North Central Texas
Water Quality Project
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Glossary of Watershed Terms

Algae - Plants that lack true roots, stems, and leaves. Algae consist of nonvascular plants that attach to rocks and debris or are free floating in the water. Such plants may be green, blue-green, or olive in color, slimy to the touch, and usually have a coarse filamentous structure.

Ambient - Refers to the existing water quality in a particular water body.

Ammonia-Nitrogen (NH3-N) - Ammonia, naturally occurring in surface and wastewaters, is produced by the breakdown of compounds containing organic nitrogen.

Attainable Use - A use which can be reasonably achieved by a water body in accordance with its physical, biological, and chemical characteristics whether it is currently meeting that use or not.

Best Management Practices - Schedules of activities, maintenance procedures, and other management practices to prevent or reduce the pollution of water in the state from point and nonpoint sources, to the maximum extent practicable.

Biological Integrity - The species composition, diversity, and functional organization of a community of organisms in an environment relatively unaffected by pollution.

Bloom - The accelerated growth of algae and/or higher aquatic plants in a body of water. This is often related to pollutants that increase the rate of growth.

BMP - Best Management Practices.

CAFO - Confined Animal Feeding Operation

Channelization - Straightening and deepening streams so water will move faster, a method of flood control that disturbs fish and wildlife habitats and can interfere with a waterbody's ability to assimilate waste.

Chlorophyll-*a* - Photosynthetic pigment which is found in all green plants. The concentration of chlorophyll a is used to estimate phytoplankton biomass (all of the phytoplankton in a given area) in surface water.

Conductivity - A measure of the electrical current carrying capacity. Dissolved substances in water dissociate into ions with the ability to conduct electrical current. Conductivity is a measure of how salty the water is; salty water has high conductivity.

Contact Recreation - Recreational activities involving a significant risk of ingestion of water, including wading by children, swimming, water skiing, diving, and surfing.

CR - Contact recreation.

Criteria - Water quality conditions which are to be met in order to support and protect desired use.

Designated Use - A use which is assigned to specific water bodies in the Texas Surface Water Quality Standards. Typical uses which may be designated for specific water bodies include domestic water supply, categories of aquatic life use, recreation categories, and aquifer protection.

Dissolved Oxygen (DO) - The oxygen freely available in water. Dissolved oxygen is vital to fish and other aquatic life and for the prevention of odors. Traditionally, the level of dissolved oxygen has been accepted as the single most important indicator of a water body's ability to support desirable aquatic life.

DO - Dissolved oxygen.

Ecological Impact - The effect that a man-made or natural activity has on living organisms and their abiotic (non-living) environment.

E. Coli - Escherichia coli, a subgroup of fecal coliform bacteria that is present in the intestinal tracts and feces of warm-blooded animals. It is used as an indicator of the potential presence of pathogens.

Eutrophication - The slow aging process during which a lake, estuary or bay evolves into a bog or marsh and eventually disappears.

Fecal Coliform - A portion of the coliform bacteria group which is present in the intestinal tracts and feces of warm-blooded animals; heat tolerant bacteria from other sources can sometimes be included. It is used as an indicator of the potential presence of pathogens.

Habitat - The area in which an organism lives.

Impoundment - A body of water confined by a dam, dike, floodgate or other barrier.

Indicator Organisms - An organism, species, or community that indicates the presence of a certain environmental condition or conditions.

MCL - Maximum Contaminant Level (for public drinking water supplies).

MS4- Municipal Separate Storm Sewer System. Permitting required by cities dependant upon population and other factors.

Narrative Standards - Descriptive standards to protect aesthetics and designated uses. Screening limits non-segment specific numeric standard for nutrients

Natural Vegetative Buffer - An area of either natural or native vegetation which buffers the water body from terrestrial runoff and the activities of man.

Nitrate-Nitrogen (NO3-N) - A compound containing nitrogen which can exist as a dissolved solid in water. Excessive amounts can have harmful effects on humans and animals.

Nitrite-Nitrogen (NO2-N) - An intermediate oxidation state in the nitrification process (ammonia, nitrite, nitrate).

Nonpoint Source - Pollution sources which are diffuse and do not have a single point of origin or are not introduced into a receiving stream from a specific outfall. The pollutants are generally carried off the land by stormwater runoff. The commonly used categories for nonpoint sources are: agriculture, forestry, urban, mining, construction, dams and channels, land disposal and saltwater intrusion.

NPDES- National Pollution Elimination Discharge System. A program developed for the reduction of point source pollution.

Noncontact Recreation - Aquatic recreational pursuits not involving a significant risk of water ingestion, including fishing, commercial and recreational boating, and limited body contact.

Numeric Standards - Segment specific water quality numbers

Nutrient - Any substance used by living things to promote growth. The term is generally applied to nitrogen and phosphorus in water and wastewater, but is also applied to other essential and trace elements.

Orthophosphate (O-P) - Nearly all phosphorus exists in water in the phosphate form. The most important form of inorganic phosphorous is orthophosphate, making up 90% of the total. Orthophosphate, the only form of soluble inorganic phosphorus that can be directly utilized, is the least abundant of any nutrient and is commonly the limiting factor.

Outfall - A designated point of effluent discharge.

pH - The hydrogen-ion activity of water caused by the breakdown of water molecules and the presence of dissolved acids and bases.

Phosphorus - Essential nutrient to the growth of organisms. In excessive amounts, it can contribute to the eutrophication of lakes and other water bodies.

Photosynthesis - The manufacture by plants of carbohydrates and oxygen from carbon dioxide and water in the presence of chlorophyll using sunlight as an energy source.

Point Source - Any discernible, confined and discrete conveyance from which pollutants or wastes are or may be discharged into or adjacent to water.

PS - Public water supply.

Public Drinking Water Supply - A water body designated to provide water to a public water system.

Receiving Water - A river, stream, lake or other body of surface water into which wastewater or treated effluent is discharged.

Reservoir - Any natural or artificial holding area used to store, regulate or control water.

Riparian Zone - Generally includes the area of the stream bank and out onto the flood plain which is periodically inundated by the flood waters from the stream. Interaction between this terrestrial zone and the stream is vital for the health of the stream.

Runoff - The part of precipitation or irrigation water that runs off land into streams and other surface water.

Sampling Event - Refers to all samples taken at a single station at one time.

Sediment - Particles and/or clumps of particle of sand, clay, silt, and plant or animal matter carried in water and are deposited in reservoirs and slow moving areas of streams and rivers.

Segment - A water body or portion of a water body which is individually defined and classified in the Texas Surface Water Quality Standards. A segment is intended to have relatively homogeneous chemical, physical, and hydrological characteristics. A segment provides a basic unit for assigning site-specific standards and for applying water quality management programs of the agency. Classified segments may include streams, rivers, bays, estuaries, wetlands, lakes, or reservoirs.

Significant Aquatic Life Use - A broad characterization of aquatic life which indicates that a subcategory of aquatic life use (limited, intermediate, high, or exceptional) is applicable.

Standards - The designation of water bodies for desirable uses and the narrative and numerical criteria deemed necessary to protect those uses.

Stormwater - Rainfall runoff, snow melt runoff, surface runoff, and drainage.

nature.

Surface Water Quality Standards - The designation of water bodies for desirable uses and the narrative and numerical criteria deemed necessary to protect those uses.

TCEQ - Acronym for the Texas Commission on Environmental Quality.

TDS - Total dissolved solids.

TPDES- Texas Pollution Discharge Elimination System. NPDES program administered by the State of Texas.

Test Results - Refers to the values for each individual water quality parameter that resulted from sampling. Some researchers refer to test results as data points.

TMDL - Total maximum daily load.

Total Maximum Daily Load (TMDL) - The total amount of a substance that a water body can assimilate and still meet the Texas Surface Water Quality Standards.

Total Dissolved Solids - The amount of material (inorganic salts and small amounts of organic material) dissolved in water and commonly expressed as a concentration in terms of milligrams per liter.

Tributary - A stream or river that flows into a larger stream or other body of water.

TSS- Total Suspended Solids.

Turbidity- Water clarity**.**

USGS - Acronym for the United States Geological Survey.

Water Quality Standards - Established limits of certain chemical, physical, and biological parameters in a water body; water quality standards are established for the different designated uses of a water body (e.g., aquatic life use, contact recreation, public water supply).

Watershed - The area of land from which precipitation drains to a single point. Watersheds are sometimes referred to as drainage basins or drainage areas.