

Glossary

acid neutralizing capacity (ANC):

The total acid-combining capacity of a water sample as determined by titration with a strong acid. Acid neutralizing capacity includes alkalinity (carbonate) as well as other basic chemicals.

acid deposition:

Rain, snow, or particulate matter containing high concentrations of sulfuric acid, nitric acid, or hydrochloric acid, usually produced by atmospheric transformation of the byproducts of fossil fuel combustion. Precipitation with a pH lower than 5.0 is generally considered to be acidic.

acidification:

To convert into an acid or become acid.

ACP:

Agriculture Conservation Program – USDA cost-share program for streambank improvement

AGNPS:

Agricultural Nonpoint Source Model (NRCS) A single-event computer model developed by The NRCS to simulate sediment and nutrient support from agricultural watersheds

ALDGF:

Alabama Division of Game and Fish

allopatric:

Condition where one species lives in a section of stream without other closely related species; the species have disjunct distributions; opposite of sympatric.

base cation:

A positively charged ion; usually includes calcium, magnesium, sodium, and potassium.

BASINS:

EPA's Better Assessment Science Integrating Point and Nonpoint Sources Model

BMPs:

Best Management Practices – Methods used by an agency or landowner to meet nonpoint source pollution control needs.

BOD:

Biological oxygen demand – Dissolved oxygen required by organisms for the aerobic biochemical decomposition of organic matter present in water.

buffering capacity:

The ability of a solution to accept additions of acid or alkali and not significantly change pH.

catchment:

Watershed. All the land and stream systems above and draining to a given point in a river or stream.

category 1:

Taxa for which USFWS has sufficient information to support proposals to list them as endangered or threatened species, but for which proposed rules have not been issued.

category 2:

Formerly taxa for which USFWS has information to indicate that proposing to list them as endangered or threatened is possibly appropriate, but for which persuasive data are not currently available. The category 2 designation was eliminated by USFWS Director Mollie Beattie in 1995 (FWS/TE/95-01837).

CEQ:

Council on Environmental Quality

CERCLA:

Comprehensive Environmental Response, Compensation and Liability Act of 1980 P.L. 96-510 STAT 2767; 42 U.S.C. 9601-9675

CERCLIS:

Comprehensive Environmental Response, Compensation and Liability Information System – data base maintained by EPA.

channelization:

Artificial change of a stream channel profile.

COE:

U.S. Army Corps of Engineers

commercial water use:

Water for motels, hotels, restaurants, office buildings, other commercial facilities, and institutions. The water may be obtained from a public supply or may be self-supplied. See also public supply and self-supplied water.

consumptive use:

That part of water withdrawn that is evaporated, transpired, incorporated into products or crops, consumed by humans or livestock, or otherwise removed from the immediate water environment. (Also referred to as water consumed.)

conveyance loss:

Water that is lost in transit from a pipe, canal, conduit, or ditch by leakage or evaporation. Generally, the water is not available for further use; however, leakage from an irrigation ditch, for example, may percolate to a groundwater source and be available for further use.

creel survey:

A survey of anglers.

CWA:

Clean Water Act

DLG:

Digital Line Graph

DMR:

Discharge Monitoring Reports

domestic water use:

Water for household purposes, such as drinking, food preparation, bathing, washing clothes and dishes, flushing toilets, and watering lawns and gardens. Also called residential water use. The water may be obtained from a public supply or may be self-supplied. See also public supply and self-supplied water.

EMAP:

U.S. Environmental Protection Agency's Environmental Monitoring and Assessment Program

endangered species:

A species or subspecies in danger of extinction throughout all or a significant portion of its range.

endemic (endemism):

Species restricted to a particular geographic area; for aquatic species, usually limited to one or a few small streams or a single drainage.

EOR:

Element Occurrence Record in the state heritage programs' databases

EPA:

U.S. Environmental Protection Agency

EPT index:

Index of the number of families (or genera) in a sample that belong to the orders Ephemeroptera (mayflies), Plecoptera (stoneflies), and Tricoptera (caddisflies).

ESA:

Endangered Species Act of 1973

eutrophication:

Condition of a lake where deleterious effects are caused by increased nutrients (nitrogen and phosphorous) and a decrease in oxygen.

evapotranspiration:

The rate of liquid water transformation to vapor from open water, bare soil, or vegetation with soil beneath.

EWPP:

Emergency Watershed Protection Program – NRCS program for emergency stream repair due to natural disorders.

extirpation:

Extinction of a species from all or part of its range.

freshwater:

Water that contains less than 1,000 milligrams per liter (mg/L) of dissolved solids; generally, more than 500 mg/L of dissolved solids is undesirable for drinking and many industrial uses.

FSA:

Farm Services Agency – USDA

FWPCA:

Federal Water Pollution Control Act P.L. 80-845 (Clean Water Act)

FWS:

Fish and Wildlife Service

GADNR:

Georgia Department of Natural Resources

GIS:

Geographic Information System

global ranks:

Ranks assigned by The Nature Conservancy and state heritage programs based on number of occurrences.

G1: Extremely rare and critically imperiled species, as determined by the network of state natural heritage programs, experts, and The Nature Conservancy, with five or fewer occurrences or very few remaining individuals or especially vulnerable to extinction.

G2: Very rare and imperiled, with 6 to 20 occurrences or few remaining individuals or vulnerable to extinction.

G3: Either very rare and local throughout its range or found locally (sometimes abundantly) in a restricted range or vulnerable to extinction; usually fewer than 100 occurrences are documented.

G4: Apparently secure globally, though possibly quite rare in parts of its range, especially at the periphery; usually 100 to 1,000 occurrences.

G5: Demonstrably secure globally, though possibly quite rare in parts of its range, especially at the periphery; usually at least 1,000 occurrences.

G?: Unranked, or rank uncertain.

G_Q_: Questionable taxonomic assignment.

G_T_: Rank of a subspecies or variety (e.g., G5T1 denotes a critically imperiled subspecies of a globally secure species).

groundwater:

Generally all subsurface water as distinct from surface water; specifically, that part of the subsurface water in the saturated zone (a zone in which all voids are filled with water) where the water is under pressure greater than atmospheric.

herptiles:

Amphibians and reptiles.

HUC:

Hydrologic units. Code cataloguing the watersheds, developed by USGS.

hydroelectric power water use:

The use of water in the generation of electricity at plants where the turbine generators are driven by falling water. Hydroelectric water use is classified as an instream use in this report.

IBI:

Index of Biotic Integrity – A measure of fish community condition or habitat quality.

instream use:

Water that is used, but not withdrawn, from a ground- or surface-water source for such purposes as hydroelectric power generation, navigation water quality improvement, fish propagation, and recreation. Sometimes called nonwithdrawal use or in-channel use.

irrigation water use:

Artificial application of water on lands to assist in the growing of crops and pastures or to maintain vegetative growth in recreational lands such as parks and golf courses.

lithology:

Description or study of the outermost solid layers of the earth.

livestock water use:

Water for livestock watering, feed lots, dairy operations, fish farming, and other on-farm needs. Livestock as used here includes cattle, sheep, goats, hogs, and poultry. Also included are animal specialties. See also rural water use and animal specialties water use.

MAGIC:

Model for Acidification of Groundwater in Catchments. It is currently the model of choice for assessing many watershed processes associated with acid deposition. MAGIC has been tested more than any other acidic deposition effects model. Results from these tests indicate that MAGIC correctly projects the direction of change of watershed responses and accurately projects the magnitudes of rates of change for surface water ANC and pH. MAGIC reasonably represents sulfur retention within watersheds and the generation and leaching of cations from watersheds, two functions generally acknowledged to be the most important of the modeled processes.

MAHA:

Mid-Atlantic Highlands Assessment – EPA

million gallons per day (Mgal/d):

A rate of flow of water.

mining water use:

Water use for the extraction of minerals occurring naturally including solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. Also includes uses associated with quarrying, well operations (dewatering), milling (crushing, screening, washing, flotation, and so forth), and other preparations customarily done at the mine site or as part of a mining activity. Does not include water used in processing, such as smelting, refining petroleum, or slurry pipeline operations. These uses are included in industrial water use.

mussel:

An aquatic marine bivalve mollusc having a dark elongated shell; a clam.

NAPAP:

National Acid Precipitation Assessment Program

NAWQA:

U.S. Geological Survey's National Water Quality Assessment program

NCDEHNR:

North Carolina Department of Environment, Health, and Natural Resources

NCWRC:

North Carolina Wildlife Resources Commission

NLFCA:

National Listing of Fish Consumption Advisories

NPL:

National Priorities List, EPA's CERCLA sites, superfund sites

NPS:

USDI National Park Service

NRCS:

Natural Resource Conservation Service, formerly USDA, soil conservation service

NRI:

Natural Resource Inventory – a multi-resource inventory based on soils and related resource data. NRCS.

nonpoint source pollution:

A diffuse source of pollution not regulated as a point source. May include atmospheric deposition, agricultural runoff, and sediment from land-disturbing activities.

offstream use:

Water withdrawn or diverted from a ground or surface-water source for public

water supply, industry, irrigation, livestock, thermoelectric power generation, and other uses. Sometimes called off-channel use or withdrawal.

order (stream):**PCB:**

Polychlorinated biphenyl

PCS:

Permits Compliance System – database containing NPDES permit-holding facilities. (EPA)

per-capita use:

The average amount of water used per person during a standard time period, generally per day.

perennial stream:

Stream that flows throughout the year.

petrographic:

The description and systematic classification of rocks.

pH:

The negative logarithm of hydrogen ion activity. The pH scale goes from 1 (most acidic) to 14 (most alkaline). The difference of 1 pH unit indicates a tenfold change in hydrogen ion activity.

point source pollution:

Sources of pollution with a known specific point of origination, i.e., a sewer outfall or pipe from a facility.

public water use:

Water supplied from a public water supply and used for such purposes as firefighting, street washing, and municipal parks and swimming pools. See also public supply.

public supply:

Water withdrawn by public and private water suppliers and delivered to users. Public suppliers provide water for a variety of uses, such as domestic, commercial, thermoelectric power, industrial, and public water use. See also commercial water use, domestic water use, thermoelectric power water use, industrial water use, and public water use.

R-EMAP:

Regional EMAP – See EMAP

rare species:

Any native or once-native species of wild animal which exists in the state in small numbers and has been determined to need monitoring; these may include peripheral species.

RAT: River Action Teams of TVA

RBP:

EPA's Rapid Bioassessment Protocol used for monitoring benthic macroinvertebrates.

RF3:

EPA Reach File Version 3.0

riparian zone:

The land bordering a lake, stream, or tidewater.

rural water use:

Term used in previous water-use circulars to describe water used in suburban or farm areas for domestic and livestock needs. The water generally is self-supplied and includes domestic use, drinking water for livestock, and other uses, such as dairy sanitation, evaporation from stockwatering ponds, and cleaning and waste disposal. See also domestic water use, livestock water use, and self-supplied water.

salmonids:

Fish of the family Salmonidae, the chars, trouts, salmon, and whitefishes.

SCWMRD:

South Carolina Wildlife and Marine Resources Department

sediment:

Inorganic material deposited in the stream system.

sensitive species:

A term used for special concern species by some states.

siliciclastic:

Pertaining to clastic noncarbonate rocks which are almost exclusively silicon-bearing, either as forms of quartz or as silicates.

SOS:

Save our Streams, a program of the Isaak Walton League.

special concern species:

In this report, a species that is federally listed as Category 2 or ranked as globally rare (G1, G2 or G3) by state heritage programs and The Nature Conservancy. A term also used by some states for any species of wild animal native or once-native to the state which is determined by the state to require monitoring.

splash dams:

Dams, usually temporary, built of wood across mountain streams to pond up large amounts of water. Logs were floated on the ponded water and the dam was blown up to create a sudden rush of water that carried the logs downstream. The stream below the dam was cleared of all obstructions (e.g., rocks, logs) prior to dam blow-up to facilitate transport.

STORET:

EPA's storage and retrieval computer database for water quality.

stratigraphic:

Pertaining to strata, or layers, as in a description of layers of rock types.

stressors:

Pressure or change brought upon an ecosystem by pollution sources such as sediment, contaminants, and toxins.

superfund:

High risk CERCLA sites on the National Priorities List.

surface water:

An open body of water, such as a stream or lake.

sympatric:

Condition where two or more closely related species live together in the same section of stream; the species have overlapping distributions; opposite of allopatric.

taxon (taxa):

A taxonomic group of any rank (e.g. species, germs, family, etc.).

taxonomic:

Classification of organisms into categories according to their natural relationships.

thermoelectric power water use:

Water used in the process of the generation of thermoelectric power. The water may be obtained from a public supply or may be self-supplied. See also public supply and self-supplied water.

threatened species:

A species or subspecies that is likely to become endangered throughout all or a significant portion of its range.

TIP:

Toxicity Index Profile – Estimate of cumulative potential for toxic impacts in water – EPA

TRI:

Toxics Release Inventory – EPA inventory of toxic releases.

TVA:
Tennessee Valley Authority

TWRA:
Tennessee Wildlife Resources Agency

USFWS:
U.S. Department of the Interior, Fish and
Wildlife Service

USGS:
U.S. Geological Survey

USLE:
Universal Soil Loss Equation

VDGIF:
Virginia Department of Game and Inland
Fisheries

VTSSS:
Virginia Trout Stream Sensitivity Study con-
ducted by researchers at the University of
Virginia.

water use:
(1) In a restrictive sense, the term refers to
water that is actually used for a specific
purpose, such as for domestic use, irriga-
tion, or industrial processing. In this report,
the quantity of water use for a specific cat-
egory is the combination of self-supplied
withdrawals and public supply deliveries.
(2) More broadly, water use pertains to
human's interaction with and influence
on the hydrologic cycle, and includes
elements such as water withdrawal,
delivery, consumptive use, wastewater
release, reclaimed wastewater, return flow,
and instream use. See also offshore use
and instream use.

watershed:
(drainage basin, catchment basin, river
basin) The total area above a given point
on a stream that contributes water to the
flow at that point.

withdrawal:
Water removed from the ground or divert-
ed from a surface water source for use. See
also offshore use and self-supplied water.

WRP:
Wetlands Reserve Program – USDA
Natural Resources Conservation Service
cost-share program for wetland restoration.

WURR:
The Forest Service Water Use, Rights, and
Requirements

WVDNR:
West Virginia Division of Natural
Resources