



NC Natural Heritage Program
www.ncnhtp.org

US Forest Service
www.fs.fed.us

National Park Service
www.nps.gov

US Fish and Wildlife Service
National Wildlife Refuge System
www.fws.gov/refuges/

Federal Wild and Scenic Rivers
www.rivers.gov

NC Division of Parks and Recreation
NC Natural and Scenic Rivers
www.ncparks.gov/visit/main.php

NC Primary Nursery Areas
www.ncfisheries.net

NC Designated Shellfish Harvesting Areas
www.deh.enr.state.nc.us/shellfish/

NC Wildlife Resources Commission
www.ncwildlife.org

OTHER AGENCY DESIGNATIONS

Unique Wetland (UWL)
Supplemental classification for wetlands of exceptional state or national ecological significance. These wetlands may include wetlands that have been documented to the satisfaction of the EMC as habitat essential for the conservation of state or federally listed threatened or endangered species.

High Quality Waters (HQW)
Supplemental classification intended to protect waters which are of exceptional biological and physical/chemical characteristics through Division monitoring or special studies, or HQW by definition:

1. WS-I, WS-II,
2. WS-III,
3. SA (commercial shellfish),
4. ORW,
5. Primary Nursery Areas and other functional nursery areas designated by Marine Fisheries Commission, or
6. Waters for which DWQ has received a petition for reclassification to either WS-I or WS-II.

Outstanding Resource Waters (ORW)
Supplemental classification intended to protect unique and special waters having excellent water quality and being of exceptional state or national, ecological or recreational significance. To qualify, waters must be rated Excellent by DWQ, and have one of the following outstanding resource values:

1. Outstanding fish habitat and fisheries,
2. Unusually high level of water based recreation or potential for such kind of recreation,
3. Some special designation such as N.C. Scenic/Natural River, or National Wildlife Refuge,
4. Important component of state or national park or forest; or
5. Special ecological or scientific significance (rare or endangered species habitat, research or educational areas).

All ORWs are HQW by supplemental classification.

Swamp Waters (Sw)
Supplemental classification intended to recognize those waters which are topographically located so as to generally have low velocities and other natural characteristics which are different from adjacent streams draining land with steeper topography.

Water Supply I (WS-I)
Waters used as sources of water supply for drinking, culinary, or food processing purposes for those users desiring maximum protection for their water supplies. These waters are also protected for Class C uses. WS-I waters are within natural and undeveloped watersheds in public ownership. All WS-I waters are HQW by supplemental classification.

SURFACE FRESHWATER CLASSIFICATIONS

DWQ CENTRAL AND REGIONAL OFFICES

Central Office

DENR - Division of Water Quality
512 North Salisbury Street, Raleigh NC 27604
1617 Mail Service Center, Raleigh NC 27699-1617
Office #: (919) 807-6300; Fax #: (919) 807-6492

Asheville Regional Office (ARO)

Office Location:
2090 US Highway 70, Swannanoa, NC 28778
Office #: (828) 296-4500
Fax #: (828) 299-7043

Avery	Graham	McDowell
Buncombe	Haywood	Mitchell
Burke	Henderson	Polk
Caldwell	Jackson	Rutherford
Cherokee	Macon	Swain
Clay	Madison	Transylvania
		Yancey

Washington Regional Office (WARO)

Office Location:
943 Washington Square Mall
Washington, NC 27889
Office #: (252) 946-6481
Fax #: (252) 975-3716

Beaufort	Gates	Pamlico
Bertie	Greene	Pasquotank
Camden	Hertford	Perquimans
Chowan	Hyde	Pitt
Craven	Jones	Tyrrell
Currituck	Lenoir	Washington
Dare	Martin	Wayne

Raleigh Regional Office (RRO)

Office Location:
3800 Barrett Drive, Raleigh, NC 27609
Office #: (919) 791-4200
Fax #: (919) 571-4718

Chatham	Johnston	Vance
Durham	Lee	Wake
Edgecombe	Nash	Warren
Franklin	Northampton	Wilson
Granville	Orange	
Halifax	Person	

Moorestville Regional Office (MRO)

Office Location:
610 East Center Avenue, Suite 301
Moorestville, NC 28115
Office #: (704) 663-1699
Fax #: (704) 663-6040

Alexander	Gaston	Rowan
Cabarrus	Iredell	Stanly
Catawba	Lincoln	Union
Cleveland	Mecklenburg	

Fayetteville Regional Office (FRO)

Office Location:
225 Green Street, Systel Building, Suite 714
Fayetteville, NC 28301-5043
Office #: (910) 433-3300
Fax #: (910) 486-0707

Anson	Hoke	Robeson
Bladen	Montgomery	Sampson
Cumberland	Moore	Scotland
Harnett	Richmond	

Wilmington Regional Office (WIRO)

Office Location:
127 Cardinal Drive Extension, Wilmington, NC 28405-2845
Office #: (910) 796-7215
Fax #: (910) 350-2004

Brunswick	Duplin	Onslow
Carteret	New	Pender
Columbus	Hanover	

Winston-Salem Regional Office (WSRO)

Office Location:
585 Waughtown Street, Winston-Salem, NC 27107
Office #: (336) 771-5000
Fax #: (336) 771-4631

Alamance	Davie	Stokes
Alleghany	Forsyth	Surry
Ashe	Guilford	Watauga
Caswell	Randolph	Wilkes
Davidson	Rockingham	Yadkin

WHERE CAN I GET MORE INFORMATION?

More detailed information is available from the Division of Water Quality's (or DWQ's) Planning Section, 1617 Mail Service Center, Raleigh, N.C. 27699-1617, (919) 807-6305. Additional information, including stream classifications, may be obtained on DWQ's website at: portal.ncdenr.org/web/vwq.

HOW CAN THIS BROCHURE HELP ME?

This brochure provides an overview of the various surface freshwater classifications used in North Carolina and associated effects on different land uses and other human activities. It is based on the classifications and associated rules as of July 2011, which are regularly updated and revised. Check with the appropriate agencies for current classifications and rules.

The rules presented in this document are based on the minimum protection rules of state and federal agencies. Local governments, in most cases, can adopt more stringent land use or water resource protection requirements. Check with local government agencies that have jurisdiction over your land for local rules and procedures that may apply.

WHAT ARE SURFACE WATER CLASSIFICATIONS?
Surface Water Classifications are designations applied to surface water bodies, such as streams, rivers and lakes, which define the best uses to be protected within these waters (for example swimming, fishing, and drinking water supply). Each classification has an associated set of water quality standards to protect those uses. Surface water classifications are one tool that state and federal agencies use to manage and protect all streams, rivers, lakes, and other surface waters in North Carolina. Classifications and their associated protection rules may be designed to protect water quality, fish and wildlife, or other special characteristics.

HOW DO CLASSIFICATIONS AFFECT ME?
Before you buy property, plan a new development project, construct a new road or undertake other land use activities, you should check with local, state and federal agencies about the assigned surface water classification for the waterbody on your property. Many classifications, especially those designed to protect drinking water supplies and certain high quality waters, have protection rules which may affect land use and other activities.

WHY DO THEY SOMETIMES OVERLAP?
Many streams, rivers and lakes may have several classifications applied to the same area. This is because surface waters are classified to protect different uses or special characteristics of the waterbody. For example, a stream or specific stream segment may be classified as Class WS-II (Tr HQW) by the NC Division of Water Quality (DWQ). This protects it as a drinking water supply (WS-III), as Trout Waters (Tr) and as High Quality Waters (HQW). The stream segments upstream or downstream may have different classifications based on other water uses or stream characteristics.

HOW DO I DETERMINE MY STREAM'S CLASSIFICATION?
DWQ classifies all surface waters. Use the classification search capabilities at portal.ncdenr.org. You can also call DWQ in Raleigh, (919) 807-6305, or any of our regional offices. Contact other agencies listed in this brochure for any of their classifications which may apply.

*Two primary classifications (WL=Freshwater Wetlands and SWL=Saltwater Wetlands) and one supplemental classification (FWS=Future Water Supply) are not discussed in this document because no water bodies currently carry these designations.

GUIDE TO SURFACE FRESHWATER CLASSIFICATIONS IN NORTH CAROLINA

NC Department of Environment and Natural Resources – Division of Water Quality – 2011

Many waterbodies have several classifications because surface waters are classified to protect different uses and characteristics. Therefore, multiple protection rules may apply, in addition to other state regulations and requirements. Check with appropriate agencies for rules applicable to specific waterbodies.

Surface Freshwater Classifications	AREA AFFECTED	WASTEWATER DISCHARGES ALLOWED	DEVELOPMENT ACTIVITIES			EROSION AND SEDIMENT CONTROLS ¹²	AGRICULTURE BEST MANAGEMENT PRACTICES MANDATED ¹³	FOREST PRACTICES GUIDELINES RULE STANDARDS ¹⁶ MANDATED	TRANSPORTATION BEST MANAGEMENT PRACTICES MANDATED	LANDFILLS ALLOWED	DAMS/ WATER RESOURCE PROJECTS
			ALLOWABLE DENSITY								
			LOW DENSITY OPTION (DU = DWELLING UNIT) (AC=ACRE)	HIGH DENSITY OPTION ⁹	STREAM BUFFERS						
WATER SUPPLY - I (WS-I) ¹	entire water supply watershed	none allowed	none undeveloped	none undeveloped	N.A.	more stringent rules apply	yes ¹⁴	yes	stricter NC Div. of Land Resources erosion controls apply ¹⁷	none allowed	no specific restrictions
	1/2 mile critical area ²	general permits ^{4,5}	1 du / 2 ac or 6% built upon area	6-24% built upon area	low density - 30' high density - 100'	more stringent rules apply	yes ¹⁴	yes	stricter NC Div. of Land Resources erosion controls apply ¹⁷	no new landfills	no specific restrictions
WATER SUPPLY - II (WS-II) ^{1,10}	rest of watershed	general permits ^{4,5}	1 du / 1 ac or 12% built upon area	12-30% built upon area	low density - 30' high density - 100'	more stringent rules apply	yes	yes	stricter NC Div. of Land Resources erosion controls apply ¹⁷	no new discharging landfills ⁶	no specific restrictions
	1/2 mile critical area ²	general permits ^{4,5}	1 du / 1 ac or 12% built upon area	12-30% built upon area	low density - 30' high density - 100'	more stringent rules apply	yes ¹⁴	yes	stricter NC Div. of Land Resources erosion controls apply ¹⁷	no new discharging landfills ⁶	no specific restrictions
WATER SUPPLY - III (WS-III) ^{1,10}	rest of watershed	domestic & non-process industrial ¹	1 du / 1/2 ac or 24% built upon area	24-50% built upon area	low density - 30' high density - 100'	standard rules	yes	yes	yes ¹⁷	no new discharging landfills ⁶	no specific restrictions
	1/2 mile critical area ²	domestic and industrial ⁴	1 du / 1/2 ac or 24% built upon area ^{7,8}	24-50% built upon area ^{7,8}	low density - 30' high density - 100'	standard rules	yes ¹⁴	yes	yes ¹⁷	no new landfills	no specific restrictions
WATER SUPPLY - IV (WS-IV) ^{1,10}	protected area ³	domestic and industrial ⁴	1 du / 1/2 ac or 24% built upon area ^{7,8}	24-70% built upon area ^{7,8}	low density - 30' high density - 100'	standard rules	yes	yes	yes ¹⁷	no specific restrictions	no specific restrictions
	river segment	domestic and industrial ⁴	no restrictions	no restrictions	none required	standard rules	yes	yes	applied as practical	no specific restrictions	no specific restrictions
CLASS B (B)	receiving stream	domestic and industrial	no restrictions	no restrictions	none required	standard rules	yes	yes	no specific BMPs required	no specific restrictions	no specific restrictions
	receiving stream	domestic and industrial	no restrictions	no restrictions	none required	standard rules	yes	yes	no specific BMPs required	no specific restrictions	no specific restrictions
CLASS C (C)	receiving stream	domestic and industrial	no restrictions	no restrictions	none required	standard rules	yes	yes	no specific BMPs required	no specific restrictions	no specific restrictions
	receiving stream	domestic and industrial	no restrictions	no restrictions	none required	standard rules	yes	yes	no specific BMPs required	no specific restrictions	no specific restrictions

DWQ Primary Classifications

DWQ Supplemental Classifications											
NUTRIENT SENSITIVE WATERS (NSW)	entire watershed or river basin	domestic & industrial (watershed-specific nutrient removal required)	stormwater meets watershed-specific nutrient loading rates in 11 Tar-Panlico, 15 Neuse, and all Jordan and Falls communities	50' in Neuse and Tar-Panlico basins and Jordan Lake Watershed ¹¹	standard rules	yes ¹⁵	buffer rules restrict harvesting in first 30 feet	diffuse flow or nutrient treatment required into buffers	no specific restrictions	no specific restrictions	no specific restrictions
	receiving stream & 25' buffer area	domestic & industrial (stricter treatment standards)	no restrictions	25' buffer between stream & graded area	more stringent rules apply plus special buffer zone	yes	yes	stricter NC Div. of Land Resources erosion controls apply	no specific restrictions	no specific restrictions	no specific restrictions
HIGH QUALITY WATERS (HQW)	within 1 mile from and draining to classified waters	domestic & industrial (stricter treatment standards for new or expanded discharges)	1 du / ac. or 12% built upon area ⁷	low density - 30' high density - N.A.	more stringent rules apply	yes	yes	stricter NC Div. of Land Resources erosion controls apply	new discharging landfills possibly restricted	no specific restrictions	no specific restrictions
	normally entire watershed (drainage area)	no new discharges or expansions	1 du / ac. or 12% built upon area ⁷	low density - 30' high density - N.A.	more stringent rules apply	yes	yes	stricter NC Div. of Land Resources erosion controls apply	no new discharging landfills	no specific restrictions	no specific restrictions
OUTANDING RESOURCE WATERS (ORW)	no new discharges or expansions	no new discharges or expansions	1 du / ac. or 12% built upon area ⁷	low density - 30' high density - N.A.	more stringent rules apply	yes	yes	stricter NC Div. of Land Resources erosion controls apply	no new discharging landfills	no specific restrictions	no specific restrictions
	no new discharges or expansions	no new discharges or expansions	1 du / ac. or 12% built upon area ⁷	low density - 30' high density - N.A.	more stringent rules apply	yes	yes	stricter NC Div. of Land Resources erosion controls apply	no new discharging landfills	no specific restrictions	no specific restrictions
SWAMP WATERS (SW)	receiving stream	no specific restrictions	no restrictions	none required	standard rules	yes	yes	no specific BMPs required	no specific restrictions	no specific restrictions	no specific restrictions
	receiving stream	no specific restrictions	no restrictions	none required	standard rules	yes	yes	no specific BMPs required	no specific restrictions	no specific restrictions	no specific restrictions

- NOTES:**
- Public water supplies are also subject to protection rules administered by the N.C. Division of Environmental Health, especially DEH designated Class I and II reservoirs.
 - Critical Area is 1/2 mile and draining to water supplies as measured from the normal pool elevation of reservoirs, or 1/2 mile and draining to a river intake.
 - Protected Area is 5 miles and draining to water supplies as measured from the normal pool elevation of reservoirs, or 10 miles upstream of and draining to a river intake. However, in some cases the Protected Area can encompass the entire drainage area.
 - Where no practical alternative exists, treated discharge from groundwater remediation projects addressing water quality problems will be allowed.
 - General permits cover relatively insignificant wastewater discharges such as swimming pool filter backwashers.
 - New industrial process wastewater discharges are allowed but must meet additional treatment requirements (15A NCAC 02B .0216).
 - These rules apply only to projects requiring a Sedimentation and Erosion Control Plan.
 - 1/3 acre lot or 36 percent built upon surface area is allowed for projects without a curb and gutter street system.
 - High Density Option requires control of runoff from the first 1 inch of rainfall through use of engineered stormwater controls. Local governments must assume ultimate responsibility for operation and maintenance of stormwater controls.
 - Buffers for low and high density options are applicable to perennial waters; however, unique management strategies with different buffer requirements apply to Rambleman Reservoir (15A NCAC 2B .0250) and Jordan Lake Water Supply Watersheds (15A NCAC 02B .0267).

- Up to fifty-foot buffers are required across all land uses on surface waters of the Neuse River Basin, Tar-Panlico Basin, and Jordan Lake Watershed. Certain activities in the buffer are allowable or allowable with mitigation.
- Erosion and sedimentation controls are specified under the N.C. Sedimentation Pollution Control Act (administered by the N.C. Division of Land Resources) or local government ordinances.
- All agricultural activities are subject to provisions of the Food Security Act of 1985 and the Food, Agriculture, Conservation and Trade Act of 1990. Statewide rules administered by DWQ require certain size animal feedlots to have permit coverage and approved animal waste management plans, as well as to implement buffer zones between newly constructed waste facilities / waste application areas and perennial surface waters.
- Agricultural activities must maintain a 10-foot vegetated buffer from perennial surface waters or equivalent control as determined by the Soil and Water Conservation Commission.
- In the Neuse, Tar-Panlico, Jordan and Falls watersheds, all agricultural operations collectively must meet strategy nutrient percent reduction goals or face individual requirements. Existing riparian buffers up to 50 feet are also protected.
- Forestry (silviculture) activities are regulated under 15A NCAC 011 .0100-.0209, "Forest Practices Guidelines Related to Water Quality", commonly called FPGs. Implementing appropriate forestry BMPs is the preferred methodology for compliance with the FPGs.
- The Department of Transportation must use BMPs as described in their document, "Best Management Practices for Protection of Surface Waters" (March 1997).
- "Discharging" landfills are those that must obtain a National Pollutant Discharge Elimination System permit from DWQ to discharge treated leachate to surface waters.

NON-DWQ MAIN CONTACTS FOR INFORMATION

NC Department of Transportation www.ncdot.org/ 1-877-DOT-4YOU	NC Division of Land Resources Land Quality Section portal.ncdenr.org/web/lqr/ (919) 733-4574	NC Division of Forest Resources http://dfr.nc.gov (919) 857-4801	NC Soil and Water Conservation Commission portal.ncdenr.org/web/swc (919) 733-2302	NC Division of Environmental Health Public Water Supply Section www.delh.emr.state.nc.us/pws (919) 733-2321	NC Division of Waste Management portal.ncdenr.org/web/wm (919) 508-8400	US Army Corps of Engineers Wilmington District Office www.saw.usace.army.mil (910) 251-4457
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