Acronyms, Definitions, & Hyperlinks

Definitions

Term	Definition
30Q2	The minimum average flow for a period of 30 days that has an average recurrence of one in two years.
7Q10	The annual minimum 7-day consecutive low flow, which on average will be exceeded in 9 out of 10 years.
Assessment Unit (AU)	A stream segment to which data is applied in order to make determinations for use support. It can be an entire stream or just the portion for which water quality has established.
Basin	The watershed of a major river system with an average size of 10,596 square miles. There are 17 major river basins in North Carolina. (Also referred to as a 6-digit hydrologic unit.)
Benthic/Benthos Macroinvertebrates	Aquatic organisms, visible to the naked eye (macro) and lacking a backbone (invertebrate), macroinvertebrates that live in or on the bottom of rivers and streams (benthic). Examples include, but are not limited to, aquatic insect larvae, mollusks and various types of worms. Some of these organisms, especially aquatic insect larvae, are used to assess water quality. See EPT index and bioclassification for more information.
Best Management Practices (BMPs)	Techniques that are determined to be currently effective, practical means of preventing or practices reducing pollutants from point and nonpoint sources, in order to protect water quality. BMPs include, but are not limited to: structural and non-structural controls, operation and maintenance procedures, and other practices. Often, BMPs are applied as system of practices and not just one at a time.
Biochemical Oxygen Demand (BOD)	A measure of the amount of oxygen consumed by the decomposition of biological matter or chemical reactions in the water column. Most NPDES discharge permits include a limit on the amount of BOD that may be discharged.
Bioclassification	A rating of water quality based on the outcome of benthic macroinvertebrate sampling of a stream. There are five levels: Poor, Fair, Good-Fair, Good and Excellent.
Channelization	The physical alteration of streams and rivers by widening, deepening or straightening of the channel, large-scale removal of natural obstructions, and/or lining the bed or banks with rock or other resistant materials.
Chlorophyll a	A chemical constituent in plants that gives them their green color. High levels of chlorophyll a in a waterbody, most often in a pond, lake or estuary, usually indicate a large amount of algae resulting from nutrient over enrichment or eutrophication.

TERM	DEFINITION
Class B	Waters protected for all Class C uses in addition to primary recreation. Primary recreational activities include swimming, skin diving, water skiing, and similar uses involving human body contact with water where such activities take place in an organized manner or on a frequent basis.
Class C	Waters protected for uses such as secondary recreation, fishing, wildlife, fish consumption, aquatic life including propagation, survival and maintenance of biological integrity, and agriculture. Secondary recreation includes wading, boating, and other uses involving human body contact with water where such activities take place in an infrequent, unorganized, or incidental manner.
Class SA	Tidal salt waters that are used for commercial shellfishing or marketing purposes and are also protected for all Class SC and Class SB uses. All SA waters are also HQW by supplemental classification.
Class SB	Tidal salt waters protected for all SC uses in addition to primary recreation. Primary recreational activities include swimming, skin diving, water skiing, and similar uses involving human body contact with water where such activities take place in an organized manner or on a frequent basis.
Class SC	All tidal salt waters protected for secondary recreation such as fishing, boating, and other activities involving minimal skin contact; fish and noncommercial shellfish consumption; aquatic life propagation and survival; and wildlife.
Class SWL	These are saltwaters that meet the definition of coastal wetlands as defined by the Division of Coastal Management and which are located landward of the mean high water line or wetlands contiguous to estuarine waters as defined by the Division of Coastal Management.
Class WL	Freshwater Wetlands are a subset of all wetlands, which in turn are waters that support vegetation that is adapted to life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. These waters are protected for storm and flood water storage, aquatic life, wildlife, hydrologic functions, filtration and shoreline protection.
Coastal Counties	Twenty counties in eastern NC subject to requirements of the Coastal Area Management Act (CAMA). They include: Beaufort, Bertie, Brunswick, Camden, Carteret, Chowan, Craven, Currituck, Dare, Gates, Hertford, Hyde, New Hanover, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Tyrrell and Washington.
Coastal Plain	One of three major physiographic regions in North Carolina. Encompasses the eastern two-fifths of state east of the fall line (approximated by Interstate I-95).
Conductivity	A measure of the ability of water to conduct an electrical current. It is dependent on the concentration of dissolved ions such as sodium, chloride, nitrates, phosphates and metals in solution.
Degradation	The lowering of the physical, chemical or biological quality of a waterbody caused by pollution or other sources of stress.
Drainage Area	Land surrounding and draining to a small creek, stream or river. Typically smaller than a subbwatershed.
Dystrophic	Naturally acidic (low pH), “black-water” lakes which are rich in organic matter. Dystrophic lakes usually have low productivity because most fish and aquatic plants are stressed by low pH water. In North Carolina, dystrophic lakes are scattered throughout the Coastal Plain and Sandhills regions and are often located in marshy areas or overlying peat deposits. NCTSI scores are not appropriate for evaluating dystrophic lakes.
Effluent	The treated liquid discharged from a wastewater treatment plant.
Eolian	Sediment deposited, produced, or eroded by wind
EPT Index	This index is used to judge water quality based on the abundance and variety of three orders of pollution sensitive aquatic insect larvae: Ephemeroptera (mayflies), Plecoptera (stoneflies) and Trichoptera (caddisflies).
Eutrophic	Elevated biological productivity related to an abundance of available nutrients. Eutrophic lakes may be so productive that the potential for water quality problems such as algal blooms, nuisance aquatic plant growth and fish kills may occur.

Term	Definition
Eutrophication	The process of physical, chemical or biological changes in a lake associated with nutrient, organic matter and silt enrichment of a waterbody. The corresponding excessive algal growth can deplete dissolved oxygen and threaten certain forms of aquatic life, cause unsightly scums on the water surface and result in taste and odor problems.
Fall Line	A geologic landscape feature that defines the line between the piedmont and coastal plain regions. It is most evident as the last set of small rapids or rock outcroppings that occur on rivers flowing from the piedmont to the coast.
Future Water Supply (FWS)	Supplemental classification for waters intended as a future source of drinking, culinary, or food processing purposes. FWS would be applied to one of the primary water supply classifications (WS-I, WS-II, WS-III, or WS-IV). Currently no water bodies in the state carry this designation.
Geographic Information System	An organized collection of computer hardware, software, geographic data and personnel designed to efficiently capture, store, update, manipulate, analyze and display all forms of geographically referenced information.
Habitat Degradation	Identified where there is a notable reduction in habitat diversity or change in habitat quality. This term includes sedimentation, bank erosion, channelization, lack of riparian vegetation, loss of pools or riffles, loss of woody habitat, and streambed scour.
Headwaters	Small streams that converge to form a larger stream in a watershed.
High Quality Waters (HQW)	Supplemental classification intended to protect waters which are rated excellent based on biological and physical/chemical characteristics through Division monitoring or special studies, primary nursery areas designated by the Marine Fisheries Commission, and other functional nursery areas designated by the Marine Fisheries Commission. The following waters are HQW by definition: WS-I, WS-II, SA, ORW, Primary nursery areas (PNA) designated by the Marine Fisheries Commission, and Waters for which DWQ has received a petition for reclassification to either WS-I or WS-II.
Hydrilla	The genus name of an aquatic plant - often considered an aquatic weed.
Hydrologic Unit Code	A watershed area defined by a national uniform hydrologic unit system that is sponsored by the Water Resources Council. This system divides the country into regions, subregions, basins, subbasins, watersheds and subwatersheds. A hierarchical code consisting of two digits for each of the above six levels combined to form an 12-digit hydrologic unit (subwatershed). An 12-digit hydrologic unit generally covers an average of 40 square miles.
Hypereutrophic	Extremely elevated biological productivity related to excessive nutrient availability. Hypereutrophic lakes exhibit frequent algal blooms, episodes of low dissolved oxygen or periods when no oxygen is present in the water, fish kills and excessive aquatic plant growth.
Impacted Waters	Any site with 7.1% to 10.0% of AMS samples over a parameter's standard will be considered Impacted as well as streams with a biological rating of Good-Fair. The term Impacted is not an official DWQ term and is used by the DWQ Planning Section to indicate streams with the potential of becoming impaired in the near future. These impacted waters are identified to allow better targeting and prioritizing of resources to prevent further degradation.
Impaired	Term that applies to a waterbody that is not meeting the designated use criteria. See the Use Support Methodology for details as to how waters across the state are designated as Supporting, Not Rated or Impaired.
Impervious	Incapable of being penetrated by water; non-porous.
Loading	Mass rate of addition of pollutants to a waterbody (e.g., kg/yr)
Macroinvertebrates	Animals large enough to be seen by the naked eye (macro) and lacking backbones (invertebrate).
Macrophyte	An aquatic plant large enough to be seen by the naked eye.
Mesotrophic	Moderate biological productivity related to intermediate concentrations of available nutrients. Mesotrophic lakes show little, if any, signs of water quality degradation while supporting a good diversity of aquatic life.

Term	Definition
NCIBI	North Carolina Index of Biotic Integrity. A measure of the community health of a population of fish in a given waterbody.
Nonpoint Source	A source of water pollution generally associated with rainfall runoff or snowmelt. The quality and rate of runoff of NPS pollution is strongly dependent on the type of land cover and land use from which the rainfall runoff flows. For example, rainfall runoff from forested lands will generally contain much less pollution and runoff more slowly than runoff from urban lands.
Notice of Violation (NOV)	An NOV serve to alert the permittee of permit infractions and request that whatever caused the violation be corrected immediately. Many times these will not include a fine. Depending upon the severity of the violation, the permittee may receive a Notice of Violation and Assessment of a Civil Penalty, which will include a fine.
Nutrient Sensitive Waters (NSW)	Supplemental classification intended for waters needing additional nutrient management due to being subject to excessive growth of microscopic or macroscopic vegetation.
Oligotrophic	Low biological productivity related to very low concentrations of available nutrients. Oligotrophic lakes in North Carolina are generally found in the mountain region or in undisturbed (natural) watersheds and have very good water quality.
Outstanding Resource Waters (ORW)	All outstanding resource waters are a subset of High Quality Waters. This supplemental classification is intended to protect unique and special waters having excellent water quality and being of exceptional state or national ecological or recreational significance.
pH	A measure of the concentration of free hydrogen ions on a scale ranging from 0 to 14. Values below 7 and approaching 0 indicate increasing acidity, whereas values above 7 and approaching 14 indicate a more basic solution.
Phytoplankton	Aquatic microscopic plant life, such as algae, that are common in ponds, lakes, rivers and estuaries.
Piedmont	One of three major physiographic regions in the state. Encompasses most of central North Carolina from the Coastal Plain region (near I-95) to the eastern slope of the Blue Ridge Mountains region.
Polychlorinated Biphenyls (PCBs)	PCBs are man-made chemicals that persist in the environment. There are a number of adverse health effect associated with exposure to PCBs.
Riparian Zone	Vegetated corridor immediately adjacent to a stream or river. See also SMZ.
Runoff	Rainfall that does not evaporate or infiltrate the ground, but instead flows across land and into waterbodies.
Sedimentation	The sinking and deposition of waterborne particles (e.g., eroded soil, algae and dead organisms).
Seeps	Seeps are areas that remain wet due to groundwater seepage. The plant community generally consists of a dense bed of wetland herbs.
Silviculture	Care and cultivation of forest trees; forestry.
SOC	Special Order by Consent. An agreement between the Environmental Management Commission and a permitted discharger found responsible for causing or contributing to surface water pollution. The SOC stipulates actions to be taken to alleviate the pollution within a defined time. The SOC typically includes relaxation of permit limits for particular parameters, while the facility completes the prescribed actions. SOCs are only issued to facilities where the cause of pollution is not operational in nature (i.e., physical changes to the wastewater treatment plant are necessary to achieve compliance).
Species of Concern	Species of Concern are those species about which NOAA's National Marine Fisheries Service (NMFS) has some concerns regarding status and threats, but for which insufficient information is available to indicate a need to list the species under the Endangered Species Act (ESA).
Streamside Management Zone (SMZ)	The area left along streams to protect streams from sediment and other pollutants, protect streambeds, and provide shade and woody debris for aquatic organisms.
SU	Standard unit; measurement of pH.

Term	Definition
Subbasin	A river basin is broken up into smaller subbasins areas with an average size of 700 square miles. (Subbasins are also referred to as 8-digit hydrologic units.)
Subwatershed	A watershed is broken up into smaller subwatershed areas with an average size of 40 square miles. Subwatersheds are also referred to as 12-digit hydrologic units.)
Swamp Waters (SW)	Supplemental classification intended to recognize those waters which have low velocities and other natural characteristics which are different from adjacent streams.
Targeted Local Watershed (TLW)	A term used by the Ecosystem Enhancement Program that identifies priority areas for planning and restoration. These watershed boundaries are based on 14-digit hydrologic units created by the National Resource Conservation Service (NRCS) that are no longer used by the NRCS.
Total Maximum Daily Load (TMDL)	The amount of a given pollutant that a waterbody can assimilate and maintain its uses and water quality standards.
Tributary	A stream that flows into a larger stream, river or other waterbody.
Trophic	Trophic classification is a relative description of a lake's biological productivity, which is the ability of the lake to support algal growth, fish populations and aquatic plants. The productivity of a lake is determined by a number of chemical and physical characteristics, including the availability of essential plant nutrients (nitrogen and phosphorus), algal growth and the depth of light penetration. Lakes are classified according to productivity: unproductive lakes are termed "oligotrophic"; moderately productive lakes are termed "mesotrophic"; and very productive lakes are termed "eutrophic".
Trout Waters (Tr)	Supplemental classification intended to protect freshwaters which have conditions which shall sustain and allow for trout propagation and survival of stocked trout on a year-round basis. This classification is not the same as the NC Wildlife Resources Commission's Designated Public Mountain Trout Waters designation.
Turbidity	An expression of the optical property that causes light to be scattered and absorbed rather than transmitted in straight lines through a sample. All particles in the water that may scatter or absorb light are measured during this procedure. Suspended sediment, aquatic organisms and organic particles such as pieces of leaves contribute to instream turbidity.
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 Environmental Management Commission as habitat essential for the conservation of state or federally listed threatened or endangered species.
Water Supply I (WS-I)	Waters protected for all Class C uses plus waters used as sources of water supply for drinking, culinary, or food processing purposes for those users desiring maximum protection for their water supplies. WS-I waters are those within natural and undeveloped watersheds in public ownership. All WS-I waters are HQW by supplemental classification.
Water Supply II (WS-II)	Waters used as sources of water supply for drinking, culinary, or food processing purposes where a WS-I classification is not feasible. These waters are also protected for Class C uses. WS-II waters are generally in predominantly undeveloped watersheds. All WS-II waters are HQW by supplemental classification.
Water Supply III (WS-III)	Waters used as sources of water supply for drinking, culinary, or food processing purposes where a more protective WS-I or II classification is not feasible. These waters are also protected for Class C uses. WS-III waters are generally in low to moderately developed watersheds.
Water Supply IV (WS-IV)	Waters used as sources of water supply for drinking, culinary, or food processing purposes where a WS-I, II or III classification is not feasible. These waters are also protected for Class C uses. WS-IV waters are generally in moderately to highly developed watersheds or Protected Areas.

Term	Definition
Water Supply V (WS-V)	Waters protected as water supplies which are generally upstream and draining to Class WS-IV waters or waters used by industry to supply their employees with drinking water or as waters formerly used as water supply. These waters are also protected for Class C uses.
Watershed	A subbasin is broken up into smaller watershed areas with an average size of 227 square miles. Watersheds are also referred to as 10-digit hydrologic units.)
Whole Effluent Toxicity (WET)	The aggregate toxic effect of a wastewater measured directly by an aquatic toxicity test.

Acronyms

Acronym	Meaning
§	Section
µg/l	Microgram per liter
µmhos/cm	micromhos per centimeter
µs/cm	microsiemens per centimeter
30Q2	Annual Minimum 30-day Consecutive Low Flow
5-in-30 Study	FCB study that measures five samples within a 30 day period.
7Q10	Seven day, consecutive low flow with a ten year return frequency; The lowest stream flow for seven consecutive days that would be expected to occur once in ten years
ACOE	United States Army Core of Engineers
ACSP	Agriculture Cost Share Program
AMS	Ambient Monitoring System
APES	Albemarle-Pamlico Estuarine Study
APNEP	Albemarle-Pamlico National Estuary Program
AU	Assessment Unit
B (Class B)	Stream Classification B: Primary Recreation, Fresh Water
BAT	Best Available Technology
BCT	Best Conventional Pollutant Control Technology
BMPs	Best Management Practices
BOD	Biochemical Oxygen Demand
BODlt	Long-Term Biochemical Oxygen Demands
BPJ	Best Professional Judgement
BPU	Basinwide Planning Unit
C (Class C)	Class C Water Quality Classification; fish waters protected for secondary recreation, fishing, wildlife, fish and aquatic life propagation and survival, and other uses
CAFI	Concentrated Animal Feeding Operation
CAMA	Coastal Area Management Act
CBOD	Carbonaceous Biochemical Oxygen Demand
CCAP	Community Conservation Assistance Program
CES	Cooperative Extension Service
cfs	Cubic Feet per Second
cfu/ml	Colony Forming Units per milliliter
CG&L	Construction, Grants & Loans
CGIA	Center for Geographic Information and Analysis
CMSWS	Charlotte-Mecklenburg Stormwater Services
CMUD	Charlotte Mecklenburg Utility Department
Cn	Cyanide
COD	Chemical Oxygen Demand
COG	Council of Governments
colonies/ml	Colonies per milliliter
CRC	Coastal Resources Commission
CREP	Conservation Reserve Enhancement Program
CWA	Clean Water Act
CWMTF	Clean Water Management Trust Fund
CWS	Community Water System

ACRONYM	MEANING
D	Dystrophic -Descriptive trophic state classification for lakes/reservoirs
DAQ	Division of Air Quality
DDD	Dichloro Diphenyl Dichloroethane
DDE	Dichloro Diphenyl Ethylene
DDT	Dichloro Diphenyl Tricholoroethane
DEH	Department of Environmental Health
DFR	Division of Forest Resources
DHHS	Department of Health and Human Services
DLR	Division of Land Resources
DMF	Division of Marine Fisheries
DO	Dissolved Oxygen
DOT	Division of Transportation
DWQ	Division of Water Quality
DWR	Division of Water Resources
E	Eutrophic -Descriptive trophic state classification for lakes/reservoirs
EAA	Evaluation of Engineering Alternatives
EEP	Ecosystem Enhancement Program
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
EPT	Ephemeroptera, Plecoptera, and Trichoptera, the three insect orders commonly used to test water quality
EQI	Environmental Quality Institute
ESS	Environmental Science Section
FC	Fecal Coliform
FCB	Fecal Coliform Bacteria
FDA	United States Food and Drug Administration
FMC	
FONSI	Finding of No Significant Impact
FS	Fully Supporting
GIS	Geographical Information Systems
H	Hypereutrophic -Descriptive trophic state classification for lakes/reservoirs
HA	Hydrologic Area
HQW	High Quality Waters
HU	Hydrologic Unit
HUC	Hydrologic Unit Code
ICWW	Intracoastal Waterway
IR	Integrated Report
lbs	Pounds
LCAT	Lower Creek Advisory Team
LCWRIP	Lower Creek Watershed Restoration Implementation Plan
LWP	Local Watershed Plan (associated with EEP)
LWSP	Local Water Supply Plan
M	Mesotrophic -Descriptive trophic state classification for lakes/reservoirs
MCSESCO	Mecklenburg County Soil Erosion & Sedimentation Control Ordinance
MEP	Maximum Extent Practicable
MFC	Marine Fisheries Commission

Acronym	Meaning
mg/l	Milligrams per liter
MGD	Million Gallons per Day
MPN	Most Probable Number
MRO	Mooresville Regional Office
MS	Management Strategy
MS4	Municipal Separate Storm Sewer Systems
NC DENR	North Carolina Department of Environment and Natural Resources
NCAC	North Carolina Administrative Code
NCDEH	National Shellfish Sanitation Program
NCDWQ	North Carolina Division of Water Quality
NCEEP	North Carolina Ecosystem Enhancement Program
NCIBI	North Carolina Index of Biotic Integrity
NCRWQP	North Carolina Recreational Water Quality Program
NCTSI	North Carolina Trophic State Index
ND	No Data
NH3-N	Ammonia nitrogen
NHP	National Heritage Program
NOV	Notice of Violation
NPDES	National Pollution Discharge Elimination System
NPS	Nonpoint Source Pollution
NR	Not Rated
NRCS	Natural Resources Conservation Service
NRI	Natural Resources Inventory
NSSP	National Shellfish Sanitation Program
NSW	Nutrient Sensitive Waters
NTU	Nephelometric Turbidity Units
O	Oligotrophic -Descriptive trophic state classification for lakes/reservoirs
ORW	Outstanding Resource Waters
PCBs	Polychlorinated Biphenyls
pH	Potential of Hydrogen
POTWs	Pubic Owned Treatment Works
PS	Partially Supporting
RAMS	Random Ambient Monitoring System
RBRPs	River Basin Restoration Priorities
RC&D	Resource Conservation and Development Program
SA	Class SA Water Classification; saltwaters that have sufficient water quality to support commercial shellfish harvesting
SB	Class SB Water Classification; saltwaters with sufficient water quality for frequent and/or organized swimming or other human contact
SBR	Sequencing Batch Reactor
SC	South Carolina
SCDHEC	South Carolina Department of Health and Environmental Control
SDR	Sediment Delivery Ratio
SEL	State Emergency Loan
SIU	Significant Industrial Users (DWQ-Pretreatment Program)
SMZ	Streamside Management Zone

Acronym	Meaning
SOC	Special Order of Consent
SOD	Sediment Oxygen Demand
SPPP	Stormwater Pollution Prevention Plan
SRF	Clean Water State Revolving Fund
SRG	
SRL	State Revolving Loan
SSLW	Steady State Live Weight
ST	Fully Supporting but Threatened
STAG	State and Tribal Assistance Grant
SU	Standard Units, units in which to measure pH
Sw	Swamp Waters
SWCD	Soil and Water Conservation District
SWIM	Surface Water Improvement & Management Program (Charlotte-Mecklenburg)
TKN	Total Kjeldahl Nitrogen
TLW	Targeted Local Watersheds
TMDL	Total Maximum Daily Load
TN	Total Nitrogen
TOT	Time-Of-Travel
TP	Total Phosphorus
Tr	Trout Waters
TRC	Total Residual Chlorine
TSS	Total Suspended Solids
UNCC	University of North Carolina at Charlotte
URW	Use Restoration Watershed
USEPA	United States Environmental Protection Agency
USFS	United States Forestry Service
USGS	United States Geological Survey
UT	Unnamed Tributary
WET	Whole effluent toxicity
WLA	Wasteload Allocation
WPCOG	Western Piedmont Council of Government
WQC	Water Quality Committee
WRC	Water Resource Commission
WRP	Watershed Restoration Plan
WRP	Wetland Reserve Program
WS	Water Supply
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plants

Hyperlink Index

Symbols

A

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