

## Glossary

**Abiota** – Any component of the environment which is not living; these components can effect the ability of living organisms to survive in an environment.

**Abiotic** – Non-living.

**Acid rain** – Natural rainfall that contains nitric and sulfuric acids due to oxides of nitrogen and sulfur dioxide discharged into the air by industries, power plants, and automobiles.

**Adaptation** – An adjustment in structure or habits by which a species or individual improves its condition in relation to its environment.

**Algae** – Simple rootless plants that grow in bodies of water (e.g. estuaries) at rates in relative proportion to the amounts of nutrients (e.g. nitrogen and phosphorus) available in water.

**Amphibian** – A cold-blooded vertebrate that spends some time on land but must breed and develop into an adult in water. Frogs, salamanders, and toads are amphibians.

**Amphipods** – Small, shrimplike crustaceans

**Anadromous** – Fish that spend most of their life in salt water but migrate into freshwater tributaries to spawn (e.g. shad, sturgeon).

**Anaerobic** – Not containing oxygen or not requiring oxygen.

**Anoxic** – A condition where no oxygen is present. Much of the "anoxic zone" of a water body is anaerobic, with absolutely no oxygen, a condition in which toxic hydrogen sulfide gas is emitted in the decomposition process.

**Aquifer** – An underground layer of earth, gravel or porous stone that contains water; these are sources of groundwater for springs and wells.

**Aquatic** – Pertaining to water.

**Autotroph** – Any organism that is able to manufacture its own food. Most plants are autotrophs, as are many protists and bacteria. Autotrophs may be photoautotrophic, using light energy to manufacture food, or chemoautotrophic, using chemical energy.

**Baseline** – The numeric level of nutrient load at a particular point in time that serves to establish nutrient reduction goals and allowances.

**Benthos** – A group of organisms that lives in or on the bottom in aquatic habitats (such as clams that live in the sediments) which are typically immotile or of limited motility or range.

**Biltmore stick** – A device used to measure the diameter and height of standing trees.

**Bioassay** – A simple biological test that uses an indicator organism to measure the potency of a given substance in a biological system. An example of a bioassay would be a test that measures algal growth in response to different nutrient concentrations.

**Biochemical** – The chemical composition of a biological substance.

**Biodiversity** – A measure of the variety of different species or the variety of habitats and functions needed for the survival of species and biological communities.

**Biomass** – The quantity of living matter, expressed as a concentration or weight per unit area.

**Biota** – The flora and fauna of a region.

**Biotic** – Living organisms.

**Bivalve** – Mollusk with two shells connected by a hinge (e.g. clams, oysters).

**Bloom** – A population burst of phytoplankton that remains within a defined part of the water column

**Boulder vane** – Structures that help protect the banks of a river by deflecting fast-moving water away from the bank.

**Brackish** – Somewhat salty water, as in an estuary.

**Bulkhead** – A wall or embankment that acts as a protective barrier.

**Camouflage** – Concealment through protective coloring.

**Canopy** – The top part of a forest. This top layer provides protection for birds and butterflies and shade to cool the forest in summer.

**Carnivore** – An organism that eats meat. Most carnivores are animals, but a few fungi, plants, and protists are as well.

**Catadromous** – Fish that live in freshwater and migrate to saltwater to spawn (e.g. American eel).

**Catch basin** – A reservoir placed at the entrance of a sewer to capture large or obstructive matter.

**Cephalopod** – A member of the group of mollusks that includes octopuses, squid, nautilus and cuttlefishes.

**Chlorine** – A nonmetallic element, which occurs naturally as a salt. It is sometimes added to drinking water as a disinfectant. Chlorine in CFCs is believed to be responsible for damage to the ozone layer.

**Chlorophyll** – A pigment contained in plants that is used to turn light energy into food. Chlorophyll also gives plants their green color.

**Clay** – A sedimentary material consisting of grains smaller than .002 millimeters in diameter, generally characterized as moist or sticky earth.

**Coliform bacteria** – A group of bacteria primarily found in human and animal intestines and wastes. These bacteria are widely used as indicator organisms to show the presence of such wastes in water and the possible presence of pathogenic (disease-producing) bacteria. *Escherichia coli* (E. coli) is one of the fecal coliform bacteria widely used for this purpose.

**Commensal** – Having benefit for one member of a two-species association but neither positive nor negative effect on the other.

**Consumer** – Any organism that consumes other organisms (living or dead) to satisfy its energy needs.

**Contaminant** – Anything that to make something impure, unclean, or polluted, especially by mixing harmful impurities into it or by putting it in contact with something harmful.

**Copepod** – A type of small planktonic crustacean. Copepods are a major group within the mesozooplankton, and are both important grazers of phytoplankton and food for fish.

**Crustaceans** – The class of aquatic Arthropods including copepods, isopods, amphipods, barnacles, shrimp, and crabs which are characterized by having jointed appendage and gills.

**Combined Sewer Overflow (CSO)** – The output from a sewer system that carries sanitary waste and storm water runoff together; combined sewer systems can be overloaded during storms, causing raw sewage and excess runoff to be discharged into nearby waterways.

**Dichloro-Diphenyl-Trichloroethane (DDT)** – A group of colorless chemicals used as insecticides. DDTs are toxic to man and animals when swallowed or absorbed through the skin.

**Decomposers** – Organisms that recycle organic material by breaking down dead organic material to get nutrients.

**Denitrification** – The conversion of nitrite and nitrate nitrogen (after nitrification) to inert nitrogen gas. This treatment process requires that little or no oxygen be present in the system and that an organic food source be provided to foster growth of another type of bacteria. The organic food source can be either recycled waste, activated sludge or methanol. The resultant nitrogen gas is released to the atmosphere.

**Detritus** – Accumulated organic debris from dead organisms, often an important source of nutrients in a food web.

**Detrivore** – Any organism that obtains most of its nutrients from the detritus in an ecosystem.

**Dicot** – (dicotyledon) A flowering plant that produces two seed leaves or cotyledons when it germinates. This includes most herbaceous plants, trees, and shrubs.

**Dinoflagellate** – Algae of the order Dinoflagellata, having two flagella and a cellulose covering; often a chief constituent of plankton.

**Dip net** – A mesh bag attached to a handle that is used to scoop fish from the water.

**Dissolved Inorganic Nitrogen (DIN)** – An important nutrient for the growth of plants. DIN is nitrogen that is readily usable by plants.

**Dissolved Oxygen (DO)** – Microscopic bubbles of oxygen that are mixed in the water and occur between water molecules. Dissolved oxygen is necessary for healthy lakes, rivers, and estuaries. Most aquatic plants and animals need oxygen to survive. Fish will drown in water when the dissolved oxygen level gets too low. The absence of dissolved oxygen in water is a sign of possible pollution.

**Diurnal** – Active during daylight.

**Diversity** – An ecological measure of the variety of organisms present in a habitat.

**Ebb tide** – A falling tide.

**Ecology** – The study of interrelationships between living things and to their environment

**Ecosystem** – All the organisms in a particular region and the environment in which they live. The elements of an ecosystem interact with each other in some way, and so depend on each other either directly or indirectly.

**Effluent** – A discharge of treated water from a treatment plant.

**Emissions** – Refers to pollution being released or discharged into the air from natural or man-made sources. Pollutants may be released directly into the air from a structural device (e.g., smokestack, chimney, exhaust pipe) or indirectly via volatilization or dispersal (e.g., aerosol spraying).

**Endangered** – A species that is in immediate danger of becoming extinct and needs protection to survive.

**Endemic species** – A species that is native to or restricted in its distribution to a particular locality or region.

**Energy flow** – The passage of energy through the food web. As energy is passed from level to level, some of the energy is lost at each transfer.

**Environment** – The place in which an organism lives, and the circumstances under which it lives. Environment includes measures like moisture and temperature, as much as it refers to the actual physical place where an organism is found.

**Erosion** – The disruption and movement of soil particles by wind, water, or ice, either occurs naturally or as a result of land use.

**Estuarine species** – A permanent resident of an estuary. Also called a resident species.

**Estuary** – The tidal portion of a river where freshwater enters into a sound, bay or the sea and mixes with salty sea water.

**Eutrophic** – Describes an aquatic system with high nutrient concentrations. These nutrient concentrations fuel algal growth. These algae eventually die and decompose, with reduce the amount of dissolved oxygen in the water.

**Eutrophication** – The fertilization of surface waters by nutrients that were previously scarce. Eutrophication through nutrient and sediment inflow is a natural aging process by which warm shallow lakes evolve to dry land. Human activities are greatly accelerating the process. The most visible

consequence is the proliferation of algae. The increased growth of algae and aquatic weeds can degrade water quality.

**Exotic species** – A species not native to the region.

**Extant species** – A species that is currently in existence (the opposite of extinct).

**Extinct species** – A species that has disappeared from existence due to either natural or human-induced means (opposite of extant).

**Feral** – A wild or untamed animal.

**Floatables** – Floating debris including both street litter (paper, plastics, bottles, etc.) and toilet-generated waste such as hygiene products.

**Flood tide** – A rising tide.

**Floodplain** – The flat area adjacent to the channel constructed by the river and overflowed at a recurrence interval of about two years or less.

**Food chain / food web** – The network of feeding relationships in a community as a series of links of trophic levels, such as primary producers, herbivores, and primary carnivores. Includes all interactions of predator and prey, along with the exchange of nutrients into and out of the soil. These interactions connect the various members of an ecosystem, and describe how energy passes from one organism to another.

**Freshet** – An increase of water flow into an estuary during the late winter or spring, owing to increased precipitation and snow melt in the watershed.

**Gastropod** – The largest and most successful class of mollusks (phylum Mollusca), containing over 35,000 living species and 15,000 fossil forms. Most gastropods have a one piece shell (univalve), however in some, such as slugs and nudibranchs there is no shell at all. Gastropods have a well defined head, with one or two sensory tentacles and a mouth. They travel by using a single large muscular foot.

**Glacial till** – Soil which was directly deposited by a glacier as it melted. It is usually a mixture of clay, sand, gravel and boulders.

**Glucose** – A sugar commonly found in most plant and animal tissue. It is a major energy source.

**Green roof** – A roof or building which is covered with vegetation and soil over a waterproof membrane in order to help absorb rainfall in urban areas.

**Habitat** – The place and conditions in which an organism lives.

**Herbivore** – An organism that eats plants or other autotrophic organisms. The term is used primarily to describe animals.

**Hermaphroditic** – An organism having both sexes: a plant or animal having both male and female reproductive organs and secondary sexual characteristics.

**Heterotroph** – An organism that cannot generate its own food and must rely on other organisms for nutrition.

**Hydrology** – The scientific study of the properties, distribution, and effects of water on the earth's surface, in the soil and underlying rocks, and in the atmosphere.

**Hypoxic** – A condition where only very low levels of oxygen are present.

**Impervious surfaces** – Structures that do not allow water to pass through, such as pavement or building roofs.

**Indigenous species** – A species, which occurs as a native in more than one area.

**Infiltration** – The passage of a liquid through a filtering medium, such as the penetration of water through the ground into the sub-surface soil.

**Interstitial** – The volume between granules of soil or sediment that provides habitat for benthic organisms.

**Intertidal** – The area of shore located between high and low tides.

**Introduced species** – Species, which have been intentionally or inadvertently brought into a region or area. Also called exotic species.

**Invasive species** – An organism that is so reproductively successful and aggressive that it can dominate an area, often to the point of becoming a monoculture; it interferes seriously with the natural functioning and diversity of the system where it becomes established.

**Invertebrate** – Animals which lack a backbone, such as squids, octopuses, lobsters, or shrimps, crabs, shellfishes, sea urchins and starfishes.

**Juvenile** – Strictly speaking, a juvenile is any of a species that is not yet sexually mature. In the context of many surveys, however, it is most often used interchangeably with young-of-year (YOY).

**Keystone species** – A species that exerts great influence on an ecosystem. Dramatic changes, such as extinction of other species, occur if a keystone species is removed.

**Land cover** – Anything that exists on, and is visible from above, the earth's surface. Examples include vegetation, exposed or barren land, water, snow, and ice.

**Land use** – The way land is developed and used in terms of the kinds of anthropogenic activities that occur (e.g. agriculture, residential areas, industrial areas).

**Larva** – A discrete stage of development in many species, beginning with zygote formation and ending with metamorphosis.

**Littoral zone** – The intertidal area, also known as the splash zone. Region near the shoreline that is well-lit and often contains aquatic vegetation.

**Loam** – Soil that is a combination of sand, clay, silt and organic matter.

**Macro-organism** – An organism visible without the aid of a microscope.

**Macroinvertebrate** – An animal without a backbone usually in a nymph or larval stage; the quantity and diversity of macroinvertebrates can indicate the health of a water system.

**Macroplankton** – Planktonic organisms that are 200-2,000 micrometers in size.

**Mammal** – Any of a large class called Mammalia; warm blooded, usually hairy vertebrates whose offspring are fed with milk secreted by the mammary gland.

**Marsh** – An emergent wetland that is usually seasonally flooded or wet, and often dominated by one or a few plant species.

**Mesohaline** – Pertaining to moderately brackish water with low range salinities (from 5-18 parts per thousand). These areas are typically in the middle portion of an estuary.

**Mesotrophic** – Describes an aquatic system somewhere between eutrophic (nutrient enriched) and oligotrophic (nutrient poor).

**Metabolism** – The set of chemical reactions which transforms matter and energy to provide for survival, growth and reproduction in cells and organisms.

**Micro-organism** – An organism requiring magnification to see/study (microscopic).

**Migratory** – Describing groups of organisms that move from one habitat to another on a regular or seasonal basis.

**Mollusk** – The invertebrate phylum that contains bivalves (e.g. oysters), gastropods (e.g. snails), and squids.

**Molt** – To shed the exoskeleton (outer covering) prior to new growth (e.g. blue crab).

**Monoculture** – A single culture of plant or animal life that exists isolated and without diversity.

**Native species** – Animals or plants that originated and naturally occur in the area in which they are found.

**Neritic** – A part of the pelagic zone which extends from the high tide line to the bottom, up to 200 meters deep.

**Niche** – A general term referring to the range of environmental space occupied by a species.

**Nitrification** – The process in which bacterial populations, under aerobic conditions, gradually oxidizes ammonium to nitrate with the intermediate formation of nitrite. Biological nitrification is a key step in nitrogen removal in wastewater treatment systems.

**Nitrogen** – (N) is used primarily by plants and animals to synthesize protein. Nitrogen enters the ecosystem in several chemical forms and also occurs in other dissolved or particulate forms, such as tissues of living and dead organisms.

**Nocturnal** – Active only at night.

**Nonpoint source pollution** – A diffuse source of pollution that cannot be attributed to a clearly identifiable, specific physical location or a defined discharge channel. This includes the nutrients that runoff the ground from any land use - croplands, feedlots, lawns, parking lots, streets, forests, etc. - and enter waterways. It also includes nutrients that enter through air pollution, through the groundwater, or from septic systems.

**Nutrient trading** – The transfer of nutrient reduction credits, specifically those for nitrogen and phosphorus.

**Nutrients** – Compounds of nitrogen and phosphorus dissolved in water that are essential to both plants and animals. Too much nitrogen and phosphorus act as pollutants and can lead to unwanted consequences - primarily algae blooms that cloud the water and rob it of oxygen critical to most forms of aquatic life. Sewage treatment plants, industries, vehicle exhaust, acid rain, and runoff from agricultural, residential and urban areas are sources of nutrients.

**Oligohaline** – Pertaining to moderately brackish water with low range salinities (from .5-5 parts per thousand). These areas are typically in the upper portion of an estuary.

**Oligotrophic** – Refers to water bodies or habitats with low concentrations of nutrients.

**Omnivore** – An organism that will eat anything. Refers to animals who eat both plants and animals.

**Organic waste** – Waste which often comes from plants, animals and living organisms and which is biodegradable.

**Outfall** – A place where treated or untreated waste water is discharged into a receiving body of water.

**Parasite** – A plant or animal that lives on or in an organism of another species from which it derives its nutrition and/or protection; usually without benefit to the host and often with harmful effects.

**Pelagic** – The open ocean, excluding the ocean bottom and shore.

**Perennial** – A term used in botany to describe plants that live for more than two growing seasons. Such plants either die back after each season, as some herbaceous plants do, or grow continuously, as some shrubs do.

**Pesticides** – A general term used to describe chemical substances that are used to destroy or control insect or plant pests. Many of these substances are manufactured and do not occur naturally in the environment. Others are natural toxins that are extracted from plants and animals.

**Phosphorus** – (P) A key nutrient in the river's ecosystem, phosphorus occurs in dissolved organic and inorganic forms, often attached to particles of sediment. This nutrient is a vital component in the process of converting sunlight into usable energy forms for the production of food and fiber. It is also essential to cellular growth and reproduction for organisms such as phytoplankton and bacteria. Phosphates, the inorganic form are preferred, but organisms will use other forms of phosphorus when phosphates are unavailable.

**pH** – Measure of the acidity or basicity of water. A substance with a pH level of 7 is neutral, lower pH levels are increasingly acidic and higher pH levels are increasingly basic.

**Photic zone** – Layer of a body of water that receives ample sunlight for photosynthesis (usually less than 100m deep).

**Photosynthesis** – The process by which plants convert carbon dioxide and water into carbohydrates and oxygen. The carbohydrates are then available for use as energy by the plant or other consuming organisms. ( $\text{CO}_2 + \text{H}_2\text{O} + \text{SUNLIGHT} = \text{C}_6\text{H}_{12}\text{O}_6 + \text{O}_2$ ). This process is also referred to as "primary production."

**Phytoplankton** – Plankton are usually very small organisms that cannot move independently of water currents. Phytoplankton is any plankton that is capable of making food via photosynthesis.

**Plankton** – Small or microscopic algae and organisms associated with surface water and the water column.

**Point source pollution** – A source of pollution that can be attributed to a specific physical location; an identifiable, end of pipe "point". The vast majority of point source discharges for nutrients are from wastewater treatment plants, although some come from industries.

**Polychlorinated Biphenyl (PCB)** – A chemical compound composed of a bi-phenyl group and chlorine atoms. It is a toxic compound, the use of which was banned in 1979.

**Polyhaline** – Describes waters with salinity between 18 and 30 ppt. These areas are typically in the lower portion of an estuary, where the ocean and estuary meet.

**Porosity** – The ability of a substance to absorb water.

**Potable water** – Water, which meets quality standards for drinking.

**ppm** – Parts per million (often used as a measurement of pollutants).

**ppt** – Parts per thousand (used as a measurement of salinity).

**Predator** – Organism that hunts and eats other organisms. This includes both carnivores, which eat animals, and herbivores, which eat plants.

**Prey** – Organism hunted and eaten by a predator.

**Primary producers** – Organisms, such as algae, that convert solar energy to organic substances through the pigment chlorophyll. Primary producers serve as a food source for higher organisms.

**Producer** – An organism that produces the nutrients it needs from simple substances such as water, carbon dioxide or nitrogen.

**Pycnocline** – The zone between waters with different densities. An example from an estuary would be a pycnocline separating deep, more saline water and shallow, more fresh water.

**Rain garden** – An area planted with wetland species that is designed to absorb excess rainwater and control run-off created by highly developed areas.

**Raptor** – A bird of prey (e.g. osprey, eagle, hawk)

**Red tide** – A dense outburst of phytoplankton (usually dinoflagellates) often coloring water red brown.

**Resident** – Species that are permanent living members of a particular area.

**Rhizome** – The underground portion of a plant's stem. Usually a thick underground horizontal stem that produces roots and has shoots that develops into new plants.

**Riffle** – The shallow, faster flowing section of a stream, where the water surface is broken as it flows over gravel or cobble substrate; shoals or sandbars wholly or partly submerged beneath the water surface; a stretch of choppy water caused by a shoal or sandbar; a rapid.

**Riparian area** – Refers to the area of land adjacent to a body of water, stream, river, marsh, or shoreline. Riparian areas form the transition between the aquatic and the terrestrial environment.

**Riparian forest buffers** – An area of trees, usually accompanied by shrubs and other vegetation, that is adjacent to a body of water which is managed to maintain the integrity of stream channels and shorelines, to reduce the impact of upland sources of pollution by trapping, filtering, and converting sediments, nutrients, and other chemicals, and to supply food, cover, and thermal protection to fish and other wildlife.

**River** – A large, flowing natural waterway, origination at headwaters or a spring, flowing to its endpoint, the mouth.

**Roe** – Fish eggs, especially while still massed in the ovarian membrane; also called caviar

**Run-off** – Water from rain or snowmelt that flows over land to a body of water. As it runs, it can pick up pollutants and deliver them into bodies of water.

**Salinity** – A measure of the salt concentration of water. Higher salinity means more dissolved salts. Usually measured in parts per thousand (ppt).

**Salinity regime** – A portion of an estuary distinguished by the amount of tidal influence and salinity of the water. The major salinity regimes are, from least saline to most saline: tidal fresh, oligohaline, mesohaline and polyhaline.

**Salt marsh** – A low-lying coastal habitat composed of plants and animals which are tolerant to tidal changes and salinity.

**Scavenger** – An opportunistic animal that feeds on decaying plants and animals or scraps of food abandoned by other animals.

**Sediment** – Matter that settles and accumulates on the bottom of a body of water or waterway.

**Seining net** – A large fishing net which has weights attached to the bottom edge to hang vertically in the water.

**Sessile** – Immobile because of an attachment to a substrate (e.g. oysters).

**Sewershed** – The region of a city served by a particular sewer system or waste treatment plant.

**Shoal** – A shallow location in a body of water or a sandy elevation or sandbar which causes the water to become shallow.

**Silt** – Material that is composed of very fine particles that measure sizes between sand and clay. Silt is easily transported by water.

**Siltation** – The process by which sedimentary material, or silt, is suspended and deposited in a body of water.

**Soil** – The uppermost layer of the earth. It consists of a combination of organic matter, rocks and minerals.

**Soil compaction** – Overuse of an area that compresses the soil, making it less able to absorb rainfall, increasing run-off and erosion.

**Soil horizon** – A layer of soil, parallel to the surface, which builds up over time.

**Soil profile** – A vertical section of the soil taken from the ground surface to the rock layer below to reveal the different soil horizons of the area.

**Spat** – Juvenile, newly attached oysters (e.g. oyster spat).

**Spawn** – To release eggs and/or sperm into water.

**Species** – A population or group of populations that are reproductively isolated from all other populations.

**Sprawl** – A form of land development that moves outward from urban areas in a manner which creates large areas of relatively low density.

**Spring** – A naturally flowing water stream which emerges from the earth.

**Storm flow** – Rainfall runoff that reaches a stream channel during, or soon after a rainfall event that causes high rates of discharge.

**Stratification** – The formation, accumulation, or deposition of materials in layers, such as layers of fresh water overlying higher salinity water (salt water) in estuaries.

**Substrate** – "Supporting surface" on which a sessile organism lives and grows. The substrate may simply provide structural support, or may provide water and nutrients. A substrate may be inorganic, such as rock or soil, or it may be organic, such as wood.

**Subtidal** – Submerged, not exposed at the lowest tide.

**Suspended sediments** – Particles of soil, sediment, living material, or detritus suspended in the water column.

**Sustainability** – The ability to continue existing.

**Swamp** – A wetland dominated by woody vegetation.

**Terrestrial** – Relating to or living on land, as opposed to marine or aquatic.

**Thermal pollution** – The discharge, usually industrial, of heated water into a natural body of water. It causes a rise in the water temperature which can kill or injure aquatic life.

**Threatened** – A species that is likely to become endangered if not protected.

**Tidal fresh** – Describes waters with salinity between 0 and 0.5 parts per thousand (ppt). These areas are at the extreme reach of tidal influence.

**Tidal mud flat** – The unvegetated shore exposed to air during low tide.

**Tides** – Periodic movement of water resulting from gravitational attraction between the earth, sun, and moon.

**Total Maximum Daily Load (TMDLs)** – Defines the pollutant load that a water body can assimilate without causing violations of water quality standards, and allocates the loading between contributing point sources and non-point source categories.

**Topography** – A detailed description of the surface features of a place or region as shown on a map.

**Toxicant** – A poisonous or toxic agent that is harmful to living resources either terrestrial or aquatic.

**Transect** – A system of grids used by scientists to ensure a fair representation of data in population studies.

**Tree canopy** – The tallest layer of trees in a forest.

**Trend Analysis** – A formal statistical process that is used to determine the presence or absence of changes in measures of water quality over time or a geographic area.

**Tributary** – A body of water flowing into a larger body of water.

**Trophic level** – Layer in the food chain in which one group of organisms serve as the source of nutrition of another group of animals.

**Turbidity** – The decreased clarity in a body of water due to the suspension of silt or sedimentary material.

**Understory** – The low-growing vegetation (shrubs, seedlings, saplings, small trees) growing under the tree canopy or overstory.

**Vertebrate** – Animals with a backbone including fish, amphibians, reptiles, birds, and mammals.

**Waste water** – Water that has been used in homes, industries, and businesses that is not for reuse unless treated by a wastewater facility.

**Water clarity** – Measurement of how far you can see through the water. The greater the water clarity, the further you can see through the water.

**Water cycle** – The continuous, solar-driven cycle where water evaporates, condenses, fall to the earth as precipitation and eventually returns to water bodies through runoff or groundwater.

**Water quality standards** – A provision of State or Federal law consisting of a designated use or uses for a water body and the quantifiable criteria protective of the use(s). Standards may be annual or seasonal, depending on the designated use.

**Waterfowl** – Any of various birds that swim in water, such as ducks, geese and swan or any bird species that is ecologically dependent on aquatic environments such as wetlands.

**Watershed** – A region of land where water, sediment and dissolved material drains downhill into a body of water, such as a river. The drainage basin includes both the streams and rivers that convey the water as well as the land surfaces from which water drains into those channels.

**Weir** – A small dam usually used to raise the water level of a river or stream.

**Wet deposition** – Atmospheric deposition that occurs when precipitation (rain and snow) carries gases and particles to the earth's surface.

**Wetland** – An area that is periodically or permanently saturated with water, and in which plants and animals are uniquely adapted to wet conditions; wetlands are extremely biologically productive and perform a wide variety of important ecological functions.

**Zooplankton** – Animal plankton. Small floating herbivores that feed on plant plankton.