

# South Carolina State Water Assessment – Second Edition

## South Carolina Department of Natural Resources – Land, Water and Conservation Division



Available online at <http://www.dnr.sc.gov/water/hydro/hydropubs/assessment.htm>

The *South Carolina State Water Assessment – Second Edition*, published in 2009 by the Land, Water and Conservation Division of the South Carolina Department of Natural Resources, provides a comprehensive overview of and general reference for the quantity, quality, availability, and use of water in South Carolina. This is the first update of the original *South Carolina State Water Assessment* published by the South Carolina Water Resources Commission in 1983.

The *South Carolina State Water Assessment* includes

- a summary of South Carolina's surface- and ground-water resources
- a review of state and federal laws that form the legal framework for water use in South Carolina
- a review of ground-water conditions in Coastal Plain aquifers
- descriptions of surface- and ground-water monitoring networks

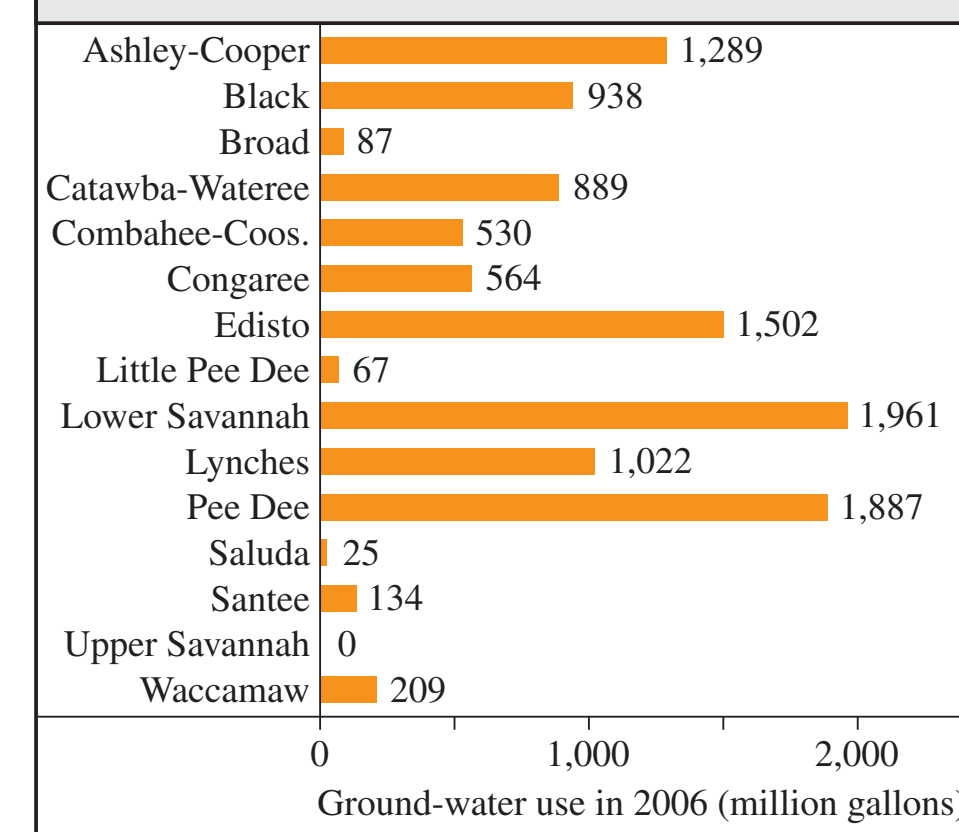
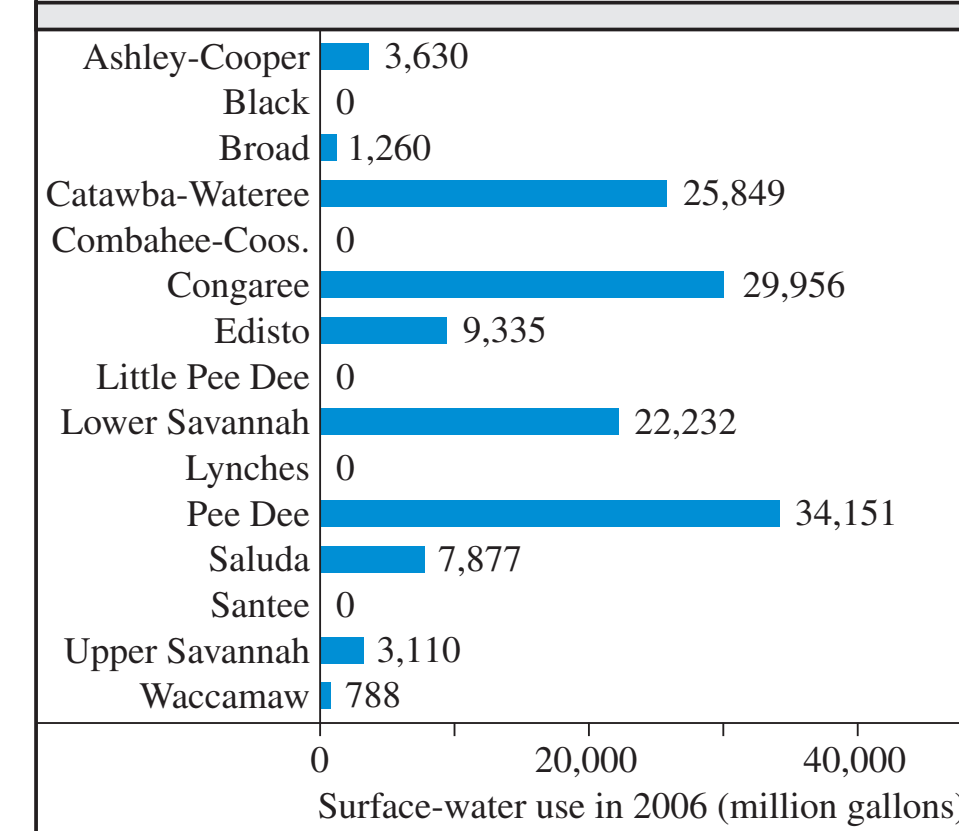
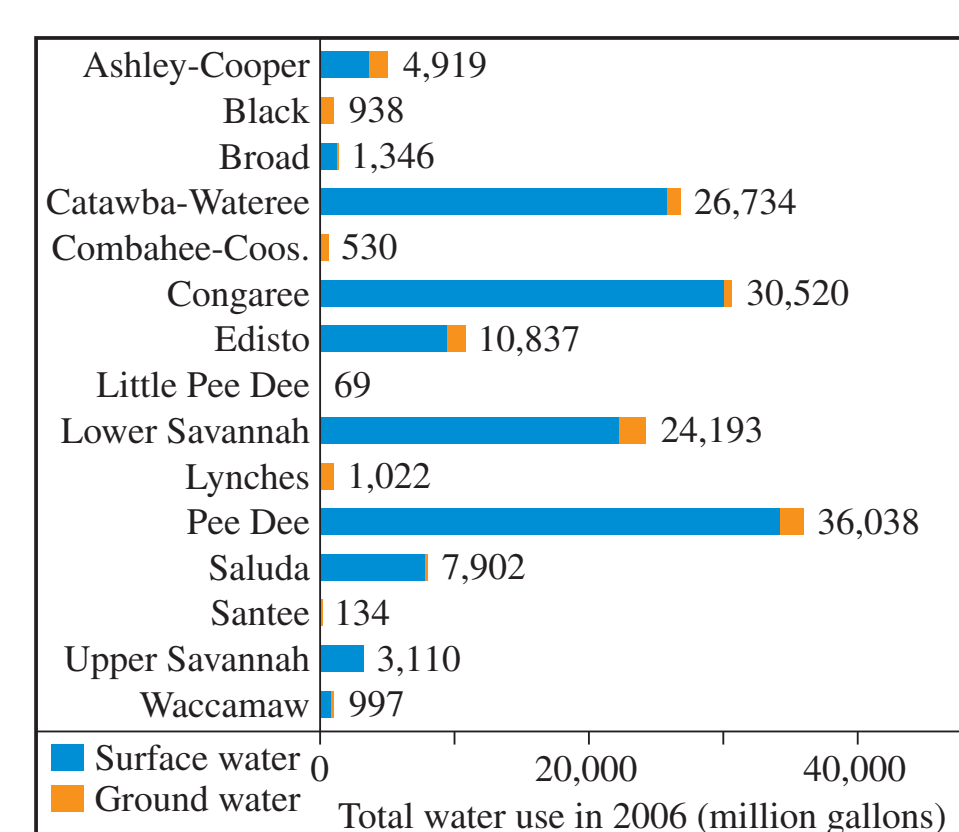
### Total volume of offstream water use in 2006, by water-use category

Water-use category	Surface water		Ground water		Total water	
	Million gallons	Percentage of total surface-water use	Million gallons	Percentage of total ground-water use	Million gallons	Percentage of total water use
Aquaculture	172	0.0	148	0.2	320	0.0
Golf course	9,275	0.4	3,350	4.1	12,625	0.5
Industry	138,188	5.7	11,106	13.6	149,294	5.9
Irrigation	11,177	0.5	17,981	22.1	29,157	1.2
Mining	498	0.0	3,225	4.0	3,723	0.1
Other	0	0.0	54	0.1	54	0.0
Thermoelectric power	2,095,552	85.8	6,261	7.7	2,101,813	83.3
Water supply	187,119	7.7	39,275	48.2	226,394	9.0
<b>Total</b>	<b>2,441,981</b>		<b>81,400</b>		<b>2,523,381</b>	

The *Water Assessment* presents statewide water-use data from 2006, analyzed both by types of water use and by geographical variations in water-use patterns.

### Total volume of offstream water use in 2006, by subbasin

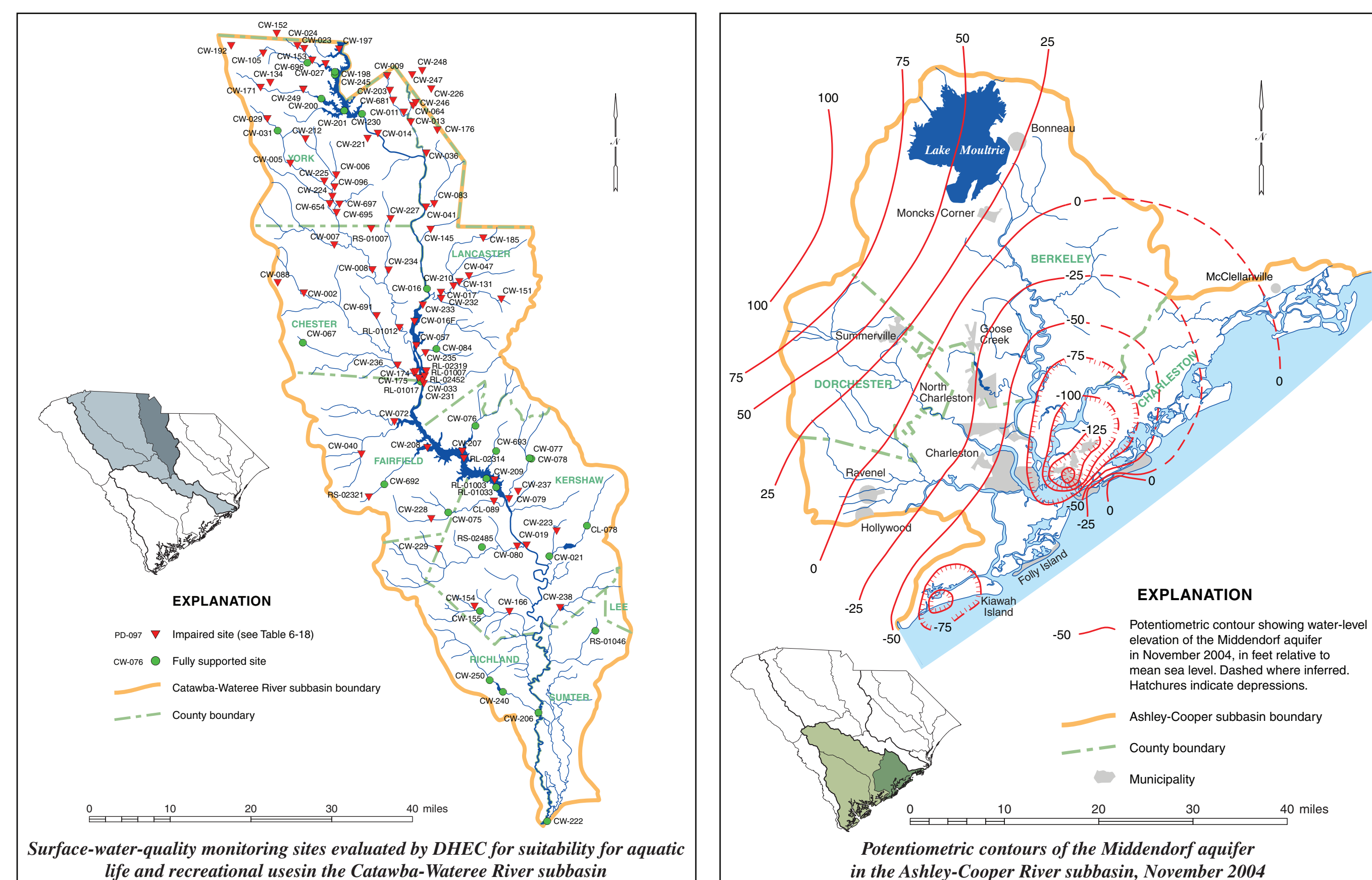
Subbasin	Surface water		Ground water		Total water	
	Million gallons	Percentage of total surface-water use	Million gallons	Percentage of total ground-water use	Million gallons	Percentage of total water use
Ashley-Cooper	217,183	8.9	4,844	6.0	222,027	8.8
Black	520	0.0	9,580	11.8	10,100	0.4
Broad	310,486	12.7	1,293	1.6	311,778	12.4
Catawba-Wataree	272,718	11.2	2,204	2.7	274,922	10.9
Combahee-Coosawhatchie	3,564	0.1	16,684	20.5	20,249	0.8
Congaree	30,659	1.3	1,520	1.9	32,179	1.3
Edisto	30,702	1.3	16,256	20.0	46,958	1.9
Little Pee Dee	50	0.0	2,437	3.0	2,487	0.1
Lower Savannah	89,826	3.7	7,437	9.1	97,263	3.9
Lynches	69	0.0	3,115	3.8	3,184	0.1
Pee Dee	343,657	14.1	11,472	14.1	355,129	14.1
Saluda	132,226	5.4	1,144	1.4	133,370	5.3
Santee	286	0.0	1,458	1.8	1,743	0.1
Upper Savannah	944,906	38.7	47	0.1	944,953	37.4
Waccamaw	65,130	2.7	1,909	2.3	67,039	2.7
<b>Statewide total</b>	<b>2,441,981</b>		<b>81,400</b>		<b>2,523,381</b>	



Industrial water use in 2006, by subbasin



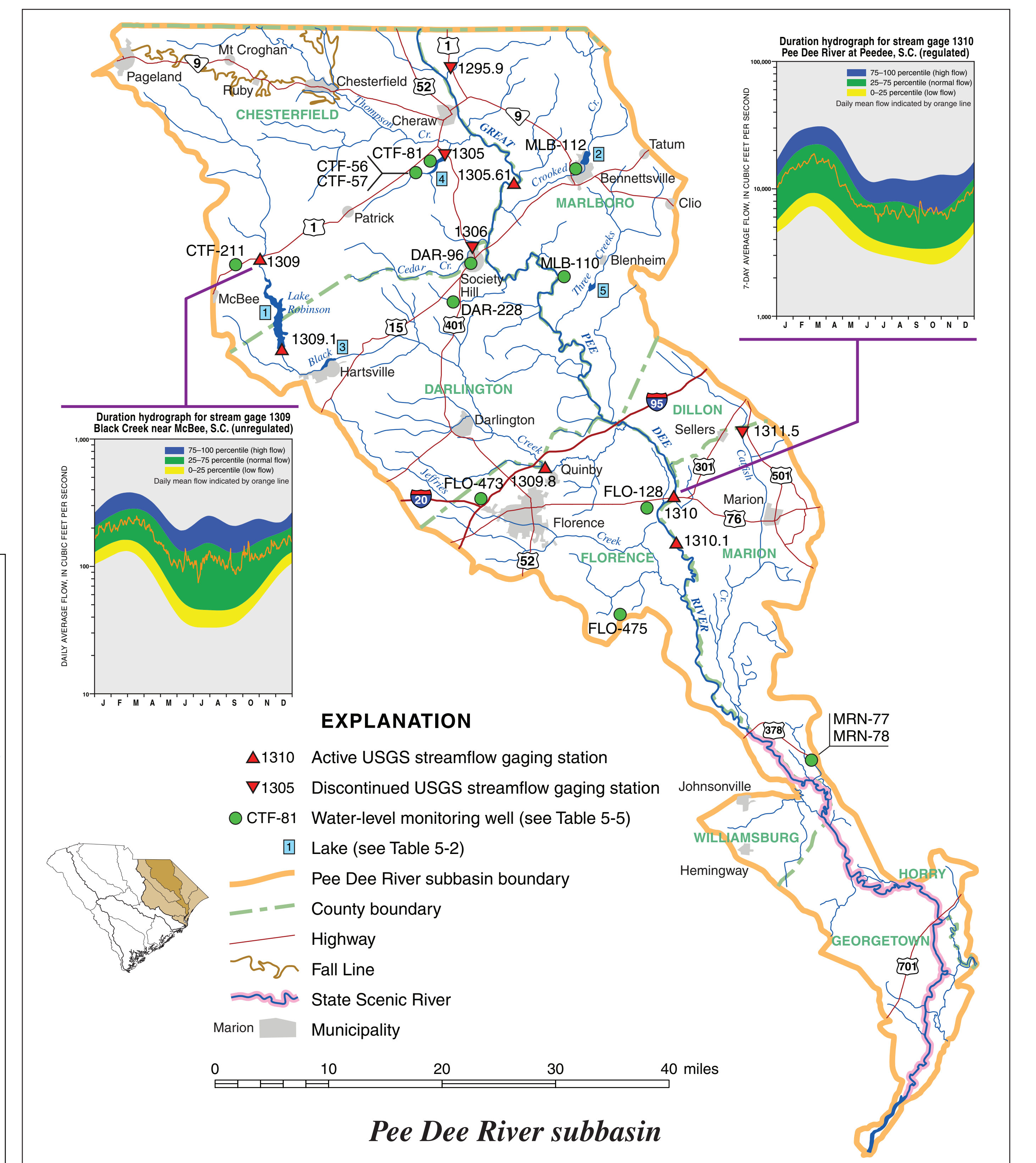
Major drainage basins and subbasins in South Carolina



Surface-water-quality monitoring sites evaluated by DHEC for suitability for aquatic life and recreational uses in the Catawba-Wataree River subbasin

Potentiometric contours of the Middendorf aquifer in the Ashley-Cooper River subbasin, November 2004

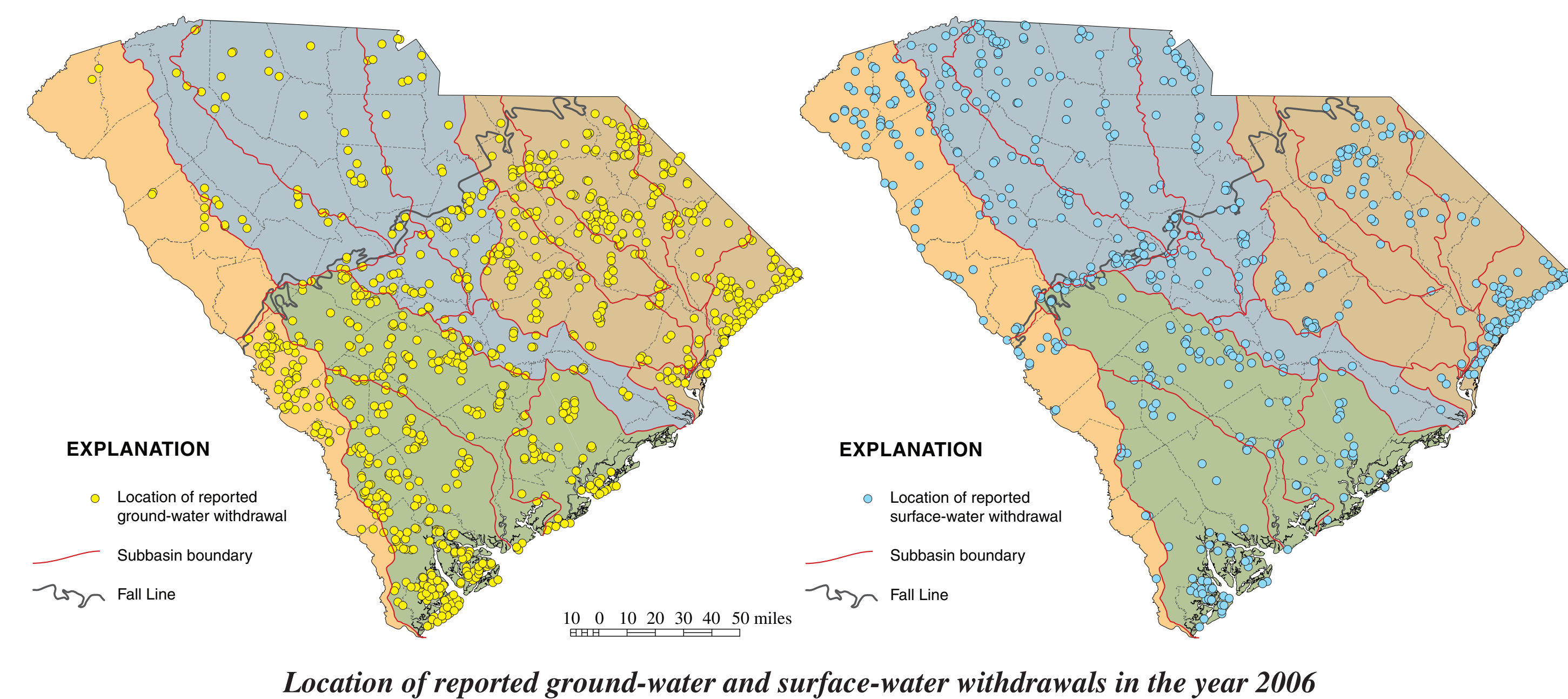
To provide more detailed descriptions of the State's water resources, the *Water Assessment* divides South Carolina into four major drainage basins (the Pee Dee, Santee, ACE, and Savannah River basins), which are subdivided into a total of fifteen subbasins. For each of these fifteen major watersheds, the *Water Assessment* describes surface-water hydrology, development, and quality; ground-water availability, quality, and problems; and water use.



### EXPLANATION

- ▲ 1310 Active USGS streamflow gaging station
- ▼ 1305 Discontinued USGS streamflow gaging station
- CTF-81 Water-level monitoring well (see Table 5-5)
- Lake (see Table 5-2)
- Pee Dee River subbasin boundary
- County boundary
- Highway
- Fall Line
- State Scenic River
- Municipality

Pee Dee River subbasin



Location of reported ground-water and surface-water withdrawals in the year 2006

A "Special Topics" chapter reviews a variety of water-related issues facing South Carolina, including

- hydroelectric power and FERC relicensing of hydropower projects
- instream flow requirements
- river conservation and watershed management planning
- aquifer storage and recovery projects in South Carolina
- saltwater contamination of coastal aquifers
- aquatic nuisance species
- unique wetland areas throughout South Carolina
- interbasin transfers of water

For more information about the *South Carolina State Water Assessment – Second Edition*, contact

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