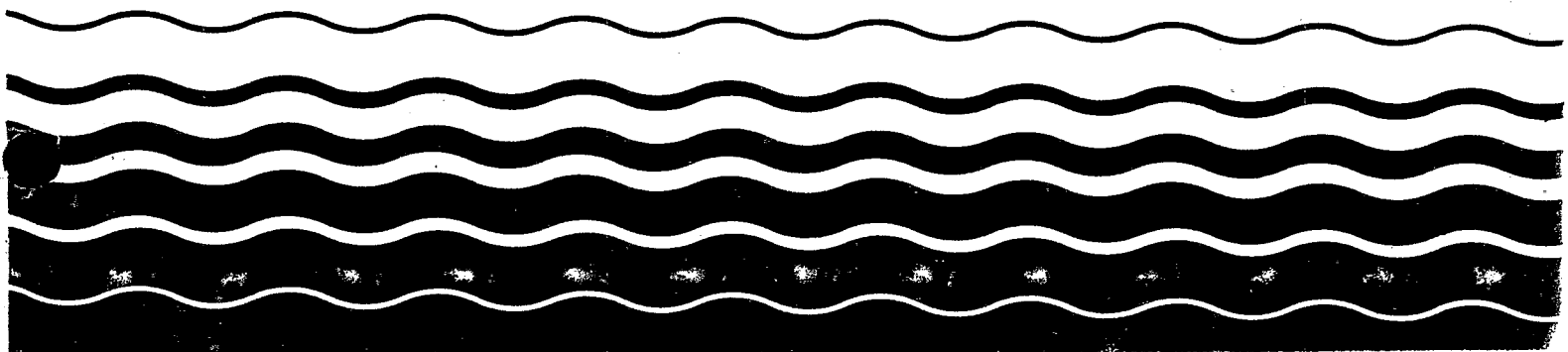


Water



# State Water Quality Standards Summary: South Carolina





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The reader should consult the water quality standards of a particular State for exact regulatory language applicable to that State. Copies of State water quality standards may be obtained from the State's Water Pollution Control Agency or its equivalent.

Additional information may also be obtained from the:

Standards Branch  
Criteria and Standards Division (WH-585)  
Office of Water Regulations and Standards  
U.S. Environmental Protection Agency  
Washington, D.C. 20460  
202-475-7315

This document may be obtained only from the National Technical Information Service (NTIS) at the following address:

National Technical Information Service  
5285 Front Royal Road  
Springfield, Virginia 22161  
703-487-4650

The NTIS order number is: PB89-142087.



## SOUTH CAROLINA

**Responsible Agency:**

Dept. of Health and Environmental Control  
2600 Bull Street

Columbia

29201

**State Contact:**

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Dept. of Health & Environmental Control  
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**Standards Available From:**

Sally Knowles  
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Fee: no

Mailing List: yes

**State Contact:****State Narrative Language For: Antidegradation**

1. Existing water uses and the level of water quality necessary to protect these existing uses shall be maintained and protected regardless of the water classification.
2. Where surface water quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife, and recreation in and on the water, that quality shall be maintained and protected unless the Department finds, after intergovernmental coordination and public participation, that allowing lower water quality is necessary to important economic or social development. In allowing such lower water quality, water quality adequate to fully protect existing uses shall be maintained. The highest statutory and regulatory requirements for all new and existing point sources shall be achieved and all cost-effective and reasonable best management practices for nonpoint source control shall be encouraged.
3. The water quality of Class AA and Class SAA surface waters shall be maintained and protected in as natural a condition as feasible, within the Department's statutory authority.
4. During certain times of the year, the quality of some free flowing surface waters (including lakes) does not meet numeric standards for dissolved oxygen or pH due to natural conditions, even though classified uses in these waters are achieved. During these times, the quality shall be neither cumulatively lowered more than 0.10 mg/l for dissolved oxygen nor cumulatively raised or lowered more than 0.10 standard units for pH from impacts by point sources and other activities, unless a site-specific standard is established.

**State Narrative Language For: Toxics**

All ground waters and surface waters of the State shall at all times, regardless of flow, be free from toxic substances attributable to sewage, industrial waste, or other waste in concentrations or combinations which interfere with classified water uses (except within mixing zones as described in D.(5) of the South Carolina Water Quality Standards), existing water uses or which are harmful to human, animal, plant or aquatic life.

**State Narrative Language For: Free From**

All ground waters and surface waters of the State shall at all times, regardless of flow, be free from:

- A. Sewage, industrial waste, or other waste that will settle to form sludge deposits that are unsightly, putrescent, or odorous to such degree as to create a nuisance or interfere with classified water uses or existing water uses;
- B. Floating debris, oil, grease, scum, and other floating material attributable to sewage, industrial waste, or other waste in amounts sufficient to be unsightly to such a degree as to create a nuisance or interfere with classified water uses or existing water uses;
- C. Sewage, industrial, or other waste which produce taste or odor or change the existing color or physical, chemical, or biological conditions in the receiving waters or aquifers to such a degree as to create a nuisance or interfere with classified uses or existing water uses; and,
- D. High temperature, toxic, corrosive, or deleterious substances attributable to sewage, industrial waste, or other waste in concentrations or combinations which interfere with classified water uses, existing water uses, or which are harmful to human, animal, plant or aquatic life.

## **SOUTH CAROLINA**

### **State Narrative Language For: Low Flow**

Intermittent streams and ephemeral streams shall be considered waters of the state. The use classification and numeric standards of the class or the stream to which intermittent and ephemeral streams are tributary shall apply, disregarding any site-specific numeric standards for that tributary.

### **State Narrative Language For: Mixing Zones**

A region or zone (called the mixing zone) in which one or more specified water quality standards and classified uses are not applicable may be allowed by the Department (South Carolina Department of Health and Environmental Control). The size of the mixing zone shall be kept to a minimum and may be determined on an individual project basis considering biological, chemical, engineering, hydrological, and physical factors.

(a) Surface Waters: Mixing zones which are used for waste treatment effluents shall allow safe passage of aquatic organisms, and shall allow the protection and propagation of a balanced indigenous population of aquatic organisms in and on the water body. The mixing zone size shall be based upon critical flow conditions. The mixing zone shall not be an area of waste treatment nor shall it interfere with or impair existing recreational uses, existing drinking water supply uses, existing industrial or agricultural uses, or existing or potential shellfish harvesting uses. [see Antidegradation (1)(A)].

## SOUTH CAROLINA

### Classifications:

Class AA	Freshwaters which constitute an outstanding recreational or ecological resource or those waters suitable as a source for drinking water supply purposes with treatment levels as specified by the Department. Suitable also for uses listed in Class A and Class B.
Class A-Trout	Freshwaters suitable for supporting reproducing trout populations and a cold water balanced indigenous aquatic community of fauna and flora. Suitable also for uses listed in Class A and Class B.
Class A	Fresh waters suitable for primary contact recreation. Also suitable for uses listed in Class B.
Class B-Trout	Freshwaters suitable for supporting reproducing trout populations and a cold water balanced indigenous aquatic community of fauna and flora. Suitable also for uses listed in Class B.
Class B	Freshwaters suitable for secondary contact recreation and as a source for drinking water supply after conventional treatment in accordance with requirements of the Department. Suitable for fishing and the survival and propagation of a balanced indigenous aquatic community of fauna and flora. Suitable also for industrial and agricultural uses.
Class SAA	Tidal saltwaters which constitute an outstanding recreational or ecological resource. Suitable also for uses listed in Class SA, Class SB, and Class SC.
Class SA	Tidal saltwaters suitable for the harvesting of clams, mussels, or oysters for market purposes or human consumption. Suitable also for uses listed in Class SB and SC.
Class SB	Tidal saltwaters suitable for primary contact recreation. Suitable also for uses listed in Class SC.
Class SC	Tidal saltwaters suitable for secondary contact recreation, crabbing, and fishing, except harvesting of clams, mussels, or oysters for market purposes or human consumption. Also suitable for the survival and propagation of a balanced marine fauna and flora.
Class 6A	Those ground waters that are highly vulnerable to contamination because of the hydrological characteristics of the areas under which they occur and that are also characterized by either of the following two factors: 1) irreplaceable, in that no reasonable alternative source of drinking water is available to substantial populations; or 2) Ecologically vital, in that the aquifer provides the base flow for a particularly sensitive ecological system that, if polluted, would destroy a unique habitat.
Class 6B	All ground waters of the State, unless classified otherwise, which meet the definition of underground sources of drinking water (USDW) as defined in Section B.
Class 6C	Those ground waters not considered potential sources of drinking water and of limited beneficial use. These ground waters also must not migrate to 6A or 6B ground waters or have a discharge to surface water that could cause degradation.

# SOUTH CAROLINA

	All Classes	Class AA	Class A-Trout	Class A
Physical				
pH				
Upper Value		Narr.	8.0	8.0
Lower Value			6.0	6.0
Dissolved Oxygen				
Upper Value		Narr.	mg/L	mg/L
Lower Value			6 mg/L	4 mg/L
Temperature				
Upper Value			Narr.	90 F
Temperature Change				
Upper Value				5 F
Turbidity				
Upper Value			Narr	
Nutrients				
Toxic Metals				
Pesticides				
Organics				
Bacteria				
Fecal Col. (Max, Geo. Mean)				
Upper Value		Narr.	400 /100 mL	Narr.
Secondary Upper Limit			200 /100 mL	



# SOUTH CAROLINA

	Class B-Trout	Class B	Class SAA	Class SA
Physical				
pH				
Upper Value	8.5	8.5	Narr.	8.5
Lower Value	6.0	6.0		6.5
Dissolved Oxygen				
Upper Value			Narr.	
Lower Value	6 mg/L	4 mg/L		4 mg/L
Temperature				
Upper Value	Narr.	90 F		Narr.
Temperature Change				
Upper Value		5 F		4 F
Secondary Upper Limit		F		1.5 F
Turbidity				
Upper Value	Narr.			
Nutrients				
Toxic Metals				
Pesticides				
Organics				
Bacteria				
Fecal Col. (Max, Geo. Mean)				
Upper Value	2000 /100 mL	2000 /100 mL		43 /100 mL
Secondary Upper Limit	1000 /100 mL	1000 /100 mL		Narr. /100 mL
Total Coliform				
Upper Value				Narr.

# SOUTH CAROLINA

	Class SB	Class SC	Class 6A	Class 6B
Physical				
pH				
Upper Value	8.5	8.5		
Lower Value	6.5	6.5		
Dissolved Oxygen				
Lower Value	4   mg/L	4   mg/L		
Temperature				
Upper Value	Narr.	Narr.		
Temperature Change				
Upper Value	4   F	4   F		
Secondary Upper Limit	1.5   F	1.5   F		
Nutrients				
Toxic Metals				
Pesticides				
Organics				
Bacteria				
Fecal Col. (Max, Geo. Mean)				
Upper Value		2000   /100 mL		
Secondary Upper Limit		1000   /100 mL		

## SOUTH CAROLINA

Class 6C

Physical

Nutrients

Toxic Metals

Pesticides

Organics

Bacteria

