

Glossary

Abiotic—The non-living, or physical part of an environment.

Accretion—Accumulation of sediments by deposition, as for a river delta or along a shoreline.

Aerobic—In the presence of, or utilizing oxygen.

Algae Bloom—Population explosion of phytoplankton in response to changing environmental conditions, including nutrient over-enrichment from wastewater and nonpoint sources. Blooms can result in oxygen depletion and biological impacts; see also *eutrophication*.

Ambient—Prevailing environmental conditions, as opposed (for example) to measurement in a laboratory or waste stream. In an estuary, ambient conditions are receiving water conditions in the bay itself, representing an integration of the various sources of impact to the system.

Amphipod—A member of the crustacean order Amphipoda. These numerous small (but generally visible) flea-like forms (flattened from side to side) are abundant in marine environments.

Anaerobic—Lacking oxygen, for example submerged sediments below a narrow oxygenated layer. Also refers to metabolic function in the absence of oxygen, present in some microbe species.

Annelid—Worms of the invertebrate phylum Annelida which are segmented (as distinguished from non-segmented roundworms and flatworms). Most estuarine worms are polychaetes, a group dominating the bay bottom habitat.

Anoxia—Absence of oxygen; see also *anaerobic*, *hypoxia*.

Assimilative Capacity—The amount of pollution a water body can receive without degradation, as a result of the natural ability of the water and its associated chemical and biological systems to dilute or transform contaminants.

Atmospheric Deposition—The contribution of atmospheric pollutants or chemical constituents to land or water ecosystems. Deposition results from materials in rain or snowfall, combined with dry dust fallout. Increasingly, atmospheric sources are recognized as a significant source of nutrients and contaminants to coastal systems.

Autotrophic—A species or ecosystem sustained entirely by food created within, for example a green plant or an estuary which is a net exporter of organic matter. Contrasts with *heterotrophic*—a species or ecosystem which imports energy (e.g. a predator or estuary which receives substantial organic matter from upstream).

Base Flow—The volume of flow in a stream or river during dry conditions (as opposed to conditions influenced by storm runoff).

Bathymetry—Underwater topography defined by patterns in depth.

Benthic—Associated with sediments on the bottom of a water body.

Berm—An elongated ridge elevated above the surrounding area; could be natural (for example an underwater longshore bar created by currents) or man-made (a ridge of sediment deposited along a navigation channel or an upland feature constructed to manage runoff).

Bioaccumulate—The accumulation of a contaminant in the tissues of a living organism due to uptake from the environment.

Biochemical Oxygen Demand (BOD)—The degree to which organic compounds consume oxygen in water, based on a five-day laboratory test in which loss of oxygen in a sample results from bacterial respiration and chemical processes. BOD is a traditional water quality measurement applied to wastewater such as treated sewage.

Bioconcentrate—The magnification of contaminant concentrations in living things due to increased tissue concentrations at each successive trophic level in a food chain. Bioconcentration generally (but not always) occurs due to a contaminant being soluble in fatty tissues and not in water.

Biogenic—Created by biological processes.

Biomass—Physical mass (weight) of living tissue. This is a biological measurement used to establish the importance of certain groups of living things in an ecosystem, as opposed to *numbers* of individuals. For example, the biomass of phytoplankton (standing crop) is an important measurement in describing an estuarine food chain.

Bioturbation—The disturbance of sediments due to displacement by living things. For example, bioturbation resulting from burrowing of organisms in the benthic habitat increases sediment aeration and influences contaminant equilibria with the overlying water.

Bivalve—Member of the invertebrate class Bivalvia, including the shellfish groups with two hinged shells, such as oysters.

Blue-Green Algae—Primitive algae with a bacteria-like cell structure, lacking a nucleus and other organelles. These species manufacture photosynthetic pigments but lack chloroplasts (the specialized photosynthetic organelles in higher plants). In some situations, an increase in blue-green algae can indicate an environmental stress such as pollution.

Bulkhead—A man-made vertical wall on the shoreline which replaces the natural gradual depth gradient. Bulkheads are normally constructed to stabilize shorelines and prevent wave damage to upland property.

Bycatch—The incidental harvesting of organisms of one species

during pursuit of another, most often applied to the numerous species of fish and shellfish captured incidentally in shrimp trawls.

Carbon Flux—Transport of organic compounds in an ecosystem, including trophic dynamics, chemical transformations, and physical movements.

Catch Per Unit Effort (CPUE)—The numbers or biomass of organisms caught in a fishery survey, corrected for the level of effort expended (e.g. area seined or time trawled). CPUE provides a better estimate of actual populations than uncorrected figures such as commercial landings.

Channelization—The conversion of shallow coastal areas to deeper dredged navigation channels.

Circulation—Estuarine current patterns, determined by bathymetry, hydrology, fresh water inflow, channels and islands, and geophysical forces.

Coarse Particulate Organic Matter (CPOM)—Unprocessed carbon compounds input to an aquatic system, for example leaf litter.

Colonial Nesting—The propensity for some bird species, for example most egrets and herons, to nest in dense colonies.

Colony Forming Units (CFU)—Bacterial colonies on laboratory media resulting from filtering and culturing bacteria from a water sample. The count of CFUs is an index to the bacterial concentration in the water: each colony in the laboratory culture is inferred to have arisen from reproduction of a bacterium in the original sample.

Commensal—A relationship among two or more species in which one or both benefits from the other without causing harm. Commensal relationships (for example certain crabs living among oysters) result from a coevolutionary history.

Community—Natural, intermingled plant and animal populations which share a given space, compete for resources, and interact with one another in an ecosystem.

Competition—Patterns in distribution, abundance, and behavior in a natural community resulting from competition for a limited resource (e.g. food or space).

Contact Recreation—Human activity involving bodily contact with water, and therefore the potential for increased risk to health when contaminants or pathogens are present. In Galveston Bay, contact activities like wade-fishing and sail-boarding are more common than swimming, traditionally perceived as the principle form of contact recreation.

Copepod—A member of the crustacean subclass Copepoda; including small but generally visible species. Free living forms are common in benthic and planktonic samples, while some are parasitic (e.g. “fish lice”).

Cordgrass—Group of several wetland plant species common to both brackish and salt estuarine marshes. Smooth cordgrass, *Spartina alterniflora*, is the dominant plant species of the fringing salt marshes of the Gulf Coast.

Coriolis Force—A force resulting from the earth’s rotation which affects fluids like the oceans and the atmosphere, causing

hurricanes and whirlpools to rotate counter-clockwise in the northern hemisphere, clock-wise in the southern hemisphere. The coriolis force, through its effect on water currents, contributes to the similarity of geography among Texas bay systems.

Crustacean—Member of the aquatic class Crustacea of the phylum Arthropoda. A heterogeneous and important estuarine group including shrimp, crabs, barnacles, and others.

Ctenophore—Member of the invertebrate phylum Ctenophora (comb jellies; sea walnuts, unrelated to the true “jellyfish”). Ctenophores are bioluminescent members of the plankton assemblage up to several inches in size, with eight rows of cilia and which prey on smaller plankton. The phosphorus jelly is a common inhabitant of Texas bays.

Cubic Feet Per Second (cfs)—Standard unit for measurement of stream flow or wastewater discharge.

Decomposer—An organism which consumes dead organic matter. Decomposers are a major (perhaps dominant) component of the estuarine food chain.

Delta—The fan-shaped mass of sediments deposited where a river discharges to a larger, slower moving water body. Deltas are important for their wetland habitat values.

Demersal—Animals living in the water but feeding on the bottom; for example bottom-feeding fish such as the croaker.

Denitrification—Natural chemical conversion of dissolved nitrogen (nitrite) to gaseous nitrogen, removing it from an aquatic system.

Denivellation—Wind forcing of water resulting in water depth changes. Denivellation in Texas estuaries can produce more extreme water level fluctuations than do tides.

Density Current—Currents resulting from salt water being heavier than fresh water. For example, seawater from the Gulf intrudes landward along the bottom of the Houston Ship Channel, displacing lighter, fresher waters seaward.

Deposit Feeder—An organism which ingests bottom sediments and digests the contained microorganisms and organic matter.

Dermo—A disease of oysters caused by the parasitic protozoan *Perkinsus marinusus*. This disease has a substantial influence on Texas oysters, being more severe in seasonally warmer waters.

Detritivore—An organism that derives nutrients and energy by consuming decaying organic matter.

Detritus—Decaying organic material.

Diatom—A group of phytoplankton species utilizing silica as a structural component of the cell wall; a dominant component of the plankton in Galveston Bay.

Dinoflagellate—Unicellular, generally motile species of algae with two whip-like flagella arranged in a characteristic pattern. This group includes some common plankton species and also red tide organisms such as *Gonyaulax monilata* and *Ptychodiscus brevis*.

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tissues in natural settings, but including also some contaminants.

Diurnal Tide—Tide occurring on a cycle of once daily.

Diversity—A measure of the variety of living things in a community, based upon one of several mathematical formulae which account for both numbers of species and numbers of individuals within species. High diversity results from high numbers of species and an even distribution of numbers within species. Stressed environments generally have low diversity.

DO Deficit—The difference between the oxygen saturation value in water (calculated under the conditions measured at sampling) and actual oxygen concentration. The measure is useful because it corrects for temperature, salinity, and atmospheric pressure—conditions which influence the saturation level. A high deficit can be an indicate a water quality problem.

Ecological Niche—The way a species “makes its living;” where it lives, what it consumes, and how it avoids consumption by predators or displacement by other species.

Ecosystem—A natural system including the sum total of all living things, the non-living environment and its physical forces, and the relationships among these, including processes such as predation, competition, energy flow, and nutrient cycling. An estuary is an ecosystem.

Ecotourism—Tourism supported by natural ecological attributes of an area, for example bird-watching.

Effluent—Wastewater discharged to a receiving water.

Embayment—Portions of open water or marsh defined by natural topographical features such as points or islands, or by human structures such as dikes or channels.

Emergent Wetlands—Marshes in which vegetation is rooted underwater and the tops exposed (as contrasted with submerged vegetation or upland habitats).

Enterococcus—Bacteria species which are enteric in man or animals, some of which are pathogens. Enterococci are considered a possible replacement for fecal coliform bacteria as an indicator of water contamination.

Entrainment—Transport of living organisms in a water current, as occurs when organisms enter a cooling water intake structure.

Epibenthic—Located at the surface of the sediments on the bay bottom, generally referring to algae.

Epifauna—Organisms living on a surface, for example the bay bottom or submerged leaves of a rooted aquatic plant.

Epiphytic—Organisms growing on, and supported in part by a plant, for example epiphytic algae growing on the surface of submerged aquatic vascular plants.

Estuary—A semi-enclosed body of water having a free connection with the open sea and within which seawater is diluted measurably by fresh water from land drainage.

Estuarine Debris—Trash in a bay or along its shoreline. Debris consists of tires, construction wastes, household trash, and above all, plastic. Debris degrades aesthetic values and rep-

resents a hazard to wildlife (e.g. entanglement or mistaken consumption as food).

Eutrophication—A process of nutrient over-enrichment of a water body, resulting in overgrowth of algae, frequently followed by algae die-offs and oxygen depletion.

Evapotranspiration—Uptake of water by living plants, transport to leaf surfaces, and evaporation to the atmosphere.

Exotic Species—Species not native to an ecosystem, often established purposefully or inadvertently by human activity. Some exotic species have fewer natural population controls in their new environment, becoming a pest or nuisance species.

Fecal Coliform Bacteria—Enteric bacteria which ferment lactose with gas and acid formation at a temperature typical of warm-blooded animals. In water, fecal coliforms are commonly used as an indicator of contamination, and are normally measured using filtration and culture on disk media (but see also *Most Probable Number*).

Feedback Loop—A self-regulatory process in a biological or physical system whereby extremes in a particular condition trigger forces to moderate that condition and maintain a steady state, for example population size (environmental) or body temperature (physiological).

Filter Feeder—Organism (for example the oyster) which feeds by pumping large volumes of water to consume material in suspension, such as phytoplankton.

Fine Particulate Organic Matter (FPOM)—Organic matter (for example plant tissue) which has undergone the first stages of decomposition to the fine particle stage.

Finfish—Fish, as opposed to shellfish.

Flocculant—Fine-grained material in suspension in water, which can settle to form a coating on the bottom.

Flushing—The natural process of water replacement in an estuary; for example Galveston Bay is flushed four to five times per year by river water and other runoff.

Food Chain—A process of energy capture (by green plants) and successive transfer to grazers (primary consumers) and predators (secondary consumers and above).

Food Web—The network of trophic relationships in an ecosystem, based on the food chain principal, but more accurately reflecting the complexities of branching energy transfer among various species at different trophic levels.

Foraminifera—Group of single-celled plankton species characterized by a calcareous skeleton, persistent beyond death.

Freshet—An influx of fresh water inflow, for example following seasonally high precipitation.

Gastropod—Member of the class Gastropoda of the phylum Mollusca. These are the snails and similar organisms with an asymmetrical, spirally-coiled shell.

Geographic Information System (GIS)—A computer system which links geographic reference data to attribute datasets, with the capability to display features and analytical outcomes on maps. GIS tools are increasingly being applied to

- ecosystem, watershed, and landscape studies, both in ecological research and for environmental management planning.
- Green Algae**—A common algae type in estuaries, with nucleated cells and photosynthetic pigments contained in organelles called chloroplasts.
- Groundwater**—Water beneath the earth's surface, occurring in aquifers at one or more depth levels.
- Guild**—A group of species with similar ecological niches; that is, they "make their living" in a similar way within an ecosystem. For example, the planktivorous fishes would constitute an *estuarine species guild*.
- Gyre**—Circular, rotational current pattern, established by winds or other physical forces.
- Habitat**—The environment chosen by a species to live in, providing life requisites such as food and shelter.
- Herbivore**—Plant-eater.
- Heterotrophic**—A species or entire community/ecosystem which acquires its energy by import rather than producing its own food. Secondary consumers are heterotrophic, as are estuaries which receive substantial organic inputs (energy subsidies) from upstream. Contrasts with *autotrophic*—a species or ecosystem capable of being sustained by creation of its own food (e.g. a green plant or an estuary which is a net exporter of organic matter due to high primary productivity).
- Hydrologic Cycle**—The continuous cycle of water in the biosphere as solid, liquid, and gas. Marked by evaporation from oceans to the atmosphere, precipitation to the earth's surface, replenishment of groundwater, runoff, uptake by plants, and storage in oceans and ice caps.
- Hypoxia**—Depletion of dissolved oxygen in water to low levels, for example less than two mg/L. Hypoxia could result from natural or human introduction of oxygen-demanding compounds, or from eutrophication resulting from nutrient over-enrichment.
- Impervious Cover**—Land surfaces with a low capacity for soil infiltration, for example paving, roofs, roadways, or other human structures. The presence of impervious cover increases runoff and affects the quantity and composition of nonpoint source pollution.
- Impingement**—The accumulation of organisms on a water intake screen, for example at a power plant cooling-water intake.
- Indicator Species**—A species which, through its population size or condition, mirrors environmental conditions within an ecosystem. For example, eastern oysters are a good indicator species in estuaries by virtue of their wide distribution, inability to move about, and sensitivity to conditions of interest like *salinity and contaminant concentrations*.
- Infauna**—Animals living within submerged sediments.
- Inflow**—The water feeding an estuary, generally referring to river sources.
- Intertidal**—The portion of shoreline between low and high tide lines, intermittently submerged.
- Isopod**—A member of the crustacean order Isopoda, small but generally visible species flattened from top to bottom (the pillbug is a terrestrial isopod). Isopods are common benthic and epibenthic invertebrates.
- Lacustrine**—Relating to a lake environment.
- LANDSAT**—An unmanned satellite system which acquires images of the earth's surface features and digitally transmits them to earth for use in a variety of applications.
- Loading**—The rate of introduction of a constituent (e.g. contaminant) to a receiving water, for example in pounds per day. *Loading is significant in relation to the volume and circulation of the receiving water; problems occur when high loadings occur into receiving waters with limited assimilative capacity.*
- Longshore Drift**—The movement of water and suspended and dissolved materials along and parallel to a shoreline as a result of tidal, wind-driven, or other currents.
- Macroalgae**—Algae large enough to be visible.
- Macrobenthos**—Bottom-dwelling invertebrates large enough to be visible.
- Macroflora**—Plants large enough to be visible.
- Macroinvertebrates**—Invertebrates large enough to be visible, for example those retained on a 0.5 mm screen. Most benthic studies concentrate on this size range.
- Macrophyte**—A higher green plant, for example rooted aquatic vegetation.
- Macrozooplankton**—Animals in the water which drift with the currents and are large enough to be visible.
- Meiofauna**—Bottom-dwelling microscopic animals in the 0.002 to 0.02 inch size range. Most benthic studies concentrate on the larger benthic macroinvertebrates, hence less is known of the meiofauna, in part composed of nematodes, copepods, and juvenile forms of larger invertebrates.
- Meroplankton**—The portion of the plankton assemblage composed of temporarily planktonic life stages of non-planktonic species. These are primarily larvae or juveniles of such species as oysters, crabs, shrimp, and barnacles.
- Mesozooplankton**—Planktonic animals 200 μ m to two millimeters in size.
- Microalgae**—Planktonic, epiphytic, or epibenthic algae smaller than visible size range.
- Microfauna**—Animals which will pass through a 0.002 inch mesh screen.
- Microflora**—Microscopic plants.
- Microzooplankton**—Planktonic animals in the 20 to 200 μ m size range.
- Mollusk**—Member of the invertebrate phylum Mollusca, containing mainly shelled creatures (bivalves like oysters, the various gastropod snails) and squid and octopus species.
- Most Probable Number (MPN)**—Measurement of fecal coliform indicator bacteria based on gas production in tubes. An alternative to the more standard fecal coliform test involving

- Reaeration**—Elevation of the dissolved oxygen concentration in water resulting from mechanical agitation, for example by wave action.
- Red Tide**—Algae bloom involving dinoflagellate phytoplankton species which naturally manufacture biotoxins. Depending upon species, red tides can cause fish kills and several types of shellfish poisoning in human consumers.
- Residence Time**—The period of time water is retained in a reservoir, bay, or other system, based upon flow rates into and out of the system. See also *flushing*.
- Resuspension**—Incorporation of non-soluble matter into water by physical forces, for example sediments resuspended by currents or dredging activity.
- Return Flow**—Wastewater discharged to an aquatic or marine environment. Return flows can alter hydrology and fresh water inflow when the original source of the water was not the receiving water (for example groundwater discharge to an estuary as wastewater).
- Riparian**—Associated with the bank of a watercourse, for example the riparian woodlands bordering a river.
- Riprap**—Rock, concrete, or other material used as a hard, artificial shoreline facing to reduce erosion.
- Risk Analysis**—The estimation of hazards associated with contaminants or other environmental conditions, as they affect exposed humans or selected elements of the ecosystem. Seafood consumption risk analysis procedures normally follow a standardized EPA protocol.
- Salinity**—Salt concentration in marine waters, ranging from zero to about 33 parts per thousand (ppt) in estuaries. Salinity originated as an oceanographic term and does not have a precise chemical definition, since the proportions of various ions vary in the different waters of the world.
- Salinity Gradient**—A spatial salinity transition, for example from a fresh river mouth to ocean inlet. “Steep” gradients can occur between adjacent water masses of differing salinity, as occurs in a density current.
- Seafood Advisory**—Warning issued by a public health authority recommending avoidance or reduced intake of certain species which may pose health risks to consumers.
- Seagrass**—Rooted, submerged marine or estuarine macrophytes of several species. Habitats created by seagrass meadows are among the most diverse and productive estuarine environments. Loss of seagrasses have become a marine conservation issue Gulf-wide.
- Secchi disc**—An opaque, black and white disk lowered into water until its black-white demarcation is no longer visible. The resulting “secchi depth” is a practical, traditional measurement of water clarity, and is well-correlated with turbidity and the depth of the biological photic zone.
- Secondary Consumer**—Predator which derives its energy from eating plant-eaters (primary consumers).
- Segmentation**—Demarcation of a water body into subsections, for purposes of monitoring or management.
- Semi-diurnal Tide**—Tide occurring on a cycle of twice daily
- Sentinel Species**—A species which, through its numbers or condition, can provide advanced warning of more generalized environmental degradation (see also *indicator species*).
- Sergestid Shrimp**—Several species of non-commercial shrimp of the decapod crustacean family Sergestidae.
- Sessile**—Attached at a given location; non-mobile (for example an oyster).
- Shoaling**—Decrease in water depth due to sediments deposited by currents, for example at an inlet.
- Siltation**—The accumulation of sediments transported by water. Siltation is an ongoing process of one to three feet accumulation per century in Galveston Bay.
- Silvicultural**—Use and management of forest resources.
- Spat**—Young oysters during early growth on a hard substrate. The *spat set* is the process of settling and attachment of planktonic larvae and onset of shell growth, establishing new recruitment on a reef.
- Stakeholder**—An individual or organization with a “stake” in a natural resource or other issue by virtue of livelihood or simple personal interest.
- Standing Crop**—The biomass of a trophic level, species, or community at a given time and location. Contrasts with *productivity*—the rate of biomass creation.
- Storm Surge**—The increase in water depth caused by a Hurricane, due to a combination of low atmospheric pressure (which creates a “bulge” in surface waters) and wind-piling of water. Serious damage can result after a storm surge moves onshore, as waters rush back to their source.
- Stratification**—Vertical separation of water masses into layers with different characteristics. For example, dense salt water intruding under fresher water in a navigation channel can establish salinity stratification.
- Stress Proteins**—Proteins synthesized by aquatic organisms as a physiological response to environmental stress. Tissue analysis for stress proteins can be combined with other more traditional measurements to indicate the presence of environmental contamination.
- Subaerial**—Surrounded by air, for example terrestrial plants and animals.
- Submerged Aquatic Vegetation (SAV)**—Rooted, submerged macrophytes, including seagrasses and freshwater rooted macrophytes. Contrasts with *emergent* species such as smooth cordgrass.
- Subsidence**—The loss of land elevation due to groundwater or petroleum withdrawal and natural settling. Groundwater withdrawal has been the most important contributor to subsidence of up to nine feet in the Galveston Bay region.
- Subtidal**—Below the low tide line; submerged virtually continuously. Contrasts with *intertidal*, which is the area intermittently submerged.
- Subwatershed**—A subdivision of a watershed based on hydrology, generally corresponding to the area drained by a small tribu-

tary or bayou, as opposed to a major river.

Supersaturation—A concentration of a gas in water (for example oxygen) above the equilibrium concentration. This occurs when the gas enters solution more quickly than release from the liquid to gas phase, for example under extremely high rates of plankton photosynthesis.

Surface Microlayer—The immediate surface of the water, important as the interface for atmosphere/water equilibria processes, the location of highest concentrations of hydrophobic pollutants like oil, and the location of floating marine eggs and other biological forms.

Suspension Feeder—An organism which feeds on materials in water suspension, for example oysters which filter plankton.

Tidal Prism—The volume of water transported in a defined area as a result of tide currents.

Total Dissolved Solids (TDS)—Sum of all dissolved materials such as salts, which are non-filterable and remain following evaporation of the water.

Total Organic Carbon (TOC)—Sum of all organic carbon compounds in water.

Total Suspended Solids (TSS)—Solids in water, filterable with a 0.45 micrometer mesh.

Toxicant—An element or compound with a negative effect on physiology or behavior of an organism.

Toxicity Test—Laboratory procedure in which living organisms are subjected to varying dilutions of sampled water or sediment, measuring mortality, declines in reproductive rates, or behavioral changes indicating a toxic response. Toxicity tests with mysid shrimp or juvenile sheepshead minnows, for example, can be used to establish toxicity both for effluent and for ambient waters and sediments.

Trophic Level—The position in the food chain relative to eating

and being eaten; including primary producers, primary consumers, and higher consumers.

Turbidity—The relative lack of clarity (cloudiness) of water, caused by suspended material (e.g. sediments), colored materials in solution, and plankton. Turbidity correlates (inversely) with available light for photosynthesis; can be measured with a transmissometer.

Turtle Excluder Device (TED)—One of several mechanical devices attached to otter trawls, used to deflect sea turtles from the catch. TEDs are in wide use in offshore shrimping operations to prevent turtle losses.

Vibrio—Genus of bacteria containing 11 naturally-occurring species, some of which have the potential to cause rapid and sometimes life-threatening infections in humans. *Vibrio vulnificus*, an estuarine species, favors warm, saline conditions in Texas bays.

Washover Fan—the fan-shaped deposits of sediment resulting from deposition by water currents, for example when a storm surge breaches a barrier island.

Water Column—The portion of an aquatic or marine environment extending from the water surface to the bottom.

Watershed—The land area drained by a river or stream. The watershed is the natural hydrologic unit associated with numerous ecological and physical processes involving water. Increasingly, the watershed is being accepted as the most appropriate geographic unit for management of water quality.

Wetland—An area where saturation with water is the dominant influence on characteristics of the soil and on composition of the plant community.

Zooplankton—Animals which are suspended in and transported by water.