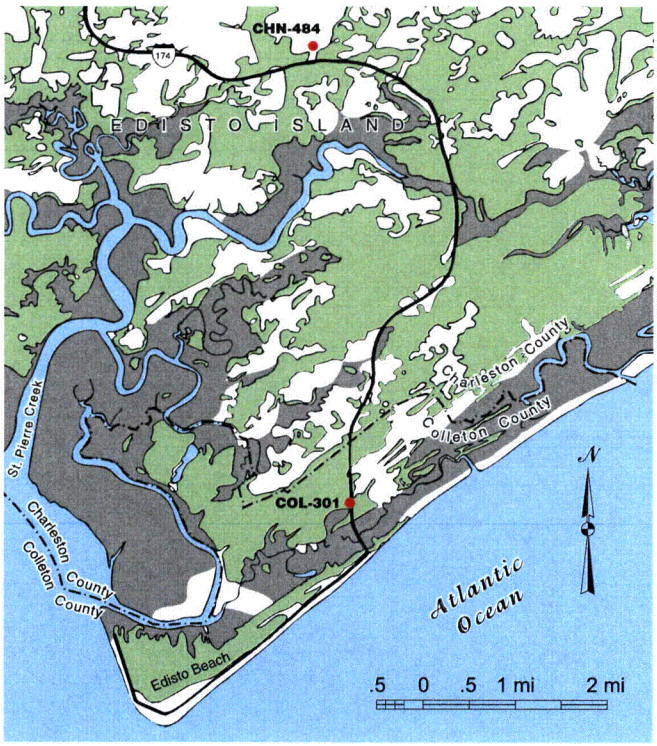
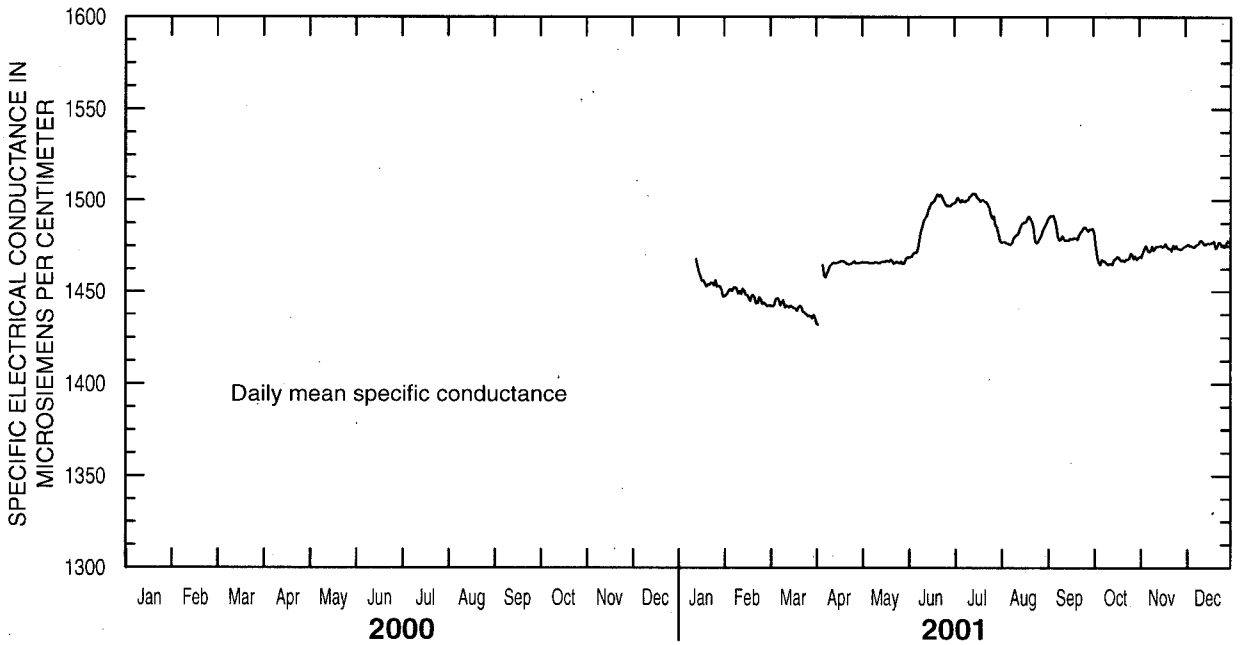


Figure 14. Locations of saltwater-intrusion monitoring wells at Edisto Island, Charleston County.

CHARLESTON COUNTY

WELL NUMBER: CHN-484 GRID NUMBER: 22GG-d1
LATITUDE: 32°34'55" LONGITUDE: 80°18'22"
LOCATION: Blue House Plantation, Edisto Island.
INSTRUMENTATION: Unidata four electrode conductivity instrument.
PERIOD OF RECORD: January 2001 to current year.
EXTREMES: Maximum specific conductance: 1430 microsiemens per centimeter, April 3, 2001.
Minimum specific conductance: 1500 microsiemens per centimeter, June 16, 2001.
REMARKS: This is a ground-water monitoring well. Water levels are also measured at this site.

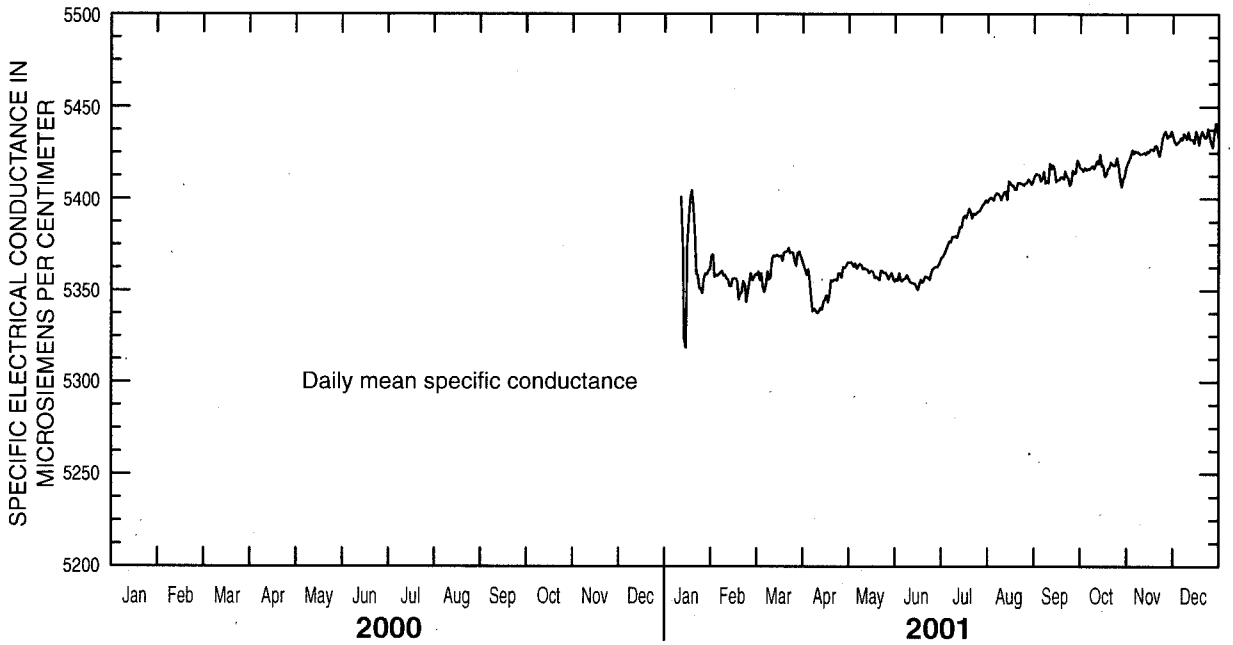


2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
MAX	1480	1450	1450	1470	1470	1500	1500	1490	1490	1480	1480	1480
MEAN	--	1450	1440	1460	1470	1490	1500	1480	1480	1470	1470	1480
MIN	1450	1440	1440	1430	1470	1470	1480	1480	1480	1460	1470	1470

SUMMARY FOR 2001 MAX 1500 (June 16, 2001) MEAN 1470 MIN 1430 (Apr.3, 2001)

COLLETON COUNTY

WELL NUMBER: COL-301 GRID NUMBER: 22GG-w4
LATITUDE: 32°30'42" LONGITUDE: 80°17'58"
LOCATION: Edisto Beach State Park, Edisto Island.
INSTRUMENTATION: Unidata four electrode conductivity instrument.
PERIOD OF RECORD: January 2001 to current year.
EXTREMES: Maximum specific conductance: 5440 microsiemens per centimeter, November 25, 2001.
Minimum specific conductance: 5320 microsiemens per centimeter, January 13, 2001.
REMARKS: This is a ground-water monitoring well. Water levels are also measured at this site.



2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
MAX	5410	5370	5370	5360	5370	5360	5400	5410	5420	5420	5440	5440
MEAN	--	5360	5360	5350	5360	5360	5380	5400	5410	5420	5430	5430
MIN	5320	5340	5350	5340	5360	5350	5370	5400	5410	5410	5420	5430

SUMMARY FOR 2001 MAX 5440 (Nov. 25, 2001) MEAN 5390 MIN 5320 (Jan. 13, 2001)

Surface Water

DNR also has initiated a surface-water network to observe salinity changes, critical in the health of flora and fauna, caused by variations in streamflow and tides. The boundary between saltwater and freshwater moves upstream and downstream with high and low tides, respectively, in coastal rivers and estuaries. Low streamflows resulting from drought conditions cause this boundary to move much farther upstream than is the case under normal conditions. Conversely, high-streamflow conditions cause the saltwater-freshwater interface to move downstream. Streamflow in most coastal rivers is influenced by water releases from hydroelectric dams, which further complicates the salinity regime of these rivers.

Salinity changes in coastal waterways have a direct impact on water users. Public water supplies may be endangered by saltwater intrusion during low-streamflow conditions. Commercial and recreational uses of the river are influenced by its salinity, and the habitats for plant and animal species are highly dependent upon salinity conditions.

Surface-water conditions are monitored at three stations on the North and South Santee Rivers. The monitoring stations collect hourly and half-hourly measurements of stream stage, specific conductance, and water temperature.

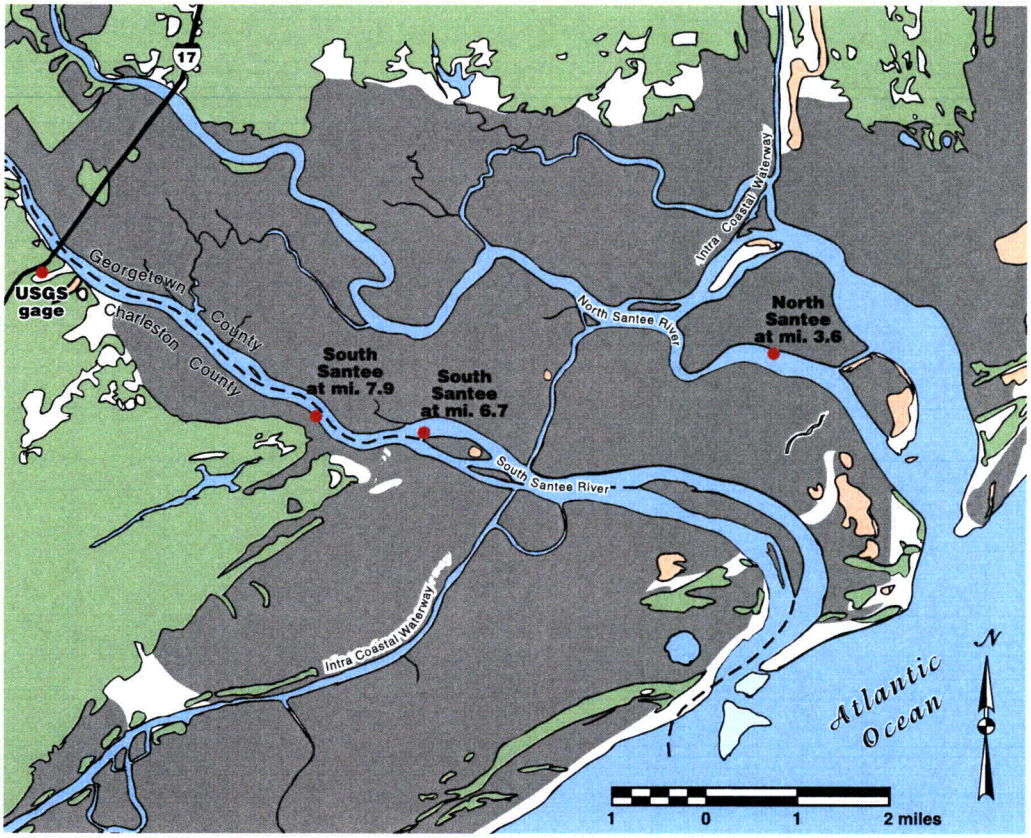
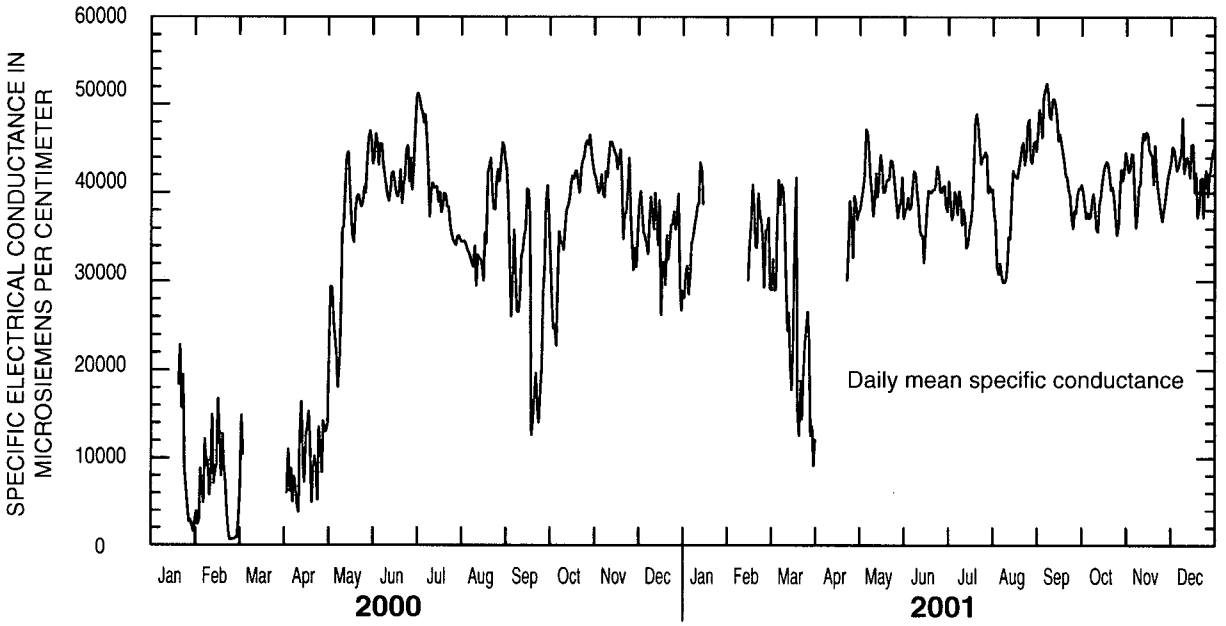


Figure 15. Locations of stage and specific-conductance monitoring stations in the Santee River delta.

NORTH SANTEE RIVER

LATITUDE: 33°10'00" LONGITUDE: 79°16'15"
LOCATION: North bank of North Santee River, at river mile 3.6, south of Crow Island.
INSTRUMENTATION: Hydrolab Minisonde Water Quality Multiprobe.
PERIOD OF RECORD: December 1997 to current year.
EXTREMES: Maximum specific conductance: 52,390 microsiemens per centimeter, September 8, 2001.
Minimum specific conductance: 80 microsiemens per centimeter, March 22, 1998.
REMARKS: None.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
MAX	22810	16720	14850	16390	47010	46720	51250	45650	43660	46580	45750	40110
MEAN	--	6840	--	9550	33750	42440	41340	36590	29620	38130	40530	35220
MIN	1570	620	1020	3820	13130	38820	34090	29510	12630	22780	31250	26210

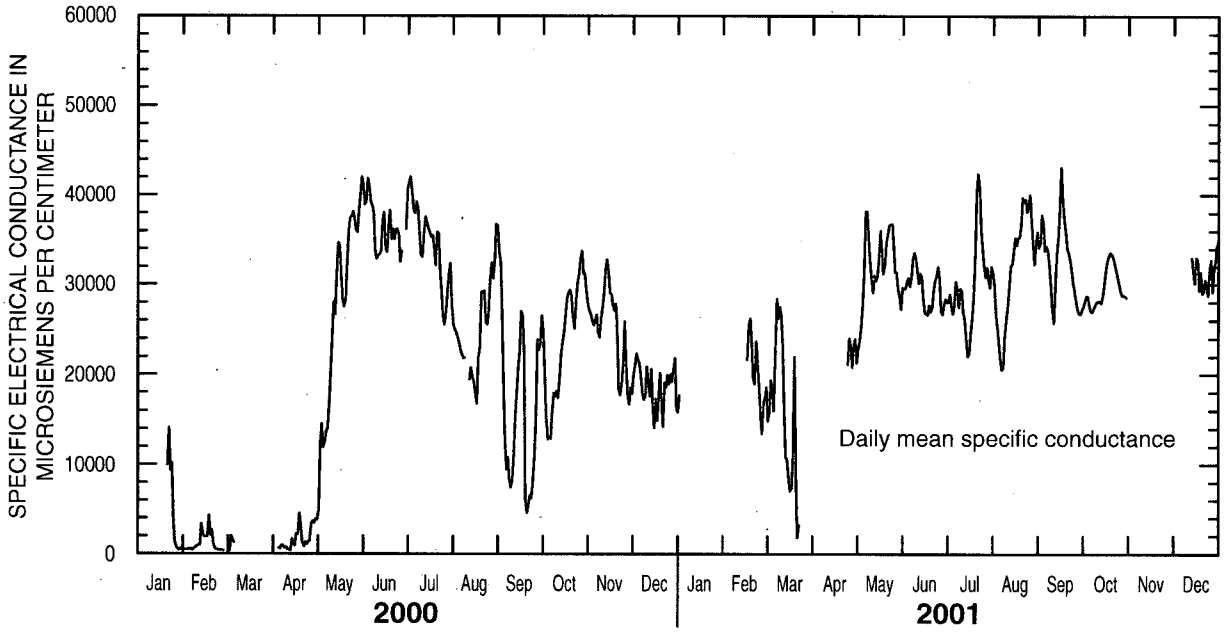
SUMMARY FOR 2000 MAX 51250 (July 3, 2000) MEAN 30640 MIN 620 (Feb. 26, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
MAX	43410	40890	41710	39630	47180	43000	48940	48300	52390	43570	46890	48480
MEAN	--	--	27330	--	--	39200	40350	39300	45250	39590	42140	42700
MIN	28120	29340	12570	9160	37000	32110	33780	29870	36020	35230	36080	37200

SUMMARY FOR 2001 MAX 52390 (Sept. 8, 2001) MEAN 38840 MIN 9160 (Apr. 1, 2001)

SOUTH SANTEE RIVER

LATITUDE: 33°09'22" LONGITUDE: 79°20'20"
LOCATION: North bank of South Santee River, at river mile 6.7, east of Pleasant Creek and north of Brown Island.
INSTRUMENTATION: Hydrolab Minisonde Water Quality Multiprobe.
PERIOD OF RECORD: December 1997 to current year.
EXTREMES: Maximum specific conductance: 43,150 microsiemens per centimeter, September 16, 2001.
Minimum specific conductance: 70 microsiemens per centimeter, February 17, 1998.
REMARKS: None.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
MAX	14120	4280	2050	4530	42050	41860	42040	36750	33820	33770	32780	22350
MEAN	--	1150	--	1620	26780	36240	34560	--	16480	24020	24780	18640
MIN	420	350	320	370	3790	32530	25520	16780	4560	12840	16660	14070

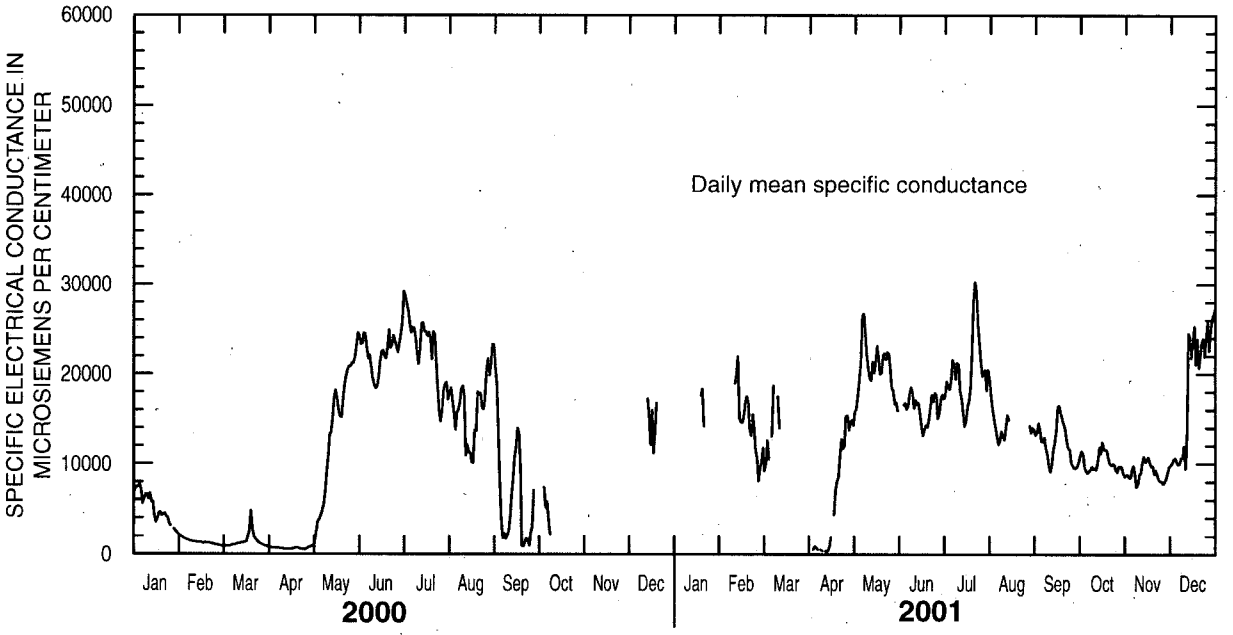
SUMMARY FOR 2000 MAX 42050 (May 31, 2000) MEAN 20270 MIN 320 (Mar. 1, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
MAX	18410	26170	28360	24040	38180	33580	42410	40030	43150	33550	--	34890
MEAN	--	--	--	--	31520	29560	29890	31980	32690	29510	--	31440
MIN	10860	13450	1800	19100	21280	26570	22080	20520	25740	26940	--	28750

SUMMARY FOR 2001 MAX 43150 (Sept. 16, 2001) MEAN 28220 MIN 1800 (Mar. 22, 2001)

SOUTH SANTEE RIVER

LATITUDE: 33°09'16" LONGITUDE: 79°21'17"
LOCATION: South bank of South Santee River, at river mile 7.9, on public dock at Santee Coastal Reserve.
INSTRUMENTATION: Unidata Water Conductivity Instrument (Model 6518-1).
PERIOD OF RECORD: October 1996 to current year.
EXTREMES: Maximum specific conductance: 33,750 microsiemens per centimeter, September 3, 1999.
Minimum specific conductance: 60 microsiemens per centimeter, February 18, 1998.
REMARKS: None.



2000	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
MAX	7840	2110	4810	880	24570	25830	29230	23280	20760	10890	--	17220
MEAN	5000	1360	1390	640	13680	22440	22820	16500	6470	--	--	--
MIN	2260	920	830	510	970	18380	14680	10100	870	2190	--	8350

SUMMARY FOR 2000 MAX 29230 (July 1, 2000) MEAN 10150 MIN 510 (Apr. 24, 2000)

2001	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
MAX	--	21990	21520	15390	26710	18550	30270	19210	16490	12420	10820	27270
MEAN	--	--	--	5380	20270	16260	20170	14470	12300	10110	9050	18770
MIN	--	8100	580	210	14230	13160	14230	12170	9080	8610	7400	9440

SUMMARY FOR 2001 MAX 30270 (July 23, 2001) MEAN 14190 MIN 210 (Apr. 1, 2001)

REFERENCES

Aucott, W. R., Davis, M. E., and Speiran, G. K., 1987, Geohydrologic framework of the Coastal Plain aquifers of South Carolina: U.S. Geological Survey Water-Resources Investigations Report 85-4271, 7 sheets.

Aucott, W. R., and Newcome, Roy, Jr., 1986, Selected aquifer-test information for the Coastal Plain aquifers of South Carolina: U.S. Geological Survey Water-Resources Investigations Report 86-4159, 30 p.

Hockensmith, B. L., 1997, Potentiometric surface of the Black Creek aquifer system in South Carolina – November 1995; South Carolina Department of Natural Resources Water Resources Report 16, 1 sheet.

_____ 2001, Potentiometric map of the Floridan aquifer and Tertiary sand aquifer in South Carolina – 1998; South Carolina Department of Natural Resources Water Resources Report 23, 1 sheet.

_____ 2003a, Potentiometric surface of the Middendorf aquifer system – November 2001; South Carolina Department of Natural Resources Water Resources Report 28, 1 sheet.

_____ 2003b, Potentiometric surface of the Black Creek aquifer system – November 2001; South Carolina Department of Natural Resources Water Resources Report 29, 1 sheet.

Hockensmith, B. L. and Waters, K. E., 1998, Potentiometric map of the Middendorf aquifer in South Carolina – November 1996; South Carolina Department of Natural Resources Water Resources Report 19 , 1 sheet.

Logan, W. Robert, and Euler, Gwen M., 1989, Geology and ground-water resources of Allendale, Bamberg, and Barnwell Counties and part of Aiken County, South Carolina; South Carolina Water Resources Commission Report 155, p.61.

Maybin, A. H., III, and Nystrom, P. G., Jr., 1995, Generalized geologic map of South Carolina (Revised by C. A. Niewendorp, 1997): South Carolina Department of Natural Resources, Hydrology/Geology Map1.

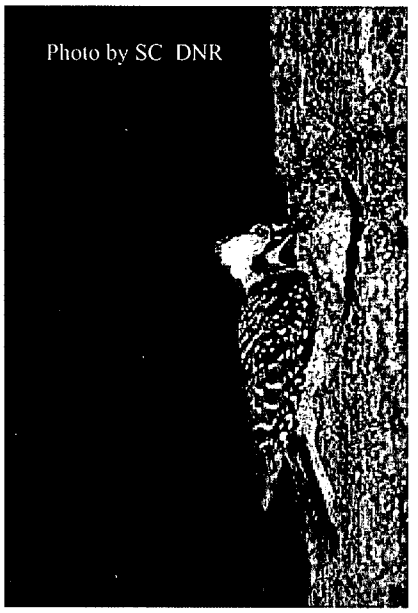
Newcome, Roy, Jr., 1997, Hydraulic conductivity of the principal Cretaceous aquifers in South Carolina, *in* Contributions to the hydrology of South Carolina; South Carolina Department of Natural Resources Water Resources Division Report 14, p. 51- 54.

_____ 2000, Results of pumping tests in the Coastal Plain of South Carolina – Supplement to S.C. Water Resources Commission Report 174: South Carolina Department of Natural Resources Water Resources Open-File Report 5.

Ransom, Camille, III, and White, J. L., 2000, Potentiometric surface of the Floridan aquifer system in southern South Carolina – September 1998; South Carolina Department of Health and Environmental Control, Bureau of Water Publication 02B-99, 1 sheet.

Waters, K. E., 2003, Ground-water levels in South Carolina – a compilation of historical water-level data; South Carolina Department of Natural Resouces Water Resources Report 26, 300p.

Sec 9.3 Ref 29



Red-cockaded Woodpecker

Picoides borealis

Contributor: Nicole Chadwick

DESCRIPTION

Taxonomy and Basic Description

Red-cockaded woodpeckers were first described by the amateur naturaist Vieillot (1807) and named *Picus borealis*. In 1810, Alexander Wilson, unaware of Vieillot's previous description, described the species as *Picus querulus* because of its distinctive vocalizations (Wilson 1810). The species is now recognized as *Picoides borealis*. The common name used today, red-cockaded woodpecker, was given to the species by Wilson. Cockade was a common term for a ribbon or other ornament worn on a hat as a badge during Wilson's time, and refers to the small patch of red feathers on adult males, located between the black crown and white cheek patch on the head.

Red-cockaded woodpeckers are relatively small; adults measure 20 to 23 cm (7.8 to 9 inches) and weigh 40 to 55 g (1.4 to 1.9 ounces) (Jackson 1994; Conner et al. 2001). They are smaller than other southern woodpeckers except the downy woodpecker (*Picoides pubescens*) and are similar in size to yellow-bellied sapsuckers (*Sphyrapicus varius*). Red-cockaded woodpecker size varies geographically, with larger birds to the north (Mengel and Jackson 1977).

Red-cockaded woodpeckers are relatively slender, long-tailed and small-billed woodpeckers. They are black and white with a coarsely barred back, white cheek patch and black crown. Their breasts and bellies are white to grayish-white with spots on the sides changing to bars on the flanks. Outer tail feathers are white with black barring and central tail feathers are black. Adult plumage is extremely similar between sexes and generally indistinguishable in the field. The only difference between adult males and females is the presence of the red cockade at the upper edge of the white auriculars, which is virtually invisible in field situations (Jackson 1994). Juveniles appear similar to adults but may be distinguished in the field by duller plumage, white flecks often present just above the bill on the forehead and diffuse black shading in the white cheek patch. Juvenile males have a distinctive red patch on the crown and may be distinguished from juvenile females in this way (Jackson 1994).

Status

The red-cockaded woodpecker was among the first species to be listed as endangered in 1970 and received federal protection under the Endangered Species Act of 1973. The red-cockaded woodpecker was once a common bird. However, by 1970, the species had declined to fewer than 10,000 individuals in widely scattered, isolated and declining populations (Jackson 1971; Ligon *et al.* 1986). The red-cockaded woodpecker is listed with 12 other avian species as a species of highest concern on the Partners in Flight watch list (Partners in Flight). Most populations of red-cockaded woodpeckers are currently stable to increasing, due to advances in knowledge of red-

cockaded woodpecker population dynamics and the use of highly effective management tools, such as artificial cavities and translocations. However, population viability is still threatened by the small, scattered and isolated nature of most red-cockaded woodpecker populations. Downlisting of the species is not expected until at least 2050 and delisting is not expected until 2075 given current population status and expected rates of growth (USFWS 2003). The South Carolina Department of Natural Resources Heritage Trust program describes the species as imperiled state-wide because of rarity or factor(s) making it vulnerable (S2) while globally the species is ranked as vulnerable (G3).

POPULATION DISTRIBUTION AND SIZE

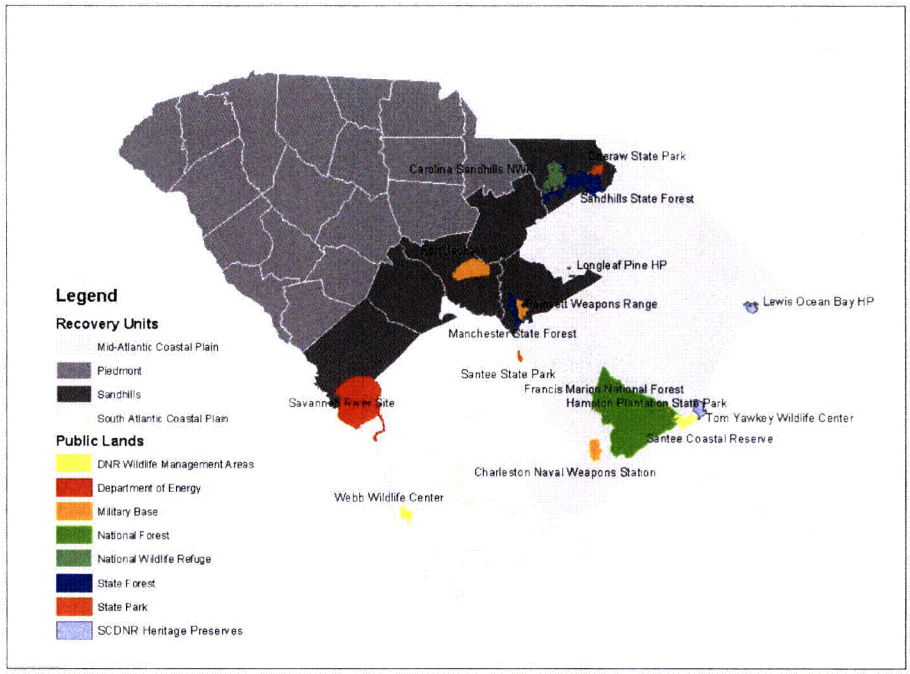
Red-cockaded woodpeckers are monitored based on the number of groups (a breeding pair with 0 to 7 helpers) and the clusters on which they depend (the actual physical cavity trees and acreage surrounding those trees). In 2000, there were an estimated 14,068 red-cockaded woodpeckers living in 5,627 known active clusters across eleven states; this number represents only 3 percent of the estimated red-cockaded woodpecker abundance at the time of European settlement. In South Carolina, there were 133 groups on state-owned lands and another 524 groups on federal properties in 2000 (USFWS 2003). In addition, there were estimated to be another 400 groups on private lands in South Carolina (Cely and Ferral 1995). Based on these numbers, there were over 1,000 red-cockaded woodpecker groups in 2000 representing nearly 20 percent of all known red-cockaded woodpecker groups.

Red-cockaded woodpecker populations on public lands in South Carolina by recovery unit. Each population has a designated role in recovery. Also listed are the property ownership (Agency), the type recovery population, the current number of active red-cockaded woodpecker groups, and the population goal for the property. Primary core (Primary) populations are those that will have at least 350 groups at recovery, secondary core (Secondary) populations are those that will have at least 250 groups at recovery, significant support (Significant) are those populations that have a population goal of 10 or more clusters, and important support (Important) are those populations that have a population goal of less than 10 groups.

Recovery Unit Population	Agency	Type	Current Status	Population Goal
Mid-Atlantic Coastal Plain				
Francis Marion National Forest	USFS	Primary	344*	350
Lewis Ocean Bay Heritage Preserve	SCDNR	Significant	3	10
Longleaf Pine Heritage Preserve	SCDNR	Important	4	4
Sandy Island		Significant	32	35
Santee Coastal Reserve	SCDNR	Significant	9	16
Wedge Plantation		Important	2	2
Yawkey Wildlife Center	SCDNR	Significant	9	15
Sandhills				
Carolina Sandhills National Wildlife Refuge	USFWS	Secondary	116*	193
Sandhills State Forest	SCFC	Secondary	57	127
Cheraw State Fish Hatchery	SCDNR	Important	1	1
Cheraw State Park	SCPRT	Significant	5	25
Fort Jackson	DOD	Significant	35	126
Manchester State Forest	SCFC	Important	3	3
Poinsett Weapons Range	DOD	Significant	11	30
South Atlantic Coastal Plain				
Savannah River Site	DOE	Secondary	45	250
Charleston Naval Weapons Station	DOD	Significant	0	12
Persanti Island	SC	Important	4	3
Santee State Park	SCPRT	Important	0	7
Webb Wildlife Center	SCDNR	Significant	11	30
Total			669	1239

* Population status from 2000 breeding season.

Populations of red-cockaded woodpeckers are distributed across the southeastern United States and managed by distinct recovery units, across which recovery criteria must be met for the species to be removed from the Endangered Species List. In South Carolina, there are recovery populations in 3 of the 13 recovery units. These recovery units are the Sandhills Recovery Unit, the Mid-Atlantic Coastal Plain Recovery Unit and the South Atlantic Coastal Plain Recovery Unit.



HABITAT AND NATURAL COMMUNITY REQUIREMENTS

Red-cockaded woodpeckers depend on open, park-like mature pine woodlands and savannahs with large old pines for nesting and foraging habitat. Large old pines are required because these birds excavate roost and nest cavities in living pine trees. The cavities are excavated completely within the heartwood; therefore, the trees must be old and large enough to have room for the cavity chamber. Additionally, old trees are more likely to have heartwood decay, which greatly facilitates cavity excavation. The cavity trees must be in open stands with little or no hardwood midstory and little or no hardwood in the canopy. Once the midstory reaches cavity height, red-cockaded woodpeckers typically abandon the cluster. Red-cockaded woodpeckers will use nearly all of the southern yellow pines for cavity trees, including loblolly pine (*Pinus taeda*), shortleaf pine (*Pinus echinata*), pond pine (*Pinus serotina*), slash pine (*Pinus elliottii*) and longleaf pine (*Pinus palustris*), but prefer longleaf pine (Jackson 1994).

Red-cockaded woodpeckers have very large foraging territories requiring vast areas of open pine habitat. Suitable foraging habitat consists of large mature pines, little or no midstory and abundant herbaceous ground cover including native bunchgrasses and forbs. Red-cockaded woodpeckers require 30 to 81 contiguous hectares (75 to 200 acres) of this foraging habitat, depending on the habitat quality. Red-cockaded woodpeckers prefer to forage on mature longleaf pine trees, but will forage on younger trees and other pine species and the occasional hardwood tree. High quality foraging habitat that results in the highest red-cockaded woodpecker productivity is contiguous open stands of mature longleaf pine with an herbaceous ground cover (Jackson 1994).

Red-cockaded woodpeckers evolved in a fire-dominated ecosystem. The history of fire in the southeast has both natural and human components. Fires were ignited naturally due to frequent lightning strikes. Both Native Americans and European settlers used fire to clear land and improve hunting grounds. Frequent fires resulted in an open forest with large pines, little to no midstory and diverse herbaceous ground cover; this represents the ideal habitat for red-cockaded woodpeckers and other species of the longleaf pine ecosystem. However, much of the currently available habitat has been subjected to fire suppression and has become unsuitable for red-cockaded woodpecker use due to the presence of a dense hardwood midstory and/or canopy. Fire is essential to maintaining and restoring southern pine ecosystems, particularly the longleaf pine ecosystem, and is essential to red-cockaded woodpecker habitat maintenance and restoration (USFWS 2003).

CHALLENGES

Lack of suitable habitat is the underlying cause for all the primary threats to red-cockaded woodpecker species viability. First, there is very little of the open mature pine habitat remaining. Over 97 percent of the longleaf pine habitat that covered the southeast has been destroyed. Of the remaining three percent, less than one percent is thought to be in pristine condition.

The serious threats from this lack of habitat fall into 4 basic categories (USFWS 2003):

(1) insufficient number of existing suitable cavities and the continued net loss of cavity trees in the environment (Costa and Escano 1989; James 1995; Hardesty *et al.* 1995);
(2) habitat fragmentation and the resulting impacts on genetic variation, dispersal, and demography (Conner and Rudolph 1991);
(3) lack of sufficient amounts of quality foraging habitat (Walters *et al.* 2000, 2002; James *et al.* 2001); and
(4) risks of extinction inherent to critically small populations (Shaffer 1981, 1987).

Red-cockaded woodpeckers depend on mature pine trees for both cavity excavation and foraging substrate. Lack of mature pine trees in suitable habitat because of past and present fire suppression and silvicultural practices resulted in a severe shortage of these trees in the landscape. Red-cockaded woodpecker groups that lack sufficient cavities for the group have been shown to decrease reproductive output. Decreased reproductive output has also been linked to an insufficient amount of quality foraging habitat. Habitat fragmentation reduces the ability for red-cockaded woodpeckers to disperse between clusters. This reduces the ability of individuals to find breeding vacancies, which influences both the genetic variation of populations and overall demographic stability. Most critically, small populations face an inherent set of risks related to the size of the population. These risks include extirpation due to random environmental, demographic, genetic and catastrophic events (Shaffer 1981, 1987).

The Longleaf Pine Heritage Preserve was purchased by the SCDNR for protection of the existing red-cockaded woodpecker population. The current size of the property is not large enough to support a self-sustaining population of red-cockaded woodpeckers. The purchase of additional lands would increase the available habitat and potential population size in that area.

In South Carolina, there are two primary threats that affect the availability of habitat, and, ultimately, red-cockaded woodpecker recovery now and in the future. The first is a lack of prescribed fire in existing and potential habitat. It has become increasingly difficult for private landowners and government agencies to burn their properties for wildlife management because of liability issues. Until this problem is solved, more and more landowners will opt not to conduct prescribed burning activities. The ultimate result will be less suitable habitat for red-cockaded woodpeckers and other wildlife.

The second major threat to red-cockaded woodpeckers in South Carolina is the risk of natural catastrophes, specifically hurricanes. Nearly all red-cockaded woodpeckers in South Carolina are present in the coastal plain and face significant risks from hurricanes. Cavity trees are particularly susceptible from winds associated with tropical weather systems and foraging habitat can be devastated from hurricane force winds (Conner et al. 2001).

Red-cockaded woodpecker surveys on DNR lands are ongoing; complete surveys should be conducted at least once every 10 years. Further, the last update to red-cockaded woodpecker status on private lands in South Carolina was conducted in the late 1980's to early 1990's. Private lands status should be updated periodically by field surveys and questionnaires to determine the current trend and management needs on private lands. This goal can largely be achieved by annual reports completed by Safe Harbor enrollees.

Currently, funding through Endangered Species Act Section 6 and other USFWS funding provide support for the red-cockaded woodpecker programs. However, the level of funding does not provide for habitat acquisition and major management projects as noted below.

CONSERVATION ACCOMPLISHMENTS

Conservation accomplishments can be divided into three major categories. The first relates to advances in understanding population dynamics and advances in management techniques related to stabilizing and increasing populations of red-cockaded woodpeckers. The second category results directly from the recovery plan for red-cockaded woodpeckers (USFWS 2003). The third category of accomplishments relates to the successful development and implementation of the Safe Harbor program in South Carolina.

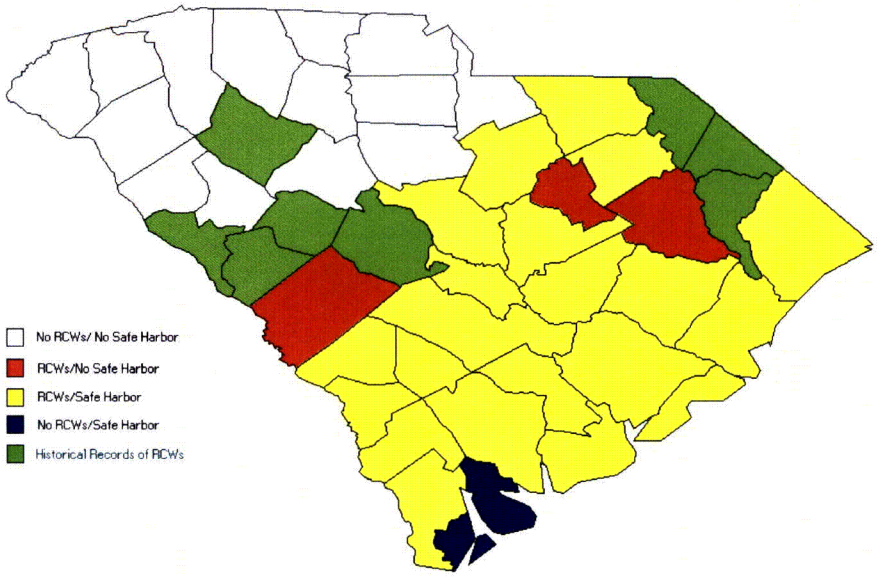
Population Dynamics/Management

- Increased knowledge of population dynamics due to extensive research in South Carolina and across the southeast has led to better translocation procedures which facilitates red-cockaded woodpecker population growth range-wide.
- Cavity creation technology advanced allowing the unprecedented growth of existing populations and the creation of new populations through a combination of cavity creation and translocations.
- Due to these practices, most populations of red-cockaded woodpeckers on public lands were stabilized to increasing by the mid 1990's. Prior to these advances, all populations, with the exception of one, were declining.

Red-cockaded Woodpecker Recovery Plan

- Drafts of the red-cockaded woodpecker recovery plan established required population goals for all federal properties and for one state property, Sandhills State Forest, and suggested goals for all other public properties in South Carolina. These established goals have resulted in population growth across all federal properties and most state properties.
- Recovery plan guidelines established standard practices for management and reporting, resulting in a consistent recovery effort range wide, including South Carolina.
- Recovery plan guidelines call for annual average growth rates of five percent on all recovery populations. These goals have been met on most properties, resulting in overall growth on public lands in South Carolina.
- Translocation, intensive habitat management and creation of recruitment clusters have yielded marked increases in many populations in recent years.

Safe Harbor Program



South Carolina Counties with Current and Historical records of RCWs and presence of Safe Harbor Properties within Counties

In March of 1998, the South Carolina Department of Natural Resources became the second agency to hold a statewide permit for a Safe Harbor Program in the nation. South Carolina's Safe Harbor Program has been very successful with nearly 300 groups of red-cockaded woodpeckers and nearly 161,875 ha (400,000 acres) enrolled in the program. This represents nearly 75 percent of red-cockaded woodpeckers on private lands in South Carolina. Of these lands, over 36,422 ha (90,000 acres) have been committed to prescribed burning, over 21,448 ha (53,000 acres) have been committed to a program of mechanical midstory control, nearly 7,689 ha (19,000 acres) have been committed to a program of chemical midstory control and over 1,214 ha (3,000 acres) have been replanted to longleaf pine.

Key conservation accomplishments related to this program include the following:

- This program has ensured habitat maintenance and enhancement for nearly 300 groups of red-cockaded woodpeckers on private lands.
- This program has led to widespread reintroduction of fire to the landscape, thus maintaining and restoring critically imperiled longleaf pine habitat.

- This program has improved relationships between the private sector and government organizations, producing a cooperative effort toward conservation.
- Several thousand acres of forest that were previously planted with off-site species, such as loblolly pine, have been restored to longleaf.
- The program has been far reaching; 24 of 27 counties with recent records of red-cockaded woodpeckers have agreed to participate in this program.

CONSERVATION RECOMMENDATIONS

- Consider purchase of properties adjacent to Longleaf Pine Heritage Preserve as they become available.
- Continue administration of the Safe Harbor Program by enrolling properties with significant red-cockaded woodpecker populations and/or longleaf pine habitat and offering technical/management support to landowners.
- Manage red-cockaded woodpecker habitat by adhering to the management objectives of the recovery plan for this species prepared by the USFWS (2003), including:
    - Application of frequent fire to foraging and cluster habitat.
    - Protection and development of large mature pines throughout the landscape.
    - Protection of existing cavities and provisioning of artificial cavities as necessary to facilitate population growth or to stabilize existing populations.
    - Creation of recruitment clusters to promote population growth.
    - Restoration of sufficient habitat quality and quantity to support species recovery.
- When possible, provision artificial cavities in existing red-cockaded woodpecker populations on SCDNR land to stabilize and increase numbers of this species with the eventual objective of reaching the recovery goal for that population.
- Conduct studies to determine the actual effect of southern flying squirrels on red-cockaded woodpecker nesting and cavity use in populations of various sizes. Use studies of southern flying squirrel population dynamics and natural history to determine the most effective management techniques to deter any possible negative effects to red-cockaded woodpecker nest success and population growth.
- Monitor size and trend of populations on all state-owned properties on an annual basis including:
    - Number of active cavities
    - Number of potential breeding groups
- Monitor recovery population on Sandhills State Forest and Cheraw State Park more intensively including:
    - Number of active cavity trees
    - Number of potential breeding groups
    - Number of actual nests including clutch size, number of chicks, number successfully fledged, and sex of all individuals
    - Band all birds at these populations for monitoring purposes
- Monitor any birds translocated to or from state-owned properties to determine translocation success.
- Monitor any populations on state-owned properties donating birds for translocation to determine the effect on the donor population.

- Provide technical support to private landowners and other public land managers on issues of red-cockaded woodpecker management and recovery in cooperation with representatives of the USFWS.
- Conduct a workshop on red-cockaded woodpeckers for forestry and environmental consultants working in South Carolina. Topics covered should include survey and management techniques, the Safe Harbor application process and federal and state regulations as they relate to red-cockaded woodpeckers.
- Develop and maintain a red-cockaded woodpecker and Safe Harbor web site for SCDNR.
- Produce quarterly red-cockaded woodpecker newsletters for distribution to Safe Harbor participants, foresters and environmental consultants.

MEASURES OF SUCCESS

If management recommendations are followed we should expect to see the following:

- Enrollment and maintenance of at least 300 groups of red-cockaded woodpeckers in the Safe Harbor Program.
- No net loss of red-cockaded woodpecker groups on private properties enrolled in the Safe Harbor Program.
- Recovery goals for red-cockaded woodpeckers will be met on all state-owned lands by the time of de-listing.
- Adequate monitoring and surveys will result in an accurate measure of red-cockaded woodpecker status and trends on public and private lands facilitating management decisions to make recovery goals.
- Outreach efforts will educate the public about issues relating to red-cockaded woodpecker management and legal responsibilities.

The overall result of these efforts will be that the red-cockaded woodpecker will meet recovery criteria in South Carolina, thus facilitating the removal of the species from the endangered species list.

LITERATURE CITED

Cely, J.E. and D.P. Ferral. 1995. Status and distribution of the red-cockaded woodpecker in South Carolina. Pages 470-476. *In*: Red-cockaded woodpecker: recovery, ecology and management, D.L. Kulhavy, R.G. Hooper and R. Costa, editors. Center for Applied Studies in Forestry, College of Forestry, Stephen F. Austin State University, Nacogdoches, Texas. 551 pp.

Conner, R.N. and D.C. Rudolph. 1991. Forest habitat loss, fragmentation, and red-cockaded woodpecker populations. Wilson Bulletin. 103:446-457.

Conner, R.N., D.C. Rudolph and J.R. Walters. 2001. The red-cockaded woodpecker surviving in a fire-maintained ecosystem. University of Texas Press. Austin, Texas. 400 pp.

Costa, R., and R. Escano. 1989. Red-cockaded woodpecker: status and management in the southern region in 1986. U.S. Forest Service Technical Publication R8-TP12.

Hardesty, J., R.J. Smith, C.J. Petrick, B.W. Hagedorn and H.F. Percival. 1995. Status and distribution of the fourth largest population of red-cockaded woodpeckers: preliminary results from Eglin AFB, Florida. Pp 494-502. *In*: Red-cockaded woodpecker: recovery, ecology and management, D.L. Kulhavy, R.G. Hooper and R. Costa, editors. Center for Applied Studies in Forestry, College of Forestry, Stephen F. Austin State University. Nacogdoches, Texas. 551 pp.

Jackson, J.A. 1971. The evolution, taxonomy, distribution, past populations, and current status of the red-cockaded woodpecker. Pp 4-29. *In:* The ecology and management of the red-cockaded woodpecker, R.L. Thompson, editor. Bureau of Sport Fisheries and Wildlife, U.S. Department of the Interior, Tall Timbers Research Station. Tallahassee, Florida.

Jackson, J.A. 1994. Red-cockaded woodpecker. Birds of North America. 85:1-20.

James, F.C. 1995. Status of the red-cockaded woodpecker and its habitat. Pp 436-438. *In*: Red-cockaded woodpecker: recovery, ecology and management, D.L. Kulhavy, R.G. Hooper and R. Costa, editors. Center for Applied Studies in Forestry, College of Forestry, Stephen F. Austin State University. Nacogdoches, Texas. 551 pp.

James, F.C., C.A. Hess, B.C. Kicklighter and R.A. Thum. 2001. Ecosystem management and the niche gestalt of the red-cockaded woodpecker in longleaf pine forests. Ecological Applications. 11:854-870.

Ligon, J.D., P.B. Stacey, R.N. Conner, C.E. Bock and C.S. Adkisson. 1986. Report of the American Ornithologists' Union Committee for the conservation of the red-cockaded woodpecker. Auk. 103:848-855.

Mengel, R.M. and J.A. Jackson. 1977. Geographic variation of the red-cockaded woodpecker. Condor. 79:349-355.

Partners in Flight. Electronic references. Retrieved June 6, 2005, from http://www.abcbirds.org/pif/pif_watch_list.htm.

Shaffer, M.L. 1981. Minimum population sizes for species conservation. Bioscience. 31:131-134.

Shaffer, M.L. 1987. Minimum viable populations: coping with uncertainty. Pp. 69-86 *In* M. E. Soule, ed. Viable populations for conservation. Cambridge University Press, Cambridge, UK. 206 pp.

U.S. Fish and Wildlife Service. 2003. Recovery plan for the red-cockaded woodpecker (Picoides borealis): second revision. U.S. Fish and Wildlife Service, Atlanta, Georgia. 296 pp.

Walters, J.R., S.J. Daniels, J.H. Carter, III and P.D. Doerr. 2002. Defining quality of red-cockaded woodpecker foraging habitat based on habitat use and fitness. Journal of Wildlife Management. 66:1064-1082.

Walters, J.R., S.J. Daniels, J.H. Carter, III, P.D. Doerr, K. Brust and J.M. Mitchell. 2000. Foraging habitat resources, preferences and fitness of red-cockaded woodpeckers in the North Carolina sandhills. Fort Bragg Project Final Report. Virginia Polytechnic Institute and State University; Blacksburg, Virginia and North Carolina State University; Raleigh, North Carolina.

Sec 9.3 Ref 31

for: MAP SALES

STAT	ROUT NO.	ROUTE LOCATION	EST. AADT	AADT YEAR	COUNTY
101	US 78	Barnwell Co. Line TO U.S. 321	3900	2005	Bamberg
103	US 78	U.S. 321 TO S-140	7000	2005	Bamberg
105	US 78	S-140 TO S-543	5900	2005	Bamberg
107	US 78	S-543 TO S-50	6000	2005	Bamberg
109	US 78	S-50 TO U.S. 301/601	7500	2005	Bamberg
111	US 78	U.S. 301/601 TO S-86	4100	2005	Bamberg
113	US 78	S-86 TO S.C. 61	3200	2005	Bamberg
115	US 78	S.C. 61 TO Orangeburg Co.	2000	2005	Bamberg
116	US 21	Colleton Co. TO Orangeburg Co.	1650	2005	Bamberg
117	US 301	Allendale Co. TO S.C. 64	2000	2005	Bamberg
118	US 78 CON	S.C. 61 TO U.S. 78	25	2005	Bamberg
119	US 301	S.C. 64 TO S-12	2200	2005	Bamberg
121	US 301	S-12 TO U.S. 601	3700	2005	Bamberg
123	US 301	U.S. 601 TO U.S. 78	8300	2005	Bamberg
125	US 301	U.S. 78 TO S-166	12000	2005	Bamberg
127	US 301	S-166 TO S-167	8900	2005	Bamberg
129	US 301	S-167 TO S-86	8100	2005	Bamberg
131	US 301	S-86 TO Orangeburg Co.	6800	2005	Bamberg
133	US 321	U.S. 301 TO S-620	1550	2005	Bamberg
135	US 321	S-620 TO S-22	1800	2005	Bamberg
137	US 321	S-22 TO S-47	1750	2005	Bamberg
139	US 321	S-47 TO S-54	2200	2005	Bamberg
141	US 321	S-54 TO S-12/S-26	3800	2005	Bamberg
143	US 321	S-12/S-26 TO U.S. 78	6200	2005	Bamberg
145	US 321	U.S. 78 TO S.C. 70	5400	2005	Bamberg
147	US 321	S.C. 70 TO Orangeburg Co.	3100	2005	Bamberg
149	SC 362	SC 217 TO S-304	350	2005	Bamberg
151	SC 362	S-304 TO S-189	700	2005	Bamberg
153	SC 362	S-189 TO U.S. 78	1150	2005	Bamberg
154	SC 217	Colleton Co. TO Colleton Co.	500	2005	Bamberg
155	US 601	Colleton Co. TO S-428	1400	2005	Bamberg
156	SC 641	Allendale Co. TO Colleton Co.	750	2005	Bamberg
157	US 601	S-428 TO S.C. 64	2200	2005	Bamberg
159	US 601	S.C. 64 TO S-21/S-23	3600	2005	Bamberg
161	US 601	S-21/S-23 TO S-59	1600	2005	Bamberg
163	US 601	S-59 TO U.S. 301	3500	2005	Bamberg
165	SC 61	U.S. 78 TO Colleton County	1150	2005	Bamberg
167	SC 64	Barnwell Co. Line to U.S. 321	1000	2005	Bamberg
169	SC 64	U.S. 321 TO U.S. 301	750	2005	Bamberg
171	SC 64	U.S. 301 TO S-25	850	2005	Bamberg
173	SC 64	S-25 TO U.S. 601	1450	2005	Bamberg
175	SC 64	U.S. 601 TO S-197 & S-466	1400	2005	Bamberg
177	SC 64	S-197/S-466 TO Colleton Co.	1250	2005	Bamberg
179	SC 70	Barnwell Co. TO S-127	2900	2005	Bamberg
181	SC 70	S-127 TO U.S. 301/S-283	3500	2005	Bamberg
183	SC 70	U.S. 321 TO S-472	2200	2005	Bamberg
185	SC 70	S-472 TO Oranbeburg Co. Line	2900	2005	Bamberg
187	S- 49	S-167 TO S-86	700	2005	Bamberg
189	S- 49	S-86 TO U.S. 321	800	2005	Bamberg
191	S- 49	U.S. 321 TO Barnwell Co.	1000	2005	Bamberg

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STAT	ROUT NO.	ROUTE LOCATION	EST. AADT	AADT YEAR	COUNTY
193	S- 86	U.S. 78 TO S-49	800	2005	Bamberg
195	S- 20	U.S. 78 TO S-86	1400	2005	Bamberg
197	S- 20	S-86 TO S-42	650	2005	Bamberg
198	S- 20	S-42 TO Orangeburg County	1000	2005	Bamberg
199	S- 18	U.S. 78 to S-124	600	2005	Bamberg
201	S- 57	U.S. 601 TO S-191	175	2005	Bamberg
202	S- 21	S-172 TO U.S. 601	600	2005	Bamberg
203	S- 21	S.C. 362 TO S-172	300	2005	Bamberg
205	S- 25	S-87 TO S.C. 64	225	2005	Bamberg
207	S- 41	U.S. 601 TO S-23	650	2005	Bamberg
209	S- 23	U.S. 601 TO S-389	900	2005	Bamberg
211	S- 23	S-389 TO U.S. 301	800	2005	Bamberg
213	S- 54	S-32 TO U.S. 321	550	2005	Bamberg
215	S- 59	S-84 TO S-41	400	2005	Bamberg
216	S- 19	S-31 To S.C. 64	125	2005	Bamberg
217	S- 19	S.C. 64 TO S-23	100	2005	Bamberg
219	S- 26	S-307 TO S-54	425	2005	Bamberg
221	S- 26	S-54 TO U.S. 321	1450	2005	Bamberg
223	S- 12	U.S. 301 TO S-54	425	2005	Bamberg
225	S- 12	S-54 TO S-53	1400	2005	Bamberg
227	S- 12	S-53 TO U.S. 321	2300	2005	Bamberg
229	S- 271	U.S. 78 TO U.S. 321	1400	2005	Bamberg
231	S- 180	S-140 TO S-53	1200	2005	Bamberg
233	S- 53	S-491 TO U.S. 78	2200	2005	Bamberg
235	S- 415	S-53 TO S-542	650	2005	Bamberg
237	S- 224	S-179 TO S-54	375	2005	Bamberg
239	S- 54	U.S. 321 TO S-26	500	2005	Bamberg
241	S- 296	S-26 TO S.C. 70	325	2005	Bamberg
243	S- 67	S-139 TO S-26	1150	2005	Bamberg
245	S- 66	U.S. 78 TO S-67	450	2005	Bamberg
247	S- 99	S-210 TO S-180	1550	2005	Bamberg
249	S- 210	S-374 TO S-264	700	2005	Bamberg
251	S- 127	S-104 TO S.C. 70	850	2005	Bamberg
253	S- 168	S-102 TO S-283	2800	2005	Bamberg
255	S- 100	S-12 TO S-264	850	2005	Bamberg
257	S- 227	S-54 TO S-179	250	2005	Bamberg
259	S- 432	U.S. 301 TO S-165	550	2005	Bamberg
261	S- 341	S-479 TO S-193	1000	2005	Bamberg
263	S- 215	S-20 TO S-116	600	2005	Bamberg
265	S- 77	U.S. 78 TO S-471	1200	2005	Bamberg
266	S- 77	S-471 To US 601	50	2005	Bamberg
267	S- 77	S-150 TO U.S. 78	550	2005	Bamberg
268	S- 96	S-77 TO S-98	425	2005	Bamberg
269	S- 189	S.C. 362 TO S-77	175	2005	Bamberg
271	S- 71	U.S. 301 TO S-77	250	2005	Bamberg
273	S- 95	U.S. 301/S-239 TO S-256	475	2005	Bamberg
275	S- 60	U.S. 301 TO U.S. 78	2000	2005	Bamberg
277	S- 32	U.S. 78 TO S-505	1700	2005	Bamberg
279	S- 50	U.S. 78 TO S-543	200	2005	Bamberg
281	S- 239	S-32 TO S-60	450	2005	Bamberg

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STAT	ROUT NO.	ROUTE LOCATION	EST. AADT	AADT YEAR	COUNTY
283	S- 61	U.S. 301 TO S-32	800	2005	Bamberg
285	S- 51	S-193 TO S-167	1200	2005	Bamberg
287	S- 167	S-51 TO U.S. 301	2700	2005	Bamberg
289	S- 166	S-167 TO S-165	1000	2005	Bamberg
291	S- 194	S-49 TO S-195	750	2005	Bamberg
293	S- 165	S-51 TO S-432	1550	2005	Bamberg
295	S- 116	S-150 TO S-341	950	2005	Bamberg
297	S- 111	U.S. 301 TO S-165	2900	2005	Bamberg
299	S- 111	S-165 TO S-116	1750	2005	Bamberg
301	S- 22	Barnwell Co. Line to U.S. 321	600	2005	Bamberg
303	S- 22	U.S. 321 TO U.S. 301	375	2005	Bamberg
305	S- 8	S-31 To S.C.641	75	2005	Bamberg
307	S- 27	S.C. 64 To Barnwell Co. Line	175	2005	Bamberg
309	S- 29	S-49 To Barnwell Co. Line	250	2005	Bamberg
311	S- 31	U.S. 321 To Three Mile Creek	225	2005	Bamberg
313	S- 34	U.S. 78 To S-29	350	2005	Bamberg
315	S- 42	S-20 To U.S. 78	375	2005	Bamberg
317	S- 58	U.S. 601 To S-75	200	2005	Bamberg
319	S- 75	S-58 To S-23	250	2005	Bamberg
321	S- 124	S-18 To S.C. 362	100	2005	Bamberg
323	S- 191	S-57 To Colleton Co. Line	50	2005	Bamberg

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STAT	ROUT NO.	ROUTE LOCATION	EST. AADT	AADT YEAR	COUNTY
100	US 15	Dorchester Co. TO U.S. 176/S.C. 45	950	2005	Orangeburg
101	US 21	Bamberg Co. TO N. of S-204	1850	2005	Orangeburg
102	US 15	U.S. 176/S.C. 45 TO S-202	2900	2005	Orangeburg
103	US 21	1.0 MI N. OF S-204 TO S-102	1850	2005	Orangeburg
104	US 15	S-202 TO S.C. 267	3100	2005	Orangeburg
105	US 21	S-102 TO U.S. 78/S-651	3500	2005	Orangeburg
106	US 15	S.C. 267 TO U.S. 301	1600	2005	Orangeburg
107	US 21	U.S. 78/S-651 TO S-183	6700	2005	Orangeburg
108	US 15 CON	U.S. 301 TO S.C. 6	4400	2005	Orangeburg
109	US 21	S-183 TO S.C. 210	4200	2005	Orangeburg
110	S- 430	S.C. 6 TO Santee River	600	2005	Orangeburg
111	US 21	S.C. 210 TO S-80	3500	2005	Orangeburg
112	SC 45	U.S. 15/76 TO S.C. 310	1900	2005	Orangeburg
113	US 21	S-80 TO S-117	3800	2005	Orangeburg
114	SC 45	S.C. 310 TO S.C. 453	2300	2005	Orangeburg
115	US 21	S-117 TO S-1258	4700	2005	Orangeburg
116	SC 45	S.C. 453 TO S-222	6200	2005	Orangeburg
117	US 21	S-1258 TO S-1348	6800	2005	Orangeburg
118	SC 45	S-222 TO S.C. 6	5700	2005	Orangeburg
119	US 21	S-1348 TO U.S. 21/178 BP/S.C. 4	11200	2005	Orangeburg
120	US 21	U.S. 21/178 /S.C. 4 TO U.S. 178	9900	2005	Orangeburg
121	US 21 BUS	US 21/178 TO S-145	4900	2005	Orangeburg
123	US 21 BUS	S-145 TO S.C. 33	7500	2005	Orangeburg
127	US 21 BUS	S.C. 33 TO S-106	13700	2005	Orangeburg
129	US 21 BUS	S-106 TO US 21/178/601	12800	2005	Orangeburg
131	US 21	U.S. 178/178 CON To S-1703	13200	2005	Orangeburg
133	US 21	S-1703 To S-194	7900	2005	Orangeburg
135	US 21	S-194 TO S-166	5700	2005	Orangeburg
137	US 21	S-166 TO Calhoun County Line	4200	2005	Orangeburg
139	US 21	U.S. 178 TO U.S. 301	10900	2005	Orangeburg
141	US 21	U.S. 301 TO S.C. 33	18500	2005	Orangeburg
143	US 21	S.C. 33 TO S-106	17900	2005	Orangeburg
145	US 21	S-106 TO U.S. 601	21000	2005	Orangeburg
147	US 21	U.S. 601 TO S-94	24600	2005	Orangeburg
149	US 21	S-94 TO U.S. 178/178 CON	23200	2005	Orangeburg
151	US 178	U.S. 178 Bus. TO U.S. 21/178	23600	2005	Orangeburg
153	US 78	Bamberg County Line TO S-884	2600	2005	Orangeburg
155	US 78	S-884 TO S-63	2900	2005	Orangeburg
157	US 78	S-63 TO U.S. 21/S-179	3800	2005	Orangeburg
158	US 78	U.S. 21/S-179 TO S-115	3800	2005	Orangeburg
159	US 78	S-115 TO S-135	3300	2005	Orangeburg
161	US 78	S-135 TO Dorchester County Line	2400	2005	Orangeburg
162	US 176	Calhoun Co. Line TO U.S. 301	600	2005	Orangeburg
163	US 176	U.S. 301 TO S-82	3000	2005	Orangeburg
165	US 176	S-82 TO I-95	2600	2005	Orangeburg
167	US 176	I-95 TO S.C. 314	4500	2005	Orangeburg
169	US 176	S.C. 314 TO S-171	5000	2005	Orangeburg
171	US 176	S-171 TO S-120	5500	2005	Orangeburg
173	US 176	S-120 TO S-147	6100	2005	Orangeburg
175	US 176	S-147 TO S-119	5900	2005	Orangeburg

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STAT	ROUT NO.	ROUTE LOCATION	EST. AADT	AADT YEAR	COUNTY
177	US 176	S-119 TO S.C. 453/S-103	6600	2005	Orangeburg
179	US 176	S.C. 453/S-103 TO S-68	3300	2005	Orangeburg
181	US 176	S-68 TO Berkeley County Line	2900	2005	Orangeburg
183	US 178	Lexington Co. Line TO S-1206	2000	2005	Orangeburg
185	US 178	S-1206 TO S.C. 394/S-209	2100	2005	Orangeburg
187	US 178	S.C. 394/S-209 TO U.S. 321	3900	2005	Orangeburg
189	US 178	U.S. 321 TO S-943	5100	2005	Orangeburg
191	US 178	S-943 TO S.C. 172	4700	2005	Orangeburg
193	US 178	S.C. 172 TO S-60	3900	2005	Orangeburg
195	US 178	S-60 TO S-61	8400	2005	Orangeburg
197	US 178	S-61 TO U.S. 178 BUS.	30300	2005	Orangeburg
199	US 178 BUS	U.S. 178 TO S-811	10200	2005	Orangeburg
201	US 178 BUS	S-811 TO S-113	9500	2005	Orangeburg
203	US 178 BUS	S-113 TO S-1061	7600	2005	Orangeburg
204	US 21 CON	S-52/S-131/S-929 TO U.S. 178	10300	2005	Orangeburg
205	US 178 BUS	S-1061 TO S.C. 33	11800	2005	Orangeburg
206	US 21 CON	S-205 TO S-52/S-131/S-929	10100	2005	Orangeburg
207	US 178 BUS	S.C. 33 TO U.S. 301/601	10500	2005	Orangeburg
208	US 21 CON	S-25 & S-702 TO S-205	6900	2005	Orangeburg
209	US 178 BUS	U.S. 301/601 TO U.S. 21/178	8500	2005	Orangeburg
210	US 21 CON	U.S. 178 BP TO S-25/S-702	11000	2005	Orangeburg
211	US 178	U.S. 21&178 Bus. TO S-793	6800	2005	Orangeburg
213	US 178	S-793 TO S-1638	4600	2005	Orangeburg
215	US 178	S-1638 TO S-1443	3300	2005	Orangeburg
217	US 178	S-1443 TO S-258	3900	2005	Orangeburg
218	US 178	S-258 TO S.C. 210/S-1076	4400	2005	Orangeburg
219	US 178	S.C. 210/S-1076 TO Dorchester Co.	2500	2005	Orangeburg
221	US 301	Bamberg Co. Line TO S.C. 332	7800	2005	Orangeburg
223	US 301	S.C. 332 TO S.C. 70	7600	2005	Orangeburg
225	US 301	S.C. 70 TO S.C. 4	12700	2005	Orangeburg
227	US 301	S.C. 4 TO S-49	24000	2005	Orangeburg
229	US 301	S-49 TO S.C. 4	27300	2005	Orangeburg
231	US 301	S.C. 4 TO U.S. 178 BUS.	16900	2005	Orangeburg
233	US 301	U.S. 178 BUS. TO U.S. 21	17300	2005	Orangeburg
235	US 301	U.S. 21 TO S-95	12900	2005	Orangeburg
237	US 301	S-95 TO S-1	11400	2005	Orangeburg
239	US 301	S-1 TO U.S. 21 BP	11800	2005	Orangeburg
241	US 301	U.S. 21 BP TO S-793	18900	2005	Orangeburg
243	US 301	S-793 TO I-26	13500	2005	Orangeburg
245	US 301	I-26 TO U.S. 176	11200	2005	Orangeburg
247	US 301	U.S. 176 TO S.C. 267	7000	2005	Orangeburg
249	US 301	S.C. 267 TO U.S. 15	7200	2005	Orangeburg
250	US 15	U.S. 301 TO I-95	4800	2005	Orangeburg
257	US 321	Bamberg Co. Line TO S.C. 332	2900	2005	Orangeburg
259	US 321	S.C. 332 TO S.C. 332/400	4100	2005	Orangeburg
261	US 321	S.C. 332/400 TO S.C. 4	3300	2005	Orangeburg
263	US 321	S.C. 4 TO S-161	7500	2005	Orangeburg
265	US 321	S-161 TO S-288	4300	2005	Orangeburg
267	US 321	S-288 TO S-792	4700	2005	Orangeburg
269	US 321	S-792 TO U.S. 178	6600	2005	Orangeburg

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STAT	ROUT NO.	ROUTE LOCATION	EST. AADT	AADT YEAR	COUNTY
271	US 321	U.S. 178 TO S-1206	4800	2005	Orangeburg
273	US 321	S-1206 TO S-1531	4800	2005	Orangeburg
275	US 321	S-1531 TO S-99	4400	2005	Orangeburg
277	US 321	S-99 TO Lexington Co. Line	4400	2005	Orangeburg
278	US 321 CON	U.S. 321 TO S.C. 4	1850	2005	Orangeburg
279	US 601	U.S. 21 TO S-1839	15500	2005	Orangeburg
281	US 601	S-1839 TO S-94	15700	2005	Orangeburg
283	US 601	S-94 TO I-26	24400	2005	Orangeburg
285	US 601	I-26 TO S-141 & S-166	8400	2005	Orangeburg
287	US 601	S-141/S-166 TO Calhoun Co.	7200	2005	Orangeburg
289	SC 3	Barnwell Co. Line TO S.C. 4	1550	2005	Orangeburg
291	SC 3	S.C. 4 TO S.C. 389	2700	2005	Orangeburg
293	SC 3	S.C. 389 TO S-259	2800	2005	Orangeburg
295	SC 3	S-259 TO Lexington Co. Line	3100	2005	Orangeburg
297	SC 3 BUS	S.C. 3/S-86 TO S.C. 4/S-86	950	2005	Orangeburg
299	SC 4	S.C. 3 Bus. TO SC-3	2400	2005	Orangeburg
300	SC 3 BUS	S.C. 4/S-86 To S.C. 4/S-1216	3300	2005	Orangeburg
301	SC 3 BUS	S.C. 4/S-1216 TO Goodland Creek	1550	2005	Orangeburg
302	SC 3 BUS	Goodland Creek TO S.C. 3	900	2005	Orangeburg
303	SC 4	Aiken Co. Line To S.C. 39/S-150	950	2005	Orangeburg
305	SC 4	S.C. 3 TO S-674	1800	2005	Orangeburg
307	SC 4	S-674 TO U.S. 321	2500	2005	Orangeburg
309	SC 4	U.S. 321 TO S-73	5500	2005	Orangeburg
311	SC 4	S-73 TO S-74	5100	2005	Orangeburg
313	SC 4	S-74 TO S-686	7100	2005	Orangeburg
315	SC 4	S-686 TO U.S. 301	9700	2005	Orangeburg
317	SC 4	U.S. 301 TO S-824	8000	2005	Orangeburg
319	SC 4	S-824 TO U.S. 21	7100	2005	Orangeburg
321	SC 6	Calhoun Co. Line TO S.C. 267	2000	2005	Orangeburg
323	SC 6	S.C. 267 TO S.C. 47/S-105	4500	2005	Orangeburg
325	SC 6	S.C. 47/S-105 TO S-562	5300	2005	Orangeburg
327	SC 6	S-562 TO S.C. 267	4500	2005	Orangeburg
329	SC 6	S.C. 267 TO US 15/301/SC 6 Con	4000	2005	Orangeburg
330	SC 6	US 15/301/SC 6 Con To I-95	13200	2005	Orangeburg
331	SC 6	I-95 TO S-1394	7600	2005	Orangeburg
333	SC 6	S-1394 TO S.C. 310	5900	2005	Orangeburg
335	SC 6	S.C. 310 TO S-1600	4400	2005	Orangeburg
337	SC 6	S-1600 TO S.C. 45	4500	2005	Orangeburg
339	SC 6	S.C. 45 TO S-137	5300	2005	Orangeburg
341	SC 6	S-137 TO Berkeley Co. Line	3800	2005	Orangeburg
343	SC 33	U.S. 301 TO S-211	5600	2005	Orangeburg
345	SC 33	S-211 TO U.S. 21 & 601 Bus.	8800	2005	Orangeburg
347	SC 33	U.S. 21 & 178 TO U.S. 21	11400	2005	Orangeburg
349	SC 33	U.S. 21 & 178 TO S-65	7100	2005	Orangeburg
351	SC 33	S-65 TO I-26	4500	2005	Orangeburg
353	SC 33	I-26 TO Calhoun County Line	2600	2005	Orangeburg
354	SC 33 MC	S.C. 33 TO S.C. 33	600	2005	Orangeburg
355	SC 39	Barnwell Co. Line TO S.C. 4	1900	2005	Orangeburg
357	SC 4	S.C.39/ S-150 TO S.C. 3 Bus.	3700	2005	Orangeburg
359	SC 39	S.C. 4 TO S-86	1150	2005	Orangeburg

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361	SC 39	S-86 TO Aiken County Line	1150	2005	Orangeburg
363	SC 47	U.S. 301 TO S-1629 & S-1858	1400	2005	Orangeburg
365	SC 47	S-1629/S-1858 TO S-35	1600	2005	Orangeburg
367	SC 47	S-35 TO S-232	3300	2005	Orangeburg
369	SC 47	S-232 TO S.C. 6	3000	2005	Orangeburg
371	SC 70	Bamberg Co. Line TO S.C. 332	3100	2005	Orangeburg
373	SC 70	S.C. 332 TO S-1343	3000	2005	Orangeburg
375	SC 70	S-1343 TO U.S. 301	3500	2005	Orangeburg
377	SC 172	U.S. 178 TO Calhoun Co. Line	1100	2005	Orangeburg
379	SC 210	U.S. 21 TO S-80	1100	2005	Orangeburg
381	SC 210	S-80 TO U.S. 178	1650	2005	Orangeburg
383	SC 210	U.S. 178 TO I-26	1900	2005	Orangeburg
385	SC 210	I-26 TO U.S. 176	1200	2005	Orangeburg
387	SC 210	U.S. 176 TO U.S. 15	550	2005	Orangeburg
389	SC 210	U.S. 15 TO S.C. 6	850	2005	Orangeburg
391	SC 267	U.S. 15 TO U.S. 301	1900	2005	Orangeburg
393	SC 267	U.S. 301 TO S.C. 6	1800	2005	Orangeburg
395	SC 267	S.C. 6 TO Calhoun Co. Line	850	2005	Orangeburg
397	SC 310	U.S. 176 TO S-1640	2700	2005	Orangeburg
399	SC 310	S-1640 TO S-1376	3400	2005	Orangeburg
401	SC 310	S-1376 TO S.C. 45	2900	2005	Orangeburg
403	SC 310	S.C. 45 TO S.C. 6	1950	2005	Orangeburg
405	SC 314	U.S. 15 TO U.S. 176	1500	2005	Orangeburg
407	SC 332	S.C. 4 TO S-162	700	2005	Orangeburg
409	SC 332	S-162 TO S-89	1250	2005	Orangeburg
411	SC 332	S-89 TO S.C. 321/400	1750	2005	Orangeburg
413	SC 332	S.C. 321/400 TO S-74	425	2005	Orangeburg
415	SC 332	S-74 TO S.C. 70	350	2005	Orangeburg
417	SC 332	S.C. 70 TO S-73/S-877	500	2005	Orangeburg
419	SC 332	S-73/S-877 TO U.S. 301	1100	2005	Orangeburg
421	SC 389	Aiken County Line TO S.C. 3	2100	2005	Orangeburg
423	SC 389	S.C. 3 TO S-132	2500	2005	Orangeburg
425	SC 389	S-132 TO S-160	3500	2005	Orangeburg
427	SC 389	S-160 TO U.S. 321	3500	2005	Orangeburg
429	SC 394	Aiken County TO S.C. 389	450	2005	Orangeburg
431	SC 394	S.C. 389 TO S.C. 3	750	2005	Orangeburg
433	SC 394	S.C. 3 TO S-279	850	2005	Orangeburg
435	SC 394	S-279 TO U.S. 178	1350	2005	Orangeburg
437	SC 400	U.S. 321 TO S-1028	1500	2005	Orangeburg
439	SC 400	S-1028 TO S-74	1500	2005	Orangeburg
441	SC 400	S-74 TO S.C. 4	2200	2005	Orangeburg
443	SC 453	Dorchester Co. Line TO S-230	3200	2005	Orangeburg
445	SC 453	S-230 TO U.S. 176	5200	2005	Orangeburg
447	S- 147	S-51 TO U.S. 176	500	2005	Orangeburg
448	SC 453	U.S. 176 TO S-964	2100	2005	Orangeburg
449	SC 453	S-964 TO S-1640	2400	2005	Orangeburg
451	SC 453	S-1640 TO S-174	2700	2005	Orangeburg
453	SC 453	S-174 TO S.C. 45	3800	2005	Orangeburg
455	SC 692	Lexington Co. Line TO S-397	900	2005	Orangeburg
457	SC 692	S-397 TO S.C. 172	900	2005	Orangeburg

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for: MAP SALES

STAT	ROUT NO.	ROUTE LOCATION	EST. AADT	AADT YEAR	COUNTY
459	S- 189	S-689 TO U.S. 178	300	2005	Orangeburg
461	S- 189	U.S. 178 TO S.C. 172	475	2005	Orangeburg
463	S- 74	U.S. 178 TO S.C. 4	5600	2005	Orangeburg
465	S- 74	S.C. 4 TO S.C. 400	2800	2005	Orangeburg
467	S- 74	S.C. 400 TO S-73	1200	2005	Orangeburg
469	S- 74	S-73 TO U.S. 321	225	2005	Orangeburg
471	S- 74	U.S. 321 TO S-162	150	2005	Orangeburg
473	S- 162	S.C. 70 TO S-1208	150	2005	Orangeburg
475	S- 162	S-1208 TO U.S. 321	150	2005	Orangeburg
477	S- 162	U.S. 321 TO S-674	225	2005	Orangeburg
479	S- 162	S-674 TO S.C. 332	200	2005	Orangeburg
481	S- 63	U.S. 78 TO S-653	350	2005	Orangeburg
483	S- 63	S-653 TO Betty Branch	325	2005	Orangeburg
485	S- 63	Betty Branch TO S-39	300	2005	Orangeburg
487	S- 63	S-39 TO S-193	550	2005	Orangeburg
489	S- 63	S-193 TO U.S. 301	550	2005	Orangeburg
490	S- 905	US 178 To S-125	350	2005	Orangeburg
491	S-1343	S-74 To S-634	800	2005	Orangeburg
493	S- 376	U.S. 301 TO S-90	1150	2005	Orangeburg
495	S- 376	S-90 TO S-49	225	2005	Orangeburg
497	S- 61	U.S. 178 TO S-77	4400	2005	Orangeburg
499	S- 61	S-77 TO Calhoun County Line	1950	2005	Orangeburg
501	S- 65	S.C. 33 TO S-154	1150	2005	Orangeburg
503	S- 65	S-154 TO S-468	125	2005	Orangeburg
505	S- 39	U.S. 21 TO S-117	800	2005	Orangeburg
507	S- 39	S-117 TO S-1131	950	2005	Orangeburg
509	S- 39	S-1131 TO S-49	650	2005	Orangeburg
511	S- 39	S-49 TO Bamberg County Line	1000	2005	Orangeburg
513	S- 191	S.C. 400 TO S.C. 400	425	2005	Orangeburg
515	S- 73	U.S. 178 TO S-97	550	2005	Orangeburg
517	S- 73	S-97 TO S.C. 4	550	2005	Orangeburg
519	S- 73	S.C. 4 TO S.C. 400	750	2005	Orangeburg
521	S- 73	S.C. 400 TO S.C. 70	750	2005	Orangeburg
523	S- 73	S.C. 70 TO S.C. 332	650	2005	Orangeburg
525	S- 470	S-29 TO S.C. 33	1350	2005	Orangeburg
527	S- 470	S.C. 33 TO S-1002	5100	2005	Orangeburg
529	S- 470	S-1002 TO 0.45 mi of S-155	700	2005	Orangeburg
531	S- 746	S-154 TO S-456	475	2005	Orangeburg
533	S- 93	U.S. 601 TO S-29	1000	2005	Orangeburg
535	S-1604	S-1603 TO S-1602	1100	2005	Orangeburg
537	S-1604	I-26 Frontage Road TO S-1603	650	2005	Orangeburg
539	S- 29	S.C. 33 TO S-470	9000	2005	Orangeburg
541	S- 29	S-470 TO S-1337	7000	2005	Orangeburg
543	S- 29	S-1337 TO S-906	4500	2005	Orangeburg
545	S- 29	S-906 TO S-93	3200	2005	Orangeburg
547	S- 29	S-93 TO Calhoun County Line	800	2005	Orangeburg
549	S- 50	Calhoun County Line To S-196	800	2005	Orangeburg
551	S- 50	S-196 TO U.S. 301	650	2005	Orangeburg
553	S-1203	U.S. 178 TO S-1032	4100	2005	Orangeburg
555	S-1203	S-1032 TO S-74	4300	2005	Orangeburg

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STAT	ROUT NO.	ROUTE LOCATION	EST. AADT	AADT YEAR	COUNTY
557	S- 141	S-142 TO U.S. 601	225	2005	Orangeburg
559	S- 166	U.S. 601 TO U.S. 21	550	2005	Orangeburg
561	S-1638	U.S. 178 TO U.S. 301	1200	2005	Orangeburg
563	S-1258	U.S. 178 TO U.S. 21	1100	2005	Orangeburg
567	S-1374	S-90 TO S-1034	750	2005	Orangeburg
569	S-1374	S-1034 TO S-49	1200	2005	Orangeburg
571	S- 49	U.S. 301 TO S-90	6700	2005	Orangeburg
573	S- 49	S-90 TO S-1374	9000	2005	Orangeburg
575	S- 49	S-1374 TO S-935	5000	2005	Orangeburg
577	S- 49	S-935 TO S-39	1750	2005	Orangeburg
579	S- 288	S.C. 4 TO S-73	700	2005	Orangeburg
581	S- 288	S-73 TO S-160	500	2005	Orangeburg
583	S- 367	S.C. 4 TO S.C. 400	900	2005	Orangeburg
585	S-1032	S-1148 TO S-1265	3400	2005	Orangeburg
587	S-1032	S-1265 TO S-1203	1650	2005	Orangeburg
589	S- 33	S.C. 400 TO S-1308	950	2005	Orangeburg
591	S- 33	S-1308 TO U.S. 301	3200	2005	Orangeburg
593	S- 33	U.S. 301 TO S-90	2100	2005	Orangeburg
595	S- 134	S-63 TO S-376	325	2005	Orangeburg
597	S- 134	S-376 TO S-1305	475	2005	Orangeburg
599	S- 134	S-1305 TO S-33	750	2005	Orangeburg
601	S- 90	S-39 TO S-1305	350	2005	Orangeburg
603	S- 90	S-1305 TO S-1374	1000	2005	Orangeburg
605	S- 90	S-1374 TO S-1606	2000	2005	Orangeburg
607	S- 90	S-1606 TO S-1072	3200	2005	Orangeburg
609	S-1034	S-90 TO Southerly & Easterly	500	2005	Orangeburg
611	S- 80	U.S. 21 TO S.C. 210	650	2005	Orangeburg
613	S- 80	S.C. 210 TO S-135	400	2005	Orangeburg
615	S- 36	S-50 TO U.S. 301	125	2005	Orangeburg
617	S- 36	U.S. 301 TO I-26	475	2005	Orangeburg
619	S- 36	I-26 TO S-492	1500	2005	Orangeburg
621	S- 36	S-492 TO S-736	1250	2005	Orangeburg
622	S- 36	S-736 TO S-178	1550	2005	Orangeburg
623	S- 92	U.S. 301 TO I-26	150	2005	Orangeburg
625	S- 92	I-26 TO U.S. 178	325	2005	Orangeburg
627	S- 200	U.S. 176 TO S-82	400	2005	Orangeburg
629	S- 196	S-50 TO I-26	200	2005	Orangeburg
631	S- 196	I-26 TO S-492	450	2005	Orangeburg
633	S- 196	S-492 TO U.S. 178	950	2005	Orangeburg
635	S- 202	U.S. 176 TO U.S. 15	350	2005	Orangeburg
637	S- 202	U.S. 15 TO S-607	700	2005	Orangeburg
639	S- 202	S-607 TO S.C. 210	750	2005	Orangeburg
641	S- 105	S.C. 6 TO S-1135	1150	2005	Orangeburg
643	S- 105	S-1135 TO S-199	950	2005	Orangeburg
645	S- 105	S-199 TO S-82	650	2005	Orangeburg
647	S- 105	S-82 TO S.C. 6	1350	2005	Orangeburg
649	S- 172	U.S. 15 TO U.S. 301	600	2005	Orangeburg
651	S- 172	U.S. 301 TO S.C. 210	400	2005	Orangeburg
653	S- 174	S.C. 453 TO S-638	1200	2005	Orangeburg
655	S- 174	S-638 TO U.S. 176	1350	2005	Orangeburg

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STAT	ROUT NO.	ROUTE LOCATION	EST. AADT	AADT YEAR	COUNTY
657	S- 68	U.S. 176 TO S.C. 314	650	2005	Orangeburg
659	S- 68	S.C. 314 TO S.C. 453	2500	2005	Orangeburg
661	S- 68	S.C. 453 TO U.S. 176	750	2005	Orangeburg
663	S-1578	S.C. 453 TO S-1439	500	2005	Orangeburg
665	S- 171	U.S. 176 TO S-68	2000	2005	Orangeburg
667	S- 104	S.C. 45 TO S-641	2700	2005	Orangeburg
669	S- 104	S-641 TO S-136	2800	2005	Orangeburg
671	S- 104	S-136 TO S-1690	650	2005	Orangeburg
673	S- 104	S-1690 TO S-174	550	2005	Orangeburg
675	S- 136	Berkeley County TO S-1568	800	2005	Orangeburg
677	S- 136	S-1568 TO S-104	850	2005	Orangeburg
679	S- 138	S-104 TO S-1582	1100	2005	Orangeburg
681	S- 138	S-1582 TO S.C. 6	450	2005	Orangeburg
683	S- 652	S.C. 6 TO S-1391	1600	2005	Orangeburg
685	S-1600	S.C. 6 TO S-1601	950	2005	Orangeburg
687	S- 222	S.C. 6 TO S.C. 45	900	2005	Orangeburg
689	S- 222	S.C. 45 TO S-960	475	2005	Orangeburg
691	S-1165	U.S. 601 TO S-1839	2400	2005	Orangeburg
693	S-1165	S-1839 TO S-29	3600	2005	Orangeburg
695	S-1165	S-29 TO S-470	1050	2005	Orangeburg
697	S-1701	S-1337 TO S-470	550	2005	Orangeburg
699	S- 106	S-29 TO S-800	1100	2005	Orangeburg
701	S- 106	S-800 TO S-677	3100	2005	Orangeburg
703	S- 106	S-677 TO U.S. 21 BP	3300	2005	Orangeburg
705	S- 106	U.S. 21 BP TO U.S. 21	2600	2005	Orangeburg
707	S- 1	U.S. 301 TO S-22	2400	2005	Orangeburg
709	S- 1	S-22 TO S.C. 33	2400	2005	Orangeburg
711	S- 797	S-29 TO S-106	1350	2005	Orangeburg
713	S- 677	S-29 TO U.S. 601	700	2005	Orangeburg
715	S- 153	S-1405 TO 0.05 mi S. of S-106	1550	2005	Orangeburg
717	S- 153	0.05 mi N. of SC 33 To SC 33	2400	2005	Orangeburg
719	S- 678	S-29 TO S-106	750	2005	Orangeburg
721	S- 678	S-106 TO U.S. 601	550	2005	Orangeburg
723	S- 801	U.S. 601 TO S-800	2000	2005	Orangeburg
725	S- 94	S-25 TO U.S. 21 BP	11200	2005	Orangeburg
727	S- 94	U.S. 21 BP TO S-194	17300	2005	Orangeburg
729	S- 94	S-194 TO S-1772	14200	2005	Orangeburg
731	S- 94	S-1772 TO U.S. 601	12400	2005	Orangeburg
733	S- 811	U.S. 21 TO U.S. 178 BUS.	2300	2005	Orangeburg
735	S- 811	U.S. 178 BUS. TO S-1148	3000	2005	Orangeburg
737	S- 25	U.S. 21 TO S-94	5700	2005	Orangeburg
739	S- 25	S-94 TO S-1099	7700	2005	Orangeburg
741	S- 25	S-1099 TO S.C. 33	5500	2005	Orangeburg
743	S- 224	S-70 TO S-131	850	2005	Orangeburg
745	S- 224	S-131 TO S-25	4300	2005	Orangeburg
747	S- 224	S-25 TO U.S. 21	3900	2005	Orangeburg
749	S- 225	S-25 TO U.S. 21 BP	550	2005	Orangeburg
751	S- 897	S-25 TO U.S. 21 BUS.	600	2005	Orangeburg
753	S- 211	S-507 TO U.S. 301	700	2005	Orangeburg
755	S- 211	U.S. 301 TO S.C. 33	4000	2005	Orangeburg

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for: MAP SALES

STAT	ROUT NO.	ROUTE LOCATION	EST. AADT	AADT YEAR	COUNTY
757	S- 211	S.C. 33 TO U.S. 21 BUS.	5200	2005	Orangeburg
759	S- 211	U.S. 21 BUS. TO U.S. 178 BUS.	1500	2005	Orangeburg
761	S- 244	S-125 TO U.S. 178 BUS.	3600	2005	Orangeburg
763	S- 244	U.S. 178 BUS. TO S-131	750	2005	Orangeburg
765	S- 113	U.S. 21 TO S-125	500	2005	Orangeburg
767	S- 131	U.S. 21 BUS. TO S-224	475	2005	Orangeburg
769	S- 131	S-224 TO S-70	3700	2005	Orangeburg
771	S- 215	S.C. 33 TO S-70	350	2005	Orangeburg
773	S- 215	S-70 TO S-224	350	2005	Orangeburg
775	S- 215	S-224 TO S-205	650	2005	Orangeburg
777	S- 205	U.S. 21 TO S-25	6100	2005	Orangeburg
779	S- 892	S-131 & S-244 TO S-205	1400	2005	Orangeburg
781	S- 52	U.S. 21 TO S-25	1700	2005	Orangeburg
782	S- 929	S-1361 TO S-70	800	2005	Orangeburg
783	S- 929	S-70 TO S-131	1050	2005	Orangeburg
785	S-1320	S.C. 33 TO S-70	2000	2005	Orangeburg
787	S- 70	S-126 TO S-131	1800	2005	Orangeburg
789	S- 70	S-131 TO S-25	4900	2005	Orangeburg
791	S- 181	S-507 TO S.C. 33	800	2005	Orangeburg
792	S- 181	S.C. 33 TO S-244	1400	2005	Orangeburg
793	S- 181	S-244 TO S-113	125	2005	Orangeburg
795	S-1148	S-1091 TO S-811	1800	2005	Orangeburg
797	S-1148	S-811 TO S-1052	4700	2005	Orangeburg
799	S- 243	S-125 TO S-1071	400	2005	Orangeburg
803	S- 125	S-126 TO S-904	2200	2005	Orangeburg
805	S- 145	S-1658 To U.S. 21	2300	2005	Orangeburg
807	S- 145	U.S. 21 TO S-1245	1400	2005	Orangeburg
809	S-1003	U.S. 21 TO S-761	750	2005	Orangeburg
811	S- 22	S-1 TO U.S. 21	1800	2005	Orangeburg
813	S- 923	U.S. 178 TO U.S. 21	1600	2005	Orangeburg
815	S- 78	U.S. 21 TO S-95	1250	2005	Orangeburg
817	S- 78	S-95 TO U.S. 301	1050	2005	Orangeburg
821	S- 95	U.S. 301 TO S-145	3000	2005	Orangeburg
823	S- 95	S-145 TO S-78	1300	2005	Orangeburg
825	S- 793	U.S. 178 TO U.S. 301	1850	2005	Orangeburg
827	S-1002	U.S. 301 TO S-796	2700	2005	Orangeburg
829	S-1002	S-796 TO S-470	2200	2005	Orangeburg
831	S- 796	U.S. 21 TO S-932	2000	2005	Orangeburg
833	S- 796	S-932 TO S-1002	475	2005	Orangeburg
835	S- 932	S-796 TO S-708	1700	2005	Orangeburg
837	S- 824	U.S. 21 TO S.C. 4	900	2005	Orangeburg
839	S-1072	S-90 TO S-821/S-1047	1500	2005	Orangeburg
841	S-1072	S-821/S-1047 To U.S. 301	2300	2005	Orangeburg
843	S- 821	S-1072 TO U.S. 301	1000	2005	Orangeburg
845	S- 702	S-811 TO S-1092	3300	2005	Orangeburg
847	S- 702	S-1092 TO U.S. 21	3400	2005	Orangeburg
849	S- 507	S-49 TO S.C. 4	8600	2005	Orangeburg
851	S- 507	S.C. 4 TO U.S. 21 BP	3500	2005	Orangeburg
853	S-1633	S-1815 TO U.S. 178	2900	2005	Orangeburg
855	S- 126	S-125 TO S.C. 33	1950	2005	Orangeburg

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STAT	ROUT NO.	ROUTE LOCATION	EST. AADT	AADT YEAR	COUNTY
857	S-1324	U.S. 178 TO S-1630	1850	2005	Orangeburg
859	S-1009	S-507 TO U.S. 301	550	2005	Orangeburg
861	S-1009	U.S. 301 TO S-981	450	2005	Orangeburg
863	S- 122	S-641 TO S.C. 45	600	2005	Orangeburg
865	S- 122	S.C. 45 TO S-222	1000	2005	Orangeburg
867	S- 117	U.S. 21 TO S-39	600	2005	Orangeburg
869	S- 117	S-39 TO S-1029	375	2005	Orangeburg
871	S- 35	S.C. 47 TO S-169	1650	2005	Orangeburg
873	S- 35	S-169 TO Calhoun County Line	1400	2005	Orangeburg
875	S- 712	S.C. 6 TO S-232	500	2005	Orangeburg
877	S- 712	S-232 TO S-35	425	2005	Orangeburg
879	S- 231	S-199 TO S.C. 6	500	2005	Orangeburg
881	S- 231	S.C. 6 TO S-1384	475	2005	Orangeburg
883	S- 562	S.C. 6 TO S-799	1200	2005	Orangeburg
885	S- 562	S-799 TO S-105	200	2005	Orangeburg
887	S- 117	S-653 TO U.S. 21	475	2005	Orangeburg
889	S- 117	S-753 TO S-653	300	2005	Orangeburg
891	S-1120	S-653 TO U.S. 78	750	2005	Orangeburg
893	S-1022	S-1120 TO U.S. 21	600	2005	Orangeburg
895	S- 258	U.S. 178 TO S-178	550	2005	Orangeburg
897	S- 258	S-178 TO S.C. 210	275	2005	Orangeburg
899	S- 178	S-1800 TO S-258	325	2005	Orangeburg
901	S- 114	S-271 TO S-958/S-1800	225	2005	Orangeburg
903	S- 957	S-36 TO S-958	250	2005	Orangeburg
905	S-1076	S-736 TO U.S. 178	425	2005	Orangeburg
907	S- 452	S-206 TO S.C. 4	225	2005	Orangeburg
909	S- 452	S.C. 3 BUS. TO S-206	125	2005	Orangeburg
911	S- 86	S.C. 4 TO S-1030	75	2005	Orangeburg
913	S- 101	S.C. 3 TO S.C. 3 BUS.	125	2005	Orangeburg
915	S- 6	U.S. 321 TO S-118	900	2005	Orangeburg
917	S- 6	S-118 TO S-1164	425	2005	Orangeburg
919	S- 161	S.C. 4 TO S-292	300	2005	Orangeburg
921	S- 161	S-292 TO U.S. 321	250	2005	Orangeburg
923	S- 209	U.S. 178 TO S-109	400	2005	Orangeburg
925	S- 209	S-109 TO U.S. 321	1400	2005	Orangeburg
927	S- 209	U.S. 321 TO S-943	200	2005	Orangeburg
929	S- 941	S-410 TO U.S. 178	375	2005	Orangeburg
931	S- 941	U.S. 178 TO S-109	1000	2005	Orangeburg
933	S- 941	S-109 TO S-980	750	2005	Orangeburg
935	S- 262	U.S. 178 TO S-411	1400	2005	Orangeburg
937	S- 111	S-159 TO U.S. 178	600	2005	Orangeburg
939	S- 111	U.S. 178 TO S-209	400	2005	Orangeburg
941	S- 626	S.C. 332 TO S-661	100	2005	Orangeburg
943	S- 645	U.S. 321 TO S-626	225	2005	Orangeburg
945	S- 661	S-212 TO U.S. 321	550	2005	Orangeburg
947	S-1640	U.S. 176 TO S.C. 453	1600	2005	Orangeburg
949	S-1137	S-1075 TO S-1640	400	2005	Orangeburg
950	S- 227	S-894 TO S-51	900	2005	Orangeburg
951	S- 227	S.C. 310 TO S-894	700	2005	Orangeburg
953	S- 631	S-103 TO S-1018	650	2005	Orangeburg

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STAT	ROUT NO.	ROUTE LOCATION	EST. AADT	AADT YEAR	COUNTY
955	S- 631	S-1018 TO S-1256	800	2005	Orangeburg
957	S-1256	US-176 TO S-631	950	2005	Orangeburg
959	S- 629	S-644 TO U.S. 176	850	2005	Orangeburg
961	S- 51	S-1387 TO S-103	650	2005	Orangeburg
963	S- 51	S-103 TO S.C. 453	3600	2005	Orangeburg
965	S- 51	S.C. 453 TO S-1075	1850	2005	Orangeburg
967	S- 51	S-1075 TO S-227	1400	2005	Orangeburg
969	S- 51	S-227 TO S-227	600	2005	Orangeburg
971	L- 119	S-230 TO U.S. 176	650	2005	Orangeburg
973	S- 119	U.S. 176 TO S-51	600	2005	Orangeburg
975	S- 119	S-51 TO S-1803	1300	2005	Orangeburg
976	S- 103	U.S. 176 TO S-51	2900	2005	Orangeburg
977	S- 103	S-51 TO S-1802	175	2005	Orangeburg
979	S- 103	S-1802 TO S-631	1350	2005	Orangeburg
981	S- 103	S-631 TO S-174	750	2005	Orangeburg
983	S-1018	S-1017 TO S-631	800	2005	Orangeburg
985	S-1017	S-1059 TO S-1018	1350	2005	Orangeburg
987	S- 962	S-1075 TO S.C. 453	75	2005	Orangeburg
989	S- 120	S-51 TO U.S. 176	550	2005	Orangeburg
991	S- 120	U.S. 176 TO S-230	1200	2005	Orangeburg
993	S- 230	S.C. 453 TO S-120	2200	2005	Orangeburg
995	S- 90	S-1078 TO S-49	4500	2005	Orangeburg
997	S- 980	US 321 TO S-980	550	2005	Orangeburg
999	S- 85	S-207 TO SC 39	225	2005	Orangeburg
1001	S- 121	S-232 TO S.C. 6	650	2005	Orangeburg
1003	S- 199	S.C. 6 TO Calhoun County Line	1000	2005	Orangeburg
1005	S- 607	S.C. 310 TO S-202	800	2005	Orangeburg
1007	S- 259	S.C. 3 TO Aiken Co. Line	375	2005	Orangeburg
1009	S- 920	U.S. 21 TO S-94	1000	2005	Orangeburg
1011	S- 47	U.S. 178 To U.S. 321	425	2005	Orangeburg
1013	S- 60	U.S. 178 To S-825	275	2005	Orangeburg
1015	S- 64	S-501 To U.S 21	300	2005	Orangeburg
1017	S- 71	S.C. 4 To S-874	100	2005	Orangeburg
1019	S- 77	S-60 To S-61	550	2005	Orangeburg
1021	S- 82	Dead End To S-105	250	2005	Orangeburg
1023	S- 82	S.C. 6 To S-200	150	2005	Orangeburg
1025	S- 97	U.S. 178 To S-73	300	2005	Orangeburg
1027	S- 102	U.S. To Dorcherster County Line	125	2005	Orangeburg
1029	S- 132	S.C. 389 To Westerly	350	2005	Orangeburg
1031	S- 133	S.C. 4 TO S.C 400	250	2005	Orangeburg
1033	S- 135	S-80 To Dorcherster County Line	125	2005	Orangeburg
1035	S- 154	S-50 TO S-65	475	2005	Orangeburg
1037	S- 154	S-65 TO S-29	800	2005	Orangeburg
1039	S- 155	S-154 TO S-65	75	2005	Orangeburg
1041	S- 160	S-288 TO S.C. 394	350	2005	Orangeburg
1043	S- 176	S-133 TO S-188	75	2005	Orangeburg
1045	S- 188	U.S. 321 TO S-191	275	2005	Orangeburg
1047	S- 204	U.S. 21 To Dorchester County Line	125	2005	Orangeburg
1049	S- 279	S.C. 394 TO S-132	325	2005	Orangeburg
1051	S- 292	Local Rd. To U.S. 321	100	2005	Orangeburg

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STAT	ROUT NO.	ROUTE LOCATION	EST. AADT	AADT YEAR	COUNTY
1053	S- 397	Calhoun Co. Line To U.S. 321	325	2005	Orangeburg
1055	S- 501	County Road To S-64	75	2005	Orangeburg
1057	S- 542	U.S. 178 To Dorchester Co. Line	350	2005	Orangeburg
1059	S- 634	U.S. 301 TO S-949	125	2005	Orangeburg
1061	S- 689	S-976 TO S-189	175	2005	Orangeburg
1063	S- 755	S-135 To Dorchester County Line	200	2005	Orangeburg
1065	S- 825	S-77 TO S-60	225	2005	Orangeburg
1067	S- 874	S-71 TO S.C. 4	100	2005	Orangeburg
1069	S- 890	U.S. 178 TO S-25	425	2005	Orangeburg
1071	S- 914	S-25 TO S-913	125	2005	Orangeburg
1073	S- 935	S-49 TO S-90	425	2005	Orangeburg
1075	S-1062	S-131 TO S-239	600	2005	Orangeburg
1077	S-1092	S-890 TO S-702	450	2005	Orangeburg
1079	S-1174	S-1579 TO S-1472	100	2005	Orangeburg
1081	S-1176	U.S. 178 TO S-1174	150	2005	Orangeburg
1083	S-1443	S-501 To U.S.178	475	2005	Orangeburg
1085	S-1607	S.C. 3 TO S.C. 39	175	2005	Orangeburg
1087	S-1828	S-25 To S-1826	100	2005	Orangeburg
1089	S-1091	S-904 To S-1148	225	2005	Orangeburg
1091	L- 401	Calhoun Co. Line To S-397	25	2005	Orangeburg
1093	L- 470	5.11mi E. of S-29 To S-155	125	2005	Orangeburg
2163	I- 26	(Calhoun) S-22 TO U.S. 601	46300	2005	Orangeburg
2165	I- 26	U.S. 601 TO S.C. 33	44300	2005	Orangeburg
2166	I- 26	S.C. 33 TO U.S. 301	42800	2005	Orangeburg
2167	I- 26	U.S. 301 TO S-36	42400	2005	Orangeburg
2169	I- 26	S-36 TO S.C. 210	41700	2005	Orangeburg
2171	I- 26	S.C. 210 TO I-95	41800	2005	Orangeburg
2383	I- 95	U.S. 178 TO I-26	40300	2005	Orangeburg
2385	I- 95	I-26 TO U.S. 176	28000	2005	Orangeburg
2387	I- 95	U.S. 176 TO U.S. 15	27300	2005	Orangeburg
2389	I- 95	U.S. 15 TO U.S. 15	27700	2005	Orangeburg
2391	I- 95	U.S. 15 TO S.C. 6	32300	2005	Orangeburg
2393	I- 95	S.C. 6 TO S-400	32600	2005	Orangeburg

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Sec 9.3 Ref 32

for: MAP SALES

STAT	ROUT NO.	ROUTE LOCATION	EST. AADT	AADT YEAR	COUNTY
101	US 76	Laurens Co. TO S-642/S.C.121	2600	2005	Newberry
103	US 76	S-642/S.C. 121 TO S-386	7700	2005	Newberry
105	US 76	S-386 TO S.C. 34	15600	2005	Newberry
107	US 76	S.C. 34 TO S-383	16100	2005	Newberry
109	US 76	S-383 TO S-82	10600	2005	Newberry
111	US 76	S-82 TO Lexington County	5600	2005	Newberry
113	S- 642	S-90 TO SC 121	4500	2005	Newberry
115	S- 60	S-383 To S.C. 395	8100	2005	Newberry
117	S- 383	US 76 TO S-60	1500	2005	Newberry
119	US 176	Union County Line TO S.C. 72	6200	2005	Newberry
121	US 176	S.C. 72 TO S.C. 34	4000	2005	Newberry
123	US 176	S.C. 34 TO S.C. 219	1000	2005	Newberry
125	US 176	S.C. 219 TO Richland Co.	1500	2005	Newberry
127	US 176 CON	S.C.72 TO U.S. 176	1850	2005	Newberry
129	SC 34	Greenwood Co. To Local Rd.	3100	2005	Newberry
130	SC 34	Local Rd. To S.C. 39	3100	2005	Newberry
131	SC 34	S-48 TO S-83	3400	2005	Newberry
132	SC 34	S.C. 39 TO S-48	3200	2005	Newberry
133	SC 34	S-83 TO S.C. 121	5700	2005	Newberry
135	SC 34	S.C. 121 TO S-90	3400	2005	Newberry
137	SC 34	S-90 TO S.C. 395	3400	2005	Newberry
139	SC 34	S.C. 395 TO S-68	5100	2005	Newberry
141	SC 34	S-68 TO U.S. 76	5900	2005	Newberry
143	SC 34	U.S. 76 TO I-26	7800	2005	Newberry
145	SC 34	I-26 TO Fairfield Co. Line	2400	2005	Newberry
147	SC 34 CON	S.C. 121 TO S.C. 34 BUS.	1400	2005	Newberry
149	S- 90	S.C. 34 TO S.C. 395	2400	2005	Newberry
151	SC 395	S-90 TO S-60	5100	2005	Newberry
152	S- 60	US 76 BUS. TO S-383	10500	2005	Newberry
153	SC 39	Saluda Co. line TO S.C. 56	1900	2005	Newberry
155	SC 39	S.C. 56 TO Laurens Co. Line	600	2005	Newberry
157	SC 56	S.C. 39 TO Laurens Co. Line	1400	2005	Newberry
159	SC 66	Laurens County Line TO S-32	650	2005	Newberry
161	SC 66	S-32 TO S.C. 72	2200	2005	Newberry
163	SC 72	Laurens County Line TO S-75	3000	2005	Newberry
165	SC 72	S-75 TO U.S. 176	4000	2005	Newberry
167	SC 121	Saluda Co. Line TO S.C. 34	2900	2005	Newberry
169	SC 121	S.C. 34 TO S.C. 34 CONN.	2600	2005	Newberry
171	SC 121	S.C. 34 CONN. TO S-58	3800	2005	Newberry
173	SC 121	S-58 TO S-91	3500	2005	Newberry
175	SC 121	S-91 TO S-56	4500	2005	Newberry
177	SC 121	S-56 TO S.C. 395/S-103	6200	2005	Newberry
179	SC 121	S.C. 395/S-103 TO U.S. 76	7500	2005	Newberry
181	SC 121	U.S. 76 TO I-26	6700	2005	Newberry
182	SC 121	I-26 To US 176	3600	2005	Newberry
183	SC 202	U.S. 76 TO I-26	1800	2005	Newberry
185	SC 202	I-26 TO U.S. 176	1000	2005	Newberry
187	SC 213	U.S. 176 TO Fairfield Co.	1550	2005	Newberry
189	SC 219	U.S.76 TO S-505	7600	2005	Newberry
191	SC 219	S-505 TO I-26	6700	2005	Newberry

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STAT	ROUT NO.	ROUTE LOCATION	EST. AADT	AADT YEAR	COUNTY
193	SC 219	I-26 TO U.S. 176	1400	2005	Newberry
195	SC 391	Saluda County TO S-197	3500	2005	Newberry
197	SC 391	S-197 TO U.S. 76	4300	2005	Newberry
199	SC 395	Saluda County Line TO S-273	1200	2005	Newberry
201	SC 395	S-273 TO S-161	3000	2005	Newberry
203	SC 395	S-161 TO S.C. 34	3800	2005	Newberry
205	SC 395	S.C. 34 TO S-127	3100	2005	Newberry
207	SC 395	S-127 TO S-90	3200	2005	Newberry
209	SC 395	S-60 TO S.C. 121/S-103	4400	2005	Newberry
211	SC 773	U.S. 76 TO U.S. 176	3200	2005	Newberry
213	S- 94	S.C. 66 TO S-86	175	2005	Newberry
215	S- 36	U.S. 176/S.C. 121 TO S.C. 66	425	2005	Newberry
217	S- 32	U.S. 76 TO I-26	400	2005	Newberry
219	S- 32	I-26 TO S.C. 66	200	2005	Newberry
221	S- 54	S-45 TO Union Co. Line	100	2005	Newberry
223	S- 45	S-55 TO Union County Line	200	2005	Newberry
225	S- 55	S.C. 34 TO S-28	375	2005	Newberry
227	S- 81	S-45 TO U.S. 76	150	2005	Newberry
229	S- 572	S.C. 34 TO U.S. 176	250	2005	Newberry
231	S- 63	S-32 TO Laurens County Line	150	2005	Newberry
233	S- 64	U.S. 76 TO S-58	200	2005	Newberry
235	S- 368	S-64 TO S-56	175	2005	Newberry
236	S- 56	S-671 To S.C. 121	2300	2005	Newberry
237	S- 56	S.C. 560 TO S-344	550	2005	Newberry
238	S- 56	S.C. 121 To S.C. 395	3000	2005	Newberry
239	S- 56	S-344 TO S-671	850	2005	Newberry
240	S- 56	S.C. 395 To S-642	2400	2005	Newberry
241	S- 65	S-48 TO Laurens County Line	50	2005	Newberry
243	S- 376	S-48 TO S-22	25	2005	Newberry
245	S- 276	S-64 TO S-101	200	2005	Newberry
247	S- 58	S-89 TO S-348	1100	2005	Newberry
249	S- 58	S-348 To S.C. 56	850	2005	Newberry
251	S- 101	S.C. 34 TO S-48	300	2005	Newberry
253	S- 366	S-343 TO S-276	125	2005	Newberry
255	S- 49	S-58 TO S.C. 34	1350	2005	Newberry
257	S- 83	S.C. 395 TO S.C. 121	325	2005	Newberry
259	S- 244	S.C. 391 TO S.C. 395	600	2005	Newberry
261	S- 363	S.C. 34 TO S-83	25	2005	Newberry
263	S- 281	U.S. 76 TO S-42	800	2005	Newberry
265	S- 67	S.C. 395 TO S-68	400	2005	Newberry
267	S- 67	S-68 TO U.S. 76	800	2005	Newberry
269	S- 38	U.S. 76 TO S.C. 773	650	2005	Newberry
271	S- 82	U.S. 176 TO U.S. 76	475	2005	Newberry
273	S- 499	S.C. 219 TO U.S. 176	150	2005	Newberry
275	S- 272	S-97 TO S.C. 34	350	2005	Newberry
277	S- 97	U.S. 176 TO S-28	250	2005	Newberry
279	S- 28	Richland Co. TO S.C. 213	1450	2005	Newberry
281	S- 28	S.C. 213 TO S-55	275	2005	Newberry
283	S- 98	S-28 TO S-97	200	2005	Newberry
284	S- 29	US 176 To S-167	500	2005	Newberry

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STAT	ROUT NO.	ROUTE LOCATION	EST. AADT	AADT YEAR	COUNTY
285	S- 33	S-107 TO S-28	225	2005	Newberry
287	S- 99	U.S. 76 TO S-38	250	2005	Newberry
289	S- 167	S-39 TO S-29	425	2005	Newberry
291	S- 39	U.S. 176 TO S-167	300	2005	Newberry
292	S- 39	S-167 TO U.S. 76	900	2005	Newberry
293	S- 40	S-39 TO Lexington Co. Line	700	2005	Newberry
295	S- 202	S-26 TO U.S. 76	750	2005	Newberry
297	S- 41	S.C. 395 TO S.C. 391	850	2005	Newberry
299	S- 41	S.C. 391 TO U.S. 76	800	2005	Newberry
301	S- 42	S.C. 395 TO S.C. 391	650	2005	Newberry
303	S- 17	S-42 TO S.C. 391	375	2005	Newberry
305	S- 71	S-587 TO S.C. 391	1250	2005	Newberry
307	S- 187	S-26 TO S-71	1300	2005	Newberry
309	S- 226	S.C. 391 TO S-587	850	2005	Newberry
311	S- 571	S-15 TO End	1150	2005	Newberry
313	S- 15	Lexington Co. Line TO S-26	1350	2005	Newberry
315	S- 26	S.C. 391 TO End	1800	2005	Newberry
317	S- 72	Lexington Co. Line TO S-26	600	2005	Newberry
319	S- 271	S-72 TO S-458	325	2005	Newberry
321	S- 20	U.S. 76 TO S-72	650	2005	Newberry
322	S- 20	S-72 To S-26	850	2005	Newberry
323	S- 48	S-58 TO S.C. 34	200	2005	Newberry
325	S- 44	S.C. 34 TO S-723	2900	2005	Newberry
327	S- 44	S-723 TO S-55	550	2005	Newberry
329	S- 344	S-56 TO U.S. 76	1000	2005	Newberry
331	S- 103	S.C. 121 TO S-344	700	2005	Newberry
333	S- 545	S.C. 121 TO S-344	1150	2005	Newberry
335	S- 348	S-56/S-149 TO S-58	1800	2005	Newberry
337	S- 104	S-642 TO S.C. 121	900	2005	Newberry
339	S- 386	U.S. 76 BUS. TO U.S. 76 BP	2500	2005	Newberry
341	S- 160	S-642 TO S-383	4300	2005	Newberry
343	S- 383	S-60 TO S-642	2100	2005	Newberry
345	S- 30	U.S. 76 BUS. TO S.C. 395	3200	2005	Newberry
347	S- 92	U.S. 76 TO S-415	3100	2005	Newberry
349	S- 375	U.S. 76 TO S.C. 34 BUS.	1500	2005	Newberry
351	L- 91	Bedenbamgh Alley To S-89	2500	2005	Newberry
352	S- 91	S-89 To SC 395	1100	2005	Newberry
353	S- 523	S-90 TO S-37	400	2005	Newberry
355	S- 37	S-30 TO S.C. 395	1600	2005	Newberry
357	S- 127	S-68 TO S.C. 395	1250	2005	Newberry
359	S- 68	S-383 TO S.C. 34	850	2005	Newberry
361	S- 68	S.C. 34 TO S-67	950	2005	Newberry
363	S- 462	S.C. 34 TO S-44	2300	2005	Newberry
365	S- 217	S-75 TO S.C. 72	325	2005	Newberry
367	S- 75	S-51 TO S.C. 72	850	2005	Newberry
369	S- 51	S.C. 66 TO S.C. 72	1300	2005	Newberry
371	S- 188	S.C. 66 TO S-578	800	2005	Newberry
373	S- 24	U.S. 76 TO U.S. 76	450	2005	Newberry
375	S- 43	S.C. 395 TO S-42	200	2005	Newberry
377	S- 66	S.C. 395 TO S.C. 34/S-761	225	2005	Newberry

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for: MAP SALES

STAT	ROUT NO.	ROUTE LOCATION	EST. AADT	AADT YEAR	COUNTY
379	S- 69	S.C. 121 TO S-642	1100	2005	Newberry
381	S- 77	Laurens Co. Line TO S-65	50	2005	Newberry
383	S- 106	S-383 TO S-68	200	2005	Newberry
385	S- 107	U.S. 176 TO U.S. 176	325	2005	Newberry
387	S- 161	S-68 TO S.C. 395	600	2005	Newberry
389	S- 170	U.S. 176 TO S-33	100	2005	Newberry
391	S- 273	S.C. 395 TO S-66	150	2005	Newberry
393	S- 321	S-48 TO S-58	125	2005	Newberry
395	S- 328	S-58 TO S-56	75	2005	Newberry
397	S- 342	S-328 TO U.S. 76	100	2005	Newberry
399	S- 370	S.C. 202 TO S-167	100	2005	Newberry
401	S- 371	S.C. 34 TO S-82	225	2005	Newberry
403	S- 403	S-41 TO S-202	650	2005	Newberry
407	S- 684	U.S. 76 TO S-160	4100	2005	Newberry
409	S- 711	S-82 TO U.S. 176	125	2005	Newberry
411	S- 730	S.C. 34 TO U.S. 176	100	2005	Newberry
413	L- 91	SC 121 TO Wardlaw St.	1450	2005	Newberry
415	L-1233	SC 395 To S-90	650	2005	Newberry
2113	I- 26	(Laurens) S.C. 66 to S-32	32800	2005	Newberry
2115	I- 26	S-32 TO S.C. 121	32800	2005	Newberry
2117	I- 26	S.C. 121 TO S.C. 34	33300	2005	Newberry
2119	I- 26	S.C. 34 TO S.C. 219	33300	2005	Newberry
2121	I- 26	S.C. 219 TO S.C. 773	36400	2005	Newberry
2123	I- 26	S.C. 773 TO S.C. 202	37500	2005	Newberry

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for: MAP SALES

STAT	ROUT NO.	ROUTE LOCATION	EST. AADT	AADT YEAR	COUNTY
100	US 1	Aiken Co. TO Lexington Co.	2600	2005	Saluda
101	US 178	Greenwood Co. Line TO S-49	2900	2005	Saluda
103	US 178	S-49 TO U.S. 378 CONN./S.C. 121	7100	2005	Saluda
105	US 178	U.S. 378/S.C. 121 TO S.C. 121	8600	2005	Saluda
107	US 178	S.C. 121 TO S.C. 39	6000	2005	Saluda
109	US 178	SC 39 TO Lexington Co. Line	3900	2005	Saluda
110	US 178 CON	U.S. 178/S.C. 121 TO U.S. 378	6700	2005	Saluda
111	US 378	Edgefield Co. Line TO S-49	1550	2005	Saluda
113	US 378	S-49 TO U.S. 178\SC 121	2300	2005	Saluda
115	US 378	US 178\SC 121 TO US 178 CONN./S-96	5400	2005	Saluda
117	US 378	U.S. 178 CONN./S-96 TO S-33	6400	2005	Saluda
119	US 378	S-33 TO S.C. 391	3300	2005	Saluda
121	US 378	S.C. 391 TO Lexington Co.	4900	2005	Saluda
122	SC 23	Edgefield Co. TO S-321	2600	2005	Saluda
123	SC 23	S-321 TO S.C. 39/S-23	2300	2005	Saluda
125	SC 23	S.C. 39/S-23 TO S.C. 39/S-75	3200	2005	Saluda
127	SC 23	S.C. 39/S-75 TO Lexington Co.	2600	2005	Saluda
128	SC 39	Aiken Co. TO S.C. 23/S-75	1150	2005	Saluda
129	SC 39	S.C. 23/S-23 TO U.S. 178	1600	2005	Saluda
131	SC 39	U.S. 178/S-12 TO S-171	3000	2005	Saluda
133	SC 39	S-171 TO Newberry Co. Line	1400	2005	Saluda
135	SC 121	Edgefield Co. TO Jefferson St.	4000	2005	Saluda
137	SC 121	Jefferson St. TO U.S. 178/S.C. 39	4700	2005	Saluda
139	SC 121	US 178/SC 39 To Wheeler St.	4700	2005	Saluda
141	SC 121	Wheeler St. To Newberry Co.	4000	2005	Saluda
142	SC 193	S.C. 23 TO S.C. 121	200	2005	Saluda
143	SC 194	U.S. 378 TO S-450	1300	2005	Saluda
145	SC 194	S-450 TO S.C. 395/S-70	1900	2005	Saluda
147	SC 194	S.C. 395/S-70 TO S.C. 391	1200	2005	Saluda
149	SC 391	Lexington Co. TO U.S. 378	3000	2005	Saluda
151	SC 391	U.S. 378 TO Newberry Co.	3500	2005	Saluda
153	SC 392	Aiken Co. Line TO S.C. 23	950	2005	Saluda
155	SC 395	S.C. 194 TO Newberry Co.	1050	2005	Saluda
157	SC 702	Greenwood Co. TO S.C. 39	1000	2005	Saluda
159	S- 21	S.C. 121 TO U.S. 178	600	2005	Saluda
161	S- 21	U.S. 178 TO Greenwood Co.	150	2005	Saluda
163	S- 65	S-21 TO S-162	225	2005	Saluda
165	S- 345	S-187 To S-21	175	2005	Saluda
167	S- 42	U.S. 178 To S-49	850	2005	Saluda
169	S- 42	S-49 To S-21	425	2005	Saluda
171	S- 51	S.C. 194 TO S.C. 121	225	2005	Saluda
173	S- 44	S-26 TO S-183	1200	2005	Saluda
175	S- 44	S-183 TO S-464	125	2005	Saluda
177	S- 59	U.S. 178 TO S.C. 391	650	2005	Saluda
179	S- 400	S-242 TO S-88	175	2005	Saluda
181	S- 40	Ansel Caughman Rd To S.C. 391	650	2005	Saluda
183	S- 105	Lexington Co. Line TO S-26	600	2005	Saluda
185	S- 26	S-59 TO S-150	600	2005	Saluda
187	S- 150	US 178 TO Lexington Co. Line	500	2005	Saluda
189	S- 41	S.C. 23 TO Aiken Co. Line	700	2005	Saluda

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for: MAP SALES

STAT	ROUT NO.	ROUTE LOCATION	EST. AADT	AADT YEAR	COUNTY
191	S- 239	Aiken County Line TO S-41	600	2005	Saluda
193	S- 25	S-149 TO S-351	300	2005	Saluda
195	S- 31	S.C. 121 TO S-145	275	2005	Saluda
197	S- 140	S-171 TO U.S. 378	1300	2005	Saluda
199	S- 139	S-33 TO U.S. 378	850	2005	Saluda
201	S- 33	U.S. 178 TO S-179	1200	2005	Saluda
202	S- 33	S-179 TO S-176	2200	2005	Saluda
203	S- 33	S-176 TO U.S. 378	1650	2005	Saluda
205	S- 264	S-113 TO S-179	1400	2005	Saluda
207	S- 30	U.S. 178 TO U.S. 378	2300	2005	Saluda
209	S- 12	S-42 TO U.S. 178	2100	2005	Saluda
211	S- 77	U.S. 178 TO U.S. 378	600	2005	Saluda
213	S- 176	U.S. 378 TO S-61	1500	2005	Saluda
215	S- 61	U.S. 178 TO S-301	1600	2005	Saluda
217	S- 29	S.C. 23 TO S-87	300	2005	Saluda
219	S- 22	S-91 TO S.C. 23	350	2005	Saluda
221	S- 35	S-75 TO S.C. 23	100	2005	Saluda
223	S- 43	S.C. 121 TO S-78	550	2005	Saluda
225	S- 57	U.S. 178 TO S-75	275	2005	Saluda
227	S- 75	S.C. 23 TO S-57	250	2005	Saluda
229	S- 78	S.C. 39 TO S-68	275	2005	Saluda
231	S- 87	S-29 TO S-59	200	2005	Saluda
233	S- 91	S-22 TO Edgefield Co.	275	2005	Saluda
235	S- 98	S-21 TO Greenwood Co.	425	2005	Saluda
236	L- 134	S-334 To L-78	25	2005	Saluda
237	S- 134	S-44 TO S-334	25	2005	Saluda
239	S- 145	S.C. 121 TO S.C. 395	125	2005	Saluda
241	S- 149	S-25 TO S.C. 193	425	2005	Saluda
243	S- 189	U.S. 178 TO S-150	175	2005	Saluda
245	L- 25	12.98 NE S-149 To 14.25 NE S- 149	175	2005	Saluda
247	L- 400	S-40 TO S-242	75	2005	Saluda
249	S- 136	US 378 To US 178	1350	2005	Saluda

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South Carolina Sect 9.3 Ref 35

	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04	Compound Growth Rate	FY 04 Percent Change
Total Revenues (School Dist., Counties, & Cities)	**7,066,311,628**	**7,428,819,044**	**8,306,614,131**	**8,835,908,494**	**10,326,330,919**	**9,585,126,237**	**10,718,432,069**	**7.2%**	**11.8%**
Revenues from Local Sources	4,109,577,658	4,293,861,833	4,801,465,721	4,940,912,031	6,422,271,471	5,702,394,723	6,725,517,086	8.6%	17.9%
Current Property Taxes	2,277,807,419	2,435,295,022	2,634,842,254	2,796,638,298	3,110,484,500	3,267,014,852	3,448,756,640	7.2%	5.6%
Current Real & Personal Property Taxes	2,207,574,819	2,358,204,224	2,541,173,642	2,682,926,214	2,986,777,554	3,133,251,606	3,300,613,007	6.9%	5.3%
Fee In Lieu of Property Tax (excl. Schools)	18,890,286	26,539,182	32,213,955	39,572,841	45,014,964	49,388,967	53,574,350	19.0%	8.5%
All Other	51,342,314	50,551,616	61,454,658	74,139,243	78,691,980	84,374,278	94,569,282	10.7%	12.1%
Local Options Sales Tax	90,750,015	113,185,438	120,803,888	131,848,654	133,089,588	134,666,642	161,057,084	10.0%	19.6%
Local Hospitality Tax	34,684,573	37,092,391	40,485,624	55,263,619	58,324,784	74,152,890	88,086,099	16.8%	18.8%
Local Accommodations Tax	17,326,876	18,159,688	20,410,067	22,370,546	22,355,594	25,955,721	28,276,030	8.5%	8.9%
Capital Projects Tax	1,633,347	11,707,048	22,883,475	22,122,327	26,139,176	25,794,903	28,333,633	60.9%	9.8%
Licenses, fees, Charges, Bonds, etc.	1,687,375,428	1,678,422,246	1,962,040,413	1,912,668,588	3,071,877,829	2,174,809,715	2,971,007,601	9.9%	36.6%
Licenses & Permits	238,414,185	265,791,482	274,412,780	304,927,614	344,966,602	354,483,534	382,538,371	8.2%	7.9%
Service Revenue & Charges	676,741,702	699,015,104	759,244,999	808,528,110	808,245,347	824,241,598	960,001,748	6.0%	16.5%
Bonds & Leases	558,358,854	486,350,656	587,163,526	415,856,154	1,485,764,080	735,480,232	1,357,794,302	16.0%	84.6%
Miscellaneous	213,860,687	227,265,003	341,219,108	383,356,710	432,901,801	260,604,352	270,673,180	4.0%	3.9%
Revenues from State Sources	2,461,046,936	2,604,059,345	2,939,557,959	3,272,089,608	3,220,451,874	3,123,337,476	3,133,613,046	4.1%	0.3%
Reimbursements for Property Tax Relief /1	224,121,205	233,362,682	247,067,328	237,740,298	244,066,474	245,054,959	243,090,660	1.4%	-0.8%
State-Shared Taxes /2	263,030,549	273,860,690	283,720,068	293,445,857	302,426,448	306,749,910	312,004,620	2.9%	1.7%
Homestead Exemption /3	44,590,825	46,198,505	45,909,727	103,867,321	111,012,208	120,013,031	128,865,110	19.3%	7.4%
Manufacturer's Depreciation Reimbursement	5,779,754	15,728,219	24,983,198	29,204,312	32,321,281	34,846,365	35,834,802	35.5%	2.8%
State Grants	548,624,022	568,652,214	788,152,073	969,225,858	965,205,933	867,287,496	854,581,102	7.7%	-1.5%
Education Finance Act (EFA)	1,006,508,468	1,078,080,282	1,114,273,990	1,152,028,357	1,088,775,840	1,032,204,791	1,027,981,967	0.4%	-0.4%
Education Improvement Act (EIA)	368,392,113	388,176,753	435,451,575	486,577,605	476,643,690	478,198,256	476,719,657	4.4%	-0.3%
Education Lottery	0	0	0	0	0	38,982,668	54,535,128	n/a	39.9%
Revenues from Federal Sources	441,861,143	477,385,517	510,296,326	567,145,048	624,109,123	687,487,160	783,822,626	10.0%	14.0%
Revenues from Other Local Sources	53,825,891	53,512,349	55,294,124	55,761,807	59,498,452	71,906,878	75,479,310	5.8%	5.0%
Total Expenditures (School Dist., Counties, & Cities)	**6,637,301,335**	**7,107,985,882**	**7,842,812,965**	**8,494,369,295**	**9,505,322,638**	**9,350,698,480**	**9,733,568,386**	**6.6%**	**4.1%**
Administration	1,980,294,382	2,139,709,564	2,305,369,071	2,493,544,425	2,685,614,962	2,730,564,574	2,840,778,134	6.2%	4.0%
Instruction	2,145,585,735	2,285,714,832	2,486,367,899	2,712,407,475	2,880,759,805	2,932,893,933	3,000,354,350	5.7%	2.3%
Public Safety	665,130,746	718,142,128	806,537,423	838,959,738	902,527,224	938,215,040	1,026,389,358	7.5%	9.4%
Transportation	182,032,766	188,818,166	222,862,264	220,244,536	230,043,087	252,647,228	273,051,009	7.0%	8.1%
Health & Human Services	124,584,570	129,146,919	144,770,743	155,037,578	175,485,584	173,284,681	191,822,396	7.5%	10.7%
Environment & Housing	220,858,025	254,130,453	257,684,690	252,881,863	282,646,898	310,382,868	352,826,879	8.1%	13.7%
Recreation & Culture	146,927,848	152,729,474	176,828,763	183,323,672	192,955,375	216,161,222	221,090,556	7.0%	2.3%
Debt Service/Interest on Debt /4	405,155,159	411,371,401	506,234,170	553,573,249	916,728,299	682,681,228	682,023,434	9.1%	-0.1%
Land Purchase & Facility Construction	678,942,405	738,752,581	789,999,325	965,647,537	1,078,441,172	997,840,392	1,001,299,342	6.7%	0.3%
All Other	87,789,699	89,470,364	146,158,617	118,749,221	160,120,232	116,027,314	143,932,927	8.6%	24.1%

1/ FY 96 was the first year School Districts received the Property Tax Reimbursement. Actual Property Tax Reimbursement for FY 00 was $251,576,947 because of differences in accounting.

2/ FY 96 was the first year School Districts separated out the Merchant's Inventory Tax, in past years it was included in Current Real and Personal Property Taxes. Actual Local Government Fund appropriation for FY 00 was $218,056,570.

3/ FY 96 was the first year School Districts separated out the Homestead Exemption. Actual Homestead Reimbursement for FY 00 was $53,579,824 because of differences in accounting. FY 01 the exemption was increased from $20,000 to $50,000.

4/ School Districts include total debt service but the Counties and Cities include only the interest on debt.

5/ Prior to FY 97 all County & Municipal data is from the F-65 Report and School District Data is from the Dept. of Education.

6/ Beginning in FY 97, County Personal Property Tax, Homestead, Manufacturer's Depreciation, Fee in Lieu, Local Option Sales Tax, Merchant's Inventory, and Motor Carrier Tax data is from the Comptroller General's office, all other data is from the F-65 and the Dept. of Education.

South Carolina

Total Property Taxes	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04	Compound Growth Rate	FY 04 Percent Change
Total for School Districts, Counties, & Cities	2,259,133,498	2,414,623,898	2,613,186,731	2,771,124,427	3,086,707,525	3,242,461,172	3,429,329,345	7.2%	5.8%
School District Total	1,320,389,281	1,436,351,896	1,570,819,771	1,701,944,624	1,880,966,610	2,018,951,520	2,148,266,421	8.5%	6.4%
County Total	688,113,111	725,484,223	773,779,050	790,548,217	894,911,536	894,412,330	940,283,543	5.3%	5.1%
Cities Total	250,631,106	252,787,779	268,587,910	278,631,586	310,829,379	329,097,322	340,779,381	5.3%	3.5%

Assessed Property Values for Tax Years	1997	1998	1999	2000	2001	2002	2003		
Total Assessed Value	11,157,180,737	11,762,368,029	12,848,921,207	13,458,465,652	14,623,633,541	14,964,365,206	15,595,809,758	5.7%	4.2%
Owner Occupied	2,556,198,725	2,804,354,307	3,085,227,312	3,264,431,069	3,699,779,681	3,976,893,938	4,216,071,993	8.7%	6.0%
Agricultural (Private)	83,276,568	85,146,209	86,839,487	87,282,929	88,792,531	89,080,131	90,053,219	1.3%	1.1%
Agricultural (Corporate)	25,315,170	24,610,593	25,424,878	24,371,064	24,101,829	23,556,785	23,319,861	-1.4%	-1.0%
Commercial/Rental	2,904,511,502	3,077,646,760	3,461,947,317	3,716,561,440	4,368,204,628	4,521,071,582	4,830,517,433	8.8%	6.8%
Personal Property (Vehicles)	2,016,491,742	2,111,239,998	2,297,835,902	2,207,688,013	2,209,728,562	2,147,095,451	2,120,497,898	0.8%	-1.2%
Other Personal Property County	0	0	0	211,264,035	223,010,089	209,572,819	388,425,323	n/a	85.3%
Manufacturing w/o Fee in Lieu Values /1	1,468,579,460	1,435,497,546	1,451,965,431	1,412,608,389	1,350,906,592	1,281,480,031	1,230,088,735	-2.9%	-4.0%
Utility	1,195,120,039	1,221,991,106	1,254,909,928	1,310,901,932	1,347,207,903	1,361,458,842	1,303,039,166	1.5%	-4.3%
Business Personal	563,713,881	598,626,907	642,996,728	662,513,783	654,627,902	647,852,863	634,820,707	2.0%	-2.0%
Motor Carrier	6,418,231	26,297,471	45,009,634	48,793,003	57,865,722	59,193,493	55,675,202	43.3%	-5.9%
Fee-in-Lieu and Joint Industrial Park	337,555,419	376,957,132	496,764,590	512,049,995	599,408,102	647,109,271	703,300,221	13.0%	8.7%
Total Average Millage Rates /2	**263.0**	**264.4**	**268.4**	**263.5**	**273.6**	**284.4**	**283.7**	**1.3%**	**-0.2%**
School Districts /3	140.3	144.4	144.2	146.0	146.9	151.3	153.3	1.5%	1.3%
Counties /4	62.3	61.5	60.0	58.4	60.8	59.2	59.6	-0.7%	0.8%
Cities & Special Purpose Districts /5	60.6	58.5	64.2	59.0	65.9	73.9	70.7	2.6%	-4.3%

Estimated Total Property Tax Revenues	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04		
Total Property Tax Revenues	2,259,133,498	2,414,623,898	2,613,186,731	2,771,124,427	3,086,707,524	3,242,461,172	3,429,329,344	7.2%	5.8%
Owner Occupied	312,687,361	364,582,551	408,416,005	413,379,293	512,833,771	587,847,737	652,197,368	13.0%	10.9%
Agricultural (Private)	18,815,305	19,748,074	19,922,286	20,396,696	21,260,238	22,139,028	23,343,222	3.7%	5.4%
Agricultural (Corporate)	5,738,098	5,647,679	5,776,330	5,639,242	5,686,525	5,715,216	5,870,150	0.4%	2.7%
Commercial/Rental	646,529,351	684,958,459	754,814,134	823,527,804	981,721,183	1,037,156,175	1,119,924,871	9.6%	8.0%
Personal Property (Vehicles)	453,171,120	480,219,955	516,413,544	508,446,699	518,028,317	518,227,518	518,239,353	2.3%	0.0%
Other Personal Property County	0	0	0	47,126,396	50,833,226	48,918,142	82,866,690	n/a	69.4%
Manufacturing	347,370,863	350,285,575	359,737,684	368,474,261	369,478,253	364,877,027	361,613,522	0.7%	-0.9%
Utility	274,209,828	283,294,035	288,550,647	308,353,196	321,687,356	333,232,887	328,084,635	3.0%	-1.5%
Business Personal	127,150,340	136,835,533	144,624,207	152,528,498	155,098,800	156,555,973	156,390,794	3.5%	-0.1%
Motor Carrier	1,459,090	6,015,901	10,069,783	11,120,205	13,481,294	14,382,656	13,541,691	45.0%	-5.8%
Fee-in-Lieu and Joint Industrial Park	71,987,785	83,025,653	104,845,022	112,132,137	136,598,560	153,408,814	167,257,047	15.1%	9.0%

1/ Assessed Manufacturing Property Values excludes assessed value attributable to manufacturing property allowed Fee in Lieu.

2/ The Total Average Millage Rate is an average of millage rates applied in each tax district as reported in the "Millage Rate Report", Office of Research and Statistics, SC Budget and Control Board. It is computed from a survey of millage rates in all 1,100 tax districts in the state by taking a simple average of tax districts in each county and averaging the county estimates together weighted by assessed value in each county.

3/ Implicit School District Average Millage Rate is computed from the tax revenues reported by the school districts and their assessed values.

4/ Implicit County Average Millage Rate is computed from the tax revenues reported by the counties and their assessed values.

5/ Cities and Special Purpose Districts Millage Rate is that millage not included in the school district and county average millage rates.

6/ Car Tax Phase-down begins in TY 2002

South Carolina

	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04	Compound Growth Rate	FY 04 Percent Change
Total Revenues (School District only)	**4,629,513,611**	**4,844,609,439**	**5,507,909,464**	**5,852,768,815**	**7,154,114,505**	**6,353,432,796**	**7,214,008,964**	**7.7%**	**13.5%**
Revenues from Local Sources	2,208,586,386	2,283,437,747	2,614,964,259	2,608,754,309	3,897,577,826	3,142,646,250	3,940,967,328	10.1%	25.4%
Current Property Taxes	1,339,063,202	1,457,023,020	1,592,475,294	1,727,458,495	1,904,743,585	2,043,505,200	2,167,693,716	8.4%	6.1%
Current Real & Personal Property Taxes	1,338,652,073	1,454,697,828	1,588,402,194	1,717,986,263	1,895,467,737	2,035,799,713	2,159,895,218	8.3%	6.1%
Fee In Lieu of Property Tax	0	0	0	0	0	0	0	n/a	n/a
All Other	411,129	2,325,192	4,073,100	9,472,232	9,275,848	7,705,487	7,798,498	63.3%	1.2%
Local Options Sales Tax	0	0	0	0	0	0	0	n/a	n/a
Local Hospitality Tax	0	0	0	0	0	0	0	n/a	n/a
Local Accommodations Tax	0	0	0	0	0	0	0	n/a	n/a
Capital Projects Tax	0	0	0	0	0	0	0	n/a	n/a
Licenses, fees, Charges, Bonds, etc.	869,523,184	826,414,727	1,022,488,965	881,295,814	1,992,834,241	1,099,141,050	1,773,273,612	12.6%	61.3%
Licenses & Permits	0	0	0	0	0	0	0	n/a	n/a
Service Revenue & Charges	248,916,487	254,523,518	272,189,250	289,566,882	258,592,722	258,182,974	303,511,851	3.4%	17.6%
Bonds & Leases	558,358,854	486,350,656	587,163,526	415,856,154	1,485,764,080	735,480,232	1,357,794,302	16.0%	84.6%
Miscellaneous	62,247,843	85,540,553	163,136,189	175,872,778	248,477,439	105,477,844	111,967,459	10.3%	6.2%
Revenues from State Sources	2,087,554,686	2,211,002,872	2,496,526,076	2,814,865,777	2,761,810,833	2,657,224,594	2,637,712,984	4.0%	-0.7%
Reimbursements for Property Tax Relief /1	224,121,205	233,362,682	247,067,328	237,740,298	244,066,474	245,054,959	243,090,660	1.4%	-0.8%
State-Shared Taxes /2	18,302,785	19,510,674	19,988,330	20,615,619	19,812,343	19,748,284	19,821,400	1.3%	0.4%
Homestead Exemption /3	22,706,275	26,616,039	25,904,157	60,003,064	65,475,167	73,004,779	77,363,826	22.7%	6.0%
Manufacturer's Depreciation Reimbursement	2,331,272	8,505,812	13,748,537	16,775,834	18,925,963	21,295,654	20,936,636	44.2%	-1.7%
State Grants 4/	445,192,568	456,750,630	640,092,159	841,125,000	848,111,356	748,735,203	717,263,710	8.3%	-4.2%
Education Finance Act (EFA)	1,006,508,468	1,078,080,282	1,114,273,990	1,152,028,357	1,088,775,840	1,032,204,791	1,027,981,967	0.4%	-0.4%
Education Improvement Act (EIA)	368,392,113	388,176,753	435,451,575	486,577,605	476,643,690	478,198,256	476,719,657	4.4%	-0.3%
Education Lottery	0	0	0	0	0	38,982,668	54,535,128	n/a	39.9%
Revenues from Federal Sources	333,372,539	350,168,820	396,419,129	429,148,729	494,725,846	553,561,952	635,328,652	11.3%	14.8%
Revenues from Other Local Sources	0	0	0	0	0	0	0	n/a	n/a
Total Expenditures (School District Only)	**4,466,288,305**	**4,816,512,183**	**5,267,161,585**	**5,830,810,104**	**6,546,488,735**	**6,381,004,157**	**6,481,000,438**	**6.4%**	**1.6%**
Administration	1,441,631,731	1,538,498,189	1,661,678,461	1,831,901,694	1,900,848,151	1,988,457,568	2,045,325,438	6.0%	2.9%
Instruction	2,145,585,735	2,285,714,832	2,486,367,899	2,712,407,475	2,880,759,805	2,932,893,933	3,000,354,350	5.7%	2.3%
Public Safety	0	0	0	0	0	0	0	n/a	n/a
Transportation	0	0	0	0	0	0	0	n/a	n/a
Health & Human Services	8,530,981	8,627,125	9,380,879	9,544,389	11,133,992	12,511,715	10,705,064	3.9%	-14.4%
Environment & Housing	0	0	0	0	0	0	0	n/a	n/a
Recreation & Culture	6,390,086	8,042,199	8,845,775	8,430,954	8,927,437	8,194,205	8,261,488	4.4%	0.8%
Debt Service/Interest on Debt	342,082,221	356,141,019	459,362,096	491,602,860	826,307,443	602,090,131	608,256,430	10.1%	1.0%
Purchase of Land & Facility Construction	512,078,295	608,673,116	623,695,464	752,176,292	881,822,517	807,132,784	764,065,487	6.9%	-5.3%
All Other	9,989,256	10,815,703	17,831,011	24,746,440	36,689,390	29,723,821	44,032,181	28.0%	48.1%

1/ FY 96 was the first year School Districts received the Property Tax Reimbursement

2/ FY 96 was the first year School Districts separated out the Merchant's Inventory Tax to the Aid to Subdivisions, in past years it was included in Current Real and Personal Property Taxes.

3/ FY 96 was the first year School Districts separated out the Homestead Exemption, in past years it was included in Current Real and Personal Property Taxes. FY 2001 the exemption was increased from $20,000 to $50,000

4/ FY 00 increase in State Grants is due to the State School Facilities Bond Act, $125MM given to School Districts for building funds.

South Carolina

	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04	6 Year Compound Growth Rate	FY 04 Percent Change
Total Revenues (County only)	**1,564,440,419**	**1,670,754,077**	**1,848,115,417**	**1,987,135,813**	**2,091,418,646**	**2,065,584,995**	**2,230,552,323**	**6.1%**	**8.0%**
Revenues from Local Sources	1,205,735,455	1,286,595,559	1,419,114,526	1,497,911,001	1,628,482,873	1,607,961,145	1,746,745,033	6.4%	8.6%
Current Property Taxes	688,113,111	725,484,223	773,779,050	790,548,217	894,911,536	894,412,330	940,283,543	5.3%	5.1%
Current Real & Personal Property Taxes	630,968,590	662,713,180	696,853,320	701,492,376	797,245,107	785,479,702	817,436,842	4.4%	4.1%
Fee In Lieu of Property Tax	15,787,840	23,395,017	28,984,609	36,920,881	40,921,240	45,247,972	48,565,162	20.6%	7.3%
All Other	41,356,681	39,376,026	47,941,122	52,134,960	56,745,189	63,684,656	74,281,539	10.3%	16.6%
Local Options Sales Tax	55,563,217	70,289,724	77,561,820	85,899,053	86,497,285	83,038,776	93,015,930	9.0%	12.0%
Local Hospitality Tax	23,531,911	24,570,019	25,253,940	35,097,376	31,799,512	31,893,353	37,232,108	7.9%	16.7%
Local Accommodations Tax	9,539,328	10,719,350	12,804,368	12,813,636	11,980,143	12,901,761	13,421,397	5.9%	4.0%
Capital Projects Tax	1,633,347	11,707,048	22,883,475	22,122,327	26,139,176	25,794,903	28,333,633	60.9%	9.8%
Licenses, fees, Charges, Bonds, etc.	427,354,541	443,825,195	506,831,873	551,430,392	577,155,221	559,920,022	634,458,423	6.8%	13.3%
Licenses & Permits	44,852,616	55,797,695	59,768,181	63,338,641	82,623,857	77,278,240	85,040,074	11.3%	10.0%
Service Revenue & Charges	295,453,593	308,195,897	345,158,267	370,719,782	391,955,527	400,813,235	463,905,619	7.8%	15.7%
Bonds & Leases	0	0	0	0	0	0	0	n/a	n/a
Miscellaneous	87,048,332	79,831,602	101,905,425	117,371,969	102,575,837	81,828,547	85,512,730	-0.3%	4.5%
Revenues from State Sources	291,535,228	303,972,848	346,372,677	367,245,822	362,976,992	357,516,306	375,097,431	4.3%	4.9%
Reimbursements for Property Tax Relief /1	0	0	0	0	0	0	0	n/a	n/a
State-Shared Taxes /2	184,578,033	193,393,081	200,842,842	212,016,490	220,586,226	217,982,826	223,807,757	3.3%	2.7%
Homestead Exemption /3	16,719,455	14,515,358	14,985,931	33,006,036	34,508,315	36,349,195	38,111,886	14.7%	4.8%
Manufacturer's Depreciation Reimbursement	3,086,692	6,529,484	10,057,359	11,034,560	11,871,119	11,847,302	12,943,803	27.0%	9.3%
State Grants	87,151,048	89,534,925	120,486,545	111,188,736	96,011,332	91,336,983	100,233,985	2.4%	9.7%
Education Finance Act (EFA)	0	0	0	0	0	0	0	n/a	n/a
Education Improvement Act (EIA)	0	0	0	0	0	0	0	n/a	n/a
Revenues from Federal Sources	49,865,849	68,937,782	62,284,103	88,096,660	74,620,427	64,495,427	76,335,203	7.4%	18.4%
Revenues from Other Local Sources	16,652,580	11,247,888	20,344,110	33,882,330	25,338,354	35,612,117	32,374,655	11.7%	-9.1%
Total Expenditures (County only)	**1,304,015,214**	**1,464,120,527**	**1,666,349,926**	**1,737,317,345**	**1,911,484,405**	**1,886,179,156**	**2,058,741,783**	**7.9%**	**9.1%**
Administration	378,810,703	428,538,106	449,574,672	470,350,941	566,557,623	516,433,536	547,644,342	6.3%	6.0%
Instruction	0	0	0	0	0	0	0	n/a	n/a
Public Safety	349,746,778	386,177,889	425,914,098	461,962,208	504,109,152	520,798,634	575,792,660	8.7%	10.6%
Transportation	118,656,814	132,368,160	159,185,607	150,582,352	155,219,477	170,712,988	169,615,127	6.1%	-0.6%
Health & Human Services	113,320,561	118,131,977	133,484,273	143,163,805	161,326,027	158,319,644	178,009,047	7.8%	12.4%
Environment & Housing	121,267,506	153,802,734	155,927,176	146,431,772	167,133,751	183,422,821	209,833,450	9.6%	14.4%
Recreation & Culture	74,065,541	75,047,085	87,555,118	95,505,570	100,401,221	103,136,591	106,975,156	6.3%	3.7%
Debt Service/Interest on Debt	40,719,094	41,822,028	33,616,977	46,186,312	77,226,669	59,948,610	54,067,470	4.8%	-9.8%
Land Purchase & Facility Construction	66,121,655	86,134,568	128,790,142	164,942,648	127,907,473	125,217,150	158,364,664	15.7%	26.5%
All Other	41,306,562	42,097,980	92,301,863	58,191,737	51,603,012	48,189,182	58,439,866	6.0%	21.3%

South Carolina

	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04	6 Year Compound Growth Rate	FY 04 Percent Change
Total Revenues (Cities only)	**873,008,905**	**913,455,528**	**950,589,250**	**996,003,866**	**1,080,797,768**	**1,166,108,447**	**1,273,964,556**	**6.5%**	**9.2%**
Revenues from Local Sources	695,255,817	723,828,527	767,386,936	834,246,720	896,210,772	951,787,328	1,037,804,725	6.9%	9.0%
Current Property Taxes	250,631,106	252,787,779	268,587,910	278,631,586	310,829,379	329,097,322	340,779,381	5.3%	3.5%
Current Real & Personal Property Taxes	237,954,156	240,793,216	255,918,128	263,447,575	294,064,710	311,972,191	323,280,947	5.2%	3.6%
Fee In Lieu of Property Tax	3,102,446	3,144,165	3,229,346	2,651,960	4,093,724	4,140,995	5,009,188	8.3%	21.0%
All Other	9,574,504	8,850,398	9,440,436	12,532,051	12,670,943	12,984,136	12,489,245	4.5%	-3.8%
Local Options Sales Tax	35,186,798	42,895,714	43,242,068	45,949,600	46,592,303	51,627,866	68,041,154	11.6%	31.8%
Local Hospitality Tax	11,152,662	12,522,372	15,231,684	20,166,243	26,525,272	42,259,537	50,853,991	28.8%	20.3%
Local Accommodations Tax	7,787,548	7,440,338	7,605,699	9,556,910	10,375,451	13,053,960	14,854,633	11.4%	13.8%
Capital Projects Tax	0	0	0	0	0	0	0	n/a	n/a
Licenses, fees, Charges, Bonds, etc.	390,497,703	408,182,324	432,719,575	479,942,382	501,888,367	515,748,643	563,275,566	6.3%	9.2%
Licenses & Permits	193,561,569	209,993,787	214,644,599	241,588,973	262,342,745	277,205,294	297,498,297	7.4%	7.3%
Service Revenue & Charges	132,371,622	136,295,689	141,897,482	148,241,446	157,697,098	165,245,389	192,584,278	6.4%	16.5%
Bonds & Leases	0	0	0	0	0	0	0	n/a	n/a
Miscellaneous	64,564,512	61,892,848	76,177,494	90,111,963	81,848,525	73,297,961	73,192,991	2.1%	-0.1%
Revenues from State Sources	81,957,022	89,083,625	96,659,206	89,978,009	95,664,049	108,596,576	120,802,631	6.7%	11.2%
Reimbursements for Property Tax Relief /1	0	0	0	0	0	0	0	n/a	n/a
State-Shared Taxes /2	60,149,731	60,956,935	62,888,896	60,813,748	62,027,879	69,018,799	68,375,463	2.2%	-0.9%
Homestead Exemption /3	5,165,095	5,067,108	5,019,639	10,858,222	11,028,726	10,659,057	13,389,398	17.2%	25.6%
Manufacturer's Depreciation Reimbursement	361,790	692,923	1,177,302	1,393,918	1,524,199	1,703,409	1,954,363	32.5%	14.7%
State Grants	16,280,406	22,366,659	27,573,369	16,912,122	21,083,245	27,215,310	37,083,407	14.7%	36.3%
Education Finance Act (EFA)	0	0	0	0	0	0	0	n/a	n/a
Education Improvement Act (EIA)	0	0	0	0	0	0	0	n/a	n/a
Revenues from Federal Sources	58,622,755	58,278,915	51,593,094	49,899,659	54,762,850	69,429,781	72,158,771	3.5%	3.9%
Revenues from Other Local Sources	37,173,311	42,264,461	34,950,014	21,879,477	34,160,098	36,294,761	43,104,655	2.5%	18.8%
Total Expenditures (Cities only)	**866,997,816**	**827,353,172**	**909,301,454**	**926,241,846**	**1,047,349,498**	**1,083,515,167**	**1,193,826,165**	**5.5%**	**10.2%**
Administration	159,851,948	172,673,269	194,115,938	191,291,790	218,209,188	225,673,470	247,808,354	7.6%	9.8%
Instruction	0	0	0	0	0	0	0	n/a	n/a
Public Safety	315,383,968	331,964,239	380,623,325	376,997,530	398,418,072	417,416,406	450,596,698	6.1%	7.9%
Transportation	63,375,952	56,450,006	63,676,657	69,662,184	74,823,610	81,934,240	103,435,882	8.5%	26.2%
Health & Human Services	2,733,028	2,387,817	1,905,591	2,329,384	3,025,565	2,453,322	3,108,285	2.2%	26.7%
Environment & Housing	99,590,519	100,327,719	101,757,514	106,450,091	115,513,147	126,960,047	142,993,429	6.2%	12.6%
Recreation & Culture	66,472,221	69,640,190	80,427,870	79,387,148	83,626,717	104,830,426	105,853,912	8.1%	1.0%
Debt Service/Interest on Debt	22,353,844	13,408,354	13,255,097	15,784,077	13,194,187	20,642,487	19,699,534	-2.1%	-4.6%
Purchase of Land & Facility Construction	100,742,455	43,944,897	37,513,719	48,528,597	68,711,182	65,490,458	78,869,191	-4.0%	20.4%
All Other	36,493,881	36,556,681	36,025,743	35,811,044	71,827,830	38,114,311	41,460,880	2.1%	8.8%

South Carolina

Estimated School District Tax Revenues	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04	6 Year Compound Growth Rate	FY 04 Percent Change
Total Revenues	1,341,394,474	1,465,528,832	1,606,223,831	1,701,944,624	1,877,343,519	2,014,175,997	2,132,787,625	8.0%	5.9%
Owner Occupied	134,550,871	174,871,234	204,205,861	240,131,619	301,028,513	361,771,683	411,789,076	20.5%	13.8%
Agricultural (Private)	11,684,921	12,550,411	12,765,141	12,626,692	13,115,817	13,614,910	14,285,878	3.4%	4.9%
Agricultural (Corporate)	3,552,089	3,589,417	3,688,364	3,439,289	3,493,782	3,504,854	3,557,700	0.0%	1.5%
Commercial/Rental	407,545,455	424,513,960	474,096,532	508,498,833	598,525,403	644,701,239	693,825,480	9.3%	7.6%
Personal Property (Vehicles)	282,943,291	305,917,489	332,616,524	321,331,912	325,794,272	331,000,080	330,901,775	2.6%	0.0%
Other Personal Property	0	0	0	29,064,588	31,170,375	30,876,835	49,185,800	n/a	59.3%
Manufacturing	206,063,183	213,728,426	218,671,208	213,159,459	206,198,333	204,868,978	200,382,139	-0.5%	-2.2%
Utility	167,692,825	185,798,458	190,583,627	197,742,539	205,395,287	215,059,513	211,499,063	3.9%	-1.7%
Business Personal	79,097,304	85,922,671	91,983,443	95,199,625	96,039,202	99,352,361	99,282,521	3.9%	-0.1%
Motor Carrier	900,572	3,900,589	6,505,590	6,999,762	8,418,288	9,127,629	8,561,581	45.5%	-6.2%
Fee-in-Lieu and Joint Industrial Park	47,363,963	54,736,177	71,107,542	73,750,304	88,164,248	100,297,914	109,516,613	15.0%	9.2%

Estimated County Tax Revenues	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04	6 Year Compound Growth Rate	FY 04 Percent Change
Total Revenues	708,570,566	746,529,065	798,822,341	786,633,372	887,201,122	883,935,821	925,733,543	4.6%	4.7%
Owner Occupied	158,722,025	174,648,891	186,632,585	191,593,653	224,622,158	234,090,782	249,191,775	7.8%	6.5%
Agricultural (Private)	5,170,891	5,841,370	5,988,075	5,902,089	6,191,033	6,501,432	6,905,899	4.9%	6.2%
Agricultural (Corporate)	1,571,895	1,704,443	1,776,636	1,698,495	1,685,217	1,705,083	1,787,218	2.2%	4.8%
Commercial/Rental	180,349,807	189,735,652	206,260,788	215,671,924	259,106,787	261,478,145	278,847,331	7.5%	6.6%
Personal Property (Vehicles)	125,210,004	130,316,814	138,643,513	129,745,726	134,883,574	129,280,011	128,691,067	0.5%	-0.5%
Other Personal Property	833,038	876,214	0	12,234,261	13,407,452	12,438,910	19,559,296	69.2%	57.2%
Manufacturing	106,976,332	107,706,731	114,502,086	81,598,060	84,835,140	76,731,681	75,624,775	-5.6%	-1.4%
Utility	74,208,578	75,719,458	76,773,173	79,320,023	83,795,248	83,225,654	82,717,258	1.8%	-0.6%
Business Personal	35,002,681	37,361,024	38,991,418	39,160,340	40,983,394	38,789,993	38,675,819	1.7%	-0.3%
Motor Carrier	398,527	1,651,634	2,775,270	3,012,476	3,730,834	3,842,012	3,607,601	44.4%	-6.1%
Fee-in-Lieu and Joint Industrial Park	20,959,826	21,843,046	26,478,797	26,696,323	33,960,284	35,852,118	40,125,504	11.4%	11.9%

Sec 9.3 Ref 37

SCWRC Report 132

REPORT ON GROUND-WATER CONDITIONS IN THE LOW COUNTRY AREA, SOUTH CAROLINA

By
B.C. Spignor and Camille Ransom
1979

ABSTRACT

The Low Country Capacity Use Investigation was initiated by the S. C, Water Resources Commission (SCWRC) in 1973 at the request of legislative and local officials in the four-county area. As required by the S. C. Ground Water Use Act of 1969, the SCWRC must report on ground-water problems in a capacity-use study area. The results of a technical ground-water investigation, made by the U. S. Geological Survey (WRD) in cooperation with the SCWRC, are contained in SCWRC Report Number 9 entitled, "The Ground-Water Resources of Beaufort, Colleton, Hampton, and Jasper Counties, South Carolina". Therefore, this report and SCWRC Report Number 9 are submitted to fulfill the requirement of the Act, and to make the findings of the investigation available to the public.

Ground water is the most important source of water supplies in the Low Country area. Six major aquifer systems have been identified. From the surface downward, these are: (1) the Hawthorne-Recent, (2) the Tertiary Limestone, (3) the Black Mingo, (4) the Peedee, (5) the Black Creek, and (6) the Tuscaloosa Aquifer Systems. Approximately 50 million gallons per day (Mgd) of ground water are withdrawn daily from these aquifer systems. The largest withdrawals, approximately 35 Mgd, are from the Tertiary Limestone Aquifer. In the adjacent Savannah area, approximately 75 Mgd to 90 Mgd of ground water are being pumped from this aquifer system for industrial and municipal water supplies.

There are several major ground-water problems that are occurring now in the Low Country area, and other problems that are likely to become major problems unless a comprehensive management plan is initiated. Documented problems include: (1) Regional water-level declines (loss of artesian pressure) throughout large areas of the Low Country and adjacent counties in Georgia; (2) Salt-water contamination of the Tertiary Limestone Aquifer in the coastal area, primarily in Beaufort County; (3) Local well interference, where water levels have been lowered below some intakes; (4) Interaquifer transfer, resulting in artesian pressure losses and/or water quality impairment; (5) Inadequate requirements relating to well location, spacing, construction, and abandonment; and (6) No requirements for proper water-use, well-construction, and hydraulic data reporting.

Potential problems include: (1) Subsidence of the land surface (compaction subsidence) caused by excessive, concentrated ground-water withdrawals; (2) Local dewatering of the Tertiary Limestone Aquifer; (3) Land-surface subsidence and collapse, if certain conditions are created by improperly-planned well location and spacing, or by dewatering operations; and (4) Ground-water pollution of aquifers within the Hawthorne-Recent and in the Tertiary Limestone Aquifer Systems.

There are several administrative problems that have a bearing on an effective ground-water management program. These are: (1) Technical data acquisition and technology transfer; (2) Uncoordinated water resources development; and (3) Economics and financing of ground-water management.

An assessment of these technical and administrative problems indicates that (1) The major technical problems are related to ground-water withdrawals from the Tertiary Limestone Aquifer; (2) Many of the problems are

interrelated, and the solution of one problem would permit the solution of another problem; (3) There is no local, state, or federal regulation which is capable of providing appropriate remedies for all of these ground-water problems; (4) A ground-water management program is urgently needed that will provide for the proper development of the ground-water resources, and aid in eliminating some of the current problems; and (5) The uses of ground water in the Low Country area have developed to a degree which requires coordination and regulation. Therefore, it is recommended that the Low Country area, which includes all of Beaufort, Jasper, Colleton, and Hampton Counties and Edisto Island in Charleston County, be declared a capacity use area.

If the Low Country area is declared a capacity use area, the SCWRC would have the authority to promulgate regulations concerning the drilling of wells and the withdrawal of ground water in the capacity use area. The following ground-water management methods are needed to protect the aquifers and ground-water users in the Low Country area: (1) Coordinated water-supply planning; (2) Regulations to limit ground-water withdrawals in areas where the supply is limited or where the movement of poor-quality water is degrading a fresh-water aquifer; (3) Regulations related to well spacing, well construction, and abandonment; (4) Regulations related to proper testing of aquifers during well-construction operations, and the proper reporting of this information; (5) Best practical management of ground-water systems; (6) Water conservation and alternative water-source selection; and (7) Proper ground-water monitoring.

Copies of this report are available in the SCDNR's Columbia office.

Lec 9.3 Ref 38

Appendix B.—RIMS II Detailed Industries

Detailed industry code and title	Related 1997 NAICS codes
AGRICULTURE, FORESTRY, FISHING, AND HUNTING	
1110 Crop production	
1111A0 Oilseed farming	11111, 11112
1111B0 Grain farming	11113, 11114, 11115, 11116, 11119
111200 Vegetable and melon farming	1112
1113A0 Fruit farming	11131, 11132, 111331-4, 111336, 111339
111335 Tree nut farming	111335
111400 Greenhouse and nursery production	1114
111910 Tobacco farming	11191
111920 Cotton farming	11192
1119A0 Sugarcane and sugar beet farming	11193, 111991
1119B0 All other crop farming	11194, 111992, 111998
1120 Animal production	
112100 Cattle ranching and farming	1121
112300 Poultry and egg production	1123
112A00 Animal production, except cattle and poultry and eggs	1122, 1124, 1125, 1129
1130 Forestry and logging	
113A00 Forest nurseries, forest products, and timber tracts	1131, 1132
113300 Logging	1133
1140 Fishing, hunting and trapping	
114100 Fishing	1141
114200 Hunting and trapping	1142
1150 Agriculture and forestry support activities	
115000 Agriculture and forestry support activities	115
MINING	
2110 Oil and gas extraction	
211000 Oil and gas extraction	211
2121 Coal mining	
212100 Coal mining	2121
2122 Metal ores mining	
212210 Iron ore mining	21221
212230 Copper, nickel, lead, and zinc mining	21223
2122A0 Gold, silver, and other metal ore mining	21222, 21229
2123 Nonmetallic mineral mining and quarrying	
212310 Stone mining and quarrying	21231
212320 Sand, gravel, clay, and refractory mining	21232
212390 Other nonmetallic mineral mining	21239
2130 Support activities for mining	
213111 Drilling oil and gas wells	213111
213112 Support activities for oil and gas operations	213112
21311A Support activities for other mining	213113-5
UTILITIES	
2211 Power generation and supply	
2211A0 Power generation and supply	2211 (1)
2212 Natural gas distribution	
221200 Natural gas distribution	2212
2213 Water, sewage and other systems	
221300 Water, sewage and other systems	2213
CONSTRUCTION	
2300 Construction	
230000 Construction	23

Detailed industry code and title	Related 1997 NAICS codes
MANUFACTURING	
3110 Food manufacturing	
311111 Dog and cat food manufacturing	311111
311119 Other animal food manufacturing	311119
311211 Flour milling	311211
311212 Rice milling	311212
311213 Malt manufacturing	311213
311221 Wet corn milling	311221
311222 Soybean processing	311222
311223 Other oilseed processing	311223
311225 Fats and oils refining and blending	311225
311230 Breakfast cereal manufacturing	31123
311310 Sugar manufacturing	31131
311320 Confectionery manufacturing from cacao beans	31132
311330 Confectionery manufacturing from purchased chocolate	31133
311340 Nonchocolate confectionery manufacturing	31134
311410 Frozen food manufacturing	31141
311420 Fruit and vegetable canning and drying	31142
311511 Fluid milk manufacturing	311511
311512 Creamery butter manufacturing	311512
311513 Cheese manufacturing	311513
311514 Dry, condensed, and evaporated dairy products	311514
311520 Ice cream and frozen dessert manufacturing	31152
311611 Animal, except poultry, slaughtering	311611
311612 Meat processed from carcasses	311612
311613 Rendering and meat byproduct processing	311613
311615 Poultry processing	311615
311700 Seafood product preparation and packaging	3117
31181A Bread and bakery product, except frozen, manufacturing	311811-2
311813 Frozen cakes and other pastries manufacturing	311813
311821 Cookie and cracker manufacturing	311821
311822 Mixes and dough made from purchased flour	311822
311823 Dry pasta manufacturing	311823
311830 Tortilla manufacturing	31183
311911 Roasted nuts and peanut butter manufacturing	311911
311919 Other snack food manufacturing	311919
311920 Coffee and tea manufacturing	31192
311930 Flavoring syrup and concentrate manufacturing	31193
311941 Mayonnaise, dressing, and sauce manufacturing	311941
311942 Spice and extract manufacturing	311942
311990 All other food manufacturing	31199
3121 Beverage manufacturing	
312110 Soft drink and ice manufacturing	31211
312120 Breweries	31212
312130 Wineries	31213
312140 Distilleries	31214
3122 Tobacco manufacturing	
312210 Tobacco stemming and redrying	31221
312221 Cigarette manufacturing	312221
312229 Other tobacco product manufacturing	312229
3130 Textile mills	
313100 Fiber, yarn, and thread mills	3131
313210 Broadwoven fabric mills	31321
313220 Narrow fabric mills and schiffli embroidery	31322
313230 Nonwoven fabric mills	31323
313240 Knit fabric mills	31324
313310 Textile and fabric finishing mills	31331
313320 Fabric coating mills	31332
3140 Textile product mills	
314110 Carpet and rug mills	31411
314120 Curtain and linen mills	31412
314910 Textile bag and canvas mills	31491
314992 Tire cord and tire fabric mills	314992
31499A Other miscellaneous textile product mills	314991, 314999
3150 Apparel manufacturing	
315111 Sheer hosiery mills	315111

Appendix B.—RIMS II Detailed Industries

Detailed industry code and title	Related 1997 NAICS codes
315119 Other hosiery and sock mills	315119
315190 Other apparel knitting mills	31519
315200 Cut and sew apparel manufacturing	3152
315900 Accessories and other apparel manufacturing	3159
3160 Leather and allied product manufacturing	
316100 Leather and hide tanning and finishing	3161
316200 Footwear manufacturing	3162
316900 Other leather product manufacturing	3169
3210 Wood product manufacturing	
321113 Sawmills	321113
321114 Wood preservation	321114
32121A Veneer and plywood manufacturing	321211-2
32121B Engineered wood member and truss manufacturing	321213-4
321219 Reconstituted wood product manufacturing	321219
321911 Wood windows and door manufacturing	321911
321912 Cut stock, resawing lumber, and planing	321912
321918 Other millwork, including flooring	321918
321920 Wood container and pallet manufacturing	32192
321991 Manufactured home, mobile home, manufacturing	321991
321992 Prefabricated wood building manufacturing	321992
321999 Miscellaneous wood product manufacturing	321999
3221 Pulp, paper, and paperboard mills	
322110 Pulp mills	32211
3221A0 Paper and paperboard mills	32212, 32213
3222 Converted paper product manufacturing	
322210 Paperboard container manufacturing	32221
32222A Coated and laminated paper and packaging materials	322221-2
32222B Coated and uncoated paper bag manufacturing	322223-4
322225 Flexible packaging foil manufacturing	322225
322226 Surface-coated paperboard manufacturing	322226
322231 Die-cut paper office supplies manufacturing	322231
322232 Envelope manufacturing	322232
322233 Stationery and related product manufacturing	322233
322291 Sanitary paper product manufacturing	322291
322299 All other converted paper product manufacturing	322299
3230 Printing and related support activities	
32311A Commercial printing	323110-5, 323119
323116 Manifold business forms printing	323116
323117 Books printing	323117
323118 Blankbook and looseleaf binder manufacturing	323118
323121 Tradebinding and related work	323121
323122 Prepress services	323122
3240 Petroleum and coal products manufacturing	
324110 Petroleum refineries	32411
324121 Asphalt paving mixture and block manufacturing	324121
324122 Asphalt shingle and coating materials manufacturing	324122
324191 Petroleum lubricating oil and grease manufacturing	324191
324199 All other petroleum and coal products manufacturing	324199
3251 Basic chemical manufacturing	
325110 Petrochemical manufacturing	32511
325120 Industrial gas manufacturing	32512
325130 Synthetic dye and pigment manufacturing	32513
325180 Other basic inorganic chemical manufacturing	32518
325190 Other basic organic chemical manufacturing	32519
3252 Resin, rubber, and artificial fibers manufacturing	
325211 Plastics material and resin manufacturing	325211
325212 Synthetic rubber manufacturing	325212
325221 Cellulosic organic fiber manufacturing	325221
325222 Noncellulosic organic fiber manufacturing	325222
3 Agricultural chemical manufacturing	
325311 Nitrogenous fertilizer manufacturing	325311
325312 Phosphatic fertilizer manufacturing	325312
325314 Fertilizer, mixing only, manufacturing	325314
325320 Pesticide and other agricultural chemical manufacturing	32532
3254 Pharmaceutical and medicine manufacturing	
325400 Pharmaceutical and medicine manufacturing	3254
3255 Paint, coating, and adhesive manufacturing	
325510 Paint and coating manufacturing	32551
325520 Adhesive manufacturing	32552
3256 Soap, cleaning compound, and toiletry manufacturing	
325611 Soap and other detergent manufacturing	325611
325612 Polish and other sanitation good manufacturing	325612
325613 Surface active agent manufacturing	325613
325620 Toilet preparation manufacturing	32562
3259 Other chemical product and preparation manufacturing	
325910 Printing ink manufacturing	32591
325920 Explosives manufacturing	32592
325991 Custom compounding of purchased resins	325991
325992 Photographic film and chemical manufacturing	325992
325998 Other miscellaneous chemical product manufacturing	325998
3260 Plastics and rubber products manufacturing	
326110 Plastics packaging materials, film and sheet	32611
326120 Plastics pipe, fittings, and profile shapes	32612
326130 Laminated plastics plate, sheet, and shapes	32613
3261A0 Foam product manufacturing	32614, 32615
326160 Plastics bottle manufacturing	32616
326192 Resilient floor covering manufacturing	326192
32619A Plastics plumbing fixtures and all other plastics products	326191, 326199
326210 Tire manufacturing	32621
326220 Rubber and plastics hose and belting manufacturing	32622
326290 Other rubber product manufacturing	32629
3270 Nonmetallic mineral product manufacturing	
327111 Vitreous china plumbing fixture manufacturing	327111
327112 Vitreous china and earthenware articles manufacturing	327112
327113 Porcelain electrical supply manufacturing	327113
327121 Brick and structural clay tile manufacturing	327121
327122 Ceramic wall and floor tile manufacturing	327122
32712A Clay refractory and other structural clay products	327123-4
327125 Nonclay refractory manufacturing	327125
327213 Glass container manufacturing	327213
32721A Glass and glass products, except glass containers	327211-2, 327215
327310 Cement manufacturing	32731
327320 Ready-mix concrete manufacturing	32732
327331 Concrete block and brick manufacturing	327331
327332 Concrete pipe manufacturing	327332
327390 Other concrete product manufacturing	32739
327410 Lime manufacturing	32741
327420 Gypsum product manufacturing	32742
327910 Abrasive product manufacturing	32791
327991 Cut stone and stone product manufacturing	327991
327992 Ground or treated minerals and earths manufacturing	327992
327993 Mineral wool manufacturing	327993
327999 Miscellaneous nonmetallic mineral products	327999
331A Iron and steel mills and manufacturing from purchased steel	
331111 Iron and steel mills	331111
331112 Ferroalloy and related product manufacturing	331112
331210 Iron, steel pipe and tube from purchased steel	33121
331221 Rolled steel shape manufacturing	331221
331222 Steel wire drawing	331222
331B Nonferrous metal production and processing	
331311 Alumina refining	331311
331312 Primary aluminum production	331312
331314 Secondary smelting and alloying of aluminum	331314
331315 Aluminum sheet, plate, and foil manufacturing	331315
331316 Aluminum extruded product manufacturing	331316
331319 Other aluminum rolling and drawing	331319
331411 Primary smelting and refining of copper	331411

Appendix B.—RIMS II Detailed Industries

Detailed industry code and title	Related 1997 NAICS codes
331419 Primary nonferrous metal, except copper and aluminum	331419
331421 Copper rolling, drawing, and extruding	331421
331422 Copper wire, except mechanical, drawing	331422
331423 Secondary processing of copper	331423
331491 Nonferrous metal, except copper and aluminum, shaping	331491
331492 Secondary processing of other nonferrous	331492
3315 Foundries	
331510 Ferrous metal foundries	33151
33152A Aluminum foundries	331521, 331524
33152B Nonferrous foundries, except aluminum	331522, 331525, 331528
3321 Forging and stamping	
332111 Iron and steel forging	332111
332112 Nonferrous forging	332112
332114 Custom roll forming	332114
33211A All other forging and stamping	332115-7
3322 Cutlery and handtool manufacturing	
332211 Cutlery and flatware, except precious, manufacturing	332211
332212 Hand and edge tool manufacturing	332212
332213 Saw blade and handsaw manufacturing	332213
332214 Kitchen utensil, pot, and pan manufacturing	332214
3323 Architectural and structural metals manufacturing	
332311 Prefabricated metal buildings and components	332311
332312 Fabricated structural metal manufacturing	332312
332313 Plate work manufacturing	332313
332321 Metal window and door manufacturing	332321
332322 Sheet metal work manufacturing	332322
332323 Ornamental and architectural metal work manufacturing	332323
4 Boiler, tank, and shipping container manufacturing	
332410 Power boiler and heat exchanger manufacturing	33241
332420 Metal tank, heavy gauge, manufacturing	33242
332430 Metal can, box, and other container manufacturing	33243
332A Ordnance and accessories manufacturing	
33299A Ammunition manufacturing	332992-3
332994 Small arms manufacturing	332994
332995 Other ordnance and accessories manufacturing	332995
332B Other fabricated metal product manufacturing	
332500 Hardware manufacturing	3325
332600 Spring and wire product manufacturing	3326
332710 Machine shops	33271
332720 Turned product and screw, nut, and bolt manufacturing	33272
332811 Metal heat treating	332811
332812 Metal coating and nonprecious engraving	332812
332813 Electroplating, anodizing, and coloring metal	332813
332910 Metal valve manufacturing	33291
332991 Ball and roller bearing manufacturing	332991
332996 Fabricated pipe and pipe fitting manufacturing	332996
332997 Industrial pattern manufacturing	332997
332998 Enameled iron and metal sanitary ware manufacturing	332998
332999 Miscellaneous fabricated metal product manufacturing	332999
3331 Agriculture, construction, and mining machinery	
333111 Farm machinery and equipment manufacturing	333111
333112 Lawn and garden equipment manufacturing	333112
333120 Construction machinery manufacturing	33312
333131 Mining machinery and equipment manufacturing	333131
333132 Oil and gas field machinery and equipment	333132
3332 Industrial machinery manufacturing	
333210 Sawmill and woodworking machinery	33321
333220 Plastics and rubber industry machinery	33322
333291 Paper industry machinery manufacturing	333291
333292 Textile machinery manufacturing	333292
333293 Printing machinery and equipment manufacturing	333293
333294 Food product machinery manufacturing	333294
333295 Semiconductor machinery manufacturing	333295
333298 All other industrial machinery manufacturing	333298
3333 Commercial and service industry machinery	
33331A Automatic vending, commercial laundry and drycleaning machinery	333311-2
333313 Office machinery manufacturing	333313
333314 Optical instrument and lens manufacturing	333314
333315 Photographic and photocopying equipment manufacturing	333315
333319 Other commercial and service machinery manufacturing	333319
3334 HVAC and commercial refrigeration equipment	
333411 Air purification equipment manufacturing	333411
333412 Industrial and commercial fan and blower manufacturing	333412
333414 Heating equipment, except warm air furnaces	333414
333415 AC, refrigeration, and forced air heating	333415
3335 Metalworking machinery manufacturing	
333511 Industrial mold manufacturing	333511
333512 Metal cutting machine tool manufacturing	333512
333513 Metal forming machine tool manufacturing	333513
333514 Special tool, die, jig, and fixture manufacturing	333514
333515 Cutting tool and machine tool accessory manufacturing	333515
33351A Rolling mill and other metalworking machinery	333516, 333518
3336 Turbine and power transmission equipment manufacturing	
333611 Turbine and turbine generator set units manufacturing	333611
33361A Speed changers and mechanical power transmission equipment	333612-3
333618 Other engine equipment manufacturing	333618
3339 Other general purpose machinery manufacturing	
333911 Pump and pumping equipment manufacturing	333911
333912 Air and gas compressor manufacturing	333912
333913 Measuring and dispensing pump manufacturing	333913
333921 Elevator and moving stairway manufacturing	333921
333922 Conveyor and conveying equipment manufacturing	333922
333923 Overhead cranes, hoists, and monorail systems	333923
333924 Industrial truck, trailer, and stacker manufacturing	333924
333991 Power-driven handtool manufacturing	333991
333992 Welding and soldering equipment manufacturing	333992
333993 Packaging machinery manufacturing	333993
333994 Industrial process furnace and oven manufacturing	333994
333995 Fluid power cylinder and actuator manufacturing	333995
333996 Fluid power pump and motor manufacturing	333996
33399A Scales, balances, and miscellaneous general purpose machinery	333997, 333999
3341 Computer and peripheral equipment manufacturing	
334111 Electronic computer manufacturing	334111
334112 Computer storage device manufacturing	334112
334113 Computer terminal manufacturing	334113
334119 Other computer peripheral equipment manufacturing	334119
334A Audio, video, and communications equipment manufacturing	
334210 Telephone apparatus manufacturing	33421
334220 Broadcast and wireless communications equipment	33422
334290 Other communications equipment manufacturing	33429
334300 Audio and video equipment manufacturing	3343
3344 Semiconductor and electronic component manufacturing	
334411 Electron tube manufacturing	334411
334413 Semiconductors and related device manufacturing	334413
33441A All other electronic component manufacturing	334412, 334414-9
3345 Electronic instrument manufacturing	
334510 Electromedical apparatus manufacturing	334510
334511 Search, detection, and navigation instruments	334511
334512 Automatic environmental control manufacturing	334512
334513 Industrial process variable instruments	334513
334514 Totalizing fluid meters and counting devices	334514
334515 Electricity and signal testing instruments	334515

Appendix B.—RIMS II Detailed Industries

Detailed industry code and title	Related 1997 NAICS codes
334516 Analytical laboratory instrument manufacturing	334516
334517 Irradiation apparatus manufacturing	334517
33451A Watch, clock, and other measuring and controlling device manufacturing	334518-9
3346 Magnetic media manufacturing and reproducing	
334611 Software reproducing	334611
334612 Audio and video media reproduction	334612
334613 Magnetic and optical recording media manufacturing	334613
3351 Electric lighting equipment manufacturing	
335110 Electric lamp bulb and part manufacturing	33511
335120 Lighting fixture manufacturing	33512
3352 Household appliance manufacturing	
335211 Electric housewares and household fan manufacturing	335211
335212 Household vacuum cleaner manufacturing	335212
335221 Household cooking appliance manufacturing	335221
335222 Household refrigerator and home freezer manufacturing	335222
335224 Household laundry equipment manufacturing	335224
335228 Other major household appliance manufacturing	335228
3353 Electrical equipment manufacturing	
335311 Electric power and specialty transformer manufacturing	335311
335312 Motor and generator manufacturing	335312
335313 Switchgear and switchboard apparatus manufacturing	335313
335314 Relay and industrial control manufacturing	335314
3359 Other electrical equipment and component manufacturing	
335911 Storage battery manufacturing	335911
335912 Primary battery manufacturing	335912
335921 Fiber optic cable manufacturing	335921
335929 Other communication and energy wire manufacturing	335929
335930 Wiring device manufacturing	33593
335991 Carbon and graphite product manufacturing	335991
335999 Miscellaneous electrical equipment manufacturing	335999
3361 Motor vehicle manufacturing	
336110 Automobile and light truck manufacturing	33611
336120 Heavy duty truck manufacturing	33612
336A Motor vehicle body, trailer, and parts manufacturing	
336211 Motor vehicle body manufacturing	336211
336212 Truck trailer manufacturing	336212
336213 Motor home manufacturing	336213
336214 Travel trailer and camper manufacturing	336214
336300 Motor vehicle parts manufacturing	3363
3364 Aerospace product and parts manufacturing	
336411 Aircraft manufacturing	336411
336412 Aircraft engine and engine parts manufacturing	336412
336413 Other aircraft parts and equipment	336413
336414 Guided missile and space vehicle manufacturing	336414
33641A Propulsion units and parts for space vehicles and guided missiles	336415, 336419
336B Other transportation equipment manufacturing	
336500 Railroad rolling stock manufacturing	3365
336611 Ship building and repairing	336611
336612 Boat building	336612
336991 Motorcycle, bicycle, and parts manufacturing	336991
336992 Military armored vehicles and tank parts manufacturing	336992
336999 All other transportation equipment manufacturing	336999
3370 Furniture and related product manufacturing	
337110 Wood kitchen cabinet and countertop manufacturing	33711
337121 Upholstered household furniture manufacturing	337121
337122 Nonupholstered wood household furniture manufacturing	337122
337124 Metal household furniture manufacturing	337124
337127 Institutional furniture manufacturing	337127
37712A Other household and institutional furniture	337125, 337129
337211 Wood office furniture manufacturing	337211
337212 Custom architectural woodwork and millwork	337212
337214 Office furniture, except wood, manufacturing	337214
337215 Showcases, partitions, shelving, and lockers	337215
337910 Mattress manufacturing	33791
337920 Blind and shade manufacturing	33792
3391 Medical equipment and supplies manufacturing	
339111 Laboratory apparatus and furniture manufacturing	339111
339112 Surgical and medical instrument manufacturing	339112
339113 Surgical appliance and supplies manufacturing	339113
339114 Dental equipment and supplies manufacturing	339114
339115 Ophthalmic goods manufacturing	339115
339116 Dental laboratories	339116
3399 Other miscellaneous manufacturing	
339910 Jewelry and silverware manufacturing	33991
339920 Sporting and athletic goods manufacturing	33992
339930 Doll, toy, and game manufacturing	33993
339940 Office supplies, except paper, manufacturing	33994
339950 Sign manufacturing	33995
339991 Gasket, packing, and sealing device manufacturing	339991
339992 Musical instrument manufacturing	339992
339994 Broom, brush, and mop manufacturing	339994
339995 Burial casket manufacturing	339995
33999A Buttons, pins, and all other miscellaneous manufacturing	339993, 339999
WHOLESALE TRADE	
4200 Wholesale trade	
420000 Wholesale trade	42
RETAIL TRADE	
4A00 Retail trade	
4A0000 Retail trade	44, 45
TRANSPORTATION AND WAREHOUSING, EXCLUDING POSTAL SERVICE	
4810 Air transportation	
481000 Air transportation	481
4820 Rail transportation	
482000 Rail transportation	482
4830 Water transportation	
483000 Water transportation	483
4840 Truck transportation	
484000 Truck transportation	484
4850 Transit and ground passenger transportation	
485A00 Transit and ground passenger transportation	485 (1)
4860 Pipeline transportation	
486000 Pipeline transportation	486
48A0 Scenic and sightseeing transportation and support activities for transportation	
48A000 Scenic and sightseeing transportation and support activities for transportation	487, 488
4920 Couriers and messengers	
492000 Couriers and messengers	492
4930 Warehousing and storage	
493000 Warehousing and storage	493
INFORMATION	
5111 Newspaper, book, and directory publishers	
511110 Newspaper publishers	51111
511120 Periodical publishers	51112

Appendix B.—RIMS II Detailed Industries

Detailed industry code and title	Related 1997 NAICS codes
511130 Book publishers	51113
5111A0 Database, directory, and other publishers	51114, 51119
5112 Software publishers	
511200 Software publishers	5112
5120 Motion picture and sound recording industries	
512100 Motion picture and video industries	5121
512200 Sound recording industries	5122
5131 Radio and television broadcasting	
513100 Radio and television broadcasting	5131
5132 Cable networks and program distribution	
513200 Cable networks and program distribution	5132
5133 Telecommunications	
513300 Telecommunications	5133
5141 Information services	
514100 Information services	5141
5142 Data processing services	
514200 Data processing services	5142
FINANCE AND INSURANCE	
52A0 Monetary authorities, credit intermediation and related activities	
52A000 Monetary authorities and depository credit intermediation	521, 5221
522A00 Nondepository credit intermediation and related activities	5222, 5223
[illegible]0 Securities, commodity contracts, investments	
523000 Securities, commodity contracts, investments	523
5240 Insurance carriers and related activities	
524100 Insurance carriers	5241
524200 Insurance agencies, brokerages, and related	5242
5250 Funds, trusts, and other financial vehicles	
525000 Funds, trusts, and other financial vehicles	525
REAL ESTATE AND RENTAL AND LEASING	
5310 Real estate	
531000 Real estate	531
S008 Owner-occupied dwellings	
S00800 Owner-occupied dwellings	
5321 Automotive equipment rental and leasing	
532100 Automotive equipment rental and leasing	5321
532A Consumer goods and general rental centers	
532A00 General and consumer goods rental except video tapes and discs	53221, 53222, 53229, 5323
532230 Video tape and disc rental	53223
5324 Machinery and equipment rental and leasing	
532400 Machinery and equipment rental and leasing	5324
5330 Lessors of nonfinancial intangible assets	
533000 Lessors of nonfinancial intangible assets	533
PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES	
5411 Legal services	
541100 Legal services	5411
[illegible]2 Accounting and bookkeeping services	
541200 Accounting and bookkeeping services	5412
5413 Architectural and engineering services	
541300 Architectural and engineering services	5413
5414 Specialized design services	
541400 Specialized design services	5414
5415 Computer systems design and related services	
541511 Custom computer programming services	541511
541512 Computer systems design services	541512
54151A Other computer related services, including facilities management	541513, 541519
5416 Management and technical consulting services	
541610 Management consulting services	54161
5416A0 Environmental and other technical consulting services	54162, 54169
5417 Scientific research and development services	
541700 Scientific research and development services	5417
5418 Advertising and related services	
541800 Advertising and related services	5418
5419 Other professional and technical services	
541920 Photographic services	54192
541940 Veterinary services	54194
5419A0 All other miscellaneous professional and technical services	54191, 54193, 54199
MANAGEMENT OF COMPANIES AND ENTERPRISES	
5500 Management of companies and enterprises	
550000 Management of companies and enterprises	55
ADMINISTRATIVE AND WASTE MANGEMENT SERVICES	
5613 Employment services	
561300 Employment services	5613
5615 Travel arrangement and reservation services	
561500 Travel arrangement and reservation services	5615
561A All other administrative and support services	
561100 Office administrative services	5611
561200 Facilities support services	5612
561400 Business support services	5614
561600 Investigation and security services	5616
561700 Services to buildings and dwellings	5617
561900 Other support services	5619
5620 Waste management and remediation services	
562000 Waste management and remediation services	562
EDUCATIONAL SERVICES	
6100 Educational services	
611100 Elementary and secondary schools	6111
611A00 Colleges, universities, and junior colleges	6112, 6113
611B00 Other educational services	6114, 6115, 6116, 6117
HEALTH CARE AND SOCIAL ASSISTANCE	
6210 Ambulatory health care services	
621A00 Offices of physicians, dentists, and other health practitioners	6211, 6212, 6213
621600 Home health care services	6216
621B00 Other ambulatory health care services	6214, 6215, 6219
6220 Hospitals	
622000 Hospitals	622
6230 Nursing and residential care facilities	
623000 Nursing and residential care facilities	623
6240 Social assistance	
624400 Child day care services	6244

Appendix B.—RIMS II Detailed Industries

Detailed industry code and title	Related 1997 NAICS codes
624A00 Social assistance, except child day care services	6241, 6242, 6243
ARTS, ENTERTAINMENT, AND RECREATION	
71A0 Performing arts, spectator sports, museums, zoos, and parks	
711100 Performing arts companies	7111
711200 Spectator sports	7112
711A00 Promoters of performing arts and sports and agents for public figures	7113, 7114
711500 Independent artists, writers, and performers	7115
712000 Museums, historical sites, zoos, and parks	712
7130 Amusements, gambling, and recreation	
713940 Fitness and recreational sports centers	71394
713950 Bowling centers	71395
713A00 Other amusement, gambling, and recreation industries	7131, 7132, 71391, 71392, 71393, 71399
ACCOMMODATION AND FOOD SERVICES	
7210 Accommodation	
7211A0 Hotels and motels, including casino hotels	72111, 72112
721A00 Other accommodations	72119, 7212, 7213
7220 Food services and drinking places	
722000 Food services and drinking places	722
OTHER SERVICES, EXCEPT PUBLIC ADMINISTRATION	
8111 Automotive repair and maintenance	
8111A0 Automotive repair and maintenance, except car washes	81111, 81112, 811191, 811198
811192 Car washes	811192
A Electronic, commercial, and household goods repair	
811200 Electronic equipment repair and maintenance	8112
811300 Commercial machinery repair and maintenance	8113
811400 Household goods repair and maintenance	8114
8120 Personal and laundry services	
812100 Personal care services	8121
812200 Death care services	8122
812300 Drycleaning and laundry services	8123
812900 Other personal services	8129
813A Religious, grantmaking and giving, and social advocacy organizations	
813100 Religious organizations	8131
813A00 Grantmaking and giving and social advocacy organizations	8132, 8133
813B Civic, social, professional and similar organizations	
813B00 Civic, social, professional and similar organizations	8134, 8139
SPECIAL INDUSTRIES	
S001 Federal and state and local government enterprises	
491000 Postal service	491
S00A00 Other government enterprises	
S002 Households	
H00000 Households	

1. Includes Federal Government enterprises.

Appendix C.—RIMS II Industry Aggregations

	Aggregate industry code and title	RIMS II detailed industry codes[1]
	Agriculture, forestry, fishing, and hunting	
1	Crop and animal production	1111A0-112A00
2	Forestry, fishing, and related activities	113A00-115000
	Mining	
3	Oil and gas extraction	211000
4	Mining, except oil and gas	212100-212390
5	Support activities for mining	213111-21311A
	Utilities*	
6	Utilities*	2211A0-221300
	Construction	
7	Construction	230000
	Manufacturing	
8	Wood product manufacturing	321113-321999
9	Nonmetallic mineral product manufacturing	327111-327999
10	Primary metal manufacturing	331111-33152B
11	Fabricated metal product manufacturing	332111-332999
12	Machinery manufacturing	333111-33399A
13	Computer and electronic product manufacturing	334111-334613
14	Electrical equipment and appliance manufacturing	335110-335999
15	Motor vehicle, body, trailer, and parts manufacturing	336110-336300
16	Other transportation equipment manufacturing	336411-336999
17	Furniture and related product manufacturing	337110-337920
18	Miscellaneous manufacturing	339111-33999A
19	Food, beverage, and tobacco product manufacturing	311111-312229
20	Textile and textile product mills	313100-31499A
21	Apparel, leather, and allied product manufacturing	315111-316900
22	Paper manufacturing	322110-322299
23	Printing and related support activities	32311A-323122
24	Petroleum and coal products manufacturing	324110-324199
25	Chemical manufacturing	325110-325998
26	Plastics and rubber products manufacturing	326110-326290
	Wholesale trade	
27	Wholesale trade	420000
	Retail trade	
28	Retail trade	4A0000
	Transportation and warehousing*	
29	Air transportation	481000
30	Rail transportation	482000
31	Water transportation	483000
32	Truck transportation	484000
33	Transit and ground passenger transportation*	485A00
34	Pipeline transportation	486000
35	Other transportation and support activities*	48A000-492000, 491000
36	Warehousing and storage	493000

Appendix C.—RIMS II Industry Aggregations

Aggregate industry code and title		RIMS II detailed industry codes[1]
	Information	
37	Publishing including software	511110-511200
38	Motion picture and sound recording industries	512100-512200
39	Broadcasting and telecommunications	513100-513300
40	Information and data processing services	514100-514200
	Finance and insurance	
41	Federal Reserve banks, credit intermediation and related services	52A000-522A00
42	Securities, commodity contracts, investments	523000
43	Insurance carriers and related activities	524100-524200
44	Funds, trusts, and other financial vehicles	525000
	Real estate and rental and leasing	
45	Real estate	531000, S00800
46	Rental and leasing services and lessors of intangible assets	532100-533000
	Professional, scientific, and technical services	
47	Professional, scientific, and technical services	541100-5419A0
	Management of companies and enterprises	
48	Management of companies and enterprises	550000
	Administrative and waste management services	
49	Administrative and support services	561300-561900
50	Waste management and remediation services	562000
	Educational services	
51	Educational services	611100-611B00
	Health care and social assistance	
52	Ambulatory health care services	621A00-621B00
53	Hospitals and nursing and residential care facilities	622000-623000
54	Social assistance	624400-624A00
	Arts, entertainment, and recreation	
55	Performing arts, museums, and related activities	711100-712000
56	Amusements, gambling, and recreation	713940-713A00
	Accommodation and food services	
57	Accommodation	7211A0-721A00
58	Food services and drinking places	722000
	Other services*	
59	Other services*	8111A0-813B00, S00A00
	Households	
60	Households	H00000

* Includes Federal Government enterprises.
1. Appendix B identifies the RIMS II detailed industry codes.

Appendix D.—RIMS II Industry Groups

Group industry code and title		RIMS II detailed industry codes[1]	RIMS II aggregate industry codes[2]
1	Agriculture, forestry, fishing, and hunting	1111A0-115000	1-2
2	Mining	211000-21311A	3-5
3	Utilities*	2211A0-221300	6
4	Construction	230000	7
5	Manufacturing	311111-33999A	8-26
6	Wholesale trade	420000	27
7	Retail trade	4A0000	28
8	Transportation and warehousing*	481000-493000	29-36
9	Information	511110-514200	37-40
10	Finance and insurance	52A000-525000	41-44
11	Real estate and rental and leasing	531000-533000	45-46
12	Professional, scientific, and technical services	541100-5419A0	47
13	Management of companies and enterprises	550000	48
14	Administrative and waste management services	561300-562000	49-50
15	Educational services	611100-611B00	51
16	Health care and social assistance	621A00-624A00	52-54
17	Arts, entertainment, and recreation	711100-713A00	55-56
18	Accommodation and food services	7211A0-722000	57-58
19	Other services*	8111A0-813B00, S00A00	59
20	Households	H00000	60

* Includes Federal Government enterprises.
1. Appendix C identifies the RIMS II detailed industry codes.
2. Appendix B identifies the RIMS II aggregate industry codes.

Region Order 1997-2004 README.DOC **November 2006**

Source

The Regional Input-Output Modeling System (RIMS II) multipliers you received were prepared by the Regional Economic Analysis Division, Bureau of Economic Analysis, BE-61, U.S. Department of Commerce. These multipliers are based on BEA's 1997 national benchmark input-output (I-O) accounts and BEA's 2004 regional economic accounts. Multipliers based on these sources were first released in November 2006.

For more information about the RIMS II model please see the RIMS II handbook, "Regional Multipliers: A User Handbook for the Regional Input-Output Modeling System (Third Edition, March 1997)." A PDF version of the handbook can be downloaded from the RIMS II web site, http://www.bea.gov/bea/regional/rims/.

For questions about the multipliers please call (202-606-5343), FAX (202-606-5321), or e-mail (rimsread@bea.gov).

RIMS II Multipliers

Final-demand output multipliers for the 473 I-O industries—Each entry in TOTLRG##.dat (the file containing the 20-by-473 total final-demand output multipliers for region number ##) represents the dollar change in output that occurs in the row industry for each additional dollar of output delivered to final demand by the column industry. For each column, the sum of the entries in rows 1-19 represents the dollar change in output that occurs in all row industries for each additional dollar of output delivered to final demand by the column industry. This value appears in M473RG##.dat as the second entry on the record corresponding to the column industry. Due to rounding these values may not be equal.

Final-demand output multipliers for the 60 RIMS II aggregate industries—Each entry in TLSQRG##.dat (the file containing the 20-by-60 total final-demand output multipliers for region number ##) represents the dollar change in output that occurs in the row industry for each additional dollar of output delivered to final demand by the column industry. For each column, the sum of the entries in rows 1-19 represents the dollar change in output that occurs in all row industries for each additional dollar of output delivered to final demand by the column industry. This value appears in M_60RG##.dat as the second entry on the record corresponding to the column industry. Due to rounding these values may not be equal.

Final-demand earnings multipliers for the 473 I-O industries—Each entry in EARNRG##.dat (the file containing the 20-by-473 total final-demand earnings multipliers for region number ##) represents the dollar change in earnings that occurs in the row industry for each additional dollar of output delivered to final demand by the column industry. For each column, the sum of the entries in rows 1-20 represents the

dollar change in earnings that occurs in all row industries for each additional dollar of output delivered to final demand by the column industry. This value appears in M473RG##.dat as the third entry on the record corresponding to the column industry. Due to rounding these values may not be equal.

Final-demand earnings multipliers for the 60 RIMS II aggregate industries—Each entry in ERSQRG##.dat (the file containing the 20-by-60 total final-demand earnings multipliers for region number ##) represents the dollar change in earnings that occurs in the row industry for each additional dollar of output delivered to final demand by the column industry. For each column, the sum of the entries in rows 1-20 represents the dollar change in earnings that occurs in all row industries for each additional dollar of output delivered to final demand by the column industry. This value appears in M_60RG##.dat as the third entry on the record corresponding to the column industry. Due to rounding these values may not be equal.

Final-demand employment multipliers for the 473 I-O industries—Each entry in EMPLRG##.dat (the file containing the 20-by-473 total final-demand employment multipliers for region number ##) represents the change in the number of jobs that occurs in the row industry for each additional 1 million dollars of output delivered to final demand by the column industry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars. For each column, the sum of the entries in rows 1-20 represents the change in the number of jobs that occurs in all row industries for each additional 1 million dollars of output delivered to final demand by the column industry. This value appears in M473RG##.dat as the fourth entry on the record corresponding to the column industry. Due to rounding these values may not be equal.

Final-demand employment multipliers for the 60 RIMS II aggregate industries—Each entry in JBSQRG##.dat (the file containing the 20-by-60 total final-demand employment multipliers for region number ##) represents the change in the number of jobs that occurs in the row industry for each additional 1 million dollars of output delivered to final demand by the column industry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars. For each column, the sum of the entries in rows 1-20 represents the change in the number of jobs that occurs in all row industries for each additional 1 million dollars of output delivered to final demand by the column industry. This value appears in M_60RG##.dat as the fourth entry on the record corresponding to the column industry. Due to rounding these values may not be equal.

Direct-effect earnings multipliers—The fifth entry on each record in M473RG##.dat or M_60RG##.dat represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the record.

Direct-effect employment multipliers—The sixth entry on each record in M473RG##.dat or M_60RG##.dat represents the total change in number of jobs in all industries for each additional job in the industry on the record.

Summary tables—Table 1.4 is a printed version of M473RG##.dat and Table 2.4 is a printed version of M_60RG##.dat. In M473RG## and M_60RG##, zero entries appears for the total direct effect multipliers for the households industry. Only in these cases does a zero entry represent a null value.

Distribution Costs Tables

RIMS II provides final-use and intermediate-use distribution costs (wholesale and retail trade margins and transportation costs) tables for both the 473 detailed I-O industries and the 60 industry aggregations. These tables can assist RIMS II users in converting final-demand changes into producers' prices.

The distribution costs tables for final purchases are based on BEA's 1997 national benchmark Input-Output Supplementary Tables. The supplementary tables are bridges between the I-O accounts and the National Income and Product Accounts (NIPA's). They provide the I-O commodity composition of NIPA final demand in producers' and purchasers' prices:

Table C—Presents the composition of all NIPA final-demand components.

Table D—Presents the composition of personal consumption expenditure categories.

Table E—Presents the composition of NIPA private fixed investment in equipment and software.

Table F—Presents the distribution costs tables for intermediate purchases. This table contains data from BEA's 1997 national benchmark Use table.

Downloaded Files

Code and Format Files

File	Description
README.txt	Description of the data product
COUNTIES.txt	County name and corresponding region number
REGIONS.txt	Region name, region number, and year of national and regional data used in estimating multipliers
IOIND473.txt	I-O industry codes and descriptions

File	Description
IO473.txt	I-O industry codes and descriptions
Colrow60.txt	Aggregate industry code and descriptions
Row20.txt	Row industry codes and descriptions
FINALUSE.txt	I-O final use codes and descriptions
FTABC60X.txt	File layout for TABC60X.txt
FTABD60X.txt	File layout for TABD60X.txt
FTABE60X.txt	File layout for TABE60X.txt
FTABF60X.txt	File layout for TABF60X.txt
FTABC473X.txt	File layout for TABC473X.txt
FTABD473X.txt	File layout for TABD473X.txt
FTABE473X.txt	File layout for TABE473X.txt
FTABF473X.txt	File layout for TABF473X.txt
FIONIPAD.txt	File layout for NIPAD.txt
FIONIPAE.txt	File layout for NIPAE.txt
NIPAD.txt	I-O category codes and NIPA table line numbers for commodity composition of NIPA Personal Consumption Expenditures (PCE)
NIPAE.txt	I-O category codes and NIPA table line numbers for commodity composition of NIPA Private Fixed Investment in Equipment and Software (PES)

Distribution Cost Files

File	Description
TABC60X.txt	Commodity composition of NIPA final demand for the 60 RIMS II industry aggregations
TABD60X.txt	Commodity composition of Personal Consumption Expenditures by PCE Category for the 60 RIMS II industry aggregations
TABE60X.txt	Commodity composition of Private Fixed Investment in Equipment and Software by PES category for the 60 RIMS II industry aggregations
TABF60X.txt	Commodity composition of intermediate purchases for the 60 RIMS II industry aggregations
TABC473X.txt	Commodity composition of NIPA final demand for the 473 I-O industries
TABD473X.txt	Commodity composition of Personal Consumption Expenditures by PCE Category for the 473 I-O industries

TABE473X.txt	Commodity composition of NIPA Private Fixed Investment in Equipment and Software (PES) for the 473 I-O industries
TABF473X.txt	Commodity composition of intermediate purchases for the 473 I-O industries

Multiplier Files: RG##.exe Files

File	Description
TOTLRG##.dat	20-by-473 final-demand output multipliers for region ##
EARNRG##.dat	20-by-473 final-demand earnings multipliers for region ##
EMPLRG##.dat	20-by-473 final-demand employment multipliers for region ##
TLSQRG##.dat	20-by-60 final-demand output multipliers for region ##
ERSQRG##.dat	20-by-60 final-demand earnings multipliers for region ##
JBSQRG##.dat	20-by-60 final-demand employment multipliers for region ##
M473RG##.dat	Summary multipliers for 473 I-O industries for region ##
M_60RG##.dat	Summary multipliers for 60 aggregate industries for region ##

File Layout for Multiplier Files: TOTLRG##.dat, EARNRG##.dat, EMPLRG##.dat, TLSQRG##.dat, ERSQRG##.dat, and JBSQRG##.dat

Columns	Description
1-2	Row number
4-6	Column number
9-15	Multiplier

File Layout for Multiplier File: M473RG##.dat

Columns	Description
1-8	I-O industry number
9-19	Summary final-demand multiplier for output
20-30	Summary final-demand multiplier for earnings
31-41	Summary final-demand multiplier for employment
42-52	Direct-effect multiplier for earnings
53-63	Direct-effect multiplier for employment

File Layout for Multiplier File: M_60RG##.dat

Columns	Description
1-6	Aggregate industry code
7-17	Summary final-demand multiplier for output
18-28	Summary final-demand multiplier for earnings
29-39	Summary final-demand multiplier for employment
40-50	Direct-effect multiplier for earnings
51-61	Direct-effect multiplier for employment

File Layout for Multiplier File: IO473.txt

Columns	Description
1-3	I-O industry number
5-11	I-O industry code
12-13	Aggregate industry code
15-20	I-O industry number
22-98	I-O industry description

File Layout for Multiplier File: Colrow60.txt

Columns	Description
1-2	Aggregate industry code
6-98	Aggregate industry description

File Layout for Multiplier File: Row20.txt

Columns	Description
1-2	Row industry code
5-98	Row industry code description

File Layout for County File: COUNTIES.txt

Columns	Description
1-2	Region number
4-51	County name

File Layout for Region File: REGIONS.txt

Columns	Description
1-2	Region number
4-52	Region name, regional data year, national input-output data year

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Savannah River

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
1111A0 Oilseed farming	1.3646	0.1811	7.8903	1.8813	1.5485
1111B0 Grain farming	1.4212	0.1871	6.9297	1.9937	1.7584
111200 Vegetable and melon farming	1.4007	0.2613	13.3880	1.6230	1.3423
1113A0 Fruit farming	1.4642	0.3311	16.4800	1.5695	1.3334
111335 Tree nut farming	1.4667	0.3502	11.9135	1.5334	1.5536
111400 Greenhouse and nursery production	1.4215	0.3796	14.0885	1.4277	1.3893
111910 Tobacco farming	1.0000	0.0000	0.0000	0.0000	0.0000
111920 Cotton farming	1.4946	0.2475	8.7628	1.9633	1.9130
1119A0 Sugarcane and sugar beet farming	1.0000	0.0000	0.0000	0.0000	0.0000
1119B0 All other crop farming	1.4473	0.1970	7.1588	1.9900	1.7842
112100 Cattle ranching and farming	1.7359	0.2291	7.8569	2.4413	2.3625
112300 Poultry and egg production	1.4078	0.1852	5.3141	1.9636	2.0289
112A00 Animal production, except cattle and poultry and eggs	1.6726	0.2207	7.6181	2.3526	2.2123
113A00 Forest nurseries, forest products, and timber tracts	1.3436	0.1838	5.7937	2.2389	3.3999
113300 Logging	1.7033	0.2738	8.3117	1.9548	2.0933
114100 Fishing	1.0000	0.0000	0.0000	0.0000	0.0000
114200 Hunting and trapping	1.0000	0.0000	0.0000	0.0000	0.0000
115000 Agriculture and forestry support activities	1.7704	0.6196	28.4847	1.4990	1.3157
211000 Oil and gas extraction	1.0000	0.0000	0.0000	0.0000	0.0000
212100 Coal mining	1.0000	0.0000	0.0000	0.0000	0.0000
212210 Iron ore mining	1.0000	0.0000	0.0000	0.0000	0.0000
212230 Copper, nickel, lead, and zinc mining	1.0000	0.0000	0.0000	0.0000	0.0000
2122A0 Gold, silver, and other metal ore mining	1.0000	0.0000	0.0000	0.0000	0.0000
212310 Stone mining and quarrying	1.5396	0.4175	9.6373	1.5711	1.9296
212320 Sand, gravel, clay, and refractory mining	1.5389	0.4351	9.5833	1.5296	1.9506
212390 Other nonmetallic mineral mining	1.0000	0.0000	0.0000	0.0000	0.0000
213111 Drilling oil and gas wells	1.4962	0.3595	11.0121	1.6817	1.6289
213112 Support activities for oil and gas operations	1.0000	0.0000	0.0000	0.0000	0.0000
21311A Support activities for other mining	1.0000	0.0000	0.0000	0.0000	0.0000
2211A0 Power generation and supply	1.3642	0.2862	5.6150	1.5902	2.6401
221200 Natural gas distribution	1.2019	0.1827	3.4710	1.4812	2.3753
221300 Water, sewage and other systems	1.5566	0.3988	10.2245	1.7087	2.0794
230000 Construction	1.7857	0.5684	17.2036	1.6473	1.7532
311111 Dog and cat food manufacturing	1.3870	0.1845	4.5232	2.0160	2.6292
311119 Other animal food manufacturing	1.4631	0.1989	5.4911	2.1737	2.3102
311211 Flour milling	1.0000	0.0000	0.0000	0.0000	0.0000
311212 Rice milling	1.0000	0.0000	0.0000	0.0000	0.0000
311213 Malt manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311221 Wet corn milling	1.0000	0.0000	0.0000	0.0000	0.0000
311222 Soybean processing	1.0000	0.0000	0.0000	0.0000	0.0000
311223 Other oilseed processing	1.0000	0.0000	0.0000	0.0000	0.0000
311225 Fats and oils refining and blending	1.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

Region Definition: Columbia, GA; Richmond, GA; Aiken, SC; Barnwell, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars.
4. Each entry in column 4 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
5. Each entry in column 5 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Savannah River

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
311230 Breakfast cereal manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311310 Sugar manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311320 Confectionery manufacturing from cacao beans	1.0000	0.0000	0.0000	0.0000	0.0000
311330 Confectionery manufacturing from purchased chocolate	1.0000	0.0000	0.0000	0.0000	0.0000
311340 Nonchocolate confectionery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311410 Frozen food manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311420 Fruit and vegetable canning and drying	1.0000	0.0000	0.0000	0.0000	0.0000
311511 Fluid milk manufacturing	1.4851	0.1922	5.4308	2.0765	2.3393
311512 Creamery butter manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311513 Cheese manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311514 Dry, condensed, and evaporated dairy products	1.0000	0.0000	0.0000	0.0000	0.0000
311520 Ice cream and frozen dessert manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311611 Animal, except poultry, slaughtering	1.7178	0.2127	7.3718	2.3243	2.2292
311612 Meat processed from carcasses	2.0341	0.2767	8.2612	2.7512	3.1837
311613 Rendering and meat byproduct processing	1.0000	0.0000	0.0000	0.0000	0.0000
311615 Poultry processing	1.0000	0.0000	0.0000	0.0000	0.0000
311700 Seafood product preparation and packaging	1.0000	0.0000	0.0000	0.0000	0.0000
31181A Bread and bakery product, except frozen, manufacturing	1.4203	0.3509	10.4885	1.4986	1.5603
311813 Frozen cakes and other pastries manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311821 Cookie and cracker manufacturing	1.3985	0.2541	6.3400	1.7606	2.0860
311822 Mixes and dough made from purchased flour	1.0000	0.0000	0.0000	0.0000	0.0000
311823 Dry pasta manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311830 Tortilla manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311911 Roasted nuts and peanut butter manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311919 Other snack food manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311920 Coffee and tea manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311930 Flavoring syrup and concentrate manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311941 Mayonnaise, dressing, and sauce manufacturing	1.3639	0.1820	4.9855	1.9893	2.1414
311942 Spice and extract manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311990 All other food manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
312110 Soft drink and ice manufacturing	1.3076	0.1745	4.1366	1.8955	2.4621
312120 Breweries	1.0000	0.0000	0.0000	0.0000	0.0000
312130 Wineries	1.0000	0.0000	0.0000	0.0000	0.0000
312140 Distilleries	1.0000	0.0000	0.0000	0.0000	0.0000
312210 Tobacco stemming and redrying	1.0000	0.0000	0.0000	0.0000	0.0000
312221 Cigarette manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
312229 Other tobacco product manufacturing	1.2416	0.1608	3.1509	1.7633	2.8497
313100 Fiber, yarn, and thread mills	1.6951	0.2879	9.1643	2.1272	2.1532
313210 Broadwoven fabric mills	1.8637	0.3614	10.6752	2.0916	2.2573
313220 Narrow fabric mills and schiffli embroidery	1.0000	0.0000	0.0000	0.0000	0.0000
313230 Nonwoven fabric mills	1.0000	0.0000	0.0000	0.0000	0.0000
313240 Knit fabric mills	1.9091	0.3605	10.9038	2.1606	2.2609

(Continued)

Region Definition: Columbia, GA; Richmond, GA; Aiken, SC; Barnwell, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars.
4. Each entry in column 4 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
5. Each entry in column 5 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Savannah River

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
313310 Textile and fabric finishing mills	2.0013	0.3630	10.8700	2.4980	2.5874
313320 Fabric coating mills	1.7564	0.3270	9.8439	2.0673	2.0421
314110 Carpet and rug mills	1.0000	0.0000	0.0000	0.0000	0.0000
314120 Curtain and linen mills	1.8503	0.3401	11.1979	2.2033	2.0594
314910 Textile bag and canvas mills	1.8226	0.4468	15.6623	1.7578	1.6358
314992 Tire cord and tire fabric mills	1.0000	0.0000	0.0000	0.0000	0.0000
31499A Other miscellaneous textile product mills	1.7428	0.3843	12.1864	1.8165	1.7954
315111 Sheer hosiery mills	1.0000	0.0000	0.0000	0.0000	0.0000
315119 Other hosiery and sock mills	1.8609	0.3795	11.9547	2.0247	2.0201
315190 Other apparel knitting mills	1.0000	0.0000	0.0000	0.0000	0.0000
315200 Cut and sew apparel manufacturing	1.9269	0.3575	11.8596	2.3698	2.2325
315900 Accessories and other apparel manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
316100 Leather and hide tanning and finishing	1.0000	0.0000	0.0000	0.0000	0.0000
316200 Footwear manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
316900 Other leather product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
321113 Sawmills	2.0693	0.3194	9.6508	2.6899	2.8294
321114 Wood preservation	2.1248	0.3005	8.7811	3.4152	3.5890
32121A Veneer and plywood manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
32121B Engineered wood member and truss manufacturing	1.7552	0.3408	10.8503	1.9061	1.8739
321219 Reconstituted wood product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
321911 Wood windows and door manufacturing	1.6103	0.3271	9.9370	1.7857	1.8250
321912 Cut stock, resawing lumber, and planing	1.9778	0.3322	11.1082	2.3868	2.1516
321918 Other millwork, including flooring	1.8702	0.3579	10.9724	2.0387	2.0572
321920 Wood container and pallet manufacturing	1.9242	0.3883	13.8854	1.9785	1.7658
321991 Manufactured home, mobile home, manufacturing	1.5560	0.2948	9.8420	1.8312	1.7423
321992 Prefabricated wood building manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
321999 Miscellaneous wood product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
322110 Pulp mills	1.0000	0.0000	0.0000	0.0000	0.0000
3221A0 Paper and paperboard mills	1.6427	0.2712	5.9022	2.1488	3.5128
322210 Paperboard container manufacturing	1.9061	0.3532	8.1568	2.1468	2.5828
32222A Coated and laminated paper and packaging materials	1.0000	0.0000	0.0000	0.0000	0.0000
32222B Coated and uncoated paper bag manufacturing	1.8496	0.3450	8.8014	2.1594	2.3053
322225 Flexible packaging foil manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
322226 Surface-coated paperboard manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
322231 Die-cut paper office supplies manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
322232 Envelope manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
322233 Stationery and related product manufacturing	1.8440	0.2996	7.3462	2.5089	2.8202
322291 Sanitary paper product manufacturing	1.5663	0.2229	5.0154	2.3647	3.4978
322299 All other converted paper product manufacturing	1.6940	0.3322	9.3214	1.9465	1.9403
32311A Commercial printing	1.7151	0.4266	11.1622	1.6838	1.8540
323116 Manifold business forms printing	1.5826	0.3059	7.2703	1.7926	2.1529
323117 Books printing	1.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

Region Definition: Columbia, GA; Richmond, GA; Aiken, SC; Barnwell, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars.
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NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Savannah River

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
323118 Blankbook and looseleaf binder manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
323121 Tradebinding and related work	1.0000	0.0000	0.0000	0.0000	0.0000
323122 Prepress services	1.0000	0.0000	0.0000	0.0000	0.0000
324110 Petroleum refineries	1.2485	0.1707	3.0844	1.6719	3.0998
324121 Asphalt paving mixture and block manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
324122 Asphalt shingle and coating materials manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
324191 Petroleum lubricating oil and grease manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
324199 All other petroleum and coal products manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325110 Petrochemical manufacturing	1.6418	0.2398	4.8479	2.5173	4.7380
325120 Industrial gas manufacturing	1.4208	0.2433	5.0788	1.9490	2.8573
325130 Synthetic dye and pigment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325180 Other basic inorganic chemical manufacturing	1.5379	0.2817	5.6231	2.0168	3.3833
325190 Other basic organic chemical manufacturing	1.7431	0.2680	5.6258	2.6178	4.3649
325211 Plastics material and resin manufacturing	1.8306	0.2625	5.5416	2.7547	4.2703
325212 Synthetic rubber manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325221 Cellulosic organic fiber manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325222 Noncellulosic organic fiber manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325311 Nitrogenous fertilizer manufacturing	1.4166	0.1956	4.1572	2.0533	3.1097
325312 Phosphatic fertilizer manufacturing	1.8187	0.2824	7.2223	2.9635	3.4203
325314 Fertilizer, mixing only, manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325320 Pesticide and other agricultural chemical manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325400 Pharmaceutical and medicine manufacturing	1.4976	0.2512	5.0209	1.9777	3.1384
325510 Paint and coating manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325520 Adhesive manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325611 Soap and other detergent manufacturing	1.5668	0.2267	4.7986	2.3792	3.7621
325612 Polish and other sanitation good manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325613 Surface active agent manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325620 Toilet preparation manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325910 Printing ink manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325920 Explosives manufacturing	1.6568	0.4317	9.7955	1.5740	1.9558
325991 Custom compounding of purchased resins	1.0000	0.0000	0.0000	0.0000	0.0000
325992 Photographic film and chemical manufacturing	1.5048	0.2862	6.1807	1.7703	2.4455
325998 Other miscellaneous chemical product manufacturing	1.6977	0.2932	6.3238	2.2068	3.1839
326110 Plastics packaging materials, film and sheet	1.7918	0.2971	7.1821	2.2005	2.5646
326120 Plastics pipe, fittings, and profile shapes	1.8653	0.3126	7.6348	2.2493	2.5238
326130 Laminated plastics plate, sheet, and shapes	1.0000	0.0000	0.0000	0.0000	0.0000
3261A0 Foam product manufacturing	1.7793	0.3015	8.0418	2.1635	2.2497
326160 Plastics bottle manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
326192 Resilient floor covering manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
32619A Plastics plumbing fixtures and all other plastics products	1.7123	0.3532	9.8643	1.8069	1.8450
326210 Tire manufacturing	1.4887	0.2902	6.7202	1.7080	2.1433
326220 Rubber and plastics hose and belting manufacturing	1.5606	0.3037	8.1472	1.7839	1.9475

(Continued)

Region Definition: Columbia, GA; Richmond, GA; Aiken, SC; Barnwell, SC

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RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Savannah River

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
326290 Other rubber product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327111 Vitreous china plumbing fixture manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327112 Vitreous china and earthenware articles manufacturing	1.6273	0.4645	16.9490	1.5901	1.4510
327113 Porcelain electrical supply manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327121 Brick and structural clay tile manufacturing	1.6081	0.4132	10.5930	1.6588	1.8982
327122 Ceramic wall and floor tile manufacturing	1.6385	0.4163	11.1626	1.7052	1.8514
32712A Clay refractory and other structural clay products	1.7298	0.3760	9.1422	2.0644	2.5612
327125 Nonclay refractory manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327213 Glass container manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
32721A Glass and glass products, except glass containers	1.5869	0.3350	8.5403	1.7969	2.0511
327310 Cement manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327320 Ready-mix concrete manufacturing	1.6191	0.3361	8.4642	2.0129	2.3385
327331 Concrete block and brick manufacturing	1.5843	0.3769	10.1639	1.7725	1.9506
327332 Concrete pipe manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327390 Other concrete product manufacturing	1.5543	0.3988	10.6989	1.6292	1.7975
327410 Lime manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327420 Gypsum product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327910 Abrasive product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327991 Cut stone and stone product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327992 Ground or treated minerals and earths manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327993 Mineral wool manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327999 Miscellaneous nonmetallic mineral products	1.0000	0.0000	0.0000	0.0000	0.0000
331111 Iron and steel mills	1.4426	0.2504	5.2286	1.9139	3.0596
331112 Ferroalloy and related product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
331210 Iron, steel pipe and tube from purchased steel	1.0000	0.0000	0.0000	0.0000	0.0000
331221 Rolled steel shape manufacturing	1.3427	0.1921	4.8965	1.9131	2.2591
331222 Steel wire drawing	1.0000	0.0000	0.0000	0.0000	0.0000
331311 Alumina refining	1.0000	0.0000	0.0000	0.0000	0.0000
331312 Primary aluminum production	1.0000	0.0000	0.0000	0.0000	0.0000
331314 Secondary smelting and alloying of aluminum	1.4418	0.2104	5.8222	2.2727	2.4254
331315 Aluminum sheet, plate, and foil manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
331316 Aluminum extruded product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
331319 Other aluminum rolling and drawing	1.0000	0.0000	0.0000	0.0000	0.0000
331411 Primary smelting and refining of copper	1.0000	0.0000	0.0000	0.0000	0.0000
331419 Primary nonferrous metal, except copper and aluminum	1.0000	0.0000	0.0000	0.0000	0.0000
331421 Copper rolling, drawing, and extruding	1.0000	0.0000	0.0000	0.0000	0.0000
331422 Copper wire, except mechanical, drawing	1.0000	0.0000	0.0000	0.0000	0.0000
331423 Secondary processing of copper	1.0000	0.0000	0.0000	0.0000	0.0000
331491 Nonferrous metal, except copper and aluminum, shaping	1.0000	0.0000	0.0000	0.0000	0.0000
331492 Secondary processing of other nonferrous	1.0000	0.0000	0.0000	0.0000	0.0000
331510 Ferrous metal foundries	1.0000	0.0000	0.0000	0.0000	0.0000
33152A Aluminum foundries	1.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

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RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Savannah River

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
33152B Nonferrous foundries, except aluminum	1.0000	0.0000	0.0000	0.0000	0.0000
332111 Iron and steel forging	1.4034	0.3086	7.4325	1.5597	1.8848
332112 Nonferrous forging	1.0000	0.0000	0.0000	0.0000	0.0000
332114 Custom roll forming	1.0000	0.0000	0.0000	0.0000	0.0000
33211A All other forging and stamping	1.0000	0.0000	0.0000	0.0000	0.0000
332211 Cutlery and flatware, except precious, manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332212 Hand and edge tool manufacturing	1.5077	0.3873	10.0674	1.5560	1.7492
332213 Saw blade and handsaw manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332214 Kitchen utensil, pot, and pan manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332311 Prefabricated metal buildings and components	1.4755	0.3093	8.6003	1.6929	1.8270
332312 Fabricated structural metal manufacturing	1.4515	0.2999	7.9221	1.6424	1.8550
332313 Plate work manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332321 Metal window and door manufacturing	1.3977	0.2947	8.7019	1.5756	1.6336
332322 Sheet metal work manufacturing	1.4534	0.3695	10.5455	1.5033	1.5989
332323 Ornamental and architectural metal work manufacturing	1.4644	0.3595	10.5181	1.5397	1.6136
332410 Power boiler and heat exchanger manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332420 Metal tank, heavy gauge, manufacturing	1.4657	0.3562	9.1258	1.5560	1.7910
332430 Metal can, box, and other container manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
33299A Ammunition manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332994 Small arms manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332995 Other ordnance and accessories manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332500 Hardware manufacturing	1.3811	0.3099	8.4604	1.5164	1.6594
332600 Spring and wire product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332710 Machine shops	1.5516	0.4985	14.1439	1.4812	1.5828
332720 Turned product and screw, nut, and bolt manufacturing	1.4287	0.3922	10.6549	1.4589	1.6132
332811 Metal heat treating	1.5144	0.3533	9.7472	1.6222	1.7335
332812 Metal coating and nonprecious engraving	1.4024	0.2897	8.2348	1.5833	1.6819
332813 Electroplating, anodizing, and coloring metal	1.6514	0.5059	14.4487	1.5270	1.6149
332910 Metal valve manufacturing	1.3955	0.3011	8.4596	1.5593	1.6793
332991 Ball and roller bearing manufacturing	1.5365	0.3661	9.2683	1.7046	1.9485
332996 Fabricated pipe and pipe fitting manufacturing	1.4267	0.3201	8.8236	1.5684	1.7133
332997 Industrial pattern manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332998 Enameled iron and metal sanitary ware manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332999 Miscellaneous fabricated metal product manufacturing	1.4987	0.3478	9.9885	1.6136	1.7028
333111 Farm machinery and equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333112 Lawn and garden equipment manufacturing	1.3786	0.1948	5.5768	2.0695	2.0811
333120 Construction machinery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333131 Mining machinery and equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333132 Oil and gas field machinery and equipment	1.0000	0.0000	0.0000	0.0000	0.0000
333210 Sawmill and woodworking machinery	1.0000	0.0000	0.0000	0.0000	0.0000
333220 Plastics and rubber industry machinery	1.0000	0.0000	0.0000	0.0000	0.0000
333291 Paper industry machinery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

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RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Savannah River

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
333292 Textile machinery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333293 Printing machinery and equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333294 Food product machinery manufacturing	1.4467	0.3529	8.2014	1.5638	1.9348
333295 Semiconductor machinery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333298 All other industrial machinery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
33331A Automatic vending, commercial laundry and drycleaning machinery	1.4551	0.2887	8.1525	1.7299	1.8079
333313 Office machinery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333314 Optical instrument and lens manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333315 Photographic and photocopying equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333319 Other commercial and service industry machinery manufacturing	1.4718	0.3249	7.9263	1.6508	1.9733
333411 Air purification equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333412 Industrial and commercial fan and blower manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333414 Heating equipment, except warm air furnaces	1.3535	0.2840	7.7769	1.5360	1.6804
333415 AC, refrigeration, and forced air heating	1.5118	0.2814	7.3298	1.8921	2.1486
333511 Industrial mold manufacturing	1.5452	0.5259	14.3642	1.4353	1.5706
333512 Metal cutting machine tool manufacturing	1.4530	0.3554	8.8065	1.5949	1.8799
333513 Metal forming machine tool manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333514 Special tool, die, jig, and fixture manufacturing	1.5454	0.5089	12.3379	1.4592	1.7165
333515 Cutting tool and machine tool accessory manufacturing	1.4824	0.4203	10.4087	1.5001	1.7471
33351A Rolling mill and other metalworking machinery	1.0000	0.0000	0.0000	0.0000	0.0000
333611 Turbine and turbine generator set units manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
33361A Speed changers and mechanical power transmission equipment	1.4479	0.3460	8.2387	1.5672	1.8914
333618 Other engine equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333911 Pump and pumping equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333912 Air and gas compressor manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333913 Measuring and dispensing pump manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333921 Elevator and moving stairway manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333922 Conveyor and conveying equipment manufacturing	1.4847	0.3628	8.8087	1.5922	1.8988
333923 Overhead cranes, hoists, and monorail systems	1.0000	0.0000	0.0000	0.0000	0.0000
333924 Industrial truck, trailer, and stacker manufacturing	1.4888	0.2849	7.4569	1.8672	2.0808
333991 Power-driven handtool manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333992 Welding and soldering equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333993 Packaging machinery manufacturing	1.4864	0.3802	8.3054	1.5710	2.0220
333994 Industrial process furnace and oven manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333995 Fluid power cylinder and actuator manufacturing	1.4490	0.3603	9.1297	1.5599	1.7979
333996 Fluid power pump and motor manufacturing	1.4488	0.3372	7.4753	1.6159	2.1009
33399A Scales, balances, and miscellaneous general purpose machinery	1.4489	0.3479	8.5352	1.5636	1.8380
334111 Electronic computer manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
334112 Computer storage device manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
334113 Computer terminal manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
334119 Other computer peripheral equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
334210 Telephone apparatus manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

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334220 Broadcast and wireless communications equipment	1.0000	0.0000	0.0000	0.0000	0.0000
334290 Other communications equipment manufacturing	1.4334	0.3647	9.0754	1.5370	1.7828
334300 Audio and video equipment manufacturing	1.4283	0.2398	5.6106	1.9256	2.6088
334411 Electron tube manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
334413 Semiconductors and related device manufacturing	1.3265	0.2323	4.7265	1.6759	2.4870
33441A All other electronic component manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
334510 Electromedical apparatus manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
334511 Search, detection, and navigation instruments	1.0000	0.0000	0.0000	0.0000	0.0000
334512 Automatic environmental control manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
334513 Industrial process variable instruments	1.4926	0.4244	10.1760	1.5238	1.8696
334514 Totalizing fluid meters and counting devices	1.0000	0.0000	0.0000	0.0000	0.0000
334515 Electricity and signal testing instruments	1.0000	0.0000	0.0000	0.0000	0.0000
334516 Analytical laboratory instrument manufacturing	1.5871	0.4510	11.3512	1.6106	1.9786
334517 Irradiation apparatus manufacturing	1.4023	0.3076	5.9129	1.6103	2.6243
33451A Watch, clock, and other measuring and controlling device manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
334611 Software reproducing	1.3826	0.3672	6.5977	1.3799	2.0276
334612 Audio and video media reproduction	1.0000	0.0000	0.0000	0.0000	0.0000
334613 Magnetic and optical recording media manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335110 Electric lamp bulb and part manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335120 Lighting fixture manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335211 Electric housewares and household fan manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335212 Household vacuum cleaner manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335221 Household cooking appliance manufacturing	1.3913	0.2396	6.3919	1.8112	2.0057
335222 Household refrigerator and home freezer manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335224 Household laundry equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335228 Other major household appliance manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335311 Electric power and specialty transformer manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335312 Motor and generator manufacturing	1.3825	0.2857	6.5769	1.6148	2.0305
335313 Switchgear and switchboard apparatus manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335314 Relay and industrial control manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335911 Storage battery manufacturing	1.4195	0.2885	6.1703	1.6735	2.3173
335912 Primary battery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335921 Fiber optic cable manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335929 Other communication and energy wire manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335930 Wiring device manufacturing	1.4507	0.3179	7.4373	1.6279	1.9908
335991 Carbon and graphite product manufacturing	1.4184	0.2872	6.1224	1.6593	2.3038
335999 Miscellaneous electrical equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
336110 Automobile and light truck manufacturing	1.4506	0.2160	4.7803	2.2247	4.4683
336120 Heavy duty truck manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
336211 Motor vehicle body manufacturing	1.4495	0.2745	6.8913	1.8245	2.2182
336212 Truck trailer manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

Region Definition: Columbia, GA; Richmond, GA; Aiken, SC; Barnwell, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars.
4. Each entry in column 4 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
5. Each entry in column 5 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Savannah River

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
336213 Motor home manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
336214 Travel trailer and camper manufacturing	1.5297	0.3286	8.2801	1.7129	2.0119
336300 Motor vehicle parts manufacturing	1.4697	0.3159	7.3109	1.6780	2.1329
336411 Aircraft manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
336412 Aircraft engine and engine parts manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
336413 Other aircraft parts and equipment	1.5604	0.4527	10.8348	1.5390	1.8574
336414 Guided missile and space vehicle manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
33641A Propulsion units and parts for space vehicles and guided missiles	1.0000	0.0000	0.0000	0.0000	0.0000
336500 Railroad rolling stock manufacturing	1.5069	0.2980	6.9415	1.8052	2.2668
336611 Ship building and repairing	1.0000	0.0000	0.0000	0.0000	0.0000
336612 Boat building	1.0000	0.0000	0.0000	0.0000	0.0000
336991 Motorcycle, bicycle, and parts manufacturing	1.6186	0.3490	8.2073	1.8949	2.3788
336992 Military armored vehicles and tank parts manufacturing	1.4240	0.3491	7.0931	1.5302	2.1507
336999 All other transportation equipment manufacturing	1.3843	0.2224	5.1798	1.8751	2.4585
337110 Wood kitchen cabinet and countertop manufacturing	1.5929	0.4122	14.4303	1.5591	1.4952
337121 Upholstered household furniture manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
337122 Nonupholstered wood household furniture manufacturing	1.6494	0.4184	15.1563	1.6270	1.5100
337124 Metal household furniture manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
337127 Institutional furniture manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
33712A Other household and institutional furniture	1.7581	0.4064	13.3059	1.7275	1.6151
337211 Wood office furniture manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
337212 Custom architectural woodwork and millwork	1.0000	0.0000	0.0000	0.0000	0.0000
337214 Office furniture, except wood, manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
337215 Showcases, partitions, shelving, and lockers	1.5214	0.4157	12.6669	1.4954	1.5480
337910 Mattress manufacturing	1.6618	0.3189	9.1860	1.9512	2.0575
337920 Blind and shade manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339111 Laboratory apparatus and furniture manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339112 Surgical and medical instrument manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339113 Surgical appliance and supplies manufacturing	1.5136	0.3364	7.3671	1.6641	2.2384
339114 Dental equipment and supplies manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339115 Ophthalmic goods manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339116 Dental laboratories	1.5466	0.4880	11.8992	1.4461	1.6821
339910 Jewelry and silverware manufacturing	1.3951	0.2967	9.0311	1.6293	1.6599
339920 Sporting and athletic goods manufacturing	1.6149	0.3370	8.3230	1.8982	2.3683
339930 Doll, toy, and game manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339940 Office supplies, except paper, manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339950 Sign manufacturing	1.6066	0.4550	11.1467	1.5409	1.8286
339991 Gasket, packing, and sealing device manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339992 Musical instrument manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339994 Broom, brush, and mop manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339995 Burial casket manufacturing	1.3939	0.2647	6.9791	1.6150	1.8483
33999A Buttons, pins, and all other miscellaneous manufacturing	1.5888	0.3704	9.0083	1.6675	2.0235

(Continued)

Region Definition: Columbia, GA; Richmond, GA; Aiken, SC; Barnwell, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars.
4. Each entry in column 4 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
5. Each entry in column 5 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Savannah River

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
420000 Wholesale trade	1.5388	0.4542	10.7129	1.5314	1.9948
4A0000 Retail trade	1.5865	0.4907	20.1080	1.5318	1.3937
481000 Air transportation	1.6079	0.4455	10.9372	1.7059	2.6075
482000 Rail transportation	1.5816	0.4002	8.4160	1.6687	2.4707
483000 Water transportation	1.0000	0.0000	0.0000	0.0000	0.0000
484000 Truck transportation	1.6303	0.4116	12.3642	1.7487	1.8349
485A00 Transit and ground passenger transportation	1.6578	0.5752	37.4097	1.4955	1.1980
486000 Pipeline transportation	1.0000	0.0000	0.0000	0.0000	0.0000
48A000 Scenic and sightseeing transportation and support activities for transportation	1.7127	0.5480	14.2776	1.6349	1.8874
492000 Couriers and messengers	1.4999	0.4308	14.2842	1.4966	1.5304
493000 Warehousing and storage	1.6289	0.5974	18.7620	1.4127	1.4831
511110 Newspaper publishers	1.6402	0.5362	16.4564	1.4702	1.4883
511120 Periodical publishers	1.0000	0.0000	0.0000	0.0000	0.0000
511130 Book publishers	1.3991	0.3144	7.9649	1.5455	1.7712
5111A0 Database, directory, and other publishers	1.4504	0.3345	7.6506	1.5905	2.0184
511200 Software publishers	1.5709	0.5301	10.3104	1.4806	2.4916
512100 Motion picture and video industries	1.4803	0.3982	13.4894	1.5283	1.5119
512200 Sound recording industries	1.3510	0.2485	7.1531	1.7180	1.9393
513100 Radio and television broadcasting	1.6947	0.4909	9.4827	1.7145	2.6993
513200 Cable networks and program distribution	1.4380	0.3388	7.2847	1.5554	2.0924
513300 Telecommunications	1.5283	0.3634	7.7687	1.6977	2.3965
514100 Information services	1.7469	0.7492	18.2610	1.4133	1.7446
514200 Data processing services	1.6308	0.6135	12.8057	1.4466	2.1258
52A000 Monetary authorities and depository credit intermediation	1.3997	0.3262	8.4089	1.5840	1.9237
522A00 Nondepository credit intermediation and related activities	1.4399	0.3418	8.1293	1.6507	2.2998
523000 Securities, commodity contracts, investments	1.7409	0.6881	16.3576	1.5040	1.8237
524100 Insurance carriers	1.5244	0.3752	8.8329	1.6722	2.0070
524200 Insurance agencies, brokerages, and related	1.4242	0.4193	10.0567	1.4118	1.7014
525000 Funds, trusts, and other financial vehicles	1.7980	0.4038	9.9362	3.6217	4.0200
531000 Real estate	1.3781	0.2096	8.1680	2.0898	1.9098
S00800 Owner-occupied dwellings	1.1442	0.0381	1.2331	0.0000	0.0000
532100 Automotive equipment rental and leasing	1.3863	0.2656	7.7210	1.7295	2.0162
532A00 General and consumer goods rental except video tapes and discs	1.5056	0.4422	12.6678	1.5056	1.7045
532230 Video tape and disc rental	1.4096	0.3208	18.3032	1.5106	1.2488
532400 Machinery and equipment rental and leasing	1.3703	0.2936	7.1905	1.5908	2.1472
533000 Lessors of nonfinancial intangible assets	1.1049	0.1275	2.2677	1.3099	1.8950
541100 Legal services	1.6700	0.6912	13.8049	1.3986	1.9852
541200 Accounting and bookkeeping services	1.6701	0.7028	22.6100	1.3877	1.4460
541300 Architectural and engineering services	1.6547	0.6352	16.4900	1.4648	1.7645
541400 Specialized design services	1.6084	0.5723	25.0472	1.4714	1.3526
541511 Custom computer programming services	1.6646	0.7120	14.9581	1.3964	1.9975

(Continued)

Region Definition: Columbia, GA; Richmond, GA; Aiken, SC; Barnwell, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars.
4. Each entry in column 4 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
5. Each entry in column 5 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Savannah River

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
541512 Computer systems design services	1.7035	0.7252	15.7766	1.4223	2.0216
54151A Other computer related services, including facilities management	1.5175	0.4232	10.8007	1.6093	2.1549
541610 Management consulting services	1.7056	0.7121	19.4831	1.4161	1.6611
5416A0 Environmental and other technical consulting services	1.6169	0.5928	18.9688	1.4613	1.5534
541700 Scientific research and development services	1.7409	0.6910	17.2497	1.4486	1.7622
541800 Advertising and related services	1.5477	0.4819	12.0278	1.5089	1.9060
541920 Photographic services	1.5867	0.5312	14.8015	1.4722	1.6867
541940 Veterinary services	1.7581	0.6060	15.5494	1.5351	1.8398
5419A0 All other miscellaneous professional and technical services	1.3486	0.2756	5.8876	1.6405	2.7388
550000 Management of companies and enterprises	1.6906	0.6871	13.3758	1.3983	1.9284
561300 Employment services	1.5447	0.6873	33.7162	1.3015	1.2038
561500 Travel arrangement and reservation services	1.7223	0.5879	17.9856	1.5799	1.6556
561100 Office administrative services	1.6776	0.6569	17.5461	1.4631	1.7596
561200 Facilities support services	1.5980	0.6310	22.3319	1.3972	1.4143
561400 Business support services	1.5553	0.5053	18.4084	1.4901	1.4746
561600 Investigation and security services	1.6273	0.7139	33.4357	1.3520	1.2496
561700 Services to buildings and dwellings	1.7178	0.5682	28.5170	1.5808	1.3599
561900 Other support services	1.5374	0.4456	17.0880	1.5408	1.4667
562000 Waste management and remediation services	1.7477	0.4980	13.4889	1.7351	2.0088
611100 Elementary and secondary schools	1.8311	0.6983	30.3206	1.4896	1.3582
611A00 Colleges, universities, and junior colleges	1.7568	0.6804	24.8524	1.4349	1.4241
611B00 Other educational services	1.5972	0.4702	20.9031	1.6100	1.4373
621A00 Offices of physicians, dentists, and other health practitioners	1.6868	0.7136	15.8140	1.3926	1.8109
621600 Home health care services	1.7022	0.7247	27.3915	1.4001	1.3726
621B00 Other ambulatory health care services	1.7946	0.6391	18.6330	1.5814	1.7633
622000 Hospitals	1.7600	0.6527	18.7734	1.4953	1.6706
623000 Nursing and residential care facilities	1.7905	0.7227	32.4892	1.4529	1.3560
624400 Child day care services	1.6163	0.5027	37.7673	1.5102	1.1890
624A00 Social assistance, except child day care services	1.7422	0.6247	31.3571	1.5019	1.2969
711100 Performing arts companies	1.6119	0.5952	44.9698	1.4318	1.1689
711200 Spectator sports	1.7130	0.7585	25.8246	1.3961	1.4176
711A00 Promoters of performing arts and sports and agents for public figures	1.5198	0.5086	30.8372	1.4354	1.2209
711500 Independent artists, writers, and performers	1.6033	0.5357	15.9783	1.4893	1.6593
712000 Museums, historical sites, zoos, and parks	1.8084	0.5987	20.2166	1.6309	1.7063
713940 Fitness and recreational sports centers	1.7040	0.5970	36.0960	1.4792	1.2227
713950 Bowling centers	1.6442	0.5592	33.6164	1.4695	1.2209
713A00 Other amusement, gambling, and recreation industries	1.6152	0.5691	27.5161	1.4372	1.2740
7211A0 Hotels and motels, including casino hotels	1.5580	0.5143	21.6587	1.4398	1.3276
721A00 Other accommodations	1.5402	0.3785	16.7271	1.6495	1.4272
722000 Food services and drinking places	1.6853	0.5547	35.0952	1.4626	1.2057
8111A0 Automotive repair and maintenance, except car washes	1.5522	0.4341	17.4020	1.5557	1.4390
811192 Car washes	1.5033	0.4470	32.5164	1.4806	1.1816

(Continued)

Region Definition: Columbia, GA; Richmond, GA; Aiken, SC; Barnwell, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars.
4. Each entry in column 4 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
5. Each entry in column 5 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Savannah River

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
811200 Electronic equipment repair and maintenance	1.5421	0.5567	17.7418	1.3916	1.4526
811300 Commercial machinery repair and maintenance	1.5193	0.5001	18.0103	1.4158	1.3931
811400 Household goods repair and maintenance	1.4668	0.3873	17.5926	1.5131	1.3506
812100 Personal care services	1.5543	0.4891	25.7525	1.4767	1.2803
812200 Death care services	1.6846	0.4641	18.0736	1.6415	1.4860
812300 Drycleaning and laundry services	1.6041	0.5061	23.4913	1.4916	1.3218
812900 Other personal services	1.4364	0.2488	10.8965	1.9289	1.5818
813100 Religious organizations	1.6827	0.7156	31.2669	1.3526	1.2671
813A00 Grantmaking and giving and social advocacy organizations	1.8045	0.5868	20.3629	1.7227	1.7390
813B00 Civic, social, professional and similar organizations	1.8539	0.6190	24.4298	1.6315	1.4867
491000 Postal service	1.6009	0.6760	15.5126	1.3384	1.6488
S00A00 Other government enterprises	1.6601	0.4181	12.2262	1.8176	1.9236
H00000 Households	0.9064	0.2591	9.4043	0.0000	0.0000

Region Definition: Columbia, GA; Richmond, GA; Aiken, SC; Barnwell, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars.
4. Each entry in column 4 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
5. Each entry in column 5 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 2.4 Total Multipliers for Output, Earnings, and Employment by Industry Aggregation
Savannah River

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
1. Crop and animal production	1.4530	0.2160	7.9438	1.8354	1.6452
2. Forestry, fishing, and related activities	1.5118	0.2399	9.1378	1.7980	1.7097
3. Oil and gas extraction	1.0000	0.0000	0.0000	0.0000	0.0000
4. Mining, except oil and gas	1.5396	0.4289	9.6609	1.5437	1.9322
5. Support activities for mining	1.4965	0.3597	9.8289	1.6828	1.7773
6. Utilities*	1.3665	0.2872	5.6728	1.5960	2.6230
7. Construction	1.7871	0.5703	17.1626	1.6529	1.7490
8. Wood product manufacturing	1.9827	0.3181	10.3848	2.5221	2.7449
9. Nonmetallic mineral product manufacturing	1.6288	0.3598	9.2227	1.8438	2.1156
10. Primary metal manufacturing	1.4336	0.2101	5.1060	2.2406	2.9322
11. Fabricated metal product manufacturing	1.4907	0.3689	10.0050	1.5737	1.7226
12. Machinery manufacturing	1.4709	0.3092	7.6127	1.7005	2.0033
13. Computer and electronic product manufacturing	1.4837	0.4078	9.0151	1.5486	2.1341
14. Electrical equipment and appliance manufacturing	1.4311	0.3026	6.9496	1.6458	2.0636
15. Motor vehicle, body, trailer, and parts manufacturing	1.4659	0.3097	6.8183	1.6923	2.2889
16. Other transportation equipment manufacturing	1.3858	0.2263	4.8611	1.8725	2.7339
17. Furniture and related product manufacturing	1.6242	0.3614	11.6174	1.7271	1.6833
18. Miscellaneous manufacturing	1.5146	0.3491	8.0269	1.6342	2.0679
19. Food, beverage, and tobacco product manufacturing	1.5815	0.2381	6.8245	2.0488	2.3225
20. Textile and textile product mills	1.8617	0.3450	10.2964	2.2134	2.3282
21. Apparel, leather, and allied product manufacturing	1.9038	0.3705	12.3884	2.2553	2.1343
22. Paper manufacturing	1.6317	0.2629	6.1282	2.1743	3.1315
23. Printing and related support activities	1.7092	0.4231	10.9647	1.6806	1.8795
24. Petroleum and coal products manufacturing	1.2505	0.1713	3.3882	1.6780	2.6450
25. Chemical manufacturing	1.6660	0.2566	5.5439	2.4205	3.6617
26. Plastics and rubber products manufacturing	1.5524	0.2952	7.5530	1.7889	2.0315
27. Wholesale trade	1.5377	0.4545	10.6619	1.5324	1.9853
28. Retail trade	1.5828	0.4886	19.9681	1.5254	1.3840
29. Air transportation	1.5995	0.4468	11.1828	1.7108	2.6660
30. Rail transportation	1.5734	0.4007	8.4865	1.6707	2.4914
31. Water transportation	1.0000	0.0000	0.0000	0.0000	0.0000
32. Truck transportation	1.6284	0.4135	12.4316	1.7571	1.8449
33. Transit and ground passenger transportation*	1.6583	0.5760	37.3594	1.4976	1.1964
34. Pipeline transportation	1.0000	0.0000	0.0000	0.0000	0.0000
35. Other transportation and support activities*	1.6082	0.5792	15.4965	1.4396	1.6349
36. Warehousing and storage	1.6240	0.5942	18.5953	1.4052	1.4700
37. Publishing including software	1.6229	0.5243	12.0807	1.4770	1.8095
38. Motion picture and sound recording industries	1.4695	0.3870	12.8705	1.5219	1.5131
39. Broadcasting and telecommunications	1.5483	0.3811	8.0178	1.6928	2.3800
40. Information and data processing services	1.7028	0.7004	15.6166	1.4206	1.8811
41. Federal Reserve banks, credit intermediation and related services	1.4039	0.3270	7.9752	1.5865	2.0022
42. Securities, commodity contracts, investments	1.7398	0.6874	16.2773	1.5024	1.8148
43. Insurance carriers and related activities	1.4848	0.3920	9.2838	1.5316	1.8371
44. Funds, trusts, and other financial vehicles	1.7970	0.4022	9.8474	3.6070	3.9841

(Continued)

Region Definition: Columbia, GA; Richmond, GA; Aiken, SC; Barnwell, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars.

4. Each entry in column 4 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.

5. Each entry in column 5 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix C identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 2.4 Total Multipliers for Output, Earnings, and Employment by Industry Aggregation
Savannah River

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
45. Real estate	1.2115	0.0887	3.2316	2.8995	2.4785
46. Rental and leasing services and lessors of intangible assets	1.3880	0.3035	8.9927	1.5820	1.7558
47. Professional, scientific, and technical services	1.6566	0.6464	15.7787	1.4324	1.7621
48. Management of companies and enterprises	1.6883	0.6852	13.2894	1.3946	1.9159
49. Administrative and support services	1.6101	0.6171	27.1635	1.4033	1.3017
50. Waste management and remediation services	1.7511	0.5005	13.6513	1.7440	2.0330
51. Educational services	1.7359	0.6490	25.6505	1.4462	1.3807
52. Ambulatory health care services	1.7088	0.6970	16.7211	1.4220	1.7479
53. Hospitals and nursing and residential care facilities	1.7616	0.6589	21.3886	1.4791	1.5375
54. Social assistance	1.6747	0.5621	33.5195	1.4970	1.2387
55. Performing arts, museums, and related activities	1.6947	0.6807	29.4714	1.4371	1.3391
56. Amusements, gambling, and recreation	1.6202	0.5689	29.8088	1.4380	1.2446
57. Accommodation	1.5556	0.5098	21.5257	1.4422	1.3259
58. Food services and drinking places	1.6766	0.5518	34.9211	1.4551	1.1997
59. Other services*	1.6154	0.5015	20.8109	1.5192	1.3825
60. Households	0.9094	0.2614	9.4799	0.0000	0.0000

Region Definition: Columbia, GA; Richmond, GA; Aiken, SC; Barnwell, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars.
4. Each entry in column 4 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
5. Each entry in column 5 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix C identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

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Appendix B.—RIMS II Detailed Industries

Detailed industry code and title	Related 1997 NAICS codes
AGRICULTURE, FORESTRY, FISHING, AND HUNTING	
1110 Crop production	
1111A0 Oilseed farming	11111, 11112
1111B0 Grain farming	11113, 11114, 11115, 11116, 11119
111200 Vegetable and melon farming	1112
1113A0 Fruit farming	11131, 11132, 111331-4, 111336, 111339
111335 Tree nut farming	111335
111400 Greenhouse and nursery production	1114
111910 Tobacco farming	11191
111920 Cotton farming	11192
1119A0 Sugarcane and sugar beet farming	11193, 111991
1119B0 All other crop farming	11194, 111992, 111998
1120 Animal production	
112100 Cattle ranching and farming	1121
112300 Poultry and egg production	1123
112A00 Animal production, except cattle and poultry and eggs	1122, 1124, 1125, 1129
1130 Forestry and logging	
113A00 Forest nurseries, forest products, and timber tracts	1131, 1132
113300 Logging	1133
1140 Fishing, hunting and trapping	
114100 Fishing	1141
114200 Hunting and trapping	1142
1150 Agriculture and forestry support activities	
115000 Agriculture and forestry support activities	115
MINING	
2110 Oil and gas extraction	
211000 Oil and gas extraction	211
2121 Coal mining	
212100 Coal mining	2121
2122 Metal ores mining	
212210 Iron ore mining	21221
212230 Copper, nickel, lead, and zinc mining	21223
2122A0 Gold, silver, and other metal ore mining	21222, 21229
2123 Nonmetallic mineral mining and quarrying	
212310 Stone mining and quarrying	21231
212320 Sand, gravel, clay, and refractory mining	21232
212390 Other nonmetallic mineral mining	21239
2130 Support activities for mining	
213111 Drilling oil and gas wells	213111
213112 Support activities for oil and gas operations	213112
21311A Support activities for other mining	213113-5
UTILITIES	
2211 Power generation and supply	
2211A0 Power generation and supply	2211 (1)
2212 Natural gas distribution	
221200 Natural gas distribution	2212
2213 Water, sewage and other systems	
221300 Water, sewage and other systems	2213
CONSTRUCTION	
2300 Construction	
230000 Construction	23

Detailed industry code and title	Related 1997 NAICS codes
MANUFACTURING	
3110 Food manufacturing	
311111 Dog and cat food manufacturing	311111
311119 Other animal food manufacturing	311119
311211 Flour milling	311211
311212 Rice milling	311212
311213 Malt manufacturing	311213
311221 Wet corn milling	311221
311222 Soybean processing	311222
311223 Other oilseed processing	311223
311225 Fats and oils refining and blending	311225
311230 Breakfast cereal manufacturing	31123
311310 Sugar manufacturing	31131
311320 Confectionery manufacturing from cacao beans	31132
311330 Confectionery manufacturing from purchased chocolate	31133
311340 Nonchocolate confectionery manufacturing	31134
311410 Frozen food manufacturing	31141
311420 Fruit and vegetable canning and drying	31142
311511 Fluid milk manufacturing	311511
311512 Creamery butter manufacturing	311512
311513 Cheese manufacturing	311513
311514 Dry, condensed, and evaporated dairy products	311514
311520 Ice cream and frozen dessert manufacturing	31152
311611 Animal, except poultry, slaughtering	311611
311612 Meat processed from carcasses	311612
311613 Rendering and meat byproduct processing	311613
311615 Poultry processing	311615
311700 Seafood product preparation and packaging	3117
31181A Bread and bakery product, except frozen, manufacturing	311811-2
311813 Frozen cakes and other pastries manufacturing	311813
311821 Cookie and cracker manufacturing	311821
311822 Mixes and dough made from purchased flour	311822
311823 Dry pasta manufacturing	311823
311830 Tortilla manufacturing	31183
311911 Roasted nuts and peanut butter manufacturing	311911
311919 Other snack food manufacturing	311919
311920 Coffee and tea manufacturing	31192
311930 Flavoring syrup and concentrate manufacturing	31193
311941 Mayonnaise, dressing, and sauce manufacturing	311941
311942 Spice and extract manufacturing	311942
311990 All other food manufacturing	31199
3121 Beverage manufacturing	
312110 Soft drink and ice manufacturing	31211
312120 Breweries	31212
312130 Wineries	31213
312140 Distilleries	31214
3122 Tobacco manufacturing	
312210 Tobacco stemming and redrying	31221
312221 Cigarette manufacturing	312221
312229 Other tobacco product manufacturing	312229
3130 Textile mills	
313100 Fiber, yarn, and thread mills	3131
313210 Broadwoven fabric mills	31321
313220 Narrow fabric mills and schiffli embroidery	31322
313230 Nonwoven fabric mills	31323
313240 Knit fabric mills	31324
313310 Textile and fabric finishing mills	31331
313320 Fabric coating mills	31332
3140 Textile product mills	
314110 Carpet and rug mills	31411
314120 Curtain and linen mills	31412
314910 Textile bag and canvas mills	31491
314992 Tire cord and tire fabric mills	314992
31499A Other miscellaneous textile product mills	314991, 314999
3150 Apparel manufacturing	
315111 Sheer hosiery mills	315111

Appendix B.—RIMS II Detailed Industries

Detailed industry code and title	Related 1997 NAICS codes
315119 Other hosiery and sock mills	315119
315190 Other apparel knitting mills	31519
315200 Cut and sew apparel manufacturing	3152
315900 Accessories and other apparel manufacturing	3159
3160 Leather and allied product manufacturing	
316100 Leather and hide tanning and finishing	3161
316200 Footwear manufacturing	3162
316900 Other leather product manufacturing	3169
3210 Wood product manufacturing	
321113 Sawmills	321113
321114 Wood preservation	321114
32121A Veneer and plywood manufacturing	321211-2
32121B Engineered wood member and truss manufacturing	321213-4
321219 Reconstituted wood product manufacturing	321219
321911 Wood windows and door manufacturing	321911
321912 Cut stock, resawing lumber, and planing	321912
321918 Other millwork, including flooring	321918
321920 Wood container and pallet manufacturing	32192
321991 Manufactured home, mobile home, manufacturing	321991
321992 Prefabricated wood building manufacturing	321992
321999 Miscellaneous wood product manufacturing	321999
3221 Pulp, paper, and paperboard mills	
322110 Pulp mills	32211
3221A0 Paper and paperboard mills	32212, 32213
3222 Converted paper product manufacturing	
322210 Paperboard container manufacturing	32221
32222A Coated and laminated paper and packaging materials	322221-2
32222B Coated and uncoated paper bag manufacturing	322223-4
322225 Flexible packaging foil manufacturing	322225
322226 Surface-coated paperboard manufacturing	322226
322231 Die-cut paper office supplies manufacturing	322231
322232 Envelope manufacturing	322232
322233 Stationery and related product manufacturing	322233
322291 Sanitary paper product manufacturing	322291
322299 All other converted paper product manufacturing	322299
3230 Printing and related support activities	
32311A Commercial printing	323110-5, 323119
323116 Manifold business forms printing	323116
323117 Books printing	323117
323118 Blankbook and looseleaf binder manufacturing	323118
323121 Tradebinding and related work	323121
323122 Prepress services	323122
3240 Petroleum and coal products manufacturing	
324110 Petroleum refineries	32411
324121 Asphalt paving mixture and block manufacturing	324121
324122 Asphalt shingle and coating materials manufacturing	324122
324191 Petroleum lubricating oil and grease manufacturing	324191
324199 All other petroleum and coal products manufacturing	324199
3251 Basic chemical manufacturing	
325110 Petrochemical manufacturing	32511
325120 Industrial gas manufacturing	32512
325130 Synthetic dye and pigment manufacturing	32513
325180 Other basic inorganic chemical manufacturing	32518
325190 Other basic organic chemical manufacturing	32519
3252 Resin, rubber, and artificial fibers manufacturing	
325211 Plastics material and resin manufacturing	325211
325212 Synthetic rubber manufacturing	325212
325221 Cellulosic organic fiber manufacturing	325221
325222 Noncellulosic organic fiber manufacturing	325222
3 Agricultural chemical manufacturing	
325311 Nitrogenous fertilizer manufacturing	325311
325312 Phosphatic fertilizer manufacturing	325312
325314 Fertilizer, mixing only, manufacturing	325314
325320 Pesticide and other agricultural chemical manufacturing	32532
3254 Pharmaceutical and medicine manufacturing	
325400 Pharmaceutical and medicine manufacturing	3254
3255 Paint, coating, and adhesive manufacturing	
325510 Paint and coating manufacturing	32551
325520 Adhesive manufacturing	32552
3256 Soap, cleaning compound, and toiletry manufacturing	
325611 Soap and other detergent manufacturing	325611
325612 Polish and other sanitation good manufacturing	325612
325613 Surface active agent manufacturing	325613
325620 Toilet preparation manufacturing	32562
3259 Other chemical product and preparation manufacturing	
325910 Printing ink manufacturing	32591
325920 Explosives manufacturing	32592
325991 Custom compounding of purchased resins	325991
325992 Photographic film and chemical manufacturing	325992
325998 Other miscellaneous chemical product manufacturing	325998
3260 Plastics and rubber products manufacturing	
326110 Plastics packaging materials, film and sheet	32611
326120 Plastics pipe, fittings, and profile shapes	32612
326130 Laminated plastics plate, sheet, and shapes	32613
3261A0 Foam product manufacturing	32614, 32615
326160 Plastics bottle manufacturing	32616
326192 Resilient floor covering manufacturing	326192
32619A Plastics plumbing fixtures and all other plastics products	326191, 326199
326210 Tire manufacturing	32621
326220 Rubber and plastics hose and belting manufacturing	32622
326290 Other rubber product manufacturing	32629
3270 Nonmetallic mineral product manufacturing	
327111 Vitreous china plumbing fixture manufacturing	327111
327112 Vitreous china and earthenware articles manufacturing	327112
327113 Porcelain electrical supply manufacturing	327113
327121 Brick and structural clay tile manufacturing	327121
327122 Ceramic wall and floor tile manufacturing	327122
32712A Clay refractory and other structural clay products	327123-4
327125 Nonclay refractory manufacturing	327125
327213 Glass container manufacturing	327213
32721A Glass and glass products, except glass containers	327211-2, 327215
327310 Cement manufacturing	32731
327320 Ready-mix concrete manufacturing	32732
327331 Concrete block and brick manufacturing	327331
327332 Concrete pipe manufacturing	327332
327390 Other concrete product manufacturing	32739
327410 Lime manufacturing	32741
327420 Gypsum product manufacturing	32742
327910 Abrasive product manufacturing	32791
327991 Cut stone and stone product manufacturing	327991
327992 Ground or treated minerals and earths manufacturing	327992
327993 Mineral wool manufacturing	327993
327999 Miscellaneous nonmetallic mineral products	327999
331A Iron and steel mills and manufacturing from purchased steel	
331111 Iron and steel mills	331111
331112 Ferroalloy and related product manufacturing	331112
331210 Iron, steel pipe and tube from purchased steel	33121
331221 Rolled steel shape manufacturing	331221
331222 Steel wire drawing	331222
331B Nonferrous metal production and processing	
331311 Alumina refining	331311
331312 Primary aluminum production	331312
331314 Secondary smelting and alloying of aluminum	331314
331315 Aluminum sheet, plate, and foil manufacturing	331315
331316 Aluminum extruded product manufacturing	331316
331319 Other aluminum rolling and drawing	331319
331411 Primary smelting and refining of copper	331411

Appendix B.—RIMS II Detailed Industries

Detailed industry code and title	Related 1997 NAICS codes
331419 Primary nonferrous metal, except copper and aluminum	331419
331421 Copper rolling, drawing, and extruding	331421
331422 Copper wire, except mechanical, drawing	331422
331423 Secondary processing of copper	331423
331491 Nonferrous metal, except copper and aluminum, shaping	331491
331492 Secondary processing of other nonferrous	331492
3315 Foundries	
331510 Ferrous metal foundries	33151
33152A Aluminum foundries	331521, 331524
33152B Nonferrous foundries, except aluminum	331522, 331525, 331528
3321 Forging and stamping	
332111 Iron and steel forging	332111
332112 Nonferrous forging	332112
332114 Custom roll forming	332114
33211A All other forging and stamping	332115-7
3322 Cutlery and handtool manufacturing	
332211 Cutlery and flatware, except precious, manufacturing	332211
332212 Hand and edge tool manufacturing	332212
332213 Saw blade and handsaw manufacturing	332213
332214 Kitchen utensil, pot, and pan manufacturing	332214
3323 Architectural and structural metals manufacturing	
332311 Prefabricated metal buildings and components	332311
332312 Fabricated structural metal manufacturing	332312
332313 Plate work manufacturing	332313
332321 Metal window and door manufacturing	332321
332322 Sheet metal work manufacturing	332322
332323 Ornamental and architectural metal work manufacturing	332323
4 Boiler, tank, and shipping container manufacturing	
332410 Power boiler and heat exchanger manufacturing	33241
332420 Metal tank, heavy gauge, manufacturing	33242
332430 Metal can, box, and other container manufacturing	33243
332A Ordnance and accessories manufacturing	
33299A Ammunition manufacturing	332992-3
332994 Small arms manufacturing	332994
332995 Other ordnance and accessories manufacturing	332995
332B Other fabricated metal product manufacturing	
332500 Hardware manufacturing	3325
332600 Spring and wire product manufacturing	3326
332710 Machine shops	33271
332720 Turned product and screw, nut, and bolt manufacturing	33272
332811 Metal heat treating	332811
332812 Metal coating and nonprecious engraving	332812
332813 Electroplating, anodizing, and coloring metal	332813
332910 Metal valve manufacturing	33291
332991 Ball and roller bearing manufacturing	332991
332996 Fabricated pipe and pipe fitting manufacturing	332996
332997 Industrial pattern manufacturing	332997
332998 Enameled iron and metal sanitary ware manufacturing	332998
332999 Miscellaneous fabricated metal product manufacturing	332999
3331 Agriculture, construction, and mining machinery	
333111 Farm machinery and equipment manufacturing	333111
333112 Lawn and garden equipment manufacturing	333112
333120 Construction machinery manufacturing	33312
333131 Mining machinery and equipment manufacturing	333131
333132 Oil and gas field machinery and equipment	333132
3332 Industrial machinery manufacturing	
333210 Sawmill and woodworking machinery	33321
333220 Plastics and rubber industry machinery	33322
333291 Paper industry machinery manufacturing	333291
333292 Textile machinery manufacturing	333292
333293 Printing machinery and equipment manufacturing	333293
333294 Food product machinery manufacturing	333294
333295 Semiconductor machinery manufacturing	333295
333298 All other industrial machinery manufacturing	333298
3333 Commercial and service industry machinery	
33331A Automatic vending, commercial laundry and drycleaning machinery	333311-2
333313 Office machinery manufacturing	333313
333314 Optical instrument and lens manufacturing	333314
333315 Photographic and photocopying equipment manufacturing	333315
333319 Other commercial and service machinery manufacturing	333319
3334 HVAC and commercial refrigeration equipment	
333411 Air purification equipment manufacturing	333411
333412 Industrial and commercial fan and blower manufacturing	333412
333414 Heating equipment, except warm air furnaces	333414
333415 AC, refrigeration, and forced air heating	333415
3335 Metalworking machinery manufacturing	
333511 Industrial mold manufacturing	333511
333512 Metal cutting machine tool manufacturing	333512
333513 Metal forming machine tool manufacturing	333513
333514 Special tool, die, jig, and fixture manufacturing	333514
333515 Cutting tool and machine tool accessory manufacturing	333515
33351A Rolling mill and other metalworking machinery	333516, 333518
3336 Turbine and power transmission equipment manufacturing	
333611 Turbine and turbine generator set units manufacturing	333611
33361A Speed changers and mechanical power transmission equipment	333612-3
333618 Other engine equipment manufacturing	333618
3339 Other general purpose machinery manufacturing	
333911 Pump and pumping equipment manufacturing	333911
333912 Air and gas compressor manufacturing	333912
333913 Measuring and dispensing pump manufacturing	333913
333921 Elevator and moving stairway manufacturing	333921
333922 Conveyor and conveying equipment manufacturing	333922
333923 Overhead cranes, hoists, and monorail systems	333923
333924 Industrial truck, trailer, and stacker manufacturing	333924
333991 Power-driven handtool manufacturing	333991
333992 Welding and soldering equipment manufacturing	333992
333993 Packaging machinery manufacturing	333993
333994 Industrial process furnace and oven manufacturing	333994
333995 Fluid power cylinder and actuator manufacturing	333995
333996 Fluid power pump and motor manufacturing	333996
33399A Scales, balances, and miscellaneous general purpose machinery	333997, 333999
3341 Computer and peripheral equipment manufacturing	
334111 Electronic computer manufacturing	334111
334112 Computer storage device manufacturing	334112
334113 Computer terminal manufacturing	334113
334119 Other computer peripheral equipment manufacturing	334119
334A Audio, video, and communications equipment manufacturing	
334210 Telephone apparatus manufacturing	33421
334220 Broadcast and wireless communications equipment	33422
334290 Other communications equipment manufacturing	33429
334300 Audio and video equipment manufacturing	3343
3344 Semiconductor and electronic component manufacturing	
334411 Electron tube manufacturing	334411
334413 Semiconductors and related device manufacturing	334413
33441A All other electronic component manufacturing	334412, 334414-9
3345 Electronic instrument manufacturing	
334510 Electromedical apparatus manufacturing	334510
334511 Search, detection, and navigation instruments	334511
334512 Automatic environmental control manufacturing	334512
334513 Industrial process variable instruments	334513
334514 Totalizing fluid meters and counting devices	334514
334515 Electricity and signal testing instruments	334515

Appendix B.—RIMS II Detailed Industries

Detailed industry code and title	Related 1997 NAICS codes
334516 Analytical laboratory instrument manufacturing	334516
334517 Irradiation apparatus manufacturing	334517
33451A Watch, clock, and other measuring and controlling device manufacturing	334518-9
3346 Magnetic media manufacturing and reproducing	
334611 Software reproducing	334611
334612 Audio and video media reproduction	334612
334613 Magnetic and optical recording media manufacturing	334613
3351 Electric lighting equipment manufacturing	
335110 Electric lamp bulb and part manufacturing	33511
335120 Lighting fixture manufacturing	33512
3352 Household appliance manufacturing	
335211 Electric housewares and household fan manufacturing	335211
335212 Household vacuum cleaner manufacturing	335212
335221 Household cooking appliance manufacturing	335221
335222 Household refrigerator and home freezer manufacturing	335222
335224 Household laundry equipment manufacturing	335224
335228 Other major household appliance manufacturing	335228
3353 Electrical equipment manufacturing	
335311 Electric power and specialty transformer manufacturing	335311
335312 Motor and generator manufacturing	335312
335313 Switchgear and switchboard apparatus manufacturing	335313
335314 Relay and industrial control manufacturing	335314
3359 Other electrical equipment and component manufacturing	
335911 Storage battery manufacturing	335911
335912 Primary battery manufacturing	335912
335921 Fiber optic cable manufacturing	335921
335929 Other communication and energy wire manufacturing	335929
335930 Wiring device manufacturing	33593
335991 Carbon and graphite product manufacturing	335991
335999 Miscellaneous electrical equipment manufacturing	335999
3361 Motor vehicle manufacturing	
336110 Automobile and light truck manufacturing	33611
336120 Heavy duty truck manufacturing	33612
336A Motor vehicle body, trailer, and parts manufacturing	
336211 Motor vehicle body manufacturing	336211
336212 Truck trailer manufacturing	336212
336213 Motor home manufacturing	336213
336214 Travel trailer and camper manufacturing	336214
336300 Motor vehicle parts manufacturing	3363
3364 Aerospace product and parts manufacturing	
336411 Aircraft manufacturing	336411
336412 Aircraft engine and engine parts manufacturing	336412
336413 Other aircraft parts and equipment	336413
336414 Guided missile and space vehicle manufacturing	336414
33641A Propulsion units and parts for space vehicles and guided missiles	336415, 336419
336B Other transportation equipment manufacturing	
336500 Railroad rolling stock manufacturing	3365
336611 Ship building and repairing	336611
336612 Boat building	336612
336991 Motorcycle, bicycle, and parts manufacturing	336991
336992 Military armored vehicles and tank parts manufacturing	336992
336999 All other transportation equipment manufacturing	336999
3370 Furniture and related product manufacturing	
337110 Wood kitchen cabinet and countertop manufacturing	33711
337121 Upholstered household furniture manufacturing	337121
337122 Nonupholstered wood household furniture manufacturing	337122
337124 Metal household furniture manufacturing	337124
337127 Institutional furniture manufacturing	337127
33712A Other household and institutional furniture	337125, 337129
337211 Wood office furniture manufacturing	337211
337212 Custom architectural woodwork and millwork	337212
337214 Office furniture, except wood, manufacturing	337214
337215 Showcases, partitions, shelving, and lockers	337215
337910 Mattress manufacturing	33791
337920 Blind and shade manufacturing	33792
3391 Medical equipment and supplies manufacturing	
339111 Laboratory apparatus and furniture manufacturing	339111
339112 Surgical and medical instrument manufacturing	339112
339113 Surgical appliance and supplies manufacturing	339113
339114 Dental equipment and supplies manufacturing	339114
339115 Ophthalmic goods manufacturing	339115
339116 Dental laboratories	339116
3399 Other miscellaneous manufacturing	
339910 Jewelry and silverware manufacturing	33991
339920 Sporting and athletic goods manufacturing	33992
339930 Doll, toy, and game manufacturing	33993
339940 Office supplies, except paper, manufacturing	33994
339950 Sign manufacturing	33995
339991 Gasket, packing, and sealing device manufacturing	339991
339992 Musical instrument manufacturing	339992
339994 Broom, brush, and mop manufacturing	339994
339995 Burial casket manufacturing	339995
33999A Buttons, pins, and all other miscellaneous manufacturing	339993, 339999
WHOLESALE TRADE	
4200 Wholesale trade	
420000 Wholesale trade	42
RETAIL TRADE	
4A00 Retail trade	
4A0000 Retail trade	44, 45
TRANSPORTATION AND WAREHOUSING, EXCLUDING POSTAL SERVICE	
4810 Air transportation	
481000 Air transportation	481
4820 Rail transportation	
482000 Rail transportation	482
4830 Water transportation	
483000 Water transportation	483
4840 Truck transportation	
484000 Truck transportation	484
4850 Transit and ground passenger transportation	
485A00 Transit and ground passenger transportation	485 (1)
4860 Pipeline transportation	
486000 Pipeline transportation	486
48A0 Scenic and sightseeing transportation and support activities for transportation	
48A000 Scenic and sightseeing transportation and support activities for transportation	487, 488
4920 Couriers and messengers	
492000 Couriers and messengers	492
4930 Warehousing and storage	
493000 Warehousing and storage	493
INFORMATION	
5111 Newspaper, book, and directory publishers	
511110 Newspaper publishers	51111
511120 Periodical publishers	51112

Appendix B.—RIMS II Detailed Industries

Detailed industry code and title	Related 1997 NAICS codes
511130 Book publishers	51113
5111A0 Database, directory, and other publishers	51114, 51119
5112 Software publishers	
511200 Software publishers	5112
5120 Motion picture and sound recording industries	
512100 Motion picture and video industries	5121
512200 Sound recording industries	5122
5131 Radio and television broadcasting	
513100 Radio and television broadcasting	5131
5132 Cable networks and program distribution	
513200 Cable networks and program distribution	5132
5133 Telecommunications	
513300 Telecommunications	5133
5141 Information services	
514100 Information services	5141
5142 Data processing services	
514200 Data processing services	5142
FINANCE AND INSURANCE	
52A0 Monetary authorities, credit intermediation and related activities	
52A000 Monetary authorities and depository credit intermediation	521, 5221
522A00 Nondepository credit intermediation and related activities	5222, 5223
[illegible]0 Securities, commodity contracts, investments	
523000 Securities, commodity contracts, investments	523
5240 Insurance carriers and related activities	
524100 Insurance carriers	5241
524200 Insurance agencies, brokerages, and related	5242
5250 Funds, trusts, and other financial vehicles	
525000 Funds, trusts, and other financial vehicles	525
REAL ESTATE AND RENTAL AND LEASING	
5310 Real estate	
531000 Real estate	531
S008 Owner-occupied dwellings	
S00800 Owner-occupied dwellings	
5321 Automotive equipment rental and leasing	
532100 Automotive equipment rental and leasing	5321
532A Consumer goods and general rental centers	
532A00 General and consumer goods rental except video tapes and discs	53221, 53222, 53229, 5323
532230 Video tape and disc rental	53223
5324 Machinery and equipment rental and leasing	
532400 Machinery and equipment rental and leasing	5324
5330 Lessors of nonfinancial intangible assets	
533000 Lessors of nonfinancial intangible assets	533
PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES	
5411 Legal services	
541100 Legal services	5411
[illegible]2 Accounting and bookkeeping services	
541200 Accounting and bookkeeping services	5412
5413 Architectural and engineering services	
541300 Architectural and engineering services	5413
5414 Specialized design services	
541400 Specialized design services	5414
5415 Computer systems design and related services	
541511 Custom computer programming services	541511
541512 Computer systems design services	541512
54151A Other computer related services, including facilities management	541513, 541519
5416 Management and technical consulting services	
541610 Management consulting services	54161
5416A0 Environmental and other technical consulting services	54162, 54169
5417 Scientific research and development services	
541700 Scientific research and development services	5417
5418 Advertising and related services	
541800 Advertising and related services	5418
5419 Other professional and technical services	
541920 Photographic services	54192
541940 Veterinary services	54194
5419A0 All other miscellaneous professional and technical services	54191, 54193, 54199
MANAGEMENT OF COMPANIES AND ENTERPRISES	
5500 Management of companies and enterprises	
550000 Management of companies and enterprises	55
ADMINISTRATIVE AND WASTE MANGEMENT SERVICES	
5613 Employment services	
561300 Employment services	5613
5615 Travel arrangement and reservation services	
561500 Travel arrangement and reservation services	5615
561A All other administrative and support services	
561100 Office administrative services	5611
561200 Facilities support services	5612
561400 Business support services	5614
561600 Investigation and security services	5616
561700 Services to buildings and dwellings	5617
561900 Other support services	5619
5620 Waste management and remediation services	
562000 Waste management and remediation services	562
EDUCATIONAL SERVICES	
6100 Educational services	
611100 Elementary and secondary schools	6111
611A00 Colleges, universities, and junior colleges	6112, 6113
611B00 Other educational services	6114, 6115, 6116, 6117
HEALTH CARE AND SOCIAL ASSISTANCE	
6210 Ambulatory health care services	
621A00 Offices of physicians, dentists, and other health practitioners	6211, 6212, 6213
621600 Home health care services	6216
621B00 Other ambulatory health care services	6214, 6215, 6219
6220 Hospitals	
622000 Hospitals	622
6230 Nursing and residential care facilities	
623000 Nursing and residential care facilities	623
6240 Social assistance	
624400 Child day care services	6244

Appendix B.—RIMS II Detailed Industries

Detailed industry code and title	Related 1997 NAICS codes
624A00 Social assistance, except child day care services	6241, 6242, 6243
ARTS, ENTERTAINMENT, AND RECREATION	
71A0 Performing arts, spectator sports, museums, zoos, and parks	
711100 Performing arts companies	7111
711200 Spectator sports	7112
711A00 Promoters of performing arts and sports and agents for public figures	7113, 7114
711500 Independent artists, writers, and performers	7115
712000 Museums, historical sites, zoos, and parks	712
7130 Amusements, gambling, and recreation	
713940 Fitness and recreational sports centers	71394
713950 Bowling centers	71395
713A00 Other amusement, gambling, and recreation industries	7131, 7132, 71391, 71392, 71393, 71399
ACCOMMODATION AND FOOD SERVICES	
7210 Accommodation	
7211A0 Hotels and motels, including casino hotels	72111, 72112
721A00 Other accommodations	72119, 7212, 7213
7220 Food services and drinking places	
722000 Food services and drinking places	722
OTHER SERVICES, EXCEPT PUBLIC ADMINISTRATION	
8111 Automotive repair and maintenance	
8111A0 Automotive repair and maintenance, except car washes	81111, 81112, 811191, 811198
811192 Car washes	811192
A Electronic, commercial, and household goods repair	
811200 Electronic equipment repair and maintenance	8112
811300 Commercial machinery repair and maintenance	8113
811400 Household goods repair and maintenance	8114
8120 Personal and laundry services	
812100 Personal care services	8121
812200 Death care services	8122
812300 Drycleaning and laundry services	8123
812900 Other personal services	8129
813A Religious, grantmaking and giving, and social advocacy organizations	
813100 Religious organizations	8131
813A00 Grantmaking and giving and social advocacy organizations	8132, 8133
813B Civic, social, professional and similar organizations	
813B00 Civic, social, professional and similar organizations	8134, 8139
SPECIAL INDUSTRIES	
S001 Federal and state and local government enterprises	
491000 Postal service	491
S00A00 Other government enterprises	
S002 Households	
H00000 Households	

1. Includes Federal Government enterprises.

Appendix C.—RIMS II Industry Aggregations

	Aggregate industry code and title	RIMS II detailed industry codes[1]
	Agriculture, forestry, fishing, and hunting	
1	Crop and animal production	1111A0-112A00
2	Forestry, fishing, and related activities	113A00-115000
	Mining	
3	Oil and gas extraction	211000
4	Mining, except oil and gas	212100-212390
5	Support activities for mining	213111-21311A
	Utilities*	
6	Utilities*	2211A0-221300
	Construction	
7	Construction	230000
	Manufacturing	
8	Wood product manufacturing	321113-321999
9	Nonmetallic mineral product manufacturing	327111-327999
10	Primary metal manufacturing	331111-33152B
11	Fabricated metal product manufacturing	332111-332999
12	Machinery manufacturing	333111-33399A
13	Computer and electronic product manufacturing	334111-334613
14	Electrical equipment and appliance manufacturing	335110-335999
15	Motor vehicle, body, trailer, and parts manufacturing	336110-336300
16	Other transportation equipment manufacturing	336411-336999
17	Furniture and related product manufacturing	337110-337920
18	Miscellaneous manufacturing	339111-33999A
19	Food, beverage, and tobacco product manufacturing	311111-312229
20	Textile and textile product mills	313100-31499A
21	Apparel, leather, and allied product manufacturing	315111-316900
22	Paper manufacturing	322110-322299
23	Printing and related support activities	32311A-323122
24	Petroleum and coal products manufacturing	324110-324199
25	Chemical manufacturing	325110-325998
26	Plastics and rubber products manufacturing	326110-326290
	Wholesale trade	
27	Wholesale trade	420000
	Retail trade	
28	Retail trade	4A0000
	Transportation and warehousing*	
29	Air transportation	481000
30	Rail transportation	482000
31	Water transportation	483000
32	Truck transportation	484000
33	Transit and ground passenger transportation*	485A00
34	Pipeline transportation	486000
35	Other transportation and support activities*	48A000-492000, 491000
36	Warehousing and storage	493000

Appendix C.—RIMS II Industry Aggregations

	Aggregate industry code and title	RIMS II detailed industry codes[1]
	Information	
37	Publishing including software	511110-511200
38	Motion picture and sound recording industries	512100-512200
39	Broadcasting and telecommunications	513100-513300
40	Information and data processing services	514100-514200
	Finance and insurance	
41	Federal Reserve banks, credit intermediation and related services	52A000-522A00
42	Securities, commodity contracts, investments	523000
43	Insurance carriers and related activities	524100-524200
44	Funds, trusts, and other financial vehicles	525000
	Real estate and rental and leasing	
45	Real estate	531000, S00800
46	Rental and leasing services and lessors of intangible assets	532100-533000
	Professional, scientific, and technical services	
47	Professional, scientific, and technical services	541100-5419A0
	Management of companies and enterprises	
48	Management of companies and enterprises	550000
	Administrative and waste management services	
49	Administrative and support services	561300-561900
50	Waste management and remediation services	562000
	Educational services	
51	Educational services	611100-611B00
	Health care and social assistance	
52	Ambulatory health care services	621A00-621B00
53	Hospitals and nursing and residential care facilities	622000-623000
54	Social assistance	624400-624A00
	Arts, entertainment, and recreation	
55	Performing arts, museums, and related activities	711100-712000
56	Amusements, gambling, and recreation	713940-713A00
	Accommodation and food services	
57	Accommodation	7211A0-721A00
58	Food services and drinking places	722000
	Other services*	
59	Other services*	8111A0-813B00, S00A00
	Households	
60	Households	H00000

* Includes Federal Government enterprises.
1. Appendix B identifies the RIMS II detailed industry codes.

Appendix D.—RIMS II Industry Groups

Group industry code and title		RIMS II detailed industry codes[1]	RIMS II aggregate industry codes[2]
1	Agriculture, forestry, fishing, and hunting	1111A0-115000	1-2
2	Mining	211000-21311A	3-5
3	Utilities*	2211A0-221300	6
4	Construction	230000	7
5	Manufacturing	311111-33999A	8-26
6	Wholesale trade	420000	27
7	Retail trade	4A0000	28
8	Transportation and warehousing*	481000-493000	29-36
9	Information	511110-514200	37-40
10	Finance and insurance	52A000-525000	41-44
11	Real estate and rental and leasing	531000-533000	45-46
12	Professional, scientific, and technical services	541100-5419A0	47
13	Management of companies and enterprises	550000	48
14	Administrative and waste management services	561300-562000	49-50
15	Educational services	611100-611B00	51
16	Health care and social assistance	621A00-624A00	52-54
17	Arts, entertainment, and recreation	711100-713A00	55-56
18	Accommodation and food services	7211A0-722000	57-58
19	Other services*	8111A0-813B00, S00A00	59
20	Households	H00000	60

* Includes Federal Government enterprises.
1. Appendix C identifies the RIMS II detailed industry codes.
2. Appendix B identifies the RIMS II aggregate industry codes.

Region Order 1997-2004 README.DOC **November 2006**

Source

The Regional Input-Output Modeling System (RIMS II) multipliers you received were prepared by the Regional Economic Analysis Division, Bureau of Economic Analysis, BE-61, U.S. Department of Commerce. These multipliers are based on BEA's 1997 national benchmark input-output (I-O) accounts and BEA's 2004 regional economic accounts. Multipliers based on these sources were first released in November 2006.

For more information about the RIMS II model please see the RIMS II handbook, "Regional Multipliers: A User Handbook for the Regional Input-Output Modeling System (Third Edition, March 1997)." A PDF version of the handbook can be downloaded from the RIMS II web site, http://www.bea.gov/bea/regional/rims/.

For questions about the multipliers please call (202-606-5343), FAX (202-606-5321), or e-mail (rimsread@bea.gov).

RIMS II Multipliers

Final-demand output multipliers for the 473 I-O industries—Each entry in TOTLRG##.dat (the file containing the 20-by-473 total final-demand output multipliers for region number ##) represents the dollar change in output that occurs in the row industry for each additional dollar of output delivered to final demand by the column industry. For each column, the sum of the entries in rows 1-19 represents the dollar change in output that occurs in all row industries for each additional dollar of output delivered to final demand by the column industry. This value appears in M473RG##.dat as the second entry on the record corresponding to the column industry. Due to rounding these values may not be equal.

Final-demand output multipliers for the 60 RIMS II aggregate industries—Each entry in TLSQRG##.dat (the file containing the 20-by-60 total final-demand output multipliers for region number ##) represents the dollar change in output that occurs in the row industry for each additional dollar of output delivered to final demand by the column industry. For each column, the sum of the entries in rows 1-19 represents the dollar change in output that occurs in all row industries for each additional dollar of output delivered to final demand by the column industry. This value appears in M_60RG##.dat as the second entry on the record corresponding to the column industry. Due to rounding these values may not be equal.

Final-demand earnings multipliers for the 473 I-O industries—Each entry in EARNRG##.dat (the file containing the 20-by-473 total final-demand earnings multipliers for region number ##) represents the dollar change in earnings that occurs in the row industry for each additional dollar of output delivered to final demand by the column industry. For each column, the sum of the entries in rows 1-20 represents the

dollar change in earnings that occurs in all row industries for each additional dollar of output delivered to final demand by the column industry. This value appears in M473RG##.dat as the third entry on the record corresponding to the column industry. Due to rounding these values may not be equal.

Final-demand earnings multipliers for the 60 RIMS II aggregate industries—Each entry in ERSQRG##.dat (the file containing the 20-by-60 total final-demand earnings multipliers for region number ##) represents the dollar change in earnings that occurs in the row industry for each additional dollar of output delivered to final demand by the column industry. For each column, the sum of the entries in rows 1-20 represents the dollar change in earnings that occurs in all row industries for each additional dollar of output delivered to final demand by the column industry. This value appears in M_60RG##.dat as the third entry on the record corresponding to the column industry. Due to rounding these values may not be equal.

Final-demand employment multipliers for the 473 I-O industries—Each entry in EMPLRG##.dat (the file containing the 20-by-473 total final-demand employment multipliers for region number ##) represents the change in the number of jobs that occurs in the row industry for each additional 1 million dollars of output delivered to final demand by the column industry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars. For each column, the sum of the entries in rows 1-20 represents the change in the number of jobs that occurs in all row industries for each additional 1 million dollars of output delivered to final demand by the column industry. This value appears in M473RG##.dat as the fourth entry on the record corresponding to the column industry. Due to rounding these values may not be equal.

Final-demand employment multipliers for the 60 RIMS II aggregate industries—Each entry in JBSQRG##.dat (the file containing the 20-by-60 total final-demand employment multipliers for region number ##) represents the change in the number of jobs that occurs in the row industry for each additional 1 million dollars of output delivered to final demand by the column industry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars. For each column, the sum of the entries in rows 1-20 represents the change in the number of jobs that occurs in all row industries for each additional 1 million dollars of output delivered to final demand by the column industry. This value appears in M_60RG##.dat as the fourth entry on the record corresponding to the column industry. Due to rounding these values may not be equal.

Direct-effect earnings multipliers—The fifth entry on each record in M473RG##.dat or M_60RG##.dat represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the record.

Direct-effect employment multipliers—The sixth entry on each record in M473RG##.dat or M_60RG##.dat represents the total change in number of jobs in all industries for each additional job in the industry on the record.

Summary tables—Table 1.4 is a printed version of M473RG##.dat and Table 2.4 is a printed version of M_60RG##.dat. In M473RG## and M_60RG##, zero entries appears for the total direct effect multipliers for the households industry. Only in these cases does a zero entry represent a null value.

Distribution Costs Tables

RIMS II provides final-use and intermediate-use distribution costs (wholesale and retail trade margins and transportation costs) tables for both the 473 detailed I-O industries and the 60 industry aggregations. These tables can assist RIMS II users in converting final-demand changes into producers' prices.

The distribution costs tables for final purchases are based on BEA's 1997 national benchmark Input-Output Supplementary Tables. The supplementary tables are bridges between the I-O accounts and the National Income and Product Accounts (NIPA's). They provide the I-O commodity composition of NIPA final demand in producers' and purchasers' prices:

Table C—Presents the composition of all NIPA final-demand components.

Table D—Presents the composition of personal consumption expenditure categories.

Table E—Presents the composition of NIPA private fixed investment in equipment and software.

Table F—Presents the distribution costs tables for intermediate purchases. This table contains data from BEA's 1997 national benchmark Use table.

Downloaded Files

Code and Format Files

File	Description
README.txt	Description of the data product
COUNTIES.txt	County name and corresponding region number
REGIONS.txt	Region name, region number, and year of national and regional data used in estimating multipliers
IOIND473.txt	I-O industry codes and descriptions

File	Description
IO473.txt	I-O industry codes and descriptions
Colrow60.txt	Aggregate industry code and descriptions
Row20.txt	Row industry codes and descriptions
FINALUSE.txt	I-O final use codes and descriptions
FTABC60X.txt	File layout for TABC60X.txt
FTABD60X.txt	File layout for TABD60X.txt
FTABE60X.txt	File layout for TABE60X.txt
FTABF60X.txt	File layout for TABF60X.txt
FTABC473X.txt	File layout for TABC473X.txt
FTABD473X.txt	File layout for TABD473X.txt
FTABE473X.txt	File layout for TABE473X.txt
FTABF473X.txt	File layout for TABF473X.txt
FIONIPAD.txt	File layout for NIPAD.txt
FIONIPAE.txt	File layout for NIPAE.txt
NIPAD.txt	I-O category codes and NIPA table line numbers for commodity composition of NIPA Personal Consumption Expenditures (PCE)
NIPAE.txt	I-O category codes and NIPA table line numbers for commodity composition of NIPA Private Fixed Investment in Equipment and Software (PES)

Distribution Cost Files

File	Description
TABC60X.txt	Commodity composition of NIPA final demand for the 60 RIMS II industry aggregations
TABD60X.txt	Commodity composition of Personal Consumption Expenditures by PCE Category for the 60 RIMS II industry aggregations
TABE60X.txt	Commodity composition of Private Fixed Investment in Equipment and Software by PES category for the 60 RIMS II industry aggregations
TABF60X.txt	Commodity composition of intermediate purchases for the 60 RIMS II industry aggregations
TABC473X.txt	Commodity composition of NIPA final demand for the 473 I-O industries
TABD473X.txt	Commodity composition of Personal Consumption Expenditures by PCE Category for the 473 I-O industries

TABE473X.txt	Commodity composition of NIPA Private Fixed Investment in Equipment and Software (PES) for the 473 I-O industries
TABF473X.txt	Commodity composition of intermediate purchases for the 473 I-O industries

Multiplier Files: RG##.exe Files

File	Description
TOTLRG##.dat	20-by-473 final-demand output multipliers for region ##
EARNRG##.dat	20-by-473 final-demand earnings multipliers for region ##
EMPLRG##.dat	20-by-473 final-demand employment multipliers for region ##
TLSQRG##.dat	20-by-60 final-demand output multipliers for region ##
ERSQRG##.dat	20-by-60 final-demand earnings multipliers for region ##
JBSQRG##.dat	20-by-60 final-demand employment multipliers for region ##
M473RG##.dat	Summary multipliers for 473 I-O industries for region ##
M_60RG##.dat	Summary multipliers for 60 aggregate industries for region ##

File Layout for Multiplier Files: TOTLRG##.dat, EARNRG##.dat, EMPLRG##.dat, TLSQRG##.dat, ERSQRG##.dat, and JBSQRG##.dat

Columns	Description
1-2	Row number
4-6	Column number
9-15	Multiplier

File Layout for Multiplier File: M473RG##.dat

Columns	Description
1-8	I-O industry number
9-19	Summary final-demand multiplier for output
20-30	Summary final-demand multiplier for earnings
31-41	Summary final-demand multiplier for employment
42-52	Direct-effect multiplier for earnings
53-63	Direct-effect multiplier for employment

File Layout for Multiplier File: M_60RG##.dat

Columns	Description
1-6	Aggregate industry code
7-17	Summary final-demand multiplier for output
18-28	Summary final-demand multiplier for earnings
29-39	Summary final-demand multiplier for employment
40-50	Direct-effect multiplier for earnings
51-61	Direct-effect multiplier for employment

File Layout for Multiplier File: IO473.txt

Columns	Description
1-3	I-O industry number
5-11	I-O industry code
12-13	Aggregate industry code
15-20	I-O industry number
22-98	I-O industry description

File Layout for Multiplier File: Colrow60.txt

Columns	Description
1-2	Aggregate industry code
6-98	Aggregate industry description

File Layout for Multiplier File: Row20.txt

Columns	Description
1-2	Row industry code
5-98	Row industry code description

File Layout for County File: COUNTIES.txt

Columns	Description
1-2	Region number
4-51	County name

File Layout for Region File: REGIONS.txt

Columns	Description
1-2	Region number
4-52	Region name, regional data year, national input-output data year

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Cope Site (EXOGENOUS)

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
1111A0 Oilseed farming	1.2679	0.1485	7.3854	1.5337	1.3209
1111B0 Grain farming	1.3314	0.1568	8.0915	1.6610	1.3838
111200 Vegetable and melon farming	1.3017	0.2257	12.3855	1.3939	1.2398
1113A0 Fruit farming	1.3120	0.2849	20.6435	1.3427	1.1521
111335 Tree nut farming	1.3035	0.3013	14.5083	1.3117	1.2350
111400 Greenhouse and nursery production	1.1781	0.3076	13.5082	1.1503	1.1209
111910 Tobacco farming	1.2584	0.1964	17.1145	1.3788	1.1167
111920 Cotton farming	1.4531	0.2344	11.8601	1.8479	1.5633
1119A0 Sugarcane and sugar beet farming	1.0000	0.0000	0.0000	0.0000	0.0000
1119B0 All other crop farming	1.3256	0.1613	9.0828	1.6204	1.3141
112100 Cattle ranching and farming	1.5946	0.1841	8.8871	1.9506	1.7183
112300 Poultry and egg production	1.5721	0.1758	6.8854	1.8529	1.5773
112A00 Animal production, except cattle and poultry and eggs	1.6790	0.1913	8.2988	2.0266	1.8162
113A00 Forest nurseries, forest products, and timber tracts	1.5116	0.2400	9.6544	2.7115	3.2411
113300 Logging	1.6418	0.2636	8.4819	1.7462	1.8944
114100 Fishing	1.0000	0.0000	0.0000	0.0000	0.0000
114200 Hunting and trapping	1.5632	0.2432	15.5104	2.3825	1.7865
115000 Agriculture and forestry support activities	1.3624	0.4620	21.1407	1.1863	1.1259
211000 Oil and gas extraction	1.0000	0.0000	0.0000	0.0000	0.0000
212100 Coal mining	1.0000	0.0000	0.0000	0.0000	0.0000
212210 Iron ore mining	1.0000	0.0000	0.0000	0.0000	0.0000
212230 Copper, nickel, lead, and zinc mining	1.0000	0.0000	0.0000	0.0000	0.0000
2122A0 Gold, silver, and other metal ore mining	1.0000	0.0000	0.0000	0.0000	0.0000
212310 Stone mining and quarrying	1.2645	0.2805	5.9419	1.2532	1.3190
212320 Sand, gravel, clay, and refractory mining	1.2568	0.2932	6.9426	1.2239	1.2489
212390 Other nonmetallic mineral mining	1.0000	0.0000	0.0000	0.0000	0.0000
213111 Drilling oil and gas wells	1.2696	0.2760	7.9317	1.2912	1.2376
213112 Support activities for oil and gas operations	1.0000	0.0000	0.0000	0.0000	0.0000
21311A Support activities for other mining	1.0000	0.0000	0.0000	0.0000	0.0000
2211A0 Power generation and supply	1.1639	0.1708	2.7939	1.2805	1.7043
221200 Natural gas distribution	1.0000	0.0000	0.0000	0.0000	0.0000
221300 Water, sewage and other systems	1.2968	0.2477	6.3783	1.4317	1.5834
230000 Construction	1.4737	0.3938	12.3165	1.3419	1.3355
311111 Dog and cat food manufacturing	1.2743	0.1259	2.8991	1.6783	2.0212
311119 Other animal food manufacturing	1.4139	0.1437	4.5228	1.9151	1.9292
311211 Flour milling	1.0000	0.0000	0.0000	0.0000	0.0000
311212 Rice milling	1.0000	0.0000	0.0000	0.0000	0.0000
311213 Malt manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311221 Wet corn milling	1.0000	0.0000	0.0000	0.0000	0.0000
311222 Soybean processing	1.0000	0.0000	0.0000	0.0000	0.0000
311223 Other oilseed processing	1.0000	0.0000	0.0000	0.0000	0.0000
311225 Fats and oils refining and blending	1.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

Region Definition: Aiken, SC; Bamberg, SC; Barnwell, SC; Colleton, SC; Lexington, SC; Orangeburg, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
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4. Each entry in column 4 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
5. Each entry in column 5 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Cope Site (EXOGENOUS)

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
311230 Breakfast cereal manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311310 Sugar manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311320 Confectionery manufacturing from cacao beans	1.0000	0.0000	0.0000	0.0000	0.0000
311330 Confectionery manufacturing from purchased chocolate	1.2293	0.1373	6.0127	1.5499	1.2948
311340 Nonchocolate confectionery manufacturing	1.2444	0.1650	4.5681	1.4490	1.4119
311410 Frozen food manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311420 Fruit and vegetable canning and drying	1.0000	0.0000	0.0000	0.0000	0.0000
311511 Fluid milk manufacturing	1.3613	0.1317	3.8638	1.7362	2.0446
311512 Creamery butter manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311513 Cheese manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311514 Dry, condensed, and evaporated dairy products	1.0000	0.0000	0.0000	0.0000	0.0000
311520 Ice cream and frozen dessert manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311611 Animal, except poultry, slaughtering	1.5547	0.1485	5.4861	1.9797	2.1488
311612 Meat processed from carcasses	1.4613	0.1550	4.4273	1.8802	2.0474
311613 Rendering and meat byproduct processing	1.0000	0.0000	0.0000	0.0000	0.0000
311615 Poultry processing	2.1268	0.2455	9.0235	2.4285	2.3079
311700 Seafood product preparation and packaging	1.0000	0.0000	0.0000	0.0000	0.0000
31181A Bread and bakery product, except frozen, manufacturing	1.2017	0.2332	6.6947	1.2152	1.2115
311813 Frozen cakes and other pastries manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311821 Cookie and cracker manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311822 Mixes and dough made from purchased flour	1.2670	0.1318	3.7850	1.6317	1.5954
311823 Dry pasta manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311830 Tortilla manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311911 Roasted nuts and peanut butter manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311919 Other snack food manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311920 Coffee and tea manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311930 Flavoring syrup and concentrate manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311941 Mayonnaise, dressing, and sauce manufacturing	1.2811	0.1290	3.3992	1.7198	1.7488
311942 Spice and extract manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311990 All other food manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
312110 Soft drink and ice manufacturing	1.2367	0.0999	2.2256	1.9104	2.3285
312120 Breweries	1.0000	0.0000	0.0000	0.0000	0.0000
312130 Wineries	1.0000	0.0000	0.0000	0.0000	0.0000
312140 Distilleries	1.0000	0.0000	0.0000	0.0000	0.0000
312210 Tobacco stemming and redrying	1.0000	0.0000	0.0000	0.0000	0.0000
312221 Cigarette manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
312229 Other tobacco product manufacturing	1.1537	0.0867	3.1793	1.6725	1.4219
313100 Fiber, yarn, and thread mills	1.8734	0.2578	8.3458	2.1693	2.1163
313210 Broadwoven fabric mills	1.8305	0.2865	8.1490	1.8878	2.0373
313220 Narrow fabric mills and schiffli embroidery	1.5696	0.3158	9.9979	1.4345	1.3591
313230 Nonwoven fabric mills	1.0000	0.0000	0.0000	0.0000	0.0000
313240 Knit fabric mills	1.8762	0.2823	7.9858	1.9268	1.9752

(Continued)

Region Definition: Aiken, SC; Bamberg, SC; Barnwell, SC; Colleton, SC; Lexington, SC; Orangeburg, SC

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5. Each entry in column 5 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Cope Site (EXOGENOUS)

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
313310 Textile and fabric finishing mills	1.8930	0.2755	8.0637	2.1584	2.0863
313320 Fabric coating mills	1.5687	0.2359	6.4166	1.6985	1.7097
314110 Carpet and rug mills	1.8479	0.2290	6.1697	2.3016	2.4102
314120 Curtain and linen mills	1.7570	0.2652	8.1961	1.8912	1.7845
314910 Textile bag and canvas mills	1.6276	0.3385	11.5170	1.4659	1.3649
314992 Tire cord and tire fabric mills	1.0000	0.0000	0.0000	0.0000	0.0000
31499A Other miscellaneous textile product mills	1.5646	0.2887	8.4064	1.5024	1.4849
315111 Sheer hosiery mills	1.0000	0.0000	0.0000	0.0000	0.0000
315119 Other hosiery and sock mills	1.6864	0.3186	9.7345	1.5632	1.5377
315190 Other apparel knitting mills	1.0000	0.0000	0.0000	0.0000	0.0000
315200 Cut and sew apparel manufacturing	1.6293	0.2723	8.5752	1.6603	1.5760
315900 Accessories and other apparel manufacturing	1.4885	0.2983	8.6397	1.4328	1.4330
316100 Leather and hide tanning and finishing	1.0000	0.0000	0.0000	0.0000	0.0000
316200 Footwear manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
316900 Other leather product manufacturing	1.2783	0.2607	11.5209	1.2550	1.1420
321113 Sawmills	2.0185	0.2804	8.6451	2.5255	2.7202
321114 Wood preservation	2.0614	0.2513	7.5919	3.0550	2.9833
32121A Veneer and plywood manufacturing	1.9350	0.3028	9.2339	2.1073	2.1525
32121B Engineered wood member and truss manufacturing	1.6720	0.2786	9.2626	1.6665	1.5513
321219 Reconstituted wood product manufacturing	1.6493	0.2345	5.8666	1.8132	2.0041
321911 Wood windows and door manufacturing	1.6371	0.2812	8.3609	1.6415	1.6271
321912 Cut stock, resawing lumber, and planing	1.8948	0.2740	10.2936	2.1061	1.7353
321918 Other millwork, including flooring	1.7965	0.2960	9.2751	1.8036	1.7271
321920 Wood container and pallet manufacturing	1.7754	0.3102	12.6476	1.6907	1.4387
321991 Manufactured home, mobile home, manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
321992 Prefabricated wood building manufacturing	1.6667	0.2823	8.9733	1.7109	1.6121
321999 Miscellaneous wood product manufacturing	1.5692	0.3011	11.5029	1.4949	1.3419
322110 Pulp mills	1.0000	0.0000	0.0000	0.0000	0.0000
3221A0 Paper and paperboard mills	1.4588	0.1859	3.7785	1.8257	2.6538
322210 Paperboard container manufacturing	1.2100	0.1760	3.5808	1.3255	1.4630
32222A Coated and laminated paper and packaging materials	1.3614	0.1670	3.4293	1.6882	2.0585
32222B Coated and uncoated paper bag manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
322225 Flexible packaging foil manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
322226 Surface-coated paperboard manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
322231 Die-cut paper office supplies manufacturing	1.3172	0.1875	5.5911	1.5222	1.4166
322232 Envelope manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
322233 Stationery and related product manufacturing	1.3151	0.1583	3.6930	1.6429	1.7572
322291 Sanitary paper product manufacturing	1.3608	0.1436	2.8984	1.8885	2.5515
322299 All other converted paper product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
32311A Commercial printing	1.2632	0.2827	7.3976	1.2429	1.2541
323116 Manifold business forms printing	1.2403	0.1999	4.5268	1.3050	1.3749
323117 Books printing	1.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

Region Definition: Aiken, SC; Bamberg, SC; Barnwell, SC; Colleton, SC; Lexington, SC; Orangeburg, SC

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SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Cope Site (EXOGENOUS)

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
323118 Blankbook and looseleaf binder manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
323121 Tradebinding and related work	1.0000	0.0000	0.0000	0.0000	0.0000
323122 Prepress services	1.1752	0.3822	7.1379	1.1170	1.1857
324110 Petroleum refineries	1.0000	0.0000	0.0000	0.0000	0.0000
324121 Asphalt paving mixture and block manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
324122 Asphalt shingle and coating materials manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
324191 Petroleum lubricating oil and grease manufacturing	1.2740	0.0917	1.9235	2.6524	3.9755
324199 All other petroleum and coal products manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325110 Petrochemical manufacturing	1.3809	0.1435	2.4949	1.9517	3.2545
325120 Industrial gas manufacturing	1.3002	0.1581	2.8786	1.6410	2.0187
325130 Synthetic dye and pigment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325180 Other basic inorganic chemical manufacturing	1.3689	0.1817	3.1719	1.6849	2.3123
325190 Other basic organic chemical manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325211 Plastics material and resin manufacturing	1.4061	0.1417	2.6515	1.9270	2.6046
325212 Synthetic rubber manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325221 Cellulosic organic fiber manufacturing	1.2927	0.1977	3.3584	1.4346	1.8073
325222 Noncellulosic organic fiber manufacturing	1.3366	0.1708	3.2522	1.6310	2.0081
325311 Nitrogenous fertilizer manufacturing	1.3029	0.1290	2.7477	1.7541	2.0165
325312 Phosphatic fertilizer manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325314 Fertilizer, mixing only, manufacturing	1.4783	0.1504	3.7419	2.0450	2.0005
325320 Pesticide and other agricultural chemical manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325400 Pharmaceutical and medicine manufacturing	1.2085	0.1444	2.8893	1.4735	1.7105
325510 Paint and coating manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325520 Adhesive manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325611 Soap and other detergent manufacturing	1.2949	0.1330	2.9399	1.8088	2.0376
325612 Polish and other sanitation good manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325613 Surface active agent manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325620 Toilet preparation manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325910 Printing ink manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325920 Explosives manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325991 Custom compounding of purchased resins	1.0000	0.0000	0.0000	0.0000	0.0000
325992 Photographic film and chemical manufacturing	1.2690	0.1793	3.2663	1.4365	1.7800
325998 Other miscellaneous chemical product manufacturing	1.3855	0.1762	3.2309	1.7181	2.3281
326110 Plastics packaging materials, film and sheet	1.5228	0.2087	4.4314	1.6348	1.7940
326120 Plastics pipe, fittings, and profile shapes	1.5266	0.2129	5.2792	1.6198	1.5839
326130 Laminated plastics plate, sheet, and shapes	1.4524	0.2329	5.0679	1.5320	1.6448
3261A0 Foam product manufacturing	1.4584	0.2078	5.1713	1.5770	1.5972
326160 Plastics bottle manufacturing	1.5494	0.2130	4.9213	1.6451	1.7156
326192 Resilient floor covering manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
32619A Plastics plumbing fixtures and all other plastics products	1.4339	0.2565	6.6677	1.3875	1.3630
326210 Tire manufacturing	1.3023	0.2185	4.3871	1.3599	1.5314
326220 Rubber and plastics hose and belting manufacturing	1.3624	0.2272	5.9589	1.4114	1:4159

(Continued)

Region Definition: Aiken, SC; Bamberg, SC; Barnwell, SC; Colleton, SC; Lexington, SC; Orangeburg, SC

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RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Cope Site (EXOGENOUS)

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
326290 Other rubber product manufacturing	1.3469	0.2447	6.4472	1.3576	1.3601
327111 Vitreous china plumbing fixture manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327112 Vitreous china and earthenware articles manufacturing	1.3233	0.3103	9.5789	1.2850	1.2329
327113 Porcelain electrical supply manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327121 Brick and structural clay tile manufacturing	1.3469	0.2788	6.7097	1.3542	1.4235
327122 Ceramic wall and floor tile manufacturing	1.3687	0.2801	9.6170	1.3881	1.2792
32712A Clay refractory and other structural clay products	1.0000	0.0000	0.0000	0.0000	0.0000
327125 Nonclay refractory manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327213 Glass container manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
32721A Glass and glass products, except glass containers	1.3884	0.2283	5.0982	1.4813	1.5897
327310 Cement manufacturing	1.3436	0.1541	2.9716	1.7028	2.2073
327320 Ready-mix concrete manufacturing	1.6222	0.2513	5.9109	1.8214	1.9229
327331 Concrete block and brick manufacturing	1.4731	0.2682	6.8263	1.5260	1.5568
327332 Concrete pipe manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327390 Other concrete product manufacturing	1.4017	0.2806	6.6054	1.3869	1.4397
327410 Lime manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327420 Gypsum product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327910 Abrasive product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327991 Cut stone and stone product manufacturing	1.4266	0.3145	9.8869	1.4081	1.3322
327992 Ground or treated minerals and earths manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327993 Mineral wool manufacturing	1.3244	0.2079	4.2721	1.4154	1.6022
327999 Miscellaneous nonmetallic mineral products	1.3675	0.2169	5.0697	1.4781	1.5619
331111 Iron and steel mills	1.4252	0.1963	3.4140	1.7142	2.4756
331112 Ferroalloy and related product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
331210 Iron, steel pipe and tube from purchased steel	1.0000	0.0000	0.0000	0.0000	0.0000
331221 Rolled steel shape manufacturing	1.5687	0.1845	4.0699	2.0981	2.1297
331222 Steel wire drawing	1.0000	0.0000	0.0000	0.0000	0.0000
331311 Alumina refining	1.0000	0.0000	0.0000	0.0000	0.0000
331312 Primary aluminum production	1.0000	0.0000	0.0000	0.0000	0.0000
331314 Secondary smelting and alloying of aluminum	1.4037	0.1648	4.5913	2.0338	1.9459
331315 Aluminum sheet, plate, and foil manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
331316 Aluminum extruded product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
331319 Other aluminum rolling and drawing	1.3347	0.1351	3.2189	1.6667	1.7777
331411 Primary smelting and refining of copper	1.3112	0.1236	2.1610	1.5249	1.8745
331419 Primary nonferrous metal, except copper and aluminum	1.0000	0.0000	0.0000	0.0000	0.0000
331421 Copper rolling, drawing, and extruding	1.0000	0.0000	0.0000	0.0000	0.0000
331422 Copper wire, except mechanical, drawing	1.4993	0.2015	4.1774	1.7850	2.0015
331423 Secondary processing of copper	1.0000	0.0000	0.0000	0.0000	0.0000
331491 Nonferrous metal, except copper and aluminum, shaping	1.4410	0.2037	4.1518	1.6924	1.9814
331492 Secondary processing of other nonferrous	1.3844	0.1983	4.7579	1.6631	1.7728
331510 Ferrous metal foundries	1.3180	0.3045	6.0653	1.2808	1.3934
33152A Aluminum foundries	1.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

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RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Cope Site (EXOGENOUS)

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
33152B Nonferrous foundries, except aluminum	1.0000	0.0000	0.0000	0.0000	0.0000
332111 Iron and steel forging	1.4677	0.2608	5.5213	1.4809	1.5569
332112 Nonferrous forging	1.3232	0.2246	4.8180	1.3555	1.4308
332114 Custom roll forming	1.0000	0.0000	0.0000	0.0000	0.0000
33211A All other forging and stamping	1.4415	0.2946	7.6017	1.3856	1.3563
332211 Cutlery and flatware, except precious, manufacturing	1.2914	0.1956	5.7625	1.4222	1.3397
332212 Hand and edge tool manufacturing	1.3463	0.2898	7.2813	1.3083	1.3036
332213 Saw blade and handsaw manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332214 Kitchen utensil, pot, and pan manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332311 Prefabricated metal buildings and components	1.6303	0.2743	5.9175	1.6871	1.7820
332312 Fabricated structural metal manufacturing	1.4452	0.2419	5.4916	1.4890	1.5355
332313 Plate work manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332321 Metal window and door manufacturing	1.3692	0.2344	6.9797	1.4083	1.3158
332322 Sheet metal work manufacturing	1.3665	0.2876	7.8067	1.3150	1.2771
332323 Ornamental and architectural metal work manufacturing	1.4296	0.2855	8.1883	1.3744	1.2944
332410 Power boiler and heat exchanger manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332420 Metal tank, heavy gauge, manufacturing	1.4321	0.2830	6.5530	1.3889	1.4104
332430 Metal can, box, and other container manufacturing	1.3671	0.1637	3.5225	1.6773	1.8508
33299A Ammunition manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332994 Small arms manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332995 Other ordnance and accessories manufacturing	1.1852	0.2957	9.9976	1.1396	1.1033
332500 Hardware manufacturing	1.3328	0.2456	6.1209	1.3507	1.3488
332600 Spring and wire product manufacturing	1.2897	0.2525	6.0662	1.2748	1.2874
332710 Machine shops	1.3224	0.3734	9.5389	1.2468	1.2455
332720 Turned product and screw, nut, and bolt manufacturing	1.3050	0.3029	7.5678	1.2657	1.2754
332811 Metal heat treating	1.0000	0.0000	0.0000	0.0000	0.0000
332812 Metal coating and nonprecious engraving	1.3816	0.2292	5.6918	1.4076	1.3816
332813 Electroplating, anodizing, and coloring metal	1.3304	0.3605	9.3691	1.2228	1.2233
332910 Metal valve manufacturing	1.3092	0.2331	6.1239	1.3564	1.3382
332991 Ball and roller bearing manufacturing	1.3968	0.2754	6.2029	1.4410	1.4877
332996 Fabricated pipe and pipe fitting manufacturing	1.4338	0.2596	6.2986	1.4292	1.4165
332997 Industrial pattern manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332998 Enameled iron and metal sanitary ware manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332999 Miscellaneous fabricated metal product manufacturing	1.3748	0.2681	7.1525	1.3978	1.3746
333111 Farm machinery and equipment manufacturing	1.3896	0.2047	4.9798	1.6056	1.6059
333112 Lawn and garden equipment manufacturing	1.4073	0.1679	4.3204	1.8846	1.7839
333120 Construction machinery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333131 Mining machinery and equipment manufacturing	1.3549	0.2279	4.9969	1.4526	1.5309
333132 Oil and gas field machinery and equipment	1.0000	0.0000	0.0000	0.0000	0.0000
333210 Sawmill and woodworking machinery	1.0000	0.0000	0.0000	0.0000	0.0000
333220 Plastics and rubber industry machinery	1.0000	0.0000	0.0000	0.0000	0.0000
333291 Paper industry machinery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

Region Definition: Aiken, SC; Bamberg, SC; Barnwell, SC; Colleton, SC; Lexington, SC; Orangeburg, SC

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3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars.
4. Each entry in column 4 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
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SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Cope Site (EXOGENOUS)

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
333292 Textile machinery manufacturing	1.3012	0.2871	6.7858	1.2904	1.3190
333293 Printing machinery and equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333294 Food product machinery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333295 Semiconductor machinery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333298 All other industrial machinery manufacturing	1.3497	0.2823	5.6692	1.3579	1.4983
33331A Automatic vending, commercial laundry and drycleaning machinery	1.4232	0.2387	6.2108	1.5116	1.4558
333313 Office machinery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333314 Optical instrument and lens manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333315 Photographic and photocopying equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333319 Other commercial and service industry machinery manufacturing	1.3658	0.2598	6.5094	1.3951	1.3958
333411 Air purification equipment manufacturing	1.3519	0.2590	7.9317	1.3698	1.2781
333412 Industrial and commercial fan and blower manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333414 Heating equipment, except warm air furnaces	1.2565	0.2265	5.3354	1.2942	1.3247
333415 AC, refrigeration, and forced air heating	1.4551	0.2306	5.9580	1.6384	1.6300
333511 Industrial mold manufacturing	1.2649	0.4071	10.0656	1.1739	1.1812
333512 Metal cutting machine tool manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333513 Metal forming machine tool manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333514 Special tool, die, jig, and fixture manufacturing	1.3006	0.3980	9.1068	1.2057	1.2304
333515 Cutting tool and machine tool accessory manufacturing	1.3425	0.3345	7.3952	1.2615	1.3067
33351A Rolling mill and other metalworking machinery	1.0000	0.0000	0.0000	0.0000	0.0000
333611 Turbine and turbine generator set units manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
33361A Speed changers and mechanical power transmission equipment	1.0000	0.0000	0.0000	0.0000	0.0000
333618 Other engine equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333911 Pump and pumping equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333912 Air and gas compressor manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333913 Measuring and dispensing pump manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333921 Elevator and moving stairway manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333922 Conveyor and conveying equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333923 Overhead cranes, hoists, and monorail systems	1.3680	0.2281	6.1027	1.4737	1.4191
333924 Industrial truck, trailer, and stacker manufacturing	1.4655	0.2365	5.2571	1.6381	1.7321
333991 Power-driven handtool manufacturing	1.3190	0.1962	4.4650	1.5012	1.6149
333992 Welding and soldering equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333993 Packaging machinery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333994 Industrial process furnace and oven manufacturing	1.2424	0.2503	6.6119	1.2581	1.2431
333995 Fluid power cylinder and actuator manufacturing	1.3272	0.2875	6.9714	1.3154	1.3232
333996 Fluid power pump and motor manufacturing	1.3111	0.2663	4.9906	1.3485	1.5176
33399A Scales, balances, and miscellaneous general purpose machinery	1.2804	0.2704	6.0596	1.2843	1.3327
334111 Electronic computer manufacturing	1.3261	0.1437	2.8850	1.8245	2.2517
334112 Computer storage device manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
334113 Computer terminal manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
334119 Other computer peripheral equipment manufacturing	1.3321	0.2278	5.6875	1.4587	1.4463
334210 Telephone apparatus manufacturing	1.2430	0.1687	2.4274	1.4285	2.1005

(Continued)

Region Definition: Aiken, SC; Bamberg, SC; Barnwell, SC; Colleton, SC; Lexington, SC; Orangeburg, SC

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SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Cope Site (EXOGENOUS)

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
334220 Broadcast and wireless communications equipment	1.2641	0.2095	4.2413	1.3440	1.4461
334290 Other communications equipment manufacturing	1.2799	0.2494	5.6623	1.3285	1.3914
334300 Audio and video equipment manufacturing	1.3122	0.1630	3.7531	1.6544	1.7712
334411 Electron tube manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
334413 Semiconductors and related device manufacturing	1.1785	0.1495	2.8662	1.3634	1.5755
33441A All other electronic component manufacturing	1.2951	0.2344	5.5819	1.3569	1.3870
334510 Electromedical apparatus manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
334511 Search, detection, and navigation instruments	1.2118	0.3084	4.0320	1.1800	1.4277
334512 Automatic environmental control manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
334513 Industrial process variable instruments	1.2576	0.2770	7.0840	1.2570	1.2864
334514 Totalizing fluid meters and counting devices	1.0000	0.0000	0.0000	0.0000	0.0000
334515 Electricity and signal testing instruments	1.1898	0.2271	5.8050	1.2270	1.2376
334516 Analytical laboratory instrument manufacturing	1.3136	0.2892	6.6296	1.3055	1.4492
334517 Irradiation apparatus manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
33451A Watch, clock, and other measuring and controlling device manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
334611 Software reproducing	1.1371	0.2356	3.8644	1.1187	1.1976
334612 Audio and video media reproduction	1.0000	0.0000	0.0000	0.0000	0.0000
334613 Magnetic and optical recording media manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335110 Electric lamp bulb and part manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335120 Lighting fixture manufacturing	1.3585	0.2330	5.0536	1.4788	1.6185
335211 Electric housewares and household fan manufacturing	1.3832	0.1907	3.6653	1.6319	2.0098
335212 Household vacuum cleaner manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335221 Household cooking appliance manufacturing	1.3820	0.1957	4.5582	1.6203	1.6869
335222 Household refrigerator and home freezer manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335224 Household laundry equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335228 Other major household appliance manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335311 Electric power and specialty transformer manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335312 Motor and generator manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335313 Switchgear and switchboard apparatus manufacturing	1.2651	0.2275	4.8116	1.3239	1.4085
335314 Relay and industrial control manufacturing	1.2947	0.2584	5.1912	1.3369	1.4590
335911 Storage battery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335912 Primary battery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335921 Fiber optic cable manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335929 Other communication and energy wire manufacturing	1.4641	0.1867	3.3527	1.7013	2.1755
335930 Wiring device manufacturing	1.3369	0.2446	4.9970	1.3723	1.4787
335991 Carbon and graphite product manufacturing	1.2595	0.2113	3.8205	1.3376	1.5748
335999 Miscellaneous electrical equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
336110 Automobile and light truck manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
336120 Heavy duty truck manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
336211 Motor vehicle body manufacturing	1.4470	0.2058	5.1147	1.7246	1.7334
336212 Truck trailer manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

Region Definition: Aiken, SC; Bamberg, SC; Barnwell, SC; Colleton, SC; Lexington, SC; Orangeburg, SC

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RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Cope Site (EXOGENOUS)

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
336213 Motor home manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
336214 Travel trailer and camper manufacturing	1.4907	0.2432	5.1233	1.5988	1.7721
336300 Motor vehicle parts manufacturing	1.4498	0.2366	4.7071	1.5846	1.8119
336411 Aircraft manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
336412 Aircraft engine and engine parts manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
336413 Other aircraft parts and equipment	1.0000	0.0000	0.0000	0.0000	0.0000
336414 Guided missile and space vehicle manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
33641A Propulsion units and parts for space vehicles and guided missiles	1.0000	0.0000	0.0000	0.0000	0.0000
336500 Railroad rolling stock manufacturing	1.4883	0.2212	4.3890	1.6899	1.9086
336611 Ship building and repairing	1.0000	0.0000	0.0000	0.0000	0.0000
336612 Boat building	1.3111	0.2144	4.9363	1.3789	1.4599
336991 Motorcycle, bicycle, and parts manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
336992 Military armored vehicles and tank parts manufacturing	1.4480	0.2801	3.2133	1.5476	4.4321
336999 All other transportation equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
337110 Wood kitchen cabinet and countertop manufacturing	1.5223	0.2977	10.6709	1.4359	1.3205
337121 Upholstered household furniture manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
337122 Nonupholstered wood household furniture manufacturing	1.5212	0.2936	11.4414	1.4556	1.2962
337124 Metal household furniture manufacturing	1.4032	0.2505	10.0336	1.4167	1.2399
337127 Institutional furniture manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
33712A Other household and institutional furniture	1.0000	0.0000	0.0000	0.0000	0.0000
337211 Wood office furniture manufacturing	1.4859	0.2937	8.7331	1.4278	1.3901
337212 Custom architectural woodwork and millwork	1.3660	0.3409	11.5161	1.2507	1.2046
337214 Office furniture, except wood, manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
337215 Showcases, partitions, shelving, and lockers	1.4178	0.2922	7.8584	1.3403	1.3292
337910 Mattress manufacturing	1.5504	0.2256	6.6673	1.7603	1.6728
337920 Blind and shade manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339111 Laboratory apparatus and furniture manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339112 Surgical and medical instrument manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339113 Surgical appliance and supplies manufacturing	1.2652	0.2201	5.1206	1.3218	1.3874
339114 Dental equipment and supplies manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339115 Ophthalmic goods manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339116 Dental laboratories	1.2048	0.3230	7.7784	1.1622	1.1841
339910 Jewelry and silverware manufacturing	1.2776	0.2112	6.3031	1.4078	1.3528
339920 Sporting and athletic goods manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339930 Doll, toy, and game manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339940 Office supplies, except paper, manufacturing	1.3040	0.2082	4.5630	1.3872	1.5038
339950 Sign manufacturing	1.3949	0.3170	7.9105	1.3034	1.3286
339991 Gasket, packing, and sealing device manufacturing	1.2548	0.2550	5.1229	1.2366	1.3307
339992 Musical instrument manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339994 Broom, brush, and mop manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339995 Burial casket manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
33999A Buttons, pins, and all other miscellaneous manufacturing	1.4050	0.2576	6.3327	1.4079	1.4619

(Continued)

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Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Cope Site (EXOGENOUS)

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
420000 Wholesale trade	1.2156	0.3019	7.1564	1.2003	1.3008
4A0000 Retail trade	1.2349	0.3256	14.6234	1.1980	1.1301
481000 Air transportation	1.2608	0.1726	5.7357	1.6158	1.9249
482000 Rail transportation	1.3363	0.2196	4.1502	1.4455	1.8333
483000 Water transportation	1.3334	0.2263	6.1725	1.5756	1.6515
484000 Truck transportation	1.4053	0.2743	8.0408	1.4619	1.4757
485A00 Transit and ground passenger transportation	1.3058	0.3332	22.8455	1.2597	1.0920
486000 Pipeline transportation	1.3455	0.3181	5.7542	1.3583	1.8722
48A000 Scenic and sightseeing transportation and support activities for transportation	1.3017	0.3396	8.7136	1.2822	1.3494
492000 Couriers and messengers	1.1986	0.2740	10.4954	1.1933	1.1752
493000 Warehousing and storage	1.1988	0.3429	11.6537	1.1371	1.1362
511110 Newspaper publishers	1.1682	0.3332	10.5695	1.1367	1.1163
511120 Periodical publishers	1.2505	0.2606	6.8405	1.2785	1.2847
511130 Book publishers	1.1521	0.1985	4.9594	1.2139	1.2353
5111A0 Database, directory, and other publishers	1.1830	0.2109	4.2149	1.2476	1.3771
511200 Software publishers	1.1604	0.3275	6.4204	1.1379	1.2959
512100 Motion picture and video industries	1.1802	0.1810	3.8728	1.2613	1.4148
512200 Sound recording industries	1.1749	0.1201	4.5043	1.5072	1.4055
513100 Radio and television broadcasting	1.2361	0.2687	4.4862	1.2480	1.5376
513200 Cable networks and program distribution	1.1746	0.2104	4.5312	1.2110	1.3159
513300 Telecommunications	1.2556	0.2304	5.1743	1.3226	1.4574
514100 Information services	1.1844	0.4724	15.4702	1.1010	1.1169
514200 Data processing services	1.1776	0.4106	6.7982	1.1173	1.3025
52A000 Monetary authorities and depository credit intermediation	1.1570	0.2042	5.4679	1.2395	1.3542
522A00 Nondepository credit intermediation and related activities	1.2003	0.2147	5.6066	1.2963	1.4293
523000 Securities, commodity contracts, investments	1.1933	0.4784	14.0475	1.1254	1.1419
524100 Insurance carriers	1.2985	0.2174	5.3049	1.3969	1.4690
524200 Insurance agencies, brokerages, and related	1.1257	0.2338	6.2342	1.1351	1.1694
525000 Funds, trusts, and other financial vehicles	1.2786	0.1949	6.5902	1.8814	1.6558
531000 Real estate	1.2181	0.1343	6.0781	1.5527	1.4123
S00800 Owner-occupied dwellings	1.1449	0.0296	0.9658	0.0000	0.0000
532100 Automotive equipment rental and leasing	1.2101	0.1619	6.0108	1.4207	1.3938
532A00 General and consumer goods rental except video tapes and discs	1.1979	0.2650	9.1663	1.2160	1.2273
532230 Video tape and disc rental	1.1653	0.1895	13.4090	1.2028	1.0838
532400 Machinery and equipment rental and leasing	1.1613	0.1743	4.3291	1.2731	1.4722
533000 Lessors of nonfinancial intangible assets	1.0127	0.0752	0.7321	1.0408	1.1620
541100 Legal services	1.1438	0.4765	9.2709	1.0826	1.1573
541200 Accounting and bookkeeping services	1.1495	0.4922	19.7208	1.0801	1.0733
541300 Architectural and engineering services	1.1814	0.3203	8.0530	1.1724	1.2672
541400 Specialized design services	1.1813	0.3456	20.4228	1.1504	1.0915
541511 Custom computer programming services	1.1382	0.4188	8.7427	1.0955	1.2072

(Continued)

Region Definition: Aiken, SC; Bamberg, SC; Barnwell, SC; Colleton, SC; Lexington, SC; Orangeburg, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
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3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars.
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NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Cope Site (EXOGENOUS)

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
541512 Computer systems design services	1.1590	0.4235	8.7091	1.1078	1.2360
54151A Other computer related services, including facilities management	1.2146	0.2479	6.8821	1.2570	1.3695
541610 Management consulting services	1.1677	0.5030	15.4584	1.0919	1.1328
5416A0 Environmental and other technical consulting services	1.1651	0.4128	14.5275	1.1107	1.1205
541700 Scientific research and development services	1.2290	0.4016	9.4987	1.1483	1.2181
541800 Advertising and related services	1.1776	0.2815	9.0382	1.1793	1.2093
541920 Photographic services	1.2038	0.3434	9.6694	1.1569	1.2139
541940 Veterinary services	1.2598	0.3824	8.7802	1.1776	1.2868
5419A0 All other miscellaneous professional and technical services	1.1307	0.1726	2.9795	1.2493	1.7284
550000 Management of companies and enterprises	1.1752	0.3875	7.0899	1.1149	1.1891
561300 Employment services	1.0487	0.3880	23.9440	1.0351	1.0197
561500 Travel arrangement and reservation services	1.2709	0.3308	11.7927	1.2524	1.2110
561100 Office administrative services	1.1596	0.3615	9.2360	1.1343	1.2220
561200 Facilities support services	1.1185	0.3512	10.9814	1.0954	1.1231
561400 Business support services	1.1720	0.2825	13.5067	1.1736	1.1274
561600 Investigation and security services	1.1092	0.4023	19.2891	1.0733	1.0546
561700 Services to buildings and dwellings	1.2985	0.3289	20.1716	1.2892	1.1688
561900 Other support services	1.1981	0.2511	12.3357	1.2232	1.1456
562000 Waste management and remediation services	1.4386	0.2996	7.1472	1.4708	1.6576
611100 Elementary and secondary schools	1.3061	0.4997	29.1202	1.1550	1.0877
611A00 Colleges, universities, and junior colleges	1.2356	0.4842	22.1380	1.1065	1.0858
611B00 Other educational services	1.2101	0.3193	20.2076	1.1847	1.0982
621A00 Offices of physicians, dentists, and other health practitioners	1.1471	0.4428	8.5965	1.0903	1.1759
621600 Home health care services	1.1530	0.4475	21.8129	1.0910	1.0658
621B00 Other ambulatory health care services	1.2530	0.3833	10.4321	1.1966	1.2623
622000 Hospitals	1.2346	0.3926	10.8284	1.1593	1.2192
623000 Nursing and residential care facilities	1.2385	0.4625	22.7867	1.1316	1.1169
624400 Child day care services	1.2365	0.3562	32.4231	1.1651	1.0603
624A00 Social assistance, except child day care services	1.2762	0.4418	28.4116	1.1568	1.0744
711100 Performing arts companies	1.1655	0.3666	33.2725	1.1167	1.0485
711200 Spectator sports	1.1448	0.4673	26.2021	1.0893	1.0658
711A00 Promoters of performing arts and sports and agents for public figures	1.1348	0.3132	26.1945	1.1194	1.0578
711500 Independent artists, writers, and performers	1.2213	0.3364	14.8761	1.1842	1.1912
712000 Museums, historical sites, zoos, and parks	1.3007	0.4343	14.7973	1.1829	1.2086
713940 Fitness and recreational sports centers	1.2621	0.3964	29.5327	1.1572	1.0629
713950 Bowling centers	1.2545	0.3769	25.6752	1.1672	1.0719
713A00 Other amusement, gambling, and recreation industries	1.2083	0.3803	19.9569	1.1318	1.0763
7211A0 Hotels and motels, including casino hotels	1.1850	0.3184	15.5067	1.1439	1.0889
721A00 Other accommodations	1.2673	0.2360	10.5351	1.3199	1.2155
722000 Food services and drinking places	1.2832	0.3606	27.1216	1.1694	1.0675
8111A0 Automotive repair and maintenance, except car washes	1.3581	0.3192	13.4229	1.2958	1.1939
811192 Car washes	1.1826	0.3079	26.0310	1.1554	1.0546

(Continued)

Region Definition: Aiken, SC; Bamberg, SC; Barnwell, SC; Colleton, SC; Lexington, SC; Orangeburg, SC

*Includes Government enterprises.

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NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Cope Site (EXOGENOUS)

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
811200 Electronic equipment repair and maintenance	1.1762	0.3910	13.4384	1.1073	1.0968
811300 Commercial machinery repair and maintenance	1.1730	0.3495	12.3752	1.1208	1.1058
811400 Household goods repair and maintenance	1.2116	0.2696	14.2518	1.1930	1.1137
812100 Personal care services	1.1882	0.3220	20.0730	1.1531	1.0892
812200 Death care services	1.2177	0.2873	12.0133	1.2052	1.1523
812300 Drycleaning and laundry services	1.2320	0.3356	18.4779	1.1730	1.0964
812900 Other personal services	1.2184	0.1550	8.6576	1.4256	1.2204
813100 Religious organizations	1.1477	0.4934	25.2405	1.0620	1.0409
813A00 Grantmaking and giving and social advocacy organizations	1.3008	0.3749	15.0003	1.2533	1.2226
813B00 Civic, social, professional and similar organizations	1.3499	0.4120	17.2049	1.2364	1.1720
491000 Postal service	1.1315	0.3528	6.7934	1.0839	1.1577
S00A00 Other government enterprises	1.3778	0.2682	7.1659	1.4496	1.5020
H00000 Households	0.0000	0.0000	0.0000	0.0000	0.0000

Region Definition: Aiken, SC; Bamberg, SC; Barnwell, SC; Colleton, SC; Lexington, SC; Orangeburg, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
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SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 2.4 Total Multipliers for Output, Earnings, and Employment by Industry Aggregation
Cope Site (EXOGENOUS)

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
1. Crop and animal production	1.4952	0.1955	9.0920	1.6418	1.3954
2. Forestry, fishing, and related activities	1.6490	0.2685	10.3516	1.6847	1.6465
3. Oil and gas extraction	1.0000	0.0000	0.0000	0.0000	0.0000
4. Mining, except oil and gas	1.2582	0.2895	6.4317	1.2281	1.2716
5. Support activities for mining	1.2703	0.2746	7.5845	1.2846	1.2470
6. Utilities*	1.1654	0.1711	2.8539	1.2780	1.6756
7. Construction	1.4704	0.3938	12.2838	1.3419	1.3320
8. Wood product manufacturing	1.9275	0.2688	8.6390	2.3144	2.3963
9. Nonmetallic mineral product manufacturing	1.3975	0.2084	4.8459	1.5642	1.6727
10. Primary metal manufacturing	1.4244	0.1962	4.0482	1.6942	2.0217
11. Fabricated metal product manufacturing	1.3990	0.2706	6.5289	1.3914	1.4115
12. Machinery manufacturing	1.3998	0.1964	4.3322	1.6297	1.7508
13. Computer and electronic product manufacturing	1.3017	0.1941	4.3209	1.4692	1.5568
14. Electrical equipment and appliance manufacturing	1.3943	0.2112	4.5000	1.5253	1.6494
15. Motor vehicle, body, trailer, and parts manufacturing	1.4547	0.2342	4.4816	1.5682	1.8435
16. Other transportation equipment manufacturing	1.4648	0.2193	4.5440	1.6307	1.8105
17. Furniture and related product manufacturing	1.4484	0.3110	10.5584	1.3375	1.2727
18. Miscellaneous manufacturing	1.3673	0.3058	7.0124	1.2937	1.3534
19. Food, beverage, and tobacco product manufacturing	1.6570	0.2158	7.2980	1.8775	2.0729
20. Textile and textile product mills	1.8283	0.2765	7.9107	1.9277	1.9340
21. Apparel, leather, and allied product manufacturing	1.6660	0.3151	9.7543	1.5774	1.5047
22. Paper manufacturing	1.3199	0.1523	3.0387	1.6765	2.0950
23. Printing and related support activities	1.2562	0.2610	6.2232	1.2486	1.2851
24. Petroleum and coal products manufacturing	1.2758	0.0913	1.8529	2.6413	4.3263
25. Chemical manufacturing	1.3500	0.1644	3.1288	1.7177	2.1911
26. Plastics and rubber products manufacturing	1.3542	0.2205	4.8663	1.4181	1.5297
27. Wholesale trade	1.2158	0.3003	7.0247	1.1940	1.2769
28. Retail trade	1.2344	0.3230	14.4663	1.1887	1.1179
29. Air transportation	1.2565	0.1708	5.7911	1.5989	1.9435
30. Rail transportation	1.3323	0.2164	4.1374	1.4241	1.8276
31. Water transportation	1.3231	0.2227	6.0932	1.5501	1.6303
32. Truck transportation	1.4024	0.2727	7.9746	1.4533	1.4636
33. Transit and ground passenger transportation*	1.3051	0.3325	22.7337	1.2572	1.0867
34. Pipeline transportation	1.3452	0.3164	5.5946	1.3511	1.8203
35. Other transportation and support activities*	1.1943	0.3049	7.8384	1.1599	1.2249
36. Warehousing and storage	1.1989	0.3394	11.4942	1.1255	1.1207
37. Publishing including software	1.1761	0.3100	8.4605	1.1525	1.1523
38. Motion picture and sound recording industries	1.1809	0.1772	3.8099	1.2636	1.4072
39. Broadcasting and telecommunications	1.2510	0.2319	4.8810	1.3140	1.4495
40. Information and data processing services	1.1820	0.4498	10.7731	1.1028	1.1643
41. Federal Reserve banks, credit intermediation and related services	1.1681	0.2045	5.3052	1.2396	1.3321
42. Securities, commodity contracts, investments	1.1927	0.4746	13.8346	1.1165	1.1246
43. Insurance carriers and related activities	1.2334	0.2224	5.5069	1.2510	1.2830
44. Funds, trusts, and other financial vehicles	1.2796	0.1923	6.4698	1.8567	1.6256

(Continued)

Region Definition: Aiken, SC; Bamberg, SC; Barnwell, SC; Colleton, SC; Lexington, SC; Orangeburg, SC

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SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 2.4 Total Multipliers for Output, Earnings, and Employment by Industry Aggregation
Cope Site (EXOGENOUS)

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
45. Real estate	1.1601	0.0532	2.1148	2.5761	2.0584
46. Rental and leasing services and lessors of intangible assets	1.1897	0.1729	6.2311	1.3164	1.3132
47. Professional, scientific, and technical services	1.1666	0.3698	9.3117	1.1228	1.1788
48. Management of companies and enterprises	1.1746	0.3838	6.9584	1.1044	1.1671
49. Administrative and support services	1.1766	0.3572	19.1919	1.1251	1.0838
50. Waste management and remediation services	1.4391	0.2986	7.2084	1.4655	1.6718
51. Educational services	1.2596	0.4767	24.4316	1.1195	1.0792
52. Ambulatory health care services	1.1659	0.4306	9.3148	1.0993	1.1647
53. Hospitals and nursing and residential care facilities	1.2353	0.4081	14.3040	1.1421	1.1566
54. Social assistance	1.2597	0.4031	29.9554	1.1522	1.0631
55. Performing arts, museums, and related activities	1.1457	0.4145	27.8911	1.0965	1.0592
56. Amusements, gambling, and recreation	1.2208	0.3808	22.2055	1.1332	1.0669
57. Accommodation	1.1915	0.3124	15.1248	1.1477	1.0904
58. Food services and drinking places	1.2876	0.3597	27.0596	1.1664	1.0650
59. Other services*	1.2548	0.3261	14.8284	1.1875	1.1182
60. Households	0.0000	0.0000	0.0000	0.0000	0.0000

Region Definition: Aiken, SC; Bamberg, SC; Barnwell, SC; Colleton, SC; Lexington, SC; Orangeburg, SC

*Includes Government enterprises.

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SOURCE.–Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

Sec 9.3 Ref 40

Appendix B.—RIMS II Detailed Industries

Detailed industry code and title	Related 1997 NAICS codes
AGRICULTURE, FORESTRY, FISHING, AND HUNTING	
1110 Crop production	
1111A0 Oilseed farming	11111, 11112
1111B0 Grain farming	11113, 11114, 11115, 11116, 11119
111200 Vegetable and melon farming	1112
1113A0 Fruit farming	11131, 11132, 111331-4, 111336, 111339
111335 Tree nut farming	111335
111400 Greenhouse and nursery production	1114
111910 Tobacco farming	11191
111920 Cotton farming	11192
1119A0 Sugarcane and sugar beet farming	11193, 111991
1119B0 All other crop farming	11194, 111992, 111998
1120 Animal production	
112100 Cattle ranching and farming	1121
112300 Poultry and egg production	1123
112A00 Animal production, except cattle and poultry and eggs	1122, 1124, 1125, 1129
1130 Forestry and logging	
113A00 Forest nurseries, forest products, and timber tracts	1131, 1132
113300 Logging	1133
1140 Fishing, hunting and trapping	
114100 Fishing	1141
114200 Hunting and trapping	1142
1150 Agriculture and forestry support activities	
115000 Agriculture and forestry support activities	115
MINING	
2110 Oil and gas extraction	
211000 Oil and gas extraction	211
2121 Coal mining	
212100 Coal mining	2121
2122 Metal ores mining	
212210 Iron ore mining	21221
212230 Copper, nickel, lead, and zinc mining	21223
2122A0 Gold, silver, and other metal ore mining	21222, 21229
2123 Nonmetallic mineral mining and quarrying	
212310 Stone mining and quarrying	21231
212320 Sand, gravel, clay, and refractory mining	21232
212390 Other nonmetallic mineral mining	21239
2130 Support activities for mining	
213111 Drilling oil and gas wells	213111
213112 Support activities for oil and gas operations	213112
21311A Support activities for other mining	213113-5
UTILITIES	
2211 Power generation and supply	
2211A0 Power generation and supply	2211 (1)
2212 Natural gas distribution	
221200 Natural gas distribution	2212
2213 Water, sewage and other systems	
221300 Water, sewage and other systems	2213
CONSTRUCTION	
2300 Construction	
230000 Construction	23
MANUFACTURING	
3110 Food manufacturing	
311111 Dog and cat food manufacturing	311111
311119 Other animal food manufacturing	311119
311211 Flour milling	311211
311212 Rice milling	311212
311213 Malt manufacturing	311213
311221 Wet corn milling	311221
311222 Soybean processing	311222
311223 Other oilseed processing	311223
311225 Fats and oils refining and blending	311225
311230 Breakfast cereal manufacturing	31123
311310 Sugar manufacturing	31131
311320 Confectionery manufacturing from cacao beans	31132
311330 Confectionery manufacturing from purchased chocolate	31133
311340 Nonchocolate confectionery manufacturing	31134
311410 Frozen food manufacturing	31141
311420 Fruit and vegetable canning and drying	31142
311511 Fluid milk manufacturing	311511
311512 Creamery butter manufacturing	311512
311513 Cheese manufacturing	311513
311514 Dry, condensed, and evaporated dairy products	311514
311520 Ice cream and frozen dessert manufacturing	31152
311611 Animal, except poultry, slaughtering	311611
311612 Meat processed from carcasses	311612
311613 Rendering and meat byproduct processing	311613
311615 Poultry processing	311615
311700 Seafood product preparation and packaging	3117
31181A Bread and bakery product, except frozen, manufacturing	311811-2
311813 Frozen cakes and other pastries manufacturing	311813
311821 Cookie and cracker manufacturing	311821
311822 Mixes and dough made from purchased flour	311822
311823 Dry pasta manufacturing	311823
311830 Tortilla manufacturing	31183
311911 Roasted nuts and peanut butter manufacturing	311911
311919 Other snack food manufacturing	311919
311920 Coffee and tea manufacturing	31192
311930 Flavoring syrup and concentrate manufacturing	31193
311941 Mayonnaise, dressing, and sauce manufacturing	311941
311942 Spice and extract manufacturing	311942
311990 All other food manufacturing	31199
3121 Beverage manufacturing	
312110 Soft drink and ice manufacturing	31211
312120 Breweries	31212
312130 Wineries	31213
312140 Distilleries	31214
3122 Tobacco manufacturing	
312210 Tobacco stemming and redrying	31221
312221 Cigarette manufacturing	312221
312229 Other tobacco product manufacturing	312229
3130 Textile mills	
313100 Fiber, yarn, and thread mills	3131
313210 Broadwoven fabric mills	31321
313220 Narrow fabric mills and schiffli embroidery	31322
313230 Nonwoven fabric mills	31323
313240 Knit fabric mills	31324
313310 Textile and fabric finishing mills	31331
313320 Fabric coating mills	31332
3140 Textile product mills	
314110 Carpet and rug mills	31411
314120 Curtain and linen mills	31412
314910 Textile bag and canvas mills	31491
314992 Tire cord and tire fabric mills	314992
31499A Other miscellaneous textile product mills	314991, 314999
3150 Apparel manufacturing	
315111 Sheer hosiery mills	315111

Appendix B.—RIMS II Detailed Industries

Detailed industry code and title	Related 1997 NAICS codes
315119 Other hosiery and sock mills	315119
315190 Other apparel knitting mills	31519
315200 Cut and sew apparel manufacturing	3152
315900 Accessories and other apparel manufacturing	3159
3160 Leather and allied product manufacturing	
316100 Leather and hide tanning and finishing	3161
316200 Footwear manufacturing	3162
316900 Other leather product manufacturing	3169
3210 Wood product manufacturing	
321113 Sawmills	321113
321114 Wood preservation	321114
32121A Veneer and plywood manufacturing	321211-2
32121B Engineered wood member and truss manufacturing	321213-4
321219 Reconstituted wood product manufacturing	321219
321911 Wood windows and door manufacturing	321911
321912 Cut stock, resawing lumber, and planing	321912
321918 Other millwork, including flooring	321918
321920 Wood container and pallet manufacturing	32192
321991 Manufactured home, mobile home, manufacturing	321991
321992 Prefabricated wood building manufacturing	321992
321999 Miscellaneous wood product manufacturing	321999
3221 Pulp, paper, and paperboard mills	
322110 Pulp mills	32211
3221A0 Paper and paperboard mills	32212, 32213
3222 Converted paper product manufacturing	
322210 Paperboard container manufacturing	32221
32222A Coated and laminated paper and packaging materials	322221-2
32222B Coated and uncoated paper bag manufacturing	322223-4
322225 Flexible packaging foil manufacturing	322225
322226 Surface-coated paperboard manufacturing	322226
322231 Die-cut paper office supplies manufacturing	322231
322232 Envelope manufacturing	322232
322233 Stationery and related product manufacturing	322233
322291 Sanitary paper product manufacturing	322291
322299 All other converted paper product manufacturing	322299
3230 Printing and related support activities	
32311A Commercial printing	323110-5, 323119
323116 Manifold business forms printing	323116
323117 Books printing	323117
323118 Blankbook and looseleaf binder manufacturing	323118
323121 Tradebinding and related work	323121
323122 Prepress services	323122
3240 Petroleum and coal products manufacturing	
324110 Petroleum refineries	32411
324121 Asphalt paving mixture and block manufacturing	324121
324122 Asphalt shingle and coating materials manufacturing	324122
324191 Petroleum lubricating oil and grease manufacturing	324191
324199 All other petroleum and coal products manufacturing	324199
3251 Basic chemical manufacturing	
325110 Petrochemical manufacturing	32511
325120 Industrial gas manufacturing	32512
325130 Synthetic dye and pigment manufacturing	32513
325180 Other basic inorganic chemical manufacturing	32518
325190 Other basic organic chemical manufacturing	32519
3252 Resin, rubber, and artificial fibers manufacturing	
325211 Plastics material and resin manufacturing	325211
325212 Synthetic rubber manufacturing	325212
325221 Cellulosic organic fiber manufacturing	325221
325222 Noncellulosic organic fiber manufacturing	325222
3 Agricultural chemical manufacturing	
325311 Nitrogenous fertilizer manufacturing	325311
325312 Phosphatic fertilizer manufacturing	325312
325314 Fertilizer, mixing only, manufacturing	325314
325320 Pesticide and other agricultural chemical manufacturing	32532
3254 Pharmaceutical and medicine manufacturing	
325400 Pharmaceutical and medicine manufacturing	3254
3255 Paint, coating, and adhesive manufacturing	
325510 Paint and coating manufacturing	32551
325520 Adhesive manufacturing	32552
3256 Soap, cleaning compound, and toiletry manufacturing	
325611 Soap and other detergent manufacturing	325611
325612 Polish and other sanitation good manufacturing	325612
325613 Surface active agent manufacturing	325613
325620 Toilet preparation manufacturing	32562
3259 Other chemical product and preparation manufacturing	
325910 Printing ink manufacturing	32591
325920 Explosives manufacturing	32592
325991 Custom compounding of purchased resins	325991
325992 Photographic film and chemical manufacturing	325992
325998 Other miscellaneous chemical product manufacturing	325998
3260 Plastics and rubber products manufacturing	
326110 Plastics packaging materials, film and sheet	32611
326120 Plastics pipe, fittings, and profile shapes	32612
326130 Laminated plastics plate, sheet, and shapes	32613
3261A0 Foam product manufacturing	32614, 32615
326160 Plastics bottle manufacturing	32616
326192 Resilient floor covering manufacturing	326192
32619A Plastics plumbing fixtures and all other plastics products	326191, 326199
326210 Tire manufacturing	32621
326220 Rubber and plastics hose and belting manufacturing	32622
326290 Other rubber product manufacturing	32629
3270 Nonmetallic mineral product manufacturing	
327111 Vitreous china plumbing fixture manufacturing	327111
327112 Vitreous china and earthenware articles manufacturing	327112
327113 Porcelain electrical supply manufacturing	327113
327121 Brick and structural clay tile manufacturing	327121
327122 Ceramic wall and floor tile manufacturing	327122
32712A Clay refractory and other structural clay products	327123-4
327125 Nonclay refractory manufacturing	327125
327213 Glass container manufacturing	327213
32721A Glass and glass products, except glass containers	327211-2, 327215
327310 Cement manufacturing	32731
327320 Ready-mix concrete manufacturing	32732
327331 Concrete block and brick manufacturing	327331
327332 Concrete pipe manufacturing	327332
327390 Other concrete product manufacturing	32739
327410 Lime manufacturing	32741
327420 Gypsum product manufacturing	32742
327910 Abrasive product manufacturing	32791
327991 Cut stone and stone product manufacturing	327991
327992 Ground or treated minerals and earths manufacturing	327992
327993 Mineral wool manufacturing	327993
327999 Miscellaneous nonmetallic mineral products	327999
331A Iron and steel mills and manufacturing from purchased steel	
331111 Iron and steel mills	331111
331112 Ferroalloy and related product manufacturing	331112
331210 Iron, steel pipe and tube from purchased steel	33121
331221 Rolled steel shape manufacturing	331221
331222 Steel wire drawing	331222
331B Nonferrous metal production and processing	
331311 Alumina refining	331311
331312 Primary aluminum production	331312
331314 Secondary smelting and alloying of aluminum	331314
331315 Aluminum sheet, plate, and foil manufacturing	331315
331316 Aluminum extruded product manufacturing	331316
331319 Other aluminum rolling and drawing	331319
331411 Primary smelting and refining of copper	331411

Appendix B.—RIMS II Detailed Industries

Detailed industry code and title	Related 1997 NAICS codes
331419 Primary nonferrous metal, except copper and aluminum	331419
331421 Copper rolling, drawing, and extruding	331421
331422 Copper wire, except mechanical, drawing	331422
331423 Secondary processing of copper	331423
331491 Nonferrous metal, except copper and aluminum, shaping	331491
331492 Secondary processing of other nonferrous	331492
3315 Foundries	
331510 Ferrous metal foundries	33151
33152A Aluminum foundries	331521, 331524
33152B Nonferrous foundries, except aluminum	331522, 331525, 331528
3321 Forging and stamping	
332111 Iron and steel forging	332111
332112 Nonferrous forging	332112
332114 Custom roll forming	332114
33211A All other forging and stamping	332115-7
3322 Cutlery and handtool manufacturing	
332211 Cutlery and flatware, except precious, manufacturing	332211
332212 Hand and edge tool manufacturing	332212
332213 Saw blade and handsaw manufacturing	332213
332214 Kitchen utensil, pot, and pan manufacturing	332214
3323 Architectural and structural metals manufacturing	
332311 Prefabricated metal buildings and components	332311
332312 Fabricated structural metal manufacturing	332312
332313 Plate work manufacturing	332313
332321 Metal window and door manufacturing	332321
332322 Sheet metal work manufacturing	332322
332323 Ornamental and architectural metal work manufacturing	332323
4 Boiler, tank, and shipping container manufacturing	
332410 Power boiler and heat exchanger manufacturing	33241
332420 Metal tank, heavy gauge, manufacturing	33242
332430 Metal can, box, and other container manufacturing	33243
332A Ordnance and accessories manufacturing	
33299A Ammunition manufacturing	332992-3
332994 Small arms manufacturing	332994
332995 Other ordnance and accessories manufacturing	332995
332B Other fabricated metal product manufacturing	
332500 Hardware manufacturing	3325
332600 Spring and wire product manufacturing	3326
332710 Machine shops	33271
332720 Turned product and screw, nut, and bolt manufacturing	33272
332811 Metal heat treating	332811
332812 Metal coating and nonprecious engraving	332812
332813 Electroplating, anodizing, and coloring metal	332813
332910 Metal valve manufacturing	33291
332991 Ball and roller bearing manufacturing	332991
332996 Fabricated pipe and pipe fitting manufacturing	332996
332997 Industrial pattern manufacturing	332997
332998 Enameled iron and metal sanitary ware manufacturing	332998
332999 Miscellaneous fabricated metal product manufacturing	332999
3331 Agriculture, construction, and mining machinery	
333111 Farm machinery and equipment manufacturing	333111
333112 Lawn and garden equipment manufacturing	333112
333120 Construction machinery manufacturing	33312
333131 Mining machinery and equipment manufacturing	333131
333132 Oil and gas field machinery and equipment	333132
3332 Industrial machinery manufacturing	
333210 Sawmill and woodworking machinery	33321
333220 Plastics and rubber industry machinery	33322
333291 Paper industry machinery manufacturing	333291
333292 Textile machinery manufacturing	333292
333293 Printing machinery and equipment manufacturing	333293
333294 Food product machinery manufacturing	333294
333295 Semiconductor machinery manufacturing	333295
333298 All other industrial machinery manufacturing	333298
3333 Commercial and service industry machinery	
33331A Automatic vending, commercial laundry and drycleaning machinery	333311-2
333313 Office machinery manufacturing	333313
333314 Optical instrument and lens manufacturing	333314
333315 Photographic and photocopying equipment manufacturing	333315
333319 Other commercial and service machinery manufacturing	333319
3334 HVAC and commercial refrigeration equipment	
333411 Air purification equipment manufacturing	333411
333412 Industrial and commercial fan and blower manufacturing	333412
333414 Heating equipment, except warm air furnaces	333414
333415 AC, refrigeration, and forced air heating	333415
3335 Metalworking machinery manufacturing	
333511 Industrial mold manufacturing	333511
333512 Metal cutting machine tool manufacturing	333512
333513 Metal forming machine tool manufacturing	333513
333514 Special tool, die, jig, and fixture manufacturing	333514
333515 Cutting tool and machine tool accessory manufacturing	333515
33351A Rolling mill and other metalworking machinery	333516, 333518
3336 Turbine and power transmission equipment manufacturing	
333611 Turbine and turbine generator set units manufacturing	333611
33361A Speed changers and mechanical power transmission equipment	333612-3
333618 Other engine equipment manufacturing	333618
3339 Other general purpose machinery manufacturing	
333911 Pump and pumping equipment manufacturing	333911
333912 Air and gas compressor manufacturing	333912
333913 Measuring and dispensing pump manufacturing	333913
333921 Elevator and moving stairway manufacturing	333921
333922 Conveyor and conveying equipment manufacturing	333922
333923 Overhead cranes, hoists, and monorail systems	333923
333924 Industrial truck, trailer, and stacker manufacturing	333924
333991 Power-driven handtool manufacturing	333991
333992 Welding and soldering equipment manufacturing	333992
333993 Packaging machinery manufacturing	333993
333994 Industrial process furnace and oven manufacturing	333994
333995 Fluid power cylinder and actuator manufacturing	333995
333996 Fluid power pump and motor manufacturing	333996
33399A Scales, balances, and miscellaneous general purpose machinery	333997, 333999
3341 Computer and peripheral equipment manufacturing	
334111 Electronic computer manufacturing	334111
334112 Computer storage device manufacturing	334112
334113 Computer terminal manufacturing	334113
334119 Other computer peripheral equipment manufacturing	334119
334A Audio, video, and communications equipment manufacturing	
334210 Telephone apparatus manufacturing	33421
334220 Broadcast and wireless communications equipment	33422
334290 Other communications equipment manufacturing	33429
334300 Audio and video equipment manufacturing	3343
3344 Semiconductor and electronic component manufacturing	
334411 Electron tube manufacturing	334411
334413 Semiconductors and related device manufacturing	334413
33441A All other electronic component manufacturing	334412, 334414-9
3345 Electronic instrument manufacturing	
334510 Electromedical apparatus manufacturing	334510
334511 Search, detection, and navigation instruments	334511
334512 Automatic environmental control manufacturing	334512
334513 Industrial process variable instruments	334513
334514 Totalizing fluid meters and counting devices	334514
334515 Electricity and signal testing instruments	334515

Appendix B.—RIMS II Detailed Industries

Detailed industry code and title	Related 1997 NAICS codes
334516 Analytical laboratory instrument manufacturing	334516
334517 Irradiation apparatus manufacturing	334517
33451A Watch, clock, and other measuring and controlling device manufacturing	334518-9
3346 Magnetic media manufacturing and reproducing	
334611 Software reproducing	334611
334612 Audio and video media reproduction	334612
334613 Magnetic and optical recording media manufacturing	334613
3351 Electric lighting equipment manufacturing	
335110 Electric lamp bulb and part manufacturing	33511
335120 Lighting fixture manufacturing	33512
3352 Household appliance manufacturing	
335211 Electric housewares and household fan manufacturing	335211
335212 Household vacuum cleaner manufacturing	335212
335221 Household cooking appliance manufacturing	335221
335222 Household refrigerator and home freezer manufacturing	335222
335224 Household laundry equipment manufacturing	335224
335228 Other major household appliance manufacturing	335228
3353 Electrical equipment manufacturing	
335311 Electric power and specialty transformer manufacturing	335311
335312 Motor and generator manufacturing	335312
335313 Switchgear and switchboard apparatus manufacturing	335313
335314 Relay and industrial control manufacturing	335314
3359 Other electrical equipment and component manufacturing	
335911 Storage battery manufacturing	335911
335912 Primary battery manufacturing	335912
335921 Fiber optic cable manufacturing	335921
335929 Other communication and energy wire manufacturing	335929
335930 Wiring device manufacturing	33593
335991 Carbon and graphite product manufacturing	335991
335999 Miscellaneous electrical equipment manufacturing	335999
3361 Motor vehicle manufacturing	
336110 Automobile and light truck manufacturing	33611
336120 Heavy duty truck manufacturing	33612
336A Motor vehicle body, trailer, and parts manufacturing	
336211 Motor vehicle body manufacturing	336211
336212 Truck trailer manufacturing	336212
336213 Motor home manufacturing	336213
336214 Travel trailer and camper manufacturing	336214
336300 Motor vehicle parts manufacturing	3363
3364 Aerospace product and parts manufacturing	
336411 Aircraft manufacturing	336411
336412 Aircraft engine and engine parts manufacturing	336412
336413 Other aircraft parts and equipment	336413
336414 Guided missile and space vehicle manufacturing	336414
33641A Propulsion units and parts for space vehicles and guided missiles	336415, 336419
336B Other transportation equipment manufacturing	
336500 Railroad rolling stock manufacturing	3365
336611 Ship building and repairing	336611
336612 Boat building	336612
336991 Motorcycle, bicycle, and parts manufacturing	336991
336992 Military armored vehicles and tank parts manufacturing	336992
336999 All other transportation equipment manufacturing	336999
3370 Furniture and related product manufacturing	
337110 Wood kitchen cabinet and countertop manufacturing	33711
337121 Upholstered household furniture manufacturing	337121
337122 Nonupholstered wood household furniture manufacturing	337122
337124 Metal household furniture manufacturing	337124
337127 Institutional furniture manufacturing	337127
33712A Other household and institutional furniture	337125, 337129
337211 Wood office furniture manufacturing	337211
337212 Custom architectural woodwork and millwork	337212
337214 Office furniture, except wood, manufacturing	337214
337215 Showcases, partitions, shelving, and lockers	337215
337910 Mattress manufacturing	33791
337920 Blind and shade manufacturing	33792
3391 Medical equipment and supplies manufacturing	
339111 Laboratory apparatus and furniture manufacturing	339111
339112 Surgical and medical instrument manufacturing	339112
339113 Surgical appliance and supplies manufacturing	339113
339114 Dental equipment and supplies manufacturing	339114
339115 Ophthalmic goods manufacturing	339115
339116 Dental laboratories	339116
3399 Other miscellaneous manufacturing	
339910 Jewelry and silverware manufacturing	33991
339920 Sporting and athletic goods manufacturing	33992
339930 Doll, toy, and game manufacturing	33993
339940 Office supplies, except paper, manufacturing	33994
339950 Sign manufacturing	33995
339991 Gasket, packing, and sealing device manufacturing	339991
339992 Musical instrument manufacturing	339992
339994 Broom, brush, and mop manufacturing	339994
339995 Burial casket manufacturing	339995
33999A Buttons, pins, and all other miscellaneous manufacturing	339993, 339999
WHOLESALE TRADE	
4200 Wholesale trade	
420000 Wholesale trade	42
RETAIL TRADE	
4A00 Retail trade	
4A0000 Retail trade	44, 45
TRANSPORTATION AND WAREHOUSING, EXCLUDING POSTAL SERVICE	
4810 Air transportation	
481000 Air transportation	481
4820 Rail transportation	
482000 Rail transportation	482
4830 Water transportation	
483000 Water transportation	483
4840 Truck transportation	
484000 Truck transportation	484
4850 Transit and ground passenger transportation	
485A00 Transit and ground passenger transportation	485 (1)
4860 Pipeline transportation	
486000 Pipeline transportation	486
48A0 Scenic and sightseeing transportation and support activities for transportation	
48A000 Scenic and sightseeing transportation and support activities for transportation	487, 488
4920 Couriers and messengers	
492000 Couriers and messengers	492
4930 Warehousing and storage	
493000 Warehousing and storage	493
INFORMATION	
5111 Newspaper, book, and directory publishers	
511110 Newspaper publishers	51111
511120 Periodical publishers	51112

Appendix B.—RIMS II Detailed Industries

Detailed industry code and title	Related 1997 NAICS codes
511130 Book publishers	51113
5111A0 Database, directory, and other publishers	51114, 51119
5112 Software publishers	
511200 Software publishers	5112
5120 Motion picture and sound recording industries	
512100 Motion picture and video industries	5121
512200 Sound recording industries	5122
5131 Radio and television broadcasting	
513100 Radio and television broadcasting	5131
5132 Cable networks and program distribution	
513200 Cable networks and program distribution	5132
5133 Telecommunications	
513300 Telecommunications	5133
5141 Information services	
514100 Information services	5141
5142 Data processing services	
514200 Data processing services	5142
FINANCE AND INSURANCE	
52A0 Monetary authorities, credit intermediation and related activities	
52A000 Monetary authorities and depository credit intermediation	521, 5221
522A00 Nondepository credit intermediation and related activities	5222, 5223
[illegible]0 Securities, commodity contracts, investments	
523000 Securities, commodity contracts, investments	523
5240 Insurance carriers and related activities	
524100 Insurance carriers	5241
524200 Insurance agencies, brokerages, and related	5242
5250 Funds, trusts, and other financial vehicles	
525000 Funds, trusts, and other financial vehicles	525
REAL ESTATE AND RENTAL AND LEASING	
5310 Real estate	
531000 Real estate	531
S008 Owner-occupied dwellings	
S00800 Owner-occupied dwellings	
5321 Automotive equipment rental and leasing	
532100 Automotive equipment rental and leasing	5321
532A Consumer goods and general rental centers	
532A00 General and consumer goods rental except video tapes and discs	53221, 53222, 53229, 5323
532230 Video tape and disc rental	53223
5324 Machinery and equipment rental and leasing	
532400 Machinery and equipment rental and leasing	5324
5330 Lessors of nonfinancial intangible assets	
533000 Lessors of nonfinancial intangible assets	533
PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES	
5411 Legal services	
541100 Legal services	5411
[illegible]12 Accounting and bookkeeping services	
541200 Accounting and bookkeeping services	5412
5413 Architectural and engineering services	
541300 Architectural and engineering services	5413
5414 Specialized design services	
541400 Specialized design services	5414
5415 Computer systems design and related services	
541511 Custom computer programming services	541511
541512 Computer systems design services	541512
54151A Other computer related services, including facilities management	541513, 541519
5416 Management and technical consulting services	
541610 Management consulting services	54161
5416A0 Environmental and other technical consulting services	54162, 54169
5417 Scientific research and development services	
541700 Scientific research and development services	5417
5418 Advertising and related services	
541800 Advertising and related services	5418
5419 Other professional and technical services	
541920 Photographic services	54192
541940 Veterinary services	54194
5419A0 All other miscellaneous professional and technical services	54191, 54193, 54199
MANAGEMENT OF COMPANIES AND ENTERPRISES	
5500 Management of companies and enterprises	
550000 Management of companies and enterprises	55
ADMINISTRATIVE AND WASTE MANGEMENT SERVICES	
5613 Employment services	
561300 Employment services	5613
5615 Travel arrangement and reservation services	
561500 Travel arrangement and reservation services	5615
561A All other administrative and support services	
561100 Office administrative services	5611
561200 Facilities support services	5612
561400 Business support services	5614
561600 Investigation and security services	5616
561700 Services to buildings and dwellings	5617
561900 Other support services	5619
5620 Waste management and remediation services	
562000 Waste management and remediation services	562
EDUCATIONAL SERVICES	
6100 Educational services	
611100 Elementary and secondary schools	6111
611A00 Colleges, universities, and junior colleges	6112, 6113
611B00 Other educational services	6114, 6115, 6116, 6117
HEALTH CARE AND SOCIAL ASSISTANCE	
6210 Ambulatory health care services	
621A00 Offices of physicians, dentists, and other health practitioners	6211, 6212, 6213
621600 Home health care services	6216
621B00 Other ambulatory health care services	6214, 6215, 6219
6220 Hospitals	
622000 Hospitals	622
6230 Nursing and residential care facilities	
623000 Nursing and residential care facilities	623
6240 Social assistance	
624400 Child day care services	6244

Appendix B.—RIMS II Detailed Industries

Detailed industry code and title	Related 1997 NAICS codes
624A00 Social assistance, except child day care services	6241, 6242, 6243
ARTS, ENTERTAINMENT, AND RECREATION	
71A0 Performing arts, spectator sports, museums, zoos, and parks	
711100 Performing arts companies	7111
711200 Spectator sports	7112
711A00 Promoters of performing arts and sports and agents for public figures	7113, 7114
711500 Independent artists, writers, and performers	7115
712000 Museums, historical sites, zoos, and parks	712
7130 Amusements, gambling, and recreation	
713940 Fitness and recreational sports centers	71394
713950 Bowling centers	71395
713A00 Other amusement, gambling, and recreation industries	7131, 7132, 71391, 71392, 71393, 71399
ACCOMMODATION AND FOOD SERVICES	
7210 Accommodation	
7211A0 Hotels and motels, including casino hotels	72111, 72112
721A00 Other accommodations	72119, 7212, 7213
7220 Food services and drinking places	
722000 Food services and drinking places	722
OTHER SERVICES, EXCEPT PUBLIC ADMINISTRATION	
8111 Automotive repair and maintenance	
8111A0 Automotive repair and maintenance, except car washes	81111, 81112, 811191, 811198
811192 Car washes	811192
[illegible]A Electronic, commercial, and household goods repair	
811200 Electronic equipment repair and maintenance	8112
811300 Commercial machinery repair and maintenance	8113
811400 Household goods repair and maintenance	8114
8120 Personal and laundry services	
812100 Personal care services	8121
812200 Death care services	8122
812300 Drycleaning and laundry services	8123
812900 Other personal services	8129
813A Religious, grantmaking and giving, and social advocacy organizations	
813100 Religious organizations	8131
813A00 Grantmaking and giving and social advocacy organizations	8132, 8133
813B Civic, social, professional and similar organizations	
813B00 Civic, social, professional and similar organizations	8134, 8139
SPECIAL INDUSTRIES	
S001 Federal and state and local government enterprises	
491000 Postal service	491
S00A00 Other government enterprises	
S002 Households	
H00000 Households	

1. Includes Federal Government enterprises.

Appendix C.—RIMS II Industry Aggregations

	Aggregate industry code and title	RIMS II detailed industry codes[1]
	Agriculture, forestry, fishing, and hunting	
1	Crop and animal production	1111A0-112A00
2	Forestry, fishing, and related activities	113A00-115000
	Mining	
3	Oil and gas extraction	211000
4	Mining, except oil and gas	212100-212390
5	Support activities for mining	213111-21311A
	Utilities*	
6	Utilities*	2211A0-221300
	Construction	
7	Construction	230000
	Manufacturing	
8	Wood product manufacturing	321113-321999
9	Nonmetallic mineral product manufacturing	327111-327999
10	Primary metal manufacturing	331111-33152B
11	Fabricated metal product manufacturing	332111-332999
12	Machinery manufacturing	333111-33399A
13	Computer and electronic product manufacturing	334111-334613
14	Electrical equipment and appliance manufacturing	335110-335999
15	Motor vehicle, body, trailer, and parts manufacturing	336110-336300
16	Other transportation equipment manufacturing	336411-336999
17	Furniture and related product manufacturing	337110-337920
18	Miscellaneous manufacturing	339111-33999A
19	Food, beverage, and tobacco product manufacturing	311111-312229
20	Textile and textile product mills	313100-31499A
21	Apparel, leather, and allied product manufacturing	315111-316900
22	Paper manufacturing	322110-322299
23	Printing and related support activities	32311A-323122
24	Petroleum and coal products manufacturing	324110-324199
25	Chemical manufacturing	325110-325998
26	Plastics and rubber products manufacturing	326110-326290
	Wholesale trade	
27	Wholesale trade	420000
	Retail trade	
28	Retail trade	4A0000
	Transportation and warehousing*	
29	Air transportation	481000
30	Rail transportation	482000
31	Water transportation	483000
32	Truck transportation	484000
33	Transit and ground passenger transportation*	485A00
34	Pipeline transportation	486000
35	Other transportation and support activities*	48A000-492000, 491000
36	Warehousing and storage	493000

Appendix C.—RIMS II Industry Aggregations

Aggregate industry code and title		RIMS II detailed industry codes[1]
	Information	
37	Publishing including software	511110-511200
38	Motion picture and sound recording industries	512100-512200
39	Broadcasting and telecommunications	513100-513300
40	Information and data processing services	514100-514200
	Finance and insurance	
41	Federal Reserve banks, credit intermediation and related services	52A000-522A00
42	Securities, commodity contracts, investments	523000
43	Insurance carriers and related activities	524100-524200
44	Funds, trusts, and other financial vehicles	525000
	Real estate and rental and leasing	
45	Real estate	531000, S00800
46	Rental and leasing services and lessors of intangible assets	532100-533000
	Professional, scientific, and technical services	
47	Professional, scientific, and technical services	541100-5419A0
	Management of companies and enterprises	
48	Management of companies and enterprises	550000
	Administrative and waste management services	
49	Administrative and support services	561300-561900
50	Waste management and remediation services	562000
	Educational services	
51	Educational services	611100-611B00
	Health care and social assistance	
52	Ambulatory health care services	621A00-621B00
53	Hospitals and nursing and residential care facilities	622000-623000
54	Social assistance	624400-624A00
	Arts, entertainment, and recreation	
55	Performing arts, museums, and related activities	711100-712000
56	Amusements, gambling, and recreation	713940-713A00
	Accommodation and food services	
57	Accommodation	7211A0-721A00
58	Food services and drinking places	722000
	Other services*	
59	Other services*	8111A0-813B00, S00A00
	Households	
60	Households	H00000

* Includes Federal Government enterprises.
1. Appendix B identifies the RIMS II detailed industry codes.

Appendix D.—RIMS II Industry Groups

Group industry code and title		RIMS II detailed industry codes[1]	RIMS II aggregate industry codes[2]
1	Agriculture, forestry, fishing, and hunting	1111A0-115000	1-2
2	Mining	211000-21311A	3-5
3	Utilities*	2211A0-221300	6
4	Construction	230000	7
5	Manufacturing	311111-33999A	8-26
6	Wholesale trade	420000	27
7	Retail trade	4A0000	28
8	Transportation and warehousing*	481000-493000	29-36
9	Information	511110-514200	37-40
10	Finance and insurance	52A000-525000	41-44
11	Real estate and rental and leasing	531000-533000	45-46
12	Professional, scientific, and technical services	541100-5419A0	47
13	Management of companies and enterprises	550000	48
14	Administrative and waste management services	561300-562000	49-50
15	Educational services	611100-611B00	51
16	Health care and social assistance	621A00-624A00	52-54
17	Arts, entertainment, and recreation	711100-713A00	55-56
18	Accommodation and food services	7211A0-722000	57-58
19	Other services*	8111A0-813B00, S00A00	59
20	Households	H00000	60

* Includes Federal Government enterprises.
1. Appendix C identifies the RIMS II detailed industry codes.
2. Appendix B identifies the RIMS II aggregate industry codes.

Source

The Regional Input-Output Modeling System (RIMS II) multipliers you received were prepared by the Regional Economic Analysis Division, Bureau of Economic Analysis, BE-61, U.S. Department of Commerce. These multipliers are based on BEA's 1997 national benchmark input-output (I-O) accounts and BEA's 2004 regional economic accounts. Multipliers based on these sources were first released in November 2006.

For more information about the RIMS II model please see the RIMS II handbook, "Regional Multipliers: A User Handbook for the Regional Input-Output Modeling System (Third Edition, March 1997)." A PDF version of the handbook can be downloaded from the RIMS II web site, http://www.bea.gov/bea/regional/rims/.

For questions about the multipliers please call (202-606-5343), FAX (202-606-5321), or e-mail (rimsread@bea.gov).

RIMS II Multipliers

Final-demand output multipliers for the 473 I-O industries—Each entry in TOTLRG##.dat (the file containing the 20-by-473 total final-demand output multipliers for region number ##) represents the dollar change in output that occurs in the row industry for each additional dollar of output delivered to final demand by the column industry. For each column, the sum of the entries in rows 1-19 represents the dollar change in output that occurs in all row industries for each additional dollar of output delivered to final demand by the column industry. This value appears in M473RG##.dat as the second entry on the record corresponding to the column industry. Due to rounding these values may not be equal.

Final-demand output multipliers for the 60 RIMS II aggregate industries—Each entry in TLSQRG##.dat (the file containing the 20-by-60 total final-demand output multipliers for region number ##) represents the dollar change in output that occurs in the row industry for each additional dollar of output delivered to final demand by the column industry. For each column, the sum of the entries in rows 1-19 represents the dollar change in output that occurs in all row industries for each additional dollar of output delivered to final demand by the column industry. This value appears in M_60RG##.dat as the second entry on the record corresponding to the column industry. Due to rounding these values may not be equal.

Final-demand earnings multipliers for the 473 I-O industries—Each entry in EARNRG##.dat (the file containing the 20-by-473 total final-demand earnings multipliers for region number ##) represents the dollar change in earnings that occurs in the row industry for each additional dollar of output delivered to final demand by the column industry. For each column, the sum of the entries in rows 1-20 represents the

dollar change in earnings that occurs in all row industries for each additional dollar of output delivered to final demand by the column industry. This value appears in M473RG##.dat as the third entry on the record corresponding to the column industry. Due to rounding these values may not be equal.

Final-demand earnings multipliers for the 60 RIMS II aggregate industries—Each entry in ERSQRG##.dat (the file containing the 20-by-60 total final-demand earnings multipliers for region number ##) represents the dollar change in earnings that occurs in the row industry for each additional dollar of output delivered to final demand by the column industry. For each column, the sum of the entries in rows 1-20 represents the dollar change in earnings that occurs in all row industries for each additional dollar of output delivered to final demand by the column industry. This value appears in M_60RG##.dat as the third entry on the record corresponding to the column industry. Due to rounding these values may not be equal.

Final-demand employment multipliers for the 473 I-O industries—Each entry in EMPLRG##.dat (the file containing the 20-by-473 total final-demand employment multipliers for region number ##) represents the change in the number of jobs that occurs in the row industry for each additional 1 million dollars of output delivered to final demand by the column industry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars. For each column, the sum of the entries in rows 1-20 represents the change in the number of jobs that occurs in all row industries for each additional 1 million dollars of output delivered to final demand by the column industry. This value appears in M473RG##.dat as the fourth entry on the record corresponding to the column industry. Due to rounding these values may not be equal.

Final-demand employment multipliers for the 60 RIMS II aggregate industries—Each entry in JBSQRG##.dat (the file containing the 20-by-60 total final-demand employment multipliers for region number ##) represents the change in the number of jobs that occurs in the row industry for each additional 1 million dollars of output delivered to final demand by the column industry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars. For each column, the sum of the entries in rows 1-20 represents the change in the number of jobs that occurs in all row industries for each additional 1 million dollars of output delivered to final demand by the column industry. This value appears in M_60RG##.dat as the fourth entry on the record corresponding to the column industry. Due to rounding these values may not be equal.

Direct-effect earnings multipliers—The fifth entry on each record in M473RG##.dat or M_60RG##.dat represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the record.

Direct-effect employment multipliers—The sixth entry on each record in M473RG##.dat or M_60RG##.dat represents the total change in number of jobs in all industries for each additional job in the industry on the record.

Summary tables—Table 1.4 is a printed version of M473RG##.dat and Table 2.4 is a printed version of M_60RG##.dat. In M473RG## and M_60RG##, zero entries appears for the total direct effect multipliers for the households industry. Only in these cases does a zero entry represent a null value.

Distribution Costs Tables

RIMS II provides final-use and intermediate-use distribution costs (wholesale and retail trade margins and transportation costs) tables for both the 473 detailed I-O industries and the 60 industry aggregations. These tables can assist RIMS II users in converting final-demand changes into producers' prices.

The distribution costs tables for final purchases are based on BEA's 1997 national benchmark Input-Output Supplementary Tables. The supplementary tables are bridges between the I-O accounts and the National Income and Product Accounts (NIPA's). They provide the I-O commodity composition of NIPA final demand in producers' and purchasers' prices:

Table C—Presents the composition of all NIPA final-demand components.

Table D—Presents the composition of personal consumption expenditure categories.

Table E—Presents the composition of NIPA private fixed investment in equipment and software.

Table F—Presents the distribution costs tables for intermediate purchases. This table contains data from BEA's 1997 national benchmark Use table.

Downloaded Files

Code and Format Files

File	Description
README.txt	Description of the data product
COUNTIES.txt	County name and corresponding region number
REGIONS.txt	Region name, region number, and year of national and regional data used in estimating multipliers
IOIND473.txt	I-O industry codes and descriptions

File	Description
IO473.txt	I-O industry codes and descriptions
Colrow60.txt	Aggregate industry code and descriptions
Row20.txt	Row industry codes and descriptions
FINALUSE.txt	I-O final use codes and descriptions
FTABC60X.txt	File layout for TABC60X.txt
FTABD60X.txt	File layout for TABD60X.txt
FTABE60X.txt	File layout for TABE60X.txt
FTABF60X.txt	File layout for TABF60X.txt
FTABC473X.txt	File layout for TABC473X.txt
FTABD473X.txt	File layout for TABD473X.txt
FTABE473X.txt	File layout for TABE473X.txt
FTABF473X.txt	File layout for TABF473X.txt
FIONIPAD.txt	File layout for NIPAD.txt
FIONIPAE.txt	File layout for NIPAE.txt
NIPAD.txt	I-O category codes and NIPA table line numbers for commodity composition of NIPA Personal Consumption Expenditures (PCE)
NIPAE.txt	I-O category codes and NIPA table line numbers for commodity composition of NIPA Private Fixed Investment in Equipment and Software (PES)

Distribution Cost Files

File	Description
TABC60X.txt	Commodity composition of NIPA final demand for the 60 RIMS II industry aggregations
TABD60X.txt	Commodity composition of Personal Consumption Expenditures by PCE Category for the 60 RIMS II industry aggregations
TABE60X.txt	Commodity composition of Private Fixed Investment in Equipment and Software by PES category for the 60 RIMS II industry aggregations
TABF60X.txt	Commodity composition of intermediate purchases for the 60 RIMS II industry aggregations
TABC473X.txt	Commodity composition of NIPA final demand for the 473 I-O industries
TABD473X.txt	Commodity composition of Personal Consumption Expenditures by PCE Category for the 473 I-O industries

TABE473X.txt	Commodity composition of NIPA Private Fixed Investment in Equipment and Software (PES) for the 473 I-O industries
TABF473X.txt	Commodity composition of intermediate purchases for the 473 I-O industries

Multiplier Files: RG##.exe Files

File	Description
TOTLRG##.dat	20-by-473 final-demand output multipliers for region ##
EARNRG##.dat	20-by-473 final-demand earnings multipliers for region ##
EMPLRG##.dat	20-by-473 final-demand employment multipliers for region ##
TLSQRG##.dat	20-by-60 final-demand output multipliers for region ##
ERSQRG##.dat	20-by-60 final-demand earnings multipliers for region ##
JBSQRG##.dat	20-by-60 final-demand employment multipliers for region ##
M473RG##.dat	Summary multipliers for 473 I-O industries for region ##
M_60RG##.dat	Summary multipliers for 60 aggregate industries for region ##

File Layout for Multiplier Files: TOTLRG##.dat, EARNRG##.dat, EMPLRG##.dat, TLSQRG##.dat, ERSQRG##.dat, and JBSQRG##.dat

Columns	Description
1-2	Row number
4-6	Column number
9-15	Multiplier

File Layout for Multiplier File: M473RG##.dat

Columns	Description
1-8	I-O industry number
9-19	Summary final-demand multiplier for output
20-30	Summary final-demand multiplier for earnings
31-41	Summary final-demand multiplier for employment
42-52	Direct-effect multiplier for earnings
53-63	Direct-effect multiplier for employment

File Layout for Multiplier File: M_60RG##.dat

Columns	Description
1-6	Aggregate industry code
7-17	Summary final-demand multiplier for output
18-28	Summary final-demand multiplier for earnings
29-39	Summary final-demand multiplier for employment
40-50	Direct-effect multiplier for earnings
51-61	Direct-effect multiplier for employment

File Layout for Multiplier File: IO473.txt

Columns	Description
1-3	I-O industry number
5-11	I-O industry code
12-13	Aggregate industry code
15-20	I-O industry number
22-98	I-O industry description

File Layout for Multiplier File: Colrow60.txt

Columns	Description
1-2	Aggregate industry code
6-98	Aggregate industry description

File Layout for Multiplier File: Row20.txt

Columns	Description
1-2	Row industry code
5-98	Row industry code description

File Layout for County File: COUNTIES.txt

Columns	Description
1-2	Region number
4-51	County name

File Layout for Region File: REGIONS.txt

Columns	Description
1-2	Region number
4-52	Region name, regional data year, national input-output data year

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Saluda Site

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
1111A0 Oilseed farming	1.6554	0.2506	10.9199	2.7081	2.0444
1111B0 Grain farming	1.6282	0.2448	11.0938	2.7154	1.9860
111200 Vegetable and melon farming	1.6896	0.3313	16.0103	2.1416	1.6776
1113A0 Fruit farming	1.7847	0.4132	24.8051	2.0385	1.4491
111335 Tree nut farming	1.7918	0.4315	19.0478	1.9663	1.6972
111400 Greenhouse and nursery production	1.5979	0.4168	17.4134	1.6315	1.5125
111910 Tobacco farming	1.0000	0.0000	0.0000	0.0000	0.0000
111920 Cotton farming	1.8466	0.3492	15.7371	2.8827	2.1714
1119A0 Sugarcane and sugar beet farming	1.0000	0.0000	0.0000	0.0000	0.0000
1119B0 All other crop farming	1.6560	0.2561	12.2946	2.6927	1.8620
112100 Cattle ranching and farming	1.8556	0.2742	11.7278	3.0416	2.3736
112300 Poultry and egg production	1.7448	0.2562	9.5720	2.8276	2.2954
112A00 Animal production, except cattle and poultry and eggs	1.7919	0.2657	10.4983	2.9471	2.4050
113A00 Forest nurseries, forest products, and timber tracts	1.7956	0.3377	13.0607	3.6746	4.2237
113300 Logging	1.8766	0.3581	11.7207	2.2849	2.5218
114100 Fishing	1.0000	0.0000	0.0000	0.0000	0.0000
114200 Hunting and trapping	1.0000	0.0000	0.0000	0.0000	0.0000
115000 Agriculture and forestry support activities	1.8828	0.6390	27.6072	1.6342	1.4642
211000 Oil and gas extraction	1.0000	0.0000	0.0000	0.0000	0.0000
212100 Coal mining	1.0000	0.0000	0.0000	0.0000	0.0000
212210 Iron ore mining	1.0000	0.0000	0.0000	0.0000	0.0000
212230 Copper, nickel, lead, and zinc mining	1.0000	0.0000	0.0000	0.0000	0.0000
2122A0 Gold, silver, and other metal ore mining	1.0000	0.0000	0.0000	0.0000	0.0000
212310 Stone mining and quarrying	1.7266	0.4200	10.9429	1.8934	2.4506
212320 Sand, gravel, clay, and refractory mining	1.7146	0.4306	11.8885	1.8131	2.1576
212390 Other nonmetallic mineral mining	1.0000	0.0000	0.0000	0.0000	0.0000
213111 Drilling oil and gas wells	1.0000	0.0000	0.0000	0.0000	0.0000
213112 Support activities for oil and gas operations	1.0000	0.0000	0.0000	0.0000	0.0000
21311A Support activities for other mining	1.0000	0.0000	0.0000	0.0000	0.0000
2211A0 Power generation and supply	1.5157	0.3263	7.3449	1.8259	3.3448
221200 Natural gas distribution	1.3403	0.2186	5.2150	1.7855	2.7421
221300 Water, sewage and other systems	1.8228	0.4697	13.5961	2.0267	2.5197
230000 Construction	2.1225	0.6429	21.2107	1.9207	2.0165
311111 Dog and cat food manufacturing	1.6087	0.2376	6.4359	2.6739	3.7874
311119 Other animal food manufacturing	1.6896	0.2567	8.1185	2.8883	2.9229
311211 Flour milling	1.7573	0.2838	8.2022	3.1936	4.2012
311212 Rice milling	1.0000	0.0000	0.0000	0.0000	0.0000
311213 Malt manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311221 Wet corn milling	1.0000	0.0000	0.0000	0.0000	0.0000
311222 Soybean processing	1.0000	0.0000	0.0000	0.0000	0.0000
311223 Other oilseed processing	1.0000	0.0000	0.0000	0.0000	0.0000
311225 Fats and oils refining and blending	1.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

Region Definition: Lexington, SC; Newberry, SC; Richland, SC; Saluda, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars.
4. Each entry in column 4 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
5. Each entry in column 5 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Saluda Site

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
311230 Breakfast cereal manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311310 Sugar manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311320 Confectionery manufacturing from cacao beans	1.0000	0.0000	0.0000	0.0000	0.0000
311330 Confectionery manufacturing from purchased chocolate	1.5658	0.2581	10.3926	2.4596	1.8889
311340 Nonchocolate confectionery manufacturing	1.6173	0.3016	9.1056	2.2348	2.3755
311410 Frozen food manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311420 Fruit and vegetable canning and drying	1.0000	0.0000	0.0000	0.0000	0.0000
311511 Fluid milk manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311512 Creamery butter manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311513 Cheese manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311514 Dry, condensed, and evaporated dairy products	1.0000	0.0000	0.0000	0.0000	0.0000
311520 Ice cream and frozen dessert manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311611 Animal, except poultry, slaughtering	1.7540	0.2394	8.5924	2.6936	2.8406
311612 Meat processed from carcasses	1.7443	0.2732	8.2746	2.7968	3.2298
311613 Rendering and meat byproduct processing	1.7874	0.2785	8.2400	2.6950	3.0847
311615 Poultry processing	2.5473	0.4116	14.7427	3.4372	3.1826
311700 Seafood product preparation and packaging	1.0000	0.0000	0.0000	0.0000	0.0000
31181A Bread and bakery product, except frozen, manufacturing	1.7080	0.4130	12.7557	1.8164	1.9483
311813 Frozen cakes and other pastries manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311821 Cookie and cracker manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311822 Mixes and dough made from purchased flour	1.0000	0.0000	0.0000	0.0000	0.0000
311823 Dry pasta manufacturing	1.7602	0.2794	7.7583	2.9649	3.7470
311830 Tortilla manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311911 Roasted nuts and peanut butter manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311919 Other snack food manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311920 Coffee and tea manufacturing	2.1232	0.3840	12.5701	4.3204	4.3285
311930 Flavoring syrup and concentrate manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311941 Mayonnaise, dressing, and sauce manufacturing	1.6678	0.2520	7.3665	2.8355	3.1988
311942 Spice and extract manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
311990 All other food manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
312110 Soft drink and ice manufacturing	1.6176	0.2550	6.6911	2.6214	3.7640
312120 Breweries	1.0000	0.0000	0.0000	0.0000	0.0000
312130 Wineries	1.0000	0.0000	0.0000	0.0000	0.0000
312140 Distilleries	1.0000	0.0000	0.0000	0.0000	0.0000
312210 Tobacco stemming and redrying	1.0000	0.0000	0.0000	0.0000	0.0000
312221 Cigarette manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
312229 Other tobacco product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
313100 Fiber, yarn, and thread mills	2.1005	0.3811	12.1826	2.9829	2.8738
313210 Broadwoven fabric mills	2.0039	0.4032	12.0308	2.4718	2.7981
313220 Narrow fabric mills and schiffli embroidery	1.9707	0.4813	15.7880	2.0339	1.9964
313230 Nonwoven fabric mills	1.0000	0.0000	0.0000	0.0000	0.0000
313240 Knit fabric mills	1.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

Region Definition: Lexington, SC; Newberry, SC; Richland, SC; Saluda, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars.
4. Each entry in column 4 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
5. Each entry in column 5 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Saluda Site

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
313310 Textile and fabric finishing mills	1.9771	0.3725	11.6013	2.7152	2.7923
313320 Fabric coating mills	1.0000	0.0000	0.0000	0.0000	0.0000
314110 Carpet and rug mills	1.9674	0.3329	9.6542	2.9133	3.2836
314120 Curtain and linen mills	1.9463	0.3887	12.5860	2.4140	2.3858
314910 Textile bag and canvas mills	1.9401	0.5056	17.7109	1.9067	1.8275
314992 Tire cord and tire fabric mills	1.0000	0.0000	0.0000	0.0000	0.0000
31499A Other miscellaneous textile product mills	1.9066	0.4504	14.0108	2.0407	2.1548
315111 Sheer hosiery mills	1.0000	0.0000	0.0000	0.0000	0.0000
315119 Other hosiery and sock mills	1.9490	0.4432	14.1721	2.1222	2.1849
315190 Other apparel knitting mills	1.0000	0.0000	0.0000	0.0000	0.0000
315200 Cut and sew apparel manufacturing	1.8094	0.3741	12.4184	2.2258	2.2274
315900 Accessories and other apparel manufacturing	1.8912	0.4444	13.8153	2.0828	2.2363
316100 Leather and hide tanning and finishing	1.0000	0.0000	0.0000	0.0000	0.0000
316200 Footwear manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
316900 Other leather product manufacturing	1.6451	0.3811	15.8128	1.8347	1.5674
321113 Sawmills	2.3533	0.4180	13.3191	3.4046	3.7902
321114 Wood preservation	2.4433	0.4046	12.7795	4.4483	4.5416
32121A Veneer and plywood manufacturing	2.3482	0.4632	14.7773	2.9153	3.1154
32121B Engineered wood member and truss manufacturing	2.1496	0.4540	15.4948	2.4560	2.3469
321219 Reconstituted wood product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
321911 Wood windows and door manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
321912 Cut stock, resawing lumber, and planing	2.3218	0.4385	16.1229	3.0481	2.4580
321918 Other millwork, including flooring	2.2660	0.4746	15.5538	2.6152	2.6193
321920 Wood container and pallet manufacturing	2.2794	0.4973	19.4573	2.4512	2.0016
321991 Manufactured home, mobile home, manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
321992 Prefabricated wood building manufacturing	2.1322	0.4578	15.2612	2.5097	2.4796
321999 Miscellaneous wood product manufacturing	2.1423	0.5014	18.7593	2.2516	1.9792
322110 Pulp mills	1.0000	0.0000	0.0000	0.0000	0.0000
3221A0 Paper and paperboard mills	1.8400	0.3169	8.0171	2.8435	5.1436
322210 Paperboard container manufacturing	2.1445	0.3967	10.0753	2.7295	3.7604
32222A Coated and laminated paper and packaging materials	1.9553	0.3312	8.4688	3.0583	4.6438
32222B Coated and uncoated paper bag manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
322225 Flexible packaging foil manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
322226 Surface-coated paperboard manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
322231 Die-cut paper office supplies manufacturing	2.1570	0.4016	12.1827	2.9793	2.8197
322232 Envelope manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
322233 Stationery and related product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
322291 Sanitary paper product manufacturing	1.7797	0.2674	6.7815	3.2122	5.4535
322299 All other converted paper product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
32311A Commercial printing	2.0358	0.5127	14.8450	2.0060	2.2392
323116 Manifold business forms printing	1.9865	0.4037	10.8481	2.3453	2.9316
323117 Books printing	1.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

Region Definition: Lexington, SC; Newberry, SC; Richland, SC; Saluda, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars.
4. Each entry in column 4 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
5. Each entry in column 5 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Saluda Site

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
323118 Blankbook and looseleaf binder manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
323121 Tradebinding and related work	1.9153	0.6151	20.1208	1.6765	1.7291
323122 Prepress services	1.8705	0.6273	15.1367	1.6312	2.2371
324110 Petroleum refineries	1.0000	0.0000	0.0000	0.0000	0.0000
324121 Asphalt paving mixture and block manufacturing	1.8332	0.3573	8.4057	2.7793	5.8900
324122 Asphalt shingle and coating materials manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
324191 Petroleum lubricating oil and grease manufacturing	1.6833	0.3782	8.7667	2.0503	3.3946
324199 All other petroleum and coal products manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325110 Petrochemical manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325120 Industrial gas manufacturing	1.6497	0.2999	7.1654	2.5113	4.0544
325130 Synthetic dye and pigment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325180 Other basic inorganic chemical manufacturing	1.7443	0.3375	7.8830	2.5255	4.6366
325190 Other basic organic chemical manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325211 Plastics material and resin manufacturing	1.5808	0.2462	6.0287	2.7013	4.7781
325212 Synthetic rubber manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325221 Cellulosic organic fiber manufacturing	1.7606	0.3769	8.7273	2.2066	3.7894
325222 Noncellulosic organic fiber manufacturing	1.7093	0.3240	7.9428	2.4967	3.9570
325311 Nitrogenous fertilizer manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325312 Phosphatic fertilizer manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325314 Fertilizer, mixing only, manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325320 Pesticide and other agricultural chemical manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325400 Pharmaceutical and medicine manufacturing	1.5748	0.2826	7.1325	2.3261	3.4069
325510 Paint and coating manufacturing	1.6749	0.2950	7.5946	2.4323	3.3566
325520 Adhesive manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325611 Soap and other detergent manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325612 Polish and other sanitation good manufacturing	1.6170	0.2680	7.0629	2.6288	3.6006
325613 Surface active agent manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325620 Toilet preparation manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325910 Printing ink manufacturing	1.7446	0.3247	8.3551	2.4464	3.3706
325920 Explosives manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
325991 Custom compounding of purchased resins	1.0000	0.0000	0.0000	0.0000	0.0000
325992 Photographic film and chemical manufacturing	1.7193	0.3411	8.1798	2.2051	3.5966
325998 Other miscellaneous chemical product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
326110 Plastics packaging materials, film and sheet	1.9075	0.3498	9.1075	2.5016	3.3665
326120 Plastics pipe, fittings, and profile shapes	1.9382	0.3632	10.3060	2.5229	2.8233
326130 Laminated plastics plate, sheet, and shapes	1.9652	0.4014	10.5619	2.4114	3.1299
3261A0 Foam product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
326160 Plastics bottle manufacturing	1.9646	0.3606	9.8602	2.5433	3.1385
326192 Resilient floor covering manufacturing	1.6359	0.2955	8.9761	2.1991	2.3279
32619A Plastics plumbing fixtures and all other plastics products	1.8827	0.4185	12.2079	2.0675	2.2785
326210 Tire manufacturing	1.6551	0.3487	8.7207	1.9819	2.7796
326220 Rubber and plastics hose and belting manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

Region Definition: Lexington, SC; Newberry, SC; Richland, SC; Saluda, SC

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NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

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RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Saluda Site

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
326290 Other rubber product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327111 Vitreous china plumbing fixture manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327112 Vitreous china and earthenware articles manufacturing	1.8864	0.5204	16.8872	1.8660	1.8819
327113 Porcelain electrical supply manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327121 Brick and structural clay tile manufacturing	1.8458	0.4665	12.9457	1.9618	2.3780
327122 Ceramic wall and floor tile manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
32712A Clay refractory and other structural clay products	1.0000	0.0000	0.0000	0.0000	0.0000
327125 Nonclay refractory manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327213 Glass container manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
32721A Glass and glass products, except glass containers	1.6919	0.3628	9.6791	2.0383	2.6131
327310 Cement manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327320 Ready-mix concrete manufacturing	1.8596	0.3884	10.8159	2.4372	3.0464
327331 Concrete block and brick manufacturing	1.8849	0.4433	12.8598	2.1836	2.5393
327332 Concrete pipe manufacturing	1.8341	0.4244	11.9873	2.0810	2.4903
327390 Other concrete product manufacturing	1.8784	0.4674	12.8825	2.0000	2.4311
327410 Lime manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327420 Gypsum product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327910 Abrasive product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327991 Cut stone and stone product manufacturing	2.0056	0.5293	17.4114	2.0519	2.0313
327992 Ground or treated minerals and earths manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327993 Mineral wool manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
327999 Miscellaneous nonmetallic mineral products	1.7213	0.3599	9.8967	2.1236	2.6399
331111 Iron and steel mills	1.8033	0.3320	7.8766	2.6863	5.2934
331112 Ferroalloy and related product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
331210 Iron, steel pipe and tube from purchased steel	1.0000	0.0000	0.0000	0.0000	0.0000
331221 Rolled steel shape manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
331222 Steel wire drawing	1.9255	0.3627	9.8142	2.5304	2.9721
331311 Alumina refining	1.0000	0.0000	0.0000	0.0000	0.0000
331312 Primary aluminum production	1.0000	0.0000	0.0000	0.0000	0.0000
331314 Secondary smelting and alloying of aluminum	1.7404	0.2926	8.8873	3.3464	3.4909
331315 Aluminum sheet, plate, and foil manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
331316 Aluminum extruded product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
331319 Other aluminum rolling and drawing	1.0000	0.0000	0.0000	0.0000	0.0000
331411 Primary smelting and refining of copper	1.4420	0.1886	4.4592	2.1564	3.5847
331419 Primary nonferrous metal, except copper and aluminum	1.0000	0.0000	0.0000	0.0000	0.0000
331421 Copper rolling, drawing, and extruding	1.0000	0.0000	0.0000	0.0000	0.0000
331422 Copper wire, except mechanical, drawing	1.0000	0.0000	0.0000	0.0000	0.0000
331423 Secondary processing of copper	1.0000	0.0000	0.0000	0.0000	0.0000
331491 Nonferrous metal, except copper and aluminum, shaping	1.0000	0.0000	0.0000	0.0000	0.0000
331492 Secondary processing of other nonferrous	1.7717	0.3395	9.5016	2.6382	3.2811
331510 Ferrous metal foundries	1.8008	0.4779	11.9298	1.8626	2.5401
33152A Aluminum foundries	1.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

Region Definition: Lexington, SC; Newberry, SC; Richland, SC; Saluda, SC

*Includes Government enterprises.

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RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Saluda Site

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
33152B Nonferrous foundries, except aluminum	1.0000	0.0000	0.0000	0.0000	0.0000
332111 Iron and steel forging	1.8445	0.4033	10.4202	2.0922	2.6840
332112 Nonferrous forging	1.5487	0.3254	8.4481	1.7939	2.2917
332114 Custom roll forming	1.0000	0.0000	0.0000	0.0000	0.0000
33211A All other forging and stamping	1.9110	0.4644	13.4978	1.9949	2.1998
332211 Cutlery and flatware, except precious, manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332212 Hand and edge tool manufacturing	1.8630	0.4702	13.4232	1.9391	2.1953
332213 Saw blade and handsaw manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332214 Kitchen utensil, pot, and pan manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332311 Prefabricated metal buildings and components	2.0920	0.4414	11.5743	2.4800	3.1839
332312 Fabricated structural metal manufacturing	1.8609	0.3897	10.5091	2.1907	2.6841
332313 Plate work manufacturing	1.8894	0.4872	12.4907	1.8658	2.3967
332321 Metal window and door manufacturing	1.7324	0.3715	11.8481	2.0386	2.0403
332322 Sheet metal work manufacturing	1.8540	0.4580	13.7238	1.9125	2.0508
332323 Ornamental and architectural metal work manufacturing	1.8891	0.4510	14.0096	1.9830	2.0230
332410 Power boiler and heat exchanger manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332420 Metal tank, heavy gauge, manufacturing	1.9211	0.4553	12.4105	2.0412	2.4401
332430 Metal can, box, and other container manufacturing	1.6723	0.2739	7.2084	2.5639	3.4597
33299A Ammunition manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332994 Small arms manufacturing	1.7862	0.4352	11.4444	1.9668	2.4770
332995 Other ordnance and accessories manufacturing	1.6690	0.4672	16.1112	1.6444	1.6241
332500 Hardware manufacturing	1.7475	0.3920	11.1409	1.9687	2.2427
332600 Spring and wire product manufacturing	1.7988	0.4168	11.5981	1.9226	2.2484
332710 Machine shops	1.8885	0.5753	16.5843	1.7547	1.9781
332720 Turned product and screw, nut, and bolt manufacturing	1.8282	0.4809	13.7014	1.8361	2.1092
332811 Metal heat treating	1.7597	0.4147	12.1455	1.9546	2.1897
332812 Metal coating and nonprecious engraving	1.8519	0.3853	10.9595	2.1613	2.4300
332813 Electroplating, anodizing, and coloring metal	1.8665	0.5582	16.3382	1.7295	1.9486
332910 Metal valve manufacturing	1.6664	0.3650	10.7104	1.9404	2.1380
332991 Ball and roller bearing manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332996 Fabricated pipe and pipe fitting manufacturing	1.8618	0.4144	11.6117	2.0845	2.3854
332997 Industrial pattern manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
332998 Enameled iron and metal sanitary ware manufacturing	1.6604	0.3291	9.6953	2.0388	2.2060
332999 Miscellaneous fabricated metal product manufacturing	1.7598	0.4067	12.0708	1.9369	2.1190
333111 Farm machinery and equipment manufacturing	1.7797	0.3385	9.4553	2.4526	2.8167
333112 Lawn and garden equipment manufacturing	1.8299	0.2986	8.5770	3.0963	3.2714
333120 Construction machinery manufacturing	1.7903	0.3353	8.9731	2.5288	3.1538
333131 Mining machinery and equipment manufacturing	1.7733	0.3710	9.7720	2.1844	2.7656
333132 Oil and gas field machinery and equipment	1.0000	0.0000	0.0000	0.0000	0.0000
333210 Sawmill and woodworking machinery	1.0000	0.0000	0.0000	0.0000	0.0000
333220 Plastics and rubber industry machinery	1.0000	0.0000	0.0000	0.0000	0.0000
333291 Paper industry machinery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

Region Definition: Lexington, SC; Newberry, SC; Richland, SC; Saluda, SC

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RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Saluda Site

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
333292 Textile machinery manufacturing	1.7855	0.4562	12.5356	1.8942	2.2508
333293 Printing machinery and equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333294 Food product machinery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333295 Semiconductor machinery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333298 All other industrial machinery manufacturing	1.7693	0.4351	10.8651	1.9330	2.6525
33331A Automatic vending, commercial laundry and drycleaning machinery	1.7641	0.3687	10.7721	2.1565	2.3324
333313 Office machinery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333314 Optical instrument and lens manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333315 Photographic and photocopying equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333319 Other commercial and service industry machinery manufacturing	1.7970	0.4152	11.8276	2.0594	2.3428
333411 Air purification equipment manufacturing	1.7695	0.4092	13.2137	1.9992	1.9669
333412 Industrial and commercial fan and blower manufacturing	1.7783	0.4179	10.5084	1.9641	2.6329
333414 Heating equipment, except warm air furnaces	1.7193	0.3773	10.3663	1.9918	2.3776
333415 AC, refrigeration, and forced air heating	1.7883	0.3639	10.5515	2.3883	2.6666
333511 Industrial mold manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333512 Metal cutting machine tool manufacturing	1.8541	0.4649	12.1755	2.0364	2.6049
333513 Metal forming machine tool manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333514 Special tool, die, jig, and fixture manufacturing	1.9381	0.6176	16.6550	1.7285	2.0788
333515 Cutting tool and machine tool accessory manufacturing	1.9277	0.5372	14.2224	1.8715	2.3215
33351A Rolling mill and other metalworking machinery	1.0000	0.0000	0.0000	0.0000	0.0000
333611 Turbine and turbine generator set units manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
33361A Speed changers and mechanical power transmission equipment	1.0000	0.0000	0.0000	0.0000	0.0000
333618 Other engine equipment manufacturing	1.7255	0.3051	7.6955	2.5871	3.7417
333911 Pump and pumping equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333912 Air and gas compressor manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333913 Measuring and dispensing pump manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333921 Elevator and moving stairway manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333922 Conveyor and conveying equipment manufacturing	1.8246	0.4523	12.1470	1.9373	2.3517
333923 Overhead cranes, hoists, and monorail systems	1.7828	0.3708	10.9731	2.2131	2.3571
333924 Industrial truck, trailer, and stacker manufacturing	1.8880	0.3879	10.3044	2.4821	3.1363
333991 Power-driven handtool manufacturing	1.6365	0.3132	8.4975	2.2141	2.8391
333992 Welding and soldering equipment manufacturing	1.7498	0.3856	9.8049	2.0156	2.6736
333993 Packaging machinery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333994 Industrial process furnace and oven manufacturing	1.7648	0.4224	12.3946	1.9614	2.1527
333995 Fluid power cylinder and actuator manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
333996 Fluid power pump and motor manufacturing	1.7591	0.4252	10.2836	1.9891	2.8888
33399A Scales, balances, and miscellaneous general purpose machinery	1.7388	0.4300	11.4564	1.8866	2.3276
334111 Electronic computer manufacturing	1.6783	0.2749	7.0297	2.9362	4.6153
334112 Computer storage device manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
334113 Computer terminal manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
334119 Other computer peripheral equipment manufacturing	1.8115	0.4112	11.6937	2.2149	2.5015
334210 Telephone apparatus manufacturing	1.5443	0.2904	6.1624	2.0683	4.4858

(Continued)

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Saluda Site

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
334220 Broadcast and wireless communications equipment	1.6337	0.3587	9.0525	1.9357	2.5964
334290 Other communications equipment manufacturing	1.7600	0.4377	11.7825	1.9612	2.4356
334300 Audio and video equipment manufacturing	1.6439	0.2910	7.9631	2.4842	3.1612
334411 Electron tube manufacturing	1.7107	0.3903	9.7772	2.0257	2.8305
334413 Semiconductors and related device manufacturing	1.5063	0.2756	6.8028	2.1132	3.1455
33441A All other electronic component manufacturing	1.7181	0.4034	11.1733	1.9647	2.3355
334510 Electromedical apparatus manufacturing	1.7352	0.4419	11.0470	1.8721	2.5865
334511 Search, detection, and navigation instruments	1.0000	0.0000	0.0000	0.0000	0.0000
334512 Automatic environmental control manufacturing	1.7370	0.4395	11.0210	1.8730	2.5249
334513 Industrial process variable instruments	1.8259	0.4960	14.5924	1.8930	2.2290
334514 Totalizing fluid meters and counting devices	1.0000	0.0000	0.0000	0.0000	0.0000
334515 Electricity and signal testing instruments	1.6053	0.3902	11.2599	1.7736	2.0193
334516 Analytical laboratory instrument manufacturing	1.9301	0.5288	14.9569	2.0078	2.7504
334517 Irradiation apparatus manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
33451A Watch, clock, and other measuring and controlling device manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
334611 Software reproducing	1.0000	0.0000	0.0000	0.0000	0.0000
334612 Audio and video media reproduction	1.0000	0.0000	0.0000	0.0000	0.0000
334613 Magnetic and optical recording media manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335110 Electric lamp bulb and part manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335120 Lighting fixture manufacturing	1.7724	0.3791	9.9852	2.2292	2.9633
335211 Electric housewares and household fan manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335212 Household vacuum cleaner manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335221 Household cooking appliance manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335222 Household refrigerator and home freezer manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335224 Household laundry equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335228 Other major household appliance manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335311 Electric power and specialty transformer manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335312 Motor and generator manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335313 Switchgear and switchboard apparatus manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335314 Relay and industrial control manufacturing	1.9309	0.4596	11.5988	2.2033	3.0207
335911 Storage battery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335912 Primary battery manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335921 Fiber optic cable manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335929 Other communication and energy wire manufacturing	1.7662	0.3043	7.3617	2.5690	4.4264
335930 Wiring device manufacturing	1.7451	0.3918	9.9624	2.0368	2.7318
335991 Carbon and graphite product manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
335999 Miscellaneous electrical equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
336110 Automobile and light truck manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
336120 Heavy duty truck manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
336211 Motor vehicle body manufacturing	1.8275	0.3530	10.0623	2.5577	2.9486
336212 Truck trailer manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000

(Continued)

Region Definition: Lexington, SC; Newberry, SC; Richland, SC; Saluda, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars.
4. Each entry in column 4 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
5. Each entry in column 5 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Saluda Site

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
336213 Motor home manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
336214 Travel trailer and camper manufacturing	1.7741	0.3760	9.6219	2.1372	2.8777
336300 Motor vehicle parts manufacturing	1.8470	0.3929	9.7817	2.2754	3.2556
336411 Aircraft manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
336412 Aircraft engine and engine parts manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
336413 Other aircraft parts and equipment	1.0000	0.0000	0.0000	0.0000	0.0000
336414 Guided missile and space vehicle manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
33641A Propulsion units and parts for space vehicles and guided missiles	1.0000	0.0000	0.0000	0.0000	0.0000
336500 Railroad rolling stock manufacturing	1.9531	0.3906	9.7560	2.5798	3.6684
336611 Ship building and repairing	1.0000	0.0000	0.0000	0.0000	0.0000
336612 Boat building	1.8766	0.3905	10.5185	2.1719	2.6898
336991 Motorcycle, bicycle, and parts manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
336992 Military armored vehicles and tank parts manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
336999 All other transportation equipment manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
337110 Wood kitchen cabinet and countertop manufacturing	1.9869	0.4954	17.9636	1.9930	1.8543
337121 Upholstered household furniture manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
337122 Nonupholstered wood household furniture manufacturing	1.9797	0.4890	18.7500	2.0223	1.7719
337124 Metal household furniture manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
337127 Institutional furniture manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
33712A Other household and institutional furniture	1.0000	0.0000	0.0000	0.0000	0.0000
337211 Wood office furniture manufacturing	1.9261	0.4861	15.4509	1.9713	2.0515
337212 Custom architectural woodwork and millwork	1.8853	0.5574	19.3555	1.7061	1.6887
337214 Office furniture, except wood, manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
337215 Showcases, partitions, shelving, and lockers	1.9130	0.4923	14.6494	1.8835	2.0669
337910 Mattress manufacturing	1.7734	0.3523	11.1733	2.2930	2.3384
337920 Blind and shade manufacturing	1.7354	0.3785	13.8109	2.0070	1.8087
339111 Laboratory apparatus and furniture manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339112 Surgical and medical instrument manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339113 Surgical appliance and supplies manufacturing	1.6661	0.3793	10.2909	1.9349	2.3686
339114 Dental equipment and supplies manufacturing	1.7421	0.4369	10.0427	1.8958	2.9623
339115 Ophthalmic goods manufacturing	1.7380	0.4327	14.3769	1.9052	1.8854
339116 Dental laboratories	1.7901	0.5485	15.2679	1.6765	1.9743
339910 Jewelry and silverware manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339920 Sporting and athletic goods manufacturing	1.9523	0.4227	11.9087	2.4559	3.0559
339930 Doll, toy, and game manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339940 Office supplies, except paper, manufacturing	1.7731	0.3747	9.8694	2.1207	2.7631
339950 Sign manufacturing	1.9219	0.5267	14.9493	1.8393	2.1328
339991 Gasket, packing, and sealing device manufacturing	1.7092	0.4310	10.7933	1.7750	2.3815
339992 Musical instrument manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
339994 Broom, brush, and mop manufacturing	1.9331	0.4422	13.2751	2.1236	2.3076
339995 Burial casket manufacturing	1.0000	0.0000	0.0000	0.0000	0.0000
33999A Buttons, pins, and all other miscellaneous manufacturing	1.8802	0.4391	12.3608	2.0386	2.4240

(Continued)

Region Definition: Lexington, SC; Newberry, SC; Richland, SC; Saluda, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars.
4. Each entry in column 4 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
5. Each entry in column 5 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Saluda Site

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
420000 Wholesale trade	1.8386	0.5424	15.1659	1.7898	2.2876
4A0000 Retail trade	1.9306	0.5800	24.3610	1.8115	1.5978
481000 Air transportation	1.8490	0.4864	16.1270	2.0570	2.4452
482000 Rail transportation	1.8203	0.4513	10.8541	1.9619	3.1666
483000 Water transportation	1.8630	0.3924	11.8605	2.7318	3.1734
484000 Truck transportation	2.0218	0.5232	16.4399	2.1504	2.3271
485A00 Transit and ground passenger transportation	2.0696	0.6944	41.3189	1.7631	1.3264
486000 Pipeline transportation	1.9620	0.5200	13.1501	2.2204	4.2786
48A000 Scenic and sightseeing transportation and support activities for transportation	2.1083	0.6856	19.7899	1.8978	2.2466
492000 Couriers and messengers	1.8590	0.6066	22.9752	1.6567	1.6134
493000 Warehousing and storage	1.9857	0.7019	24.5442	1.6025	1.6475
511110 Newspaper publishers	1.9464	0.6115	20.0490	1.7241	1.7501
511120 Periodical publishers	1.8651	0.4797	14.0173	1.9450	2.1757
511130 Book publishers	1.6643	0.3823	10.9327	1.9322	2.2506
5111A0 Database, directory, and other publishers	1.7204	0.3992	10.0230	1.9520	2.7065
511200 Software publishers	1.8249	0.5864	14.9218	1.6842	2.4891
512100 Motion picture and video industries	1.7793	0.4710	12.1835	1.8401	2.4952
512200 Sound recording industries	1.5793	0.3056	11.4158	2.1508	1.9971
513100 Radio and television broadcasting	2.0459	0.5754	12.8365	2.0229	3.3300
513200 Cable networks and program distribution	1.9286	0.4533	11.8732	2.1474	2.8386
513300 Telecommunications	1.8018	0.4250	11.4653	2.0628	2.7310
514100 Information services	2.0996	0.8303	28.2943	1.5994	1.6884
514200 Data processing services	1.9792	0.7250	16.7641	1.6399	2.6698
52A000 Monetary authorities and depository credit intermediation	1.6436	0.3965	11.8529	1.8651	2.2742
522A00 Nondepository credit intermediation and related activities	1.7230	0.4247	12.6668	1.9867	2.5017
523000 Securities, commodity contracts, investments	2.0655	0.7804	24.6122	1.6732	1.8233
524100 Insurance carriers	2.2675	0.5870	16.6107	2.5445	3.1026
524200 Insurance agencies, brokerages, and related	1.7494	0.5185	15.3231	1.6983	1.9389
525000 Funds, trusts, and other financial vehicles	1.7808	0.3703	12.5467	3.2578	2.8730
531000 Real estate	1.5880	0.2574	10.8381	2.6124	2.2101
S00800 Owner-occupied dwellings	1.2745	0.0722	2.4028	0.0000	0.0000
532100 Automotive equipment rental and leasing	1.6055	0.3157	11.6244	2.1694	2.1102
532A00 General and consumer goods rental except video tapes and discs	1.7531	0.4924	17.4532	1.7692	1.8294
532230 Video tape and disc rental	1.6608	0.3677	21.7696	1.8274	1.3776
532400 Machinery and equipment rental and leasing	1.5952	0.3425	9.8577	1.9579	2.6245
533000 Lessors of nonfinancial intangible assets	1.0000	0.0000	0.0000	0.0000	0.0000
541100 Legal services	2.0611	0.8212	20.4748	1.5861	2.1729
541200 Accounting and bookkeeping services	2.0202	0.8130	31.8607	1.5518	1.5082
541300 Architectural and engineering services	1.9127	0.6810	19.6416	1.6509	2.0469
541400 Specialized design services	1.9195	0.6558	34.1960	1.6862	1.4115
541511 Custom computer programming services	1.9801	0.8048	20.8187	1.5517	2.1192

(Continued)

Region Definition: Lexington, SC; Newberry, SC; Richland, SC; Saluda, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars.
4. Each entry in column 4 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
5. Each entry in column 5 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Saluda Site

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
541512 Computer systems design services	2.0518	0.8269	21.3656	1.5944	2.2353
54151A Other computer related services, including facilities management	1.8370	0.5116	15.8881	1.9126	2.3308
541610 Management consulting services	2.0379	0.8029	26.4318	1.5871	1.7638
5416A0 Environmental and other technical consulting services	1.8672	0.6607	23.8831	1.6189	1.6774
541700 Scientific research and development services	2.0391	0.7758	21.5858	1.6156	2.0161
541800 Advertising and related services	1.7771	0.5099	17.2261	1.7696	1.9092
541920 Photographic services	1.8648	0.5930	18.4135	1.6857	1.9507
541940 Veterinary services	2.0643	0.6838	18.7829	1.7768	2.3230
5419A0 All other miscellaneous professional and technical services	1.5276	0.3189	7.7819	1.9475	3.8094
550000 Management of companies and enterprises	2.0324	0.7456	17.7374	1.6310	2.2618
561300 Employment services	1.7661	0.7292	40.1338	1.4269	1.2538
561500 Travel arrangement and reservation services	2.1217	0.6873	24.4993	1.9085	1.8455
561100 Office administrative services	1.9417	0.7132	20.9595	1.6414	2.0342
561200 Facilities support services	1.8348	0.6795	22.5627	1.5549	1.6928
561400 Business support services	1.8231	0.5654	25.1330	1.7229	1.5389
561600 Investigation and security services	1.9033	0.7697	34.5713	1.5062	1.3865
561700 Services to buildings and dwellings	1.9814	0.6294	34.1119	1.8095	1.4499
561900 Other support services	1.7793	0.4993	22.6652	1.7843	1.5441
562000 Waste management and remediation services	2.0459	0.5698	15.6962	2.0518	2.6705
611100 Elementary and secondary schools	2.2354	0.7900	40.8516	1.6953	1.4165
611A00 Colleges, universities, and junior colleges	2.1751	0.7766	33.5185	1.6475	1.5262
611B00 Other educational services	1.8877	0.5434	29.3343	1.8716	1.4800
621A00 Offices of physicians, dentists, and other health practitioners	2.0053	0.8077	19.9728	1.5528	2.1331
621600 Home health care services	1.9954	0.8128	37.0636	1.5472	1.4140
621B00 Other ambulatory health care services	2.1147	0.7366	22.4492	1.7957	2.1209
622000 Hospitals	2.0607	0.7261	22.2410	1.6961	1.9809
623000 Nursing and residential care facilities	2.1089	0.8072	37.0210	1.6202	1.4887
624400 Child day care services	1.9215	0.5899	43.4419	1.7200	1.2663
624A00 Social assistance, except child day care services	2.1385	0.7384	40.8981	1.7233	1.3786
711100 Performing arts companies	1.9085	0.6657	49.3892	1.6260	1.2477
711200 Spectator sports	1.9752	0.8114	41.2121	1.5165	1.3440
711A00 Promoters of performing arts and sports and agents for public figures	1.8072	0.5811	40.1843	1.6651	1.3010
711500 Independent artists, writers, and performers	2.0010	0.6428	27.9845	1.8144	1.7966
712000 Museums, historical sites, zoos, and parks	2.2481	0.7052	25.2850	1.9416	2.0875
713940 Fitness and recreational sports centers	2.0768	0.6570	40.4763	1.7579	1.3351
713950 Bowling centers	1.9324	0.6048	35.0728	1.7162	1.3420
713A00 Other amusement, gambling, and recreation industries	1.8893	0.6103	28.9719	1.6645	1.4319
7211A0 Hotels and motels, including casino hotels	1.8011	0.5591	25.1546	1.6572	1.4573
721A00 Other accommodations	1.7653	0.4260	17.9079	1.9656	1.7047
722000 Food services and drinking places	2.0039	0.6420	40.7991	1.6786	1.2949
8111A0 Automotive repair and maintenance, except car washes	1.9469	0.5232	21.0832	1.9242	1.6986
811192 Car washes	1.7459	0.5025	34.7613	1.7075	1.2756

(Continued)

Region Definition: Lexington; SC; Newberry, SC; Richland, SC; Saluda, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars.
4. Each entry in column 4 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
5. Each entry in column 5 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 1.4 Total Multipliers for Output, Earnings, and Employment by Detailed Industry
Saluda Site

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
811200 Electronic equipment repair and maintenance	1.8321	0.6211	21.9407	1.5930	1.6219
811300 Commercial machinery repair and maintenance	1.7482	0.5512	19.8325	1.6012	1.6051
811400 Household goods repair and maintenance	1.6571	0.4329	20.8348	1.7354	1.4747
812100 Personal care services	1.8952	0.6027	32.7901	1.6909	1.3941
812200 Death care services	1.8261	0.5335	21.5205	1.7534	1.6175
812300 Drycleaning and laundry services	1.9035	0.6123	30.4636	1.6769	1.4163
812900 Other personal services	1.7283	0.3294	15.7356	2.3734	1.7380
813100 Religious organizations	2.0262	0.7828	36.9086	1.5167	1.3701
813A00 Grantmaking and giving and social advocacy organizations	2.2154	0.6859	26.9415	2.0642	1.9767
813B00 Civic, social, professional and similar organizations	2.2470	0.7098	28.3760	1.9178	1.7400
491000 Postal service	1.8564	0.7316	17.7172	1.4774	1.9846
S00A00 Other government enterprises	1.9042	0.4785	14.3116	2.1059	2.4424
H00000 Households	1.2783	0.3568	13.4635	0.0000	0.0000

Region Definition: Lexington, SC; Newberry, SC; Richland, SC; Saluda, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars.
4. Each entry in column 4 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
5. Each entry in column 5 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix B identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 2.4 Total Multipliers for Output, Earnings, and Employment by Industry Aggregation
Saluda Site

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
1. Crop and animal production	1.7707	0.2785	11.7002	2.5885	1.9874
2. Forestry, fishing, and related activities	1.8869	0.3831	14.4572	2.1747	2.0805
3. Oil and gas extraction	1.0000	0.0000	0.0000	0.0000	0.0000
4. Mining, except oil and gas	1.7254	0.4225	11.2647	1.8700	2.3238
5. Support activities for mining	1.0000	0.0000	0.0000	0.0000	0.0000
6. Utilities*	1.5143	0.3237	7.3719	1.8268	3.2708
7. Construction	2.1306	0.6453	21.2242	1.9279	2.0178
8. Wood product manufacturing	2.3487	0.4565	15.3482	3.1246	3.3840
9. Nonmetallic mineral product manufacturing	1.8578	0.4262	11.6851	2.1680	2.7342
10. Primary metal manufacturing	1.8154	0.3445	8.8890	2.6026	3.8835
11. Fabricated metal product manufacturing	1.8651	0.4329	12.0764	2.0463	2.4003
12. Machinery manufacturing	1.7425	0.3663	9.6932	2.1446	2.7639
13. Computer and electronic product manufacturing	1.6818	0.3280	8.8249	2.2991	2.9446
14. Electrical equipment and appliance manufacturing	1.8134	0.3440	9.0250	2.4776	3.2993
15. Motor vehicle, body, trailer, and parts manufacturing	1.8513	0.3917	9.5780	2.2698	3.4090
16. Other transportation equipment manufacturing	1.9334	0.3925	10.0757	2.4447	3.3624
17. Furniture and related product manufacturing	1.9479	0.4908	16.9196	1.9618	1.8956
18. Miscellaneous manufacturing	1.8757	0.4919	13.2767	1.8792	2.3141
19. Food, beverage, and tobacco product manufacturing	2.2227	0.3702	12.4914	3.2465	3.5765
20. Textile and textile product mills	2.0103	0.4200	12.7861	2.4076	2.5698
21. Apparel, leather, and allied product manufacturing	1.9093	0.4307	14.0544	2.1678	2.1800
22. Paper manufacturing	1.9321	0.3414	8.8776	2.8987	4.7216
23. Printing and related support activities	2.0395	0.4972	13.7042	2.0587	2.4491
24. Petroleum and coal products manufacturing	1.8184	0.3608	8.5900	2.6575	5.1056
25. Chemical manufacturing	1.7209	0.3273	8.0055	2.5363	4.1577
26. Plastics and rubber products manufacturing	1.7405	0.3578	9.4690	2.1316	2.7566
27. Wholesale trade	1.8408	0.5414	14.9895	1.7867	2.2610
28. Retail trade	1.9279	0.5760	24.0796	1.7989	1.5794
29. Air transportation	1.8379	0.4852	16.4780	2.0523	2.4985
30. Rail transportation	1.8181	0.4516	10.9303	1.9633	3.1888
31. Water transportation	1.8576	0.3940	12.0360	2.7429	3.2204
32. Truck transportation	2.0258	0.5247	16.4461	2.1566	2.3280
33. Transit and ground passenger transportation*	2.0776	0.6951	41.2363	1.7647	1.3237
34. Pipeline transportation	1.9779	0.5265	13.0729	2.2478	4.2534
35. Other transportation and support activities*	1.8834	0.6793	19.5379	1.5650	1.8486
36. Warehousing and storage	1.9802	0.6952	24.2187	1.5870	1.6256
37. Publishing including software	1.8492	0.5156	15.4462	1.8193	1.9969
38. Motion picture and sound recording industries	1.7721	0.4629	12.0000	1.8359	2.4654
39. Broadcasting and telecommunications	1.8723	0.4593	11.8498	2.0762	2.8078
40. Information and data processing services	2.0111	0.7475	21.0097	1.6259	2.0143
41. Federal Reserve banks, credit intermediation and related services	1.6672	0.4026	11.8529	1.8904	2.3050
42. Securities, commodity contracts, investments	2.0649	0.7763	24.3918	1.6645	1.8070
43. Insurance carriers and related activities	2.3597	0.5972	16.8714	2.4546	2.8720
44. Funds, trusts, and other financial vehicles	1.7899	0.3687	12.4313	3.2442	2.8466

(Continued)

Region Definition: Lexington, SC; Newberry, SC; Richland, SC; Saluda, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars.

4. Each entry in column 4 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.

5. Each entry in column 5 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.--Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix C identifies the industries corresponding to the entries.

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.

RIMS II Multipliers (1997/2004)
Table 2.4 Total Multipliers for Output, Earnings, and Employment by Industry Aggregation
Saluda Site

INDUSTRY	Multiplier				
	Final Demand			Direct Effect	
	Output/1/ (dollars)	Earnings/2/ (dollars)	Employment/3/ (jobs)	Earnings/4/ (dollars)	Employment/5/ (jobs)
45. Real estate	1.4083	0.1507	5.9486	3.4071	2.7018
46. Rental and leasing services and lessors of intangible assets	1.6306	0.3521	12.7199	1.9859	1.9852
47. Professional, scientific, and technical services	1.9766	0.7299	21.0054	1.6112	1.9331
48. Management of companies and enterprises	2.0323	0.7417	17.6239	1.6226	2.2473
49. Administrative and support services	1.8756	0.6694	32.6834	1.5838	1.3864
50. Waste management and remediation services	2.0597	0.5734	15.9580	2.0645	2.7150
51. Educational services	2.0752	0.6888	32.1075	1.6894	1.4811
52. Ambulatory health care services	2.0265	0.7918	20.8492	1.5820	2.0404
53. Hospitals and nursing and residential care facilities	2.0660	0.7312	26.0378	1.6668	1.7147
54. Social assistance	2.0379	0.6650	41.3187	1.7102	1.3193
55. Performing arts, museums, and related activities	1.9876	0.6548	36.9635	1.7292	1.4011
56. Amusements, gambling, and recreation	1.9446	0.6186	31.6590	1.6830	1.3909
57. Accommodation	1.8007	0.5394	24.1032	1.6833	1.4759
58. Food services and drinking places	2.0200	0.6405	40.6852	1.6749	1.2913
59. Other services*	1.9308	0.5680	24.1604	1.7866	1.5736
60. Households	1.2926	0.3595	13.5686	0.0000	0.0000

Region Definition: Lexington, SC; Newberry, SC; Richland, SC; Saluda, SC

*Includes Government enterprises.

1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2004 data, the output delivered to final demand should be in 2004 dollars.
4. Each entry in column 4 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
5. Each entry in column 5 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

NOTE.–Multipliers are based on the 1997 Benchmark Input-Output Table for the Nation and 2004 regional data. Appendix C identifies the industries corresponding to the entries.

SOURCE.–Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis.