

**Table 2.** Status of Water Quality Standards for the Waccamaw River and Coastal Waters

<i>Parameter</i>	<i>Waccamaw River</i>	<i>Coastal Waters</i>	<i>Pollutant Problem</i>	<i>River WQS: Class FW</i>	<i>Coastal WQS: Class SA</i>
Temperature	Narrative WQS (Class FW, SC DHEC)	None	Thermal pollution, contributes to low DO by lowering gas solubility	Free flowing waters shall not be increased more than 5°F (2.8°C) above natural temperature conditions and shall not exceed a maximum of 90°F (32.2°C) as a result of the discharge of heated liquids unless a different site-specific temperature standard as been provided for, a mixing zone has been established, or a Section 316(a) determination under the CWA has been completed.	Same as Class FW
Dissolved Oxygen (DO)	Site Specific Quantitative WQS (Class FW, SC DHEC)	EPA recommendation**	Hypoxia and anoxia that lead to fish and benthic animal mortality	Daily average not less than 5.0 mg/l with a low of 4.0 mg/l.	Same as Class FW **Poor: < 2 mg/L Fair: 2 – 5 mg/L
Turbidity	Quantitative WQS (Class FW, SC DHEC) EPA recommendation*	None	Indicator of excessive soil erosion or introduction of other particles. Particles carry absorbed pollutants such as toxics and bacteria.	Not to exceed 50 NTUs provided existing uses are maintained. EPA recommendation is 3.89 NTU	< 25 NTU
pH	Quantitative WQS (Class FW, SC DHEC)	None	Extreme acidity from decomposition of organic remains. Extreme alkalinity from discharge of ground or mining waters	Between 6.0 and 8.5.	Shall not vary more than one-half of a pH unit above or below that of effluent-free waters in the same geological area having a similar total salinity, alkalinity and temperature, but not lower than 6.5 or above 8.5.
Fecal Coliform	Quantitative WQS (Class FW, SC DHEC)	Enterococcus is the indicator of choice	Presence of pathogens from septage, sewage or animals	Not to exceed a geometric mean of 200/100 ml, based on 5 consecutive samples during any 30 day period; nor shall more than 10% of the 32 total samples during any 30 day period exceed 400/100 ml.	Same as Class FW
Conductivity	None	None	Accepted tracer of polluted stormwater runoff.	NA	NA
BOD5	None	None	Indicator of oxygen-demanding substances such as septage, sewage, eroded soils, decaying vegetation.	Anything above 2 mg/L is considered high for natural waters.	NA
Chlorophyll	EPA recommendation*	EPA recommendation**	Indicator of algal overgrowth.	0.44 µg/L	**High: >20 µg/L Medium: 5-20 µg/L
Nutrients	EPA recommendation*	EPA recommendation**	Stimulates algal overgrowth. Caused by fertilizer runoff and breakdown of organics such as sewage, septage and eroded soils.	52.5 µg P/L as TP 0.87 mg N/L as TN	**Poor: > 0.5 mg N/L as DIN Fair: 0.1-0.5 mg N/L as DIN Poor: > 0.05 mg P/L as DIP Fair: 0.01-0.05 mg P/L as DIP
Toxicity	None	None	Broad screen of water toxicity reflecting high levels of metals, herbicides, pesticides, etc.	Positive result (toxicity)	NA

\*US EPA (2000) Ambient Water Quality Criteria Recommendations Information Supporting the Development Of State And Tribal Nutrient Criteria For Rivers And Streams In Nutrient Ecoregion XIV, EPA 822-B-00-022  
 \*\*US EPA (2008) National Coastal Condition Report III, EPA/842-R-08-002 and Bricker, S., B. Longstaff, W. Dennison, A. Jones, K. Boicourt, C. Wicks, and J. Woerner. 2007. Effects of Nutrient Enrichment In the Nation's Estuaries: A Decade of Change. NOAA Coastal Ocean Program Decision Analysis Series No. 26. National Centers for Coastal Ocean Science, Silver Spring, MD. 328 pp.