

Glossary for the Clean Water Team Guidance Compendium

This Glossary contains definitions created or compiled from various sources by the Clean Water Team (CWT) coordinators. Additional definitions are brought from the National Water Quality Monitoring Council (NWQMC) glossary, from the US EPA Quality System materials (predominantly QA/G-5), and from a few other sources.

Term or Word	Definition	Definition source
Accuracy (D1)	How close is our measurement to the real truth: the extent of agreement between an observed value (measurement result) and the accepted, or true, value of the parameter being measured.	CWT
Accuracy (D2)	A measure of the overall agreement of a measurement to a known value. Accuracy includes a combination of random error (precision) and systematic error (bias) components that are due to sampling and analytical operations; EPA recommends using the terms "precision" and "bias," rather than "accuracy," to convey the information usually associated with accuracy.	EPA
Accuracy Check	Comparison of the reading, or output, of a measurement device with a value believed the “true” value, without adjustments of the reading . The “true” value may be represented by natural conditions (e.g., freezing point) or by an accepted Standard.	CWT
Acid	Any substance capable of giving up a proton; a substance that ionizes in solution to give the positive ion of the solvent; a solution with a pH measurement less than 7.0. See also alkaline.	CWT
Acidity	A measure of the number of free hydrogen ions (H+) in a solution that can chemically react with other substances. Also see pH.	CWT
Aerobic	Living or occurring only in the presence of oxygen.	CWT
Algae	Rootless plants that grow in bodies of water at rates in relative proportion to the amounts of nutrients available in the water.	CWT
Alkaline (D1)	A solution with a pH measurement above 7.0. Alkaline solutions contain an alkali, which is one of a specific group of elements. Also see base, acid.	CWT
Alkaline (D2)	A substance containing an alkali, which are lithium, sodium, potassium, rubidium, cesium, or francium [the leftmost column on the periodic table] and produces a pH greater than 7 when in solution.	Bill Ray
Alkalinity	The capacity of water to neutralize acids, imparted by the water's content of carbonate, bicarbonate, hydroxide, and on occasion borate, silicate, and phosphate. It is expressed in milligrams per liter of equivalent calcium carbonate (mg/l CaCO ₃)	CWT
Ambient (D1)	Pertaining to the current environmental condition.	CWT

Term or Word	Definition	Definition source
Ambient (D2)	All forms of monitoring conducted beyond the immediate influence of a discharge pipe or injection well and may include sampling of sediments and living resources [U.S. Environmental Protection Agency (USEPA) Region 5].	NWQMC
Anaerobic	Living or occurring only in the absence of free oxygen. Analyte - Parameter being tested.	CWT
Analyte	Substance being measured using an analytical method. Analytes, such as nitrate or ammonia, are a sub-group within the realm of Parameters (also see "Parameter").	CWT
Anion	Ion having a negative charge; an atom with extra electrons. Atoms of non-metals, in solution, become anions. See conductivity.	CWT
Anoxia	A condition when the water becomes totally depleted of oxygen (below 0.5 mg/l) and results in the death of any organism that requires oxygen for survival. The adjective is anoxic.	CWT
Assemblage	The set of related organisms that represent a portion of a biological community (e.g., benthic macroinvertebrates).	CWT
Assessment	the evaluation process used to measure the performance or effectiveness of a system and its elements	EPA
Atomic Absorption	Quantitative chemical method used for the analysis of elemental constituents.	CWT
Audit	a systematic and independent examination to determine whether quality activities and related results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve objectives.	EPA
Autoclave	An oven-like vessel used for sterilization of equipment by destroying all forms of life at elevated temperature (beyond boiling point) under high pressure.	CWT
Average	(see mean)	CWT
Bacteria	Any of numerous unicellular microorganisms of the class Schizomycetes, occurring in a wide variety of forms, existing either as free-living organisms or parasites, and having a wide range of biochemical, often pathogenic properties.	CWT
Bacterial Examination	The examination of water and wastewater to determine the presence, number, and identification of bacteria. Also called bacterial analysis.	CWT
Base	Any substance that contains hydroxyl (OH-) groups and furnishes hydroxide ions in solution. A solution with a pH of greater than 7.0. Also see pH.	CWT
Baseline Data	Initial data generated within a long-term dataset for the purpose of tracking changes. All data in such datasets are collected by consistent monitoring of the same sites over time. Sites may be pristine or impacted.	CWT
Basic	A solution with a pH value of above 7.0.	CWT
Benthic	Pertaining to the bottom (bed) of a waterbody, at or beneath the interface of the sediment with the water column.	CWT

Term or Word	Definition	Definition source
Bias (D1)	(1) The degree of systematic error encountered in a measurement or analysis, usually in only one direction away from the true value.	CWT
Bias (D2)	(2) Sampling bias: an untrue representation of the population being sampled due to failure to adjust sampling frequency to the relative distribution of sub-population within the population being sampled.	CWT
Bias (D3)	the systematic or persistent distortion of a measurement process that causes errors in one direction (the expected sample measurement value differs from the sample's true value).	EPA
Biochemical Oxygen Demand (BOD)	A measure of the amount of organic matter that is available for decomposition in a water (or sediment) sample, as reflected by the amount of oxygen that has been consumed by microorganisms in that sample over a period of five days.	CWT
Biocides	Chemical agents with the capacity to kill biological life forms. Bactericides, insecticides, herbicides, pesticides, etc. are examples.	CWT
Biodegradability	The susceptibility of a substance to decomposition by the actions of microorganisms.	CWT
Biological Accumulation (Bioaccumulation) (D1)	The uptake and storage of chemicals (e.g., DDT, PCBs) from the environment by animals and plants. Uptake can occur through feeding or direct absorption from water or sediments. The concentration of a substance in the tissue of an individual organism.	CWT
Biological Accumulation (Bioaccumulation) (D2)	The net uptake of a material by an organism from food, water, and (or) respiration that results in elevated internal concentrations [U.S. Fish and Wildlife Service (USFWS)].	NWQMC
Biological Criteria (D1)	Numerical values or narrative descriptions that depict the biological integrity of aquatic communities in that state. May be listed in state water quality standards.	CWT
Biological Criteria (D2)	Numerical values or narrative expressions that describe the reference biological integrity of aquatic communities that inhabit water of a given designated aquatic life use (USEPA Region 5).	NWQMC
Biological Magnification (also called Bioamplification or Bioconcentration)	The progressive increase in the concentration of chemical contaminants (e.g., DDT, PCBs, methyl mercury) from the bottom of the food chain to the top of the food chain.	CWT
Biomass	The amount of living matter in a given habitat or the total mass of a particular species or groups of species in a specified area.	CWT
Biomonitoring	The use of living organisms to evaluate the effects, or impacts, of natural or anthropogenic (human-induced) factors on biota.	CWT
Blank (Sample) (D1)	A sample that contains pure water and is analyzed concomitantly with a set of environmental samples. Blanks include field blank and trip blanks as well as laboratory method blanks and reagent blanks.	CWT

Term or Word	Definition	Definition source
Blank (Sample) (D2)	A sample subjected to the usual analytical or measurement process to establish a zero baseline or background value. Sometimes used to adjust or correct routine analytical results.	EPA
Blank (Sample) (D3)	A sample that is intended to contain none of the analytes of interest. A blank is used to detect contamination during sample handling preparation and/or analysis.	EPA
Blind Sample	A sample submitted to an analyst without their knowledge of its identity or composition. Samples and their blind duplicates are often used to measure the precision of the analysis.	CWT
Brackish	Having a salinity between that of fresh and marine water.	CWT
Buffer	A substance that is present in an equilibrium between two or more forms (e.g., ionized and unionized) and can compensate for changes in pH by changing its equilibrium to restore the original hydrogen ion concentration. Also see Standard Buffer.	CWT
Buffer Capacity	The capacity of a solution to resist changes in pH.	CWT
Calibration Adjustment	The action of adjusting the readings of an instrument to have them match a “true” value as represented by known natural conditions or by a Standard Solution. Calibration adjustment is always preceded by an Accuracy Check.	CWT
Calibration	Comparison of a measurement standard, instrument, or item with a standard or instrument of higher accuracy to detect and quantify inaccuracies and to report or eliminate those inaccuracies by adjustments [this definition includes both accuracy checks and calibration adjustments as separated by CWT].	EPA
Calibrator (1)	(1) A solution or object believed to represent the “true” condition or dimensions when it is used to adjust a measurement device. Essentially, “Calibrator” is a functional descriptor for a “Standard”.	CWT
Calibrator (2)	(2) A solution believed to represent the “true” concentration of an analyte, which is run through the analytical procedure in parallel to the tested samples. The sample’s concentration is derived based on comparison with the calibrators run at the same procedures.	CWT
Carcinogen	A substance that causes cancer.	CWT
Cation	A positively charged atom or group of atoms, or a radical which moves to the negative pole (cathode) during electrolysis. See conductivity.	CWT
Certified Standard	Any Standard that is traceable to NIST or ASTM (also see “Standard Solution” below). A Certified Standard is considered the “ultimate authority” if properly stored and used before the expiration date.	CWT
Chain of Custody (D1)	Complete documentation of sample handling from field collection through analysis and storage, including presence of custody seals placed during shipping.	CWT
Chain of Custody (D2)	An unbroken rail of accountability that ensures the physical security of samples, data, and records.	EPA

Term or Word	Definition	Definition source
Characteristic (D1)	A catch-all word for: physical attribute, analyte, constituent, substance, property, etc; equivalent to the (misused) sense of the word "parameter". Characteristics are often measured within a medium, and include properties such acidity (pH) or electrical conductivity, particulates such as suspended solids or bacteria, and analytes such as ammonia or heavy metals.	CWT
Chlorinated Hydrocarbons	Compounds such as DDT and PCBs made of carbon, hydrogen, and chlorine atoms. Once released into the environment, these chemicals become biologically amplified as they move up the food chain.	CWT
Chlorophyll	A group of green pigments found in most plants, including phytoplankton, which are used for photosynthesis. The chlorophyll a pigment is generally measured.	CWT
Chronic Toxicity	Also referred to as sub-lethal. Does not result in death (at exposures of at least 96 hours) but can cause impairment to aquatic animals, organ damage and failure, gastro-intestinal damage, and can affect growth and reproduction.	CWT
Citizen Group Lab	A laboratory environment in which citizen groups perform measurements or analyses and implement quality assurance procedures.	CWT
Coliform Bacteria	Bacteria that are metabolically related to Escherichia coli, a gram-negative bacillus which lives naturally in the intestines of warm-blooded animals.	CWT
Coliform Index	A measure of the purity of water based on a count of Coliform bacteria it contains.	SCMI
Comparability (D1)	A data quality indicator, comparability is the degree to which different methods, data sets, and/or decisions agree or are similar. [[needs work]]	CWT
Comparability (D2)	A measure of the confidence with which one data set or method can be compared to another	EPA
Completeness (D1)	The number of samples collected (or valid Results obtained) as compared to the number of samples (or valid Results) called for in the Planning Document (based on the number needed to enable use of the information), expressed as a percentage.	CWT
Completeness (D2)	A measure of the amount of valid data obtained from a measurement system.	EPA
Composite Sample	A sample made of several sub-samples, collected at different locations within the same area (to provide better representation of that area) or at different times within a flow period (to provide better representation of what was going through during that period).	CWT
Compound	Two or more elements combined; a substance having properties different from those of its separate elements.	CWT
Concentrated (D1)	(1) Solution prepared at "full strength", i.e., with a lot of substance in a small amount of water (or other solvent).	CWT
Concentrated (D2)	(2) Solution that has been processed to increase the strength by removing water (or solvent) without losing the substance.	CWT

Term or Word	Definition	Definition source
Concentration	The amount of a substance in a given volume of a solution, usually expressed in units of weight (e.g., gram) per unit of volume (e.g., liter).	CWT
Conductivity	A measure of the ability of water to pass an electrical current. Conductivity of water is a function of the concentration and type of dissolved solids such as chloride anions (ions that carry a negative charge) or sodium cations (ions that carry a positive charge).	CWT
Confidence interval	A range of values bracketing a given measurement Result, within which that Result is expected to be included at a known probability.	CWT
Confidence Limits	The upper and lower values of the confidence interval.	CWT
Contamination	(1) Inadvertent addition of an analyte to a sample through introduction of analyte residues from the sampling equipment, sample container, etc. into the sample. Contamination may cause false positive results or higher result values.	CWT
Contamination (2)	(2) the impairment of water, sediments, plants or animals by toxic chemicals or pathogenic bacteria to such a degree that it creates a hazard to public and/or environmental health.	CWT
Continuous Monitoring	A methodology that utilizes sensors connected to data loggers and provides multiple Results of a given characteristics, spaced at pre-determined time intervals.	CWT
Data Quality Indicators (D1)	The outcomes of quality assurance activities done to improve and assess accuracy, precision, resolution, detection limit, and sample integrity.	CWT
Data Quality Indicators (D2)	The quantitative statistics and qualitative descriptors used to interpret the degree of acceptability or utility of data to the user. The principal data quality indicators are bias, precision, accuracy (bias is preferred), comparability, completeness, representativeness, and sensitivity.	EPA
Data Quality Objectives (DQO) Process	A systematic planning tool based on the scientific method that identifies and defines the type, quality, and quantity of data needed to satisfy a specified use. DQOs are the quantitative and qualitative outputs from the DQO process.	EPA
Data Quality Objectives (DQOs) (D1)	Statements about the level of uncertainty that a decision maker is willing to accept in data used to support a particular decision (NWQMC 1998). They include specifications of how good the Results should be (e.g., tolerable measurement error) and what each result should represent.	CWT
Data Quality Objectives (DQOs) (D2)	In the context of water- quality monitoring, the characteristics or goals that are determined by a monitoring or interpretive program to be essential to the usefulness of the data. They would include, but not be limited to, the specification of delineation of the limits of precision and bias of measurements, the completeness of sampling and measurements, the representativeness of sites relative to program objectives, the validity of data, and so forth (ITFM/Data Methods Collection Task Group).	NWQMC

Term or Word	Definition	Definition source
Data Quality Objectives (DQOs) (D3 a)	The qualitative and quantitative statements derived from the DQO process that clarified the study's technical and quality objectives, define the appropriate type of data, and specify tolerable levels of potential decisions errors that will be used as the basis of establishing the quality and quantity of data needed to support decisions.	EPA
Data Reconciliation	The process to assure data meets requirements and objectives; actions to correct invalid data.	CWT
Data Users	The group(s) that will be applying the monitoring results for decision making or other purpose. Data users can include the monitors themselves as well as government agencies, schools, universities, businesses, watershed organizations, and community groups.	CWT
Data Validation (D1)	The process of checking all documentation to determine if the test or analysis used to generate the data was valid, and if the data meets requirements and quality objectives.	CWT
Data Validation (D2)	An analyte- and sample-specific process that extends the evaluation of data beyond method, procedural, or contractual compliance (i.e., data verification) to determine the analytical quality of a specific data set.	EPA
Data Verification	the process of evaluating the completeness, correctness, and conformance/compliance of a specific data set against the method, procedural, or contractual specifications.	EPA
Database	A computerized system for managing, storing, and retrieving data.	CWT
Decontamination	The action of cleaning sampling equipment and sample containers to avoid carry over of contamination from non-sample sources into a sample. This Term is also used in reference to removing hazardous contaminants from personnel, area or built space, vehicles, etc.	CWT
Deionized Water	Water that has been passed through a column containing a matrix that binds and removes ions, or has been subject to removal of salts by reverse osmosis.	CWT
Denitrification	The process whereby bacteria convert nitrate to nitrite and then to nitrogen gas.	CWT
Depth integrated sample	a combination of subsamples each representing a given layer, or sampling a virtual "core" of water down the water column, or a real core of sediment	CWT
Derived Endpoint (for 1 data point)	Value calculated from multiple raw data, or predicted from multiple raw data based on probabilistic considerations; represents one point in space and time or relevant to one sample.	CWT
Descriptive statistic (for many data points)	Value derived from many points in space and time, represent a descriptor of the population	CWT
Design (D1)	(1) the specifications, drawings, design criteria, and performance specifications	EPA
Design (D2)	(2) the result of deliberate planning, analysis, mathematical manipulations, and design processes.	EPA

Term or Word	Definition	Definition source
Detection Limit (D1)	Applied to both methods and equipment, detection limits are the lowest concentration of a target analyte that a given method or piece of equipment can reliably ascertain and report as greater than zero.	CWT
Detection Limit (D2)	A measure of the capability of an analytical method to distinguish samples that do not contain a specific analyte from samples that contain low concentrations of the analyte; the lowest concentration or amount of the target analyte that can be determined to be different from zero by a single measurement at a stated level of probability. DLs are analyte- and matrix-specific and may be laboratory-dependent.	EPA
Detritus	Small particles of dead and decomposing organic matter, including twigs, leaves and other plant and animal wastes.	CWT
D-frame Net	A fine mesh net (usually with pores of 0.5 mm) that is attached to a D-shaped frame and mounted on a pole. It is used for sampling of macroinvertebrates in flowing streams.	CWT
Digital Titrator	A titrator unit having a counter that displays numbers. As the reagent is dispensed, the counter changes in proportion to the amount of reagent used.	CWT
Dilute	To thin out, or having been thinned out; less than full strength.	CWT
Dinoflagellate	A type of planktonic organism: a microscopic single cell with two flagella to assist with movement. When nutrients abound, Dinoflagellates often multiply rapidly to produce massive populations called "bloom".	CWT
Dioxin	A family of some 210 synthetic, organic chemicals of the chlorinated hydrocarbon class. Some dioxins are known to be highly toxic and are thought to increase the incidence of cancer and birth defects in humans.	CWT
Dissolved Oxygen (DO)	Oxygen dissolved in water and available for living organisms to use for respiration, usually expressed in milligrams per liter or percent of saturation.	CWT
Dissolved Solids	The total amount of dissolved material, organic and inorganic, contained in water or wastewater. Measurements are expressed as ppm or mg/l.	CWT
Distilled Water	Water that has been purified by distillation (boiling the water off as steam and condensing it back to liquid, leaving the impurities behind). Having been boiled, the water is also sterile.	CWT
Duplicate Sample	Two samples taken at the same time from the same site that are carried through all assessment and analytical procedures in an identical manner. The results give a measure of the "process reproducibility".	CWT
Ecosystem (D1)	A community of species interacting with each other and with the physical and chemical (nonliving) environment.	CWT
Ecosystem (D2)	A system that is made up of a community of animals, plants, and bacteria and its interrelated physical and chemical environment (USFWS).	NWQMC
Effluent	A discharge to a body of water from a defined or point source.	CWT

Term or Word	Definition	Definition source
Emergent Plants	Plants rooted under water, but with their tops extending above the water.	CWT
Endocrine Disrupters	Chemicals that can mimic, block, or otherwise disrupt the normal and balanced activity of hormones in living organisms.	CWT
Endpoint (1)	(1) A numerical value, representing the result of a measured parameter, that has been calculated from a number of individual measurements (of “raw data”). Examples: flow discharge in cfs, bacterial concentration in MPN/100 ml.	CWT
Endpoint (2)	(2) That stage in titration at which an effect, such as a color change, occurs, indicating that a desired point in the titration has been reached.	CWT
Enrichment	The addition of nitrogen, phosphorous, carbonaceous compounds, or other nutrients into a waterway that greatly increase the growth potential for algae and other aquatic plants.	CWT
<i>Enterococci</i>	A group of bacteria found primarily in the intestinal tract of warm-blooded animals. <i>Enterococci</i> are unrelated to the coliforms; rather, they are a subgroup of the fecal streptococci group. <i>Enterococcus</i> is the plural form.	CWT
Environment	All the factors that act upon an organism or community of organisms, including climate, soil, water, chemicals, radiation, and other living things.	CWT
Environmental Monitoring	The process of collecting environmental data	EPA
Environmental Sample	A specimen of any material (water, sediment, macroinvertebrates, etc.) collected from an environmental source like a stream, lake, or estuary.	CWT
Equipment or Rinsate Blank	Clean water that has been used to rinse sampling equipment and was then collected as a regular environmental sample. Rinsates are analyzed along with the other samples to check specifically for carryover contamination from reuse of sampling equipment.	CWT
Erlenmeyer Flask	A flask having a wide bottom and a smaller neck and mouth that is used to mix liquids.	CWT
<i>Escherichia coli</i>	A single species within the fecal coliforms group. Commonly used as indicator bacteria. Occurs only in the feces of warm-blooded mammals.	CWT
Estuary (D1)	A semi-enclosed coastal body of water which has free connection with the open sea and within which seawater is measurably diluted with fresh water derived from land drainage.	CWT
Estuary (D2)	Tidal habitats and adjacent tidal wetlands that are usually semienclosed by land but have open, partly obstructed, or sporadic access to the open ocean and in which ocean water is at least occasionally diluted by freshwater runoff from the land (USFS).	NWQMC
Eutrophication	The normally slow aging process by which a lake or a standing body of water fills with organic matter, evolves into a bog or marsh, and ultimately disappears.	SCMI

Term or Word	Definition	Definition source
Exponential growth	The steepest phase in a growth curve, in which the curve is described by an equation containing a mathematical exponent.	SCMI
Fecal Coliforms	Coliform Bacteria that are natural residents of the guts of warm blooded animals. Although not pathogenic themselves, their presence in water indicates contamination with sewage or feces, which in turn suggests that disease-causing bacteria or viruses may also be present.	CWT
Field Blank (D1)	A sample container of the same batch used for the environmental samples that has been filled, in the field, with “clean” water. The field blank is analyzed along with the other samples to check for (or confirm the lack of) container contamination.	CWT
Field Blank (D2)	A clean analyte-free sample which is carried to the sampling site and then exposed to sampling conditions, returned to the laboratory, and treated as an environmental sample.	EPA
Field Operator	The Project person who conducts monitoring activities in the field, including measurements, calibrations and/or accuracy checks, and sampling.	CWT
Filter Feeders	Animals (e.g., clams and oysters) that feed by filtering small food items out of a water column such as detritus, phytoplankton, and zooplankton.	CWT
Filtration	The process of separating solids from a liquid by means of a porous device (filter) through which only the liquid can pass.	CWT
Fixed Sample	(specific for the measurements of dissolved oxygen using the modified Winkler titration method) A sample that has been rendered chemically stable or unalterable, meaning that atmospheric oxygen will no longer affect the test result.	CWT
Floating Plants	Plants that grow free floating, rather than being attached to the streambed.	CWT
Floc	A mass of particles that form a clump as a result of interaction with a natural or synthetic flocculating agent (flocculant).	CWT
Flocculant	A substance that interacts with suspended particles and bind them together to form flocs. Flocculants such as mucus are secreted naturally by living organisms. Synthetic flocculants are often used to remove particulates from water.	CWT
Flow-weighed composite sample	A sample made up of multiple sub-samples, collections of which are triggered by equal amounts of flow volumes.	CWT
Formalin	A 40% solution of Formaldehyde (CH ₂ O), which is a preservative, an irritant, and a probable carcinogen. Formalin is used to preserve organisms for later observation.	CWT
Fresh Water	Water that is not salty. Fresh water enters estuaries from rivers, streams and through precipitation (rain, snow).	CWT
Graduated Cylinder	A cylinder used to measure liquids that is marked in units of volume (e.g., milliliter or liter).	CWT
Habitat (D1)	The place where a population or community (e.g., microorganisms, plants, animals) lives and its surroundings, both living and nonliving.	CWT

Term or Word	Definition	Definition source
Habitat (D2)	A. A place where the physical and biological elements of ecosystems provide a suitable environment, and the food, cover, and space resources needed for plant and animal existence (USFS).	NWQMC
Habitat (D3)	B. The physical/chemical theater in which the ecological play takes place; it is a template for the biota, their interactions, and their evolution (Hutchinson, 1965; Southwood, 1977).	NWQMC
Headwaters	The origins of a stream.	CWT
Heavy metals	A general term given to the ions of metallic elements such as mercury, copper, zinc, chromium, and aluminum.	CWT
Herbicide	A pesticide designed to kill specific plants.	CWT
Holding time (sample)	the period of time a sample may be stored before analysis. While exceeding the holding time does not necessarily negate the veracity of analytical results, it causes the qualifying of "flagging" of any data not meeting all of the specified acceptance criteria.	EPA
Hydrocarbon	A chemical compound containing only hydrogen and carbon.	CWT
Hypoxia	When the level of dissolved oxygen falls below 3 mg/l, water is considered hypoxic. At this level, many species will move elsewhere and immobile species may die.	CWT
Indicator (D1) (molecule)	(1) A compound that changes color in response to changes in chemical or physical conditions.	CWT
Indicator (D2) (organism)	(2) An organism whose presence suggests the presence of other organisms. e.g. coliform bacteria (the word 'indicator' is used as a function, e.g., indicator bacteria),	CWT
Indicator (D3) (attribute)	(3) Measures of environmental conditions or trends in environmental quality that can be used to evaluate resource protection programs and assess the general state of the environment.	CWT
Inert	Not chemically or physically active.	CWT
Inorganic	Being or composed of matter other than plant or animal.	CWT
Instrument	a probe, electrode, reagent kit, indicator strip, or any other type of device used for field or laboratory measurements.	CWT
Instrument Detection Limit	The instrument detection limit is the lowest concentration of a given substance or analyte that can be reliably detected by analytical equipment or instruments (see detection limit).	CWT
Invertebrates	Animals that lack a spinal column or backbone. Includes mollusks (e.g., clams and oysters), crustaceans (e.g., crabs and shrimp), insects, starfish, jellyfish, sponges, and any types of worms that live in the benthos.	CWT
Kick Net	A fine mesh net used to collect organisms. Kick nets vary in size, but generally are about three feet long and are attached to two wooden poles at each end.	CWT
Larva/Larvae	An immature form of an organism that will undergo metamorphosis to become a juvenile and then an adult.	CWT
Lotic	Pertaining to running freshwater habitats (rivers and streams)	SCMI

Term or Word	Definition	Definition source
Macro	A prefix meaning large. Usually refers to organisms large enough to be seen with the unaided eye.	CWT
Macroinvertebrates	Organisms that are large (macro) enough to be seen with the naked eye and lack a backbone (invertebrate).	CWT
Management Practices (MPs)	Describes collections of practices, technologies, processes, siting criteria, operating methods or other alternatives to control nonpoint source pollution. Also described as Best Management Practices (BMPs).	CWT
Marsh or Salt Marsh	A protected intertidal wetland where fresh water and salt water meet.	CWT
Matrix	A matrix is a specific type of medium, such as surface water or sediment, which the analyte of interest may be contained.	CWT
Matrix Spike sample	a sample prepared by adding a known amount of the target analyte to a specified amount of matrix. Spiked samples are used, for example, to determine the effect of the matrix on the method's recovery efficiency.	EPA
Mean (D1)	An arithmetic derivation: the sum of all measurement result values divided by the number of measurements. Example: $4+5+6+10+35=60$; $60/5=12$. Also referred to as Average.	CWT
Mean (D2)	A measure of central tendency. A population mean is the expected value ("average" value) from a population. A sample mean is the sum of all the values of a set of measurements divided by the number of values in the set.	EPA
Mean (D3)	The mean is the true central point of a distribution of data and like other true values is estimated from actual data. In this case, the average provides an estimate. The quality of the estimate is usually dependant upon the amount of data, and on the type of distribution.	Bill Ray
Measurement Quality Objectives (D1)	Statements about the tolerated error and desired sensitivity of a measurement. They include extent of values for the measures of precision, accuracy, detection limit, and resolution. MQOs are a subset of Data Quality Objectives (DQOs).	CWT
Measurement Quality Objectives (D2)	"Acceptance criteria" for the quality attributes measured by project data quality indicators. During project planning, measurement quality objectives are established as quantitative measures of performance against selected data quality indicators, such as precision, bias, representativeness, completeness, comparability, and sensitivity.	EPA
Measurement Range	The range of reliable measurements of an instrument or measuring device.	CWT
Median	The numerical value of the Result occupying the central point in the distribution of all the results in the same population. (RK)	CWT
Membrane Filtration	A quantitation method commonly used to evaluate the numbers of coliforms in water. A measured amount of water is passed through a membrane filter, trapping bacteria on its surface. The bacteria form visible colonies on the filter when provided with a specific growth medium, and the colonies are counted.	CWT

Term or Word	Definition	Definition source
Metadata (D1)	"Data about data." Information that answers the "who, what, when, where, why, how, and how good" questions about the data	CWT
Metadata (D2)	Information that describes the content, quality, condition, and other characteristics of data [Federal Geographic Data Committee (FGDC)].	NWQMC
Metadata (D3)	Information that describes the data and the quality criteria associated with their generation.	EPA
Method	a body of procedures and techniques for performing an activity (for example, chemical analysis, quantification), systematically presented in the order in which they are to be executed.	EPA
Method Blank	a blank prepared to represent the sample matrix as closely as possible and analyzed exactly like the calibration standards, samples, and quality control QC samples. Results of method blanks provide an estimate of the within-batch variability of the blank response and an indication of bias introduced by the analytical procedure.	EPA
Method Detection Limit (MDL)	The MDL is the lowest concentration of a given substance or analyte that can be reliably detected by an analytical procedure (see detection limit).	CWT
Metric (D1)	A universal measurement method for length and weight, based on a standard Meter and on the properties of water. The metric system is decimal.	CWT
Metric (D2)	General: a calculated end-point (see Derived Endpoint);	CWT
Metric (D3)	Measure of a biological attribute	CWT
Micro (D1)	A prefix meaning one-millionth of a unit.	CWT
Micro (D2)	A prefix attached to words to denote a very small thing	CWT
Microorganisms	Organisms (microbes) observable only through a microscope; larger, visible types are called macro organisms.	CWT
Milligrams Per Liter (mg/l)	A weight per volume designation used in water and wastewater analysis. Equivalent to parts per million (1 ppm = 1 mg/l).	CWT
Molecule	The simplest structural unit of a substance that retains the properties of the substance and is composed of one or more atoms.	CWT
Most Probable Number (MPN)	A derived endpoint based on a small number of positive/negative results from replicates of a given sample, often used in bacterial testing (e.g., for enumeration of coliforms in a water sample).	CWT
Narrative Statement	A sentence or phrase that includes a verbal description of a QA/QC result associated with a set of samples (e.g., analyses of Blanks demonstrated lack of contamination).	CWT
Nephelometer	An instrument that measures scattered light in a liquid.	CWT
Nephelometric (NTU)	A standard unit of turbidity measurement using a Nephelometer.	CWT
Neutral (pH)	On the pH scale, neither acid nor alkaline. Pure water is neutral, and has a pH of 7.0.	CWT
Nitrates	One form of nitrogen, when it is combined with oxygen, that plants can use for growth.	CWT

Term or Word	Definition	Definition source
Nitrification	The process whereby some bacteria transform ammonia (NH ₃ , where the nitrogen is combined with hydrogen) into nitrite (NO ₂) and then to nitrate (NO ₃).	CWT
Nitrogen	One of the most important atoms for life. Nitrogen (combined with hydrogen or oxygen) is an essential nutrient for plant and animal development. Too much of this nutrient can cause algal blooms and increase the amount of material available for decomposition (which lowers dissolved oxygen).	CWT
Nonpoint Source Pollution (D1)	Pollution that enters water from sources that cannot be traced to a single point. Generally initiated by stormwater runoff from agricultural, urban, forestry, marina, construction, and other land uses.	CWT
Nonpoint Source Pollution (D2)	A contributory factor to water pollution that cannot be traced to a specific spot; for example, pollution that results from water runoff from urban areas, construction sites, agricultural and silvicultural operations, and so forth (USEPA Region 5).	NWQMC
Nonsettleable Matter	Suspended matter that neither settles nor floats to the surface of water in a period of one hour.	CWT
Nutrient	Any of a necessary complement of organic or inorganic elements or compounds that are considered essential to the life and growth of an organism.	CWT
Oligotrophy	Aquatic environments low in nutrients and organisms; low in productivity	SCMI
Organic Matter	Chemical compounds based on carbon chains or rings, and also containing hydrogen with or without oxygen, nitrogen, or other compounds.	CWT
Orthophosphate	Phosphorus atom combined with 4 oxygen atoms in the 'ortho' molecular configuration to form an anion (PO ₄) with two negative charges. It is one of the forms of inorganic, 'reactive' phosphate, and can form salts such as K ₃ PO ₄ (potassium phosphate).	CWT
Outfall	The pipe through which industrial facilities or wastewater treatment plants discharge their effluent (wastewater) into a waterbody, or where municipal storm drains open into a waterbody.	CWT
Outlier (D1)	Measurement or analytical Result that differs radically from other data in the same data set, and is therefore suspect or thought to be a poor representation of that environment.	CWT
Outlier (D2)	An extreme observation that is shown to have low probability of belonging to a specified data population.	EPA
Overturn (a.k.a. turnover)	A breakdown of the stratification of a waterbody; i.e., mixing of deep water with surface water. Turnover occurs when the surface layer becomes identical to the bottom layer in its temperature or salinity, and the properties that held them apart (and maintained two distinct, unmixed layers) are no longer there.	CWT
Parameter (D1)	see "characteristic"	CWT

Term or Word	Definition	Definition source
Parameter (D2)	an entity used by physicists and mathematicians in their equations	CWT
Parameter (D3)	Quantity, usually unknown, such as a mean or a standard deviation characterizing a population. Commonly misused for "variable," "characteristic," or "property."	EPA
Parts Per Million (ppm)	The unit commonly used to represent the degree of pollutant concentration where the concentrations are small. 1 ppm is equivalent to 1 milligram per liter (mg/l) in water or 1 mg/kg in sediment.	CWT
Pathogen	An organism (such as a bacterium or virus) that can cause a disease.	CWT
PCB	see "Polychlorinated biphenyls"	CWT
Percent Saturation	Amount of oxygen in the water compared to the maximum it could hold at that temperature.	CWT
Performance Criteria	address the adequacy of information that is to be collected for the project. These criteria apply to new data collected for a specific use ("primary data")	EPA
Permeable	A porous material that allows passage of our substance of interest.	CWT
pH	Numerical measure of the hydrogen ion concentration used to indicate the alkalinity or acidity of a substance. Measured on a scale of 1.0 (acidic) to 14.0 (basic); 7.0 is neutral.	CWT
Phosphorus	One of the most important atoms for life. A nutrient that is essential for plants and animals.	CWT
Phytoplankton	Microscopic plants that are common components of our natural waters. These plants are microalgae, and contain an assortment of pigments in their cells.	CWT
Pipette	An eyedropper-like instrument that can measure very small amounts of a liquid.	CWT
Plankton	A broad group of aquatic microorganisms that form the basis of the food chain. Included in this group are bacterioplankton (bacteria), phytoplankton (plants), and zooplankton (animals).	CWT
Plumber's Patty	Pliable, non-water soluble material used by plumbers to exclude water from selected compartments or to prevent pipe leakage	CWT
Point Source Pollution (D1)	Pollution discharged into a waterbody from any discrete pipe or other conveyance. Easier to identify, and often less expensive to cleanup than non-point sources of water pollution.	CWT
Point Source Pollution (D2)	Pollution discharged through a pipe or some other discrete source from municipal water-treatment plants, factories, confined animal feedlots, or combined sewers (USEPA Region 5).	NWQMC
Polychlorinated biphenyls (PCBs)	(PCBs) - A group of synthetic chlorinated hydrocarbons that have been used for electrical insulation, caulking, and many other purposes in the 1960s and early 1970s. Their use has been banned because many of them are toxic, and tend to bioaccumulate in organisms.	CWT

Term or Word	Definition	Definition source
Power analysis	A procedure often used to determine how many samples of each population one would need compare to show statistically-significant difference of a given magnitude between these populations, when the variability within populations is known.	CWT
Precipitate	The discrete particles of material that separate from a liquid solution as a result of some chemical or physical change.	CWT
Precision (D1)	A data quality indicator that provides a measure of how close repeated trials are to each other, i.e., indicates the repeatability of measurements or reproducibility of a sampling and analyses process.	CWT
Precision (D2)	A measurement of agreement among repeated measurements of the same property under identical, of substantially similar, conditions; expressed generally in terms of the standard deviation.	EPA
Presence-Absence Test (P-A test)	A method commonly used to determine whether the target organism or organisms (for example, total coliforms or E. coli) are present in a water sample or not.	CWT
Probe (or Sensor)	A measurement device. Probes and sensors are often connected to another unit for the purpose of display or data logging of the measurement Results.	CWT
Project	A data collection effort, performed by one or more organizational entities, which is limited in space and time.	CWT
Project File	An Excel workbook with multiple spreadsheets that include all the results, result descriptors, and supporting documentation relevant to one Project.	CWT
Protocols	A defined procedure. Protocols are detailed, written, standardized procedures for field and/or laboratory operation. SOPs are Protocols.	CWT
Protozoa	Single-cell organisms, usually microscopic.	CWT
Quality Assurance (D1)	Quality Assurance (QA) QA is an integrated management system designed to ensure that a product or service meets defined standards of quality with a stated level of confidence.	CWT
Quality Assurance (D2)	An integrated system of management activities involving planning, implementation, assessment, reporting, and quality improvement to ensure that a process, item, or service is of the type and quality needed and expected by the customer.	EPA
Quality Assurance Project Plan (QAPP) (D1)	A written plan which details monitoring objectives, scope of the program, methods, procedures (field and lab), and the activities necessary to meet stated data quality objectives.	CWT
Quality Assurance Project Plan (QAPP) (D2)	A formal document describing in comprehensive detail the necessary quality assurance procedures, quality control activities, and other technical activities that need to be implemented to ensure that the results of the work performed will satisfy the stated performance or acceptance criteria.	EPA
Quantitation operations	Activities to determine the current values of physical and chemical properties, or how much of an analyte is present in a sample.	CWT

Term or Word	Definition	Definition source
Raw Data	Results of individual measurements of a given property, often used as a group to compute an endpoint. Example: measurements of current velocity, stream width, and stream depth that are used to compute flow discharge in units of volume per time.	CWT
Reagent	A chemical substance that reacts with our target analyte to produce a measurable response.	CWT
Recovery	The act of determining whether or not the methodology measures all of the analyte contained in the sample.	EPA
Recovery (percent)	The amount of analyte actually measured in a sample to which a known amount of that analyte has been previously added, expressed as a percentage of the nominal (added) value).	CWT
Relative Percent Difference (RPD)	An expression of precision based on how close two measurements are to each other. RPD is the difference between the two values as a percentage of the mean of these values.	CWT
Relative Standard Deviation (RSD), a.k.a %CV)	(RSD), also known as Coefficient of Variation (%CV), is the standard deviation within a group of values derived from repetitive measurements, expressed as a percentage of the mean of these values.	CWT
Replicate Measurement	A repeated measurement conducted on the same sample, e.g., in two test tubes with liquid from the same sample jar.	CWT
Replicate Samples	two or more test tubes taken from the same sample container and analyzed in parallel, or repeated titrations of the same fixed sample (i.e., measurements relating to a common Sample ID).	CWT
Representativeness (D1)	The degree to which a measured Result realistically portrays the conditions in the environment being monitored. It is a function of why, where, and when that Results was measured.	CWT
Representativeness (D2)	A measure of the degree to which data accurately and precisely represent characteristics of a population, parameter variations at a sampling point, a process condition, or an environmental condition.	EPA
Resolution	The smallest increment that can be discerned on the scale of a measuring device, or the capability of a method to discriminate between measurement responses.	CWT
Resource Inventory	Survey of flora and fauna of the area and surveys of benthic organisms	CWT
Result	The outcome of a measurement or an observation. Results can be expressed in numbers, words (“verbal categories”), or ranges or numbers (“numeric range categories”).	CWT
Riparian (D1)	Of or pertaining to the banks of a body of water.	CWT
Riparian (D2)	Of, pertaining to, or situated or dwelling on the bank of a river or other water body (Shuh-shiaw Lo, 1992, Glossary of Hydrology: Littleton, Colo., Water Resources Publications, p. 1250).	NWQMC
Riparian Zone	The vegetative area on each bank of a body of water.	CWT

Term or Word	Definition	Definition source
Risk Management	To control issues that can cause physical or financial injury or damage. Risk management programs include plans to reduce risk and liability by stressing safety with volunteers, purchasing insurance, and using waivers.	CWT
Runoff	Water from rain, melted snow or agricultural or landscape irrigation that flows over the land surface from where it falls to another place.	CWT
Salinity	A measure of the amount of salts dissolved in water. Generally reported as "parts per thousand" (i.e., grams of salt per 1,000 grams of water) and abbreviated as "ppt" or ‰. Estuaries vary in salinity from 0 ppt to 34 ppt depending on tides and river inputs.	CWT
Salt	Any compound formed by combination of a negative ion (except hydroxide) with a positive ion (except hydrogen or hydronium)	CWT
Saturated	Filled to the point of capacity.	CWT
Secchi Depth	A measure of transparency; the depth beneath the water's surface at which a Secchi disk can no longer be seen. Secchi disks are lowered by a marked rope into the water and observed till they disappear.	CWT
Sediment	Mud, sand, silts, clay, shell debris, and other particles that settle on the bottom of waterways.	CWT
Sedimentation	The deposition of suspended matter carried by water, wastewater, or other liquids, by gravity. It is usually accomplished by reducing the velocity of the liquid below the point at which it can transport the suspended material. Also called settling.	CWT
Sensitivity (D1)	A combined descriptor for detection limits and resolution of a method or instrument, sometimes also used for "quick to response" or "fragile"	CWT
Sensitivity (D2)	The capability of a method or instrument to discriminate between measurement responses representing different levels of a variable of interest.	EPA
Settleable Solids	Particles of debris and fine matter heavy enough to settle out of water within a prescribed length of time.	CWT
Sheen	the glimmering effects that oil has on water as light is reflected more sharply off the surface.	CWT
Sieve Bucket	A bucket with a screen bottom that is used to wash macroinvertebrate samples and to remove excess silt and mud.	CWT
Significant Digits	Digits in a numerical Result showing a number that is meaningful. In most cases three significant digits are fine, e.g., 10.4 mg/l DO (all three digits are significant) or 1560 uS (the first three are significant, the last one provides the order of magnitude).	CWT
Solution	A liquid (solvent) that contains a dissolved substance (solute).	CWT
Sonde	A common name for a cylindrical, watertight chamber that houses programmable data logging software inside it and provides watertight connections to an array of measurement devices, e.g., Probes.	CWT

Term or Word	Definition	Definition source
spatial composite sample	a combination of subsamples each representing a given location within an area; each location is selected randomly, systematically, or in a directed manner	CWT
Species	(1) A single, distinct kind of organism, having certain distinguishing characteristics. Organisms forming a natural population that transmit specific characteristics from parent to offspring.	CWT
Species (2)	(2) Chemical forms. For example, nitrogen comes in many different chemical forms, including nitrite (NO ₂) and nitrate (NO ₃).	CWT
Specific Gravity	Also called relative density. The ratio of the density of a substance to the density of some reference substance. Hydrometers use this principle to determine salinity of a water sample, compared to fresh water.	CWT
Specifications	A detailed and exact statement of particulars, esp., a statement prescribing materials, dimensions, and workmanship.	Dictionary, by WRR
Spiked Samples	Used for quality control purposes, a spiked sample is a sample to which a known concentration of the target analyte has been added and the recovery of the analyte is noted.	CWT
Split Samples	Two or more Replicates that have originated from a common Sample container and thus represent the same “chunk” of water. Split Samples are often used to compare performance of different laboratories, in what is commonly termed “round robin tests”.	CWT
Standard (document or procedure)	As used in American Society for Testing and Materials (ASTM), a document that has been developed and established within the consensus principles of the ASTM and that meets the approval requirements of ASTM procedures and regulations. The term "standard" serves as an adjective in the title of documents, such as test methods, practices, and specifications, to connote specified consensus and approval. The various types of standard documents are based on the needs and usage as prescribed by the technical committees of the ASTM. "Consensus principles " include timely and adequate notice to all known interested parties; opportunity for all affected interests to participate in the deliberations, discussions, and decisions that affect the proposal; maintenance of records of discussions, decisions, and data accumulated in standards development; timely publication and distribution of minutes of meetings; distribution of ballots to all eligible voters and full reporting of results; and careful attention to minority opinions throughout.	NWQMC
Standard Deviation (D1)	A statistical measure of the dispersion of measurement Results or other types of values. Often used to determine precision or the range of variation among repeated measurements.	CWT

Term or Word	Definition	Definition source
Standard Deviation (D2)	A measure of the dispersion or imprecision of a sample or population distribution as expressed as the square root of the variance and has the same unit of measurement as the mean. The standard deviation is calculated as the square root of the variance.	EPA
Standard Material	An umbrella term for the following: a Standard solution (e.g., pH standard buffer), or a certified device (e.g., NIST thermometer), or natural conditions that reflect a known value (e.g., water or humid air saturated with oxygen).	CWT
Standard Operating Procedures (SOP) (D1)	A written document detailing the prescribed and established methods used for performing project operations, analyses, or actions.	CWT
Standard Operating Procedures (SOP) (D2)	A written document that details the method for an operation, analysis, or action with thoroughly prescribed techniques and steps and that is officially approved as the method for performing certain routine or repetitive tasks.	EPA
Standard pH Buffer	A well-buffered solution used for calibration or for accuracy checks of pH measuring devices (also see “Standard Solution” below).	CWT
Standard Reagent	A solution or a suspension of particles of known properties, such as concentration or turbidity, that is provided with a test kit and used as part of the measurement procedure (e.g., reagent for turbidity comparisons in the dual cylinder kit).	CWT
Standard Reference Materials (SRM)	An SRM is a certified material or substance with an established, known and accepted value for the analyte or property of interest.	CWT
Standard Solution	A solution containing a known concentration of a substance, prepared or purchased for use in the field or in the analytical laboratory. It is used for accuracy checks and calibration adjustments of instruments or lab procedures.	CWT
Statistical Power	The probability of detecting a difference when one exists. An increase in sample size usually will increase the power of a test by reducing the uncertainty around the mean.	CWT
Stratification (D1)	(1) The formation and maintenance of two distinct layers of water, e.g., hot and cold layers in a lake (usually during summer), or fresh water overlying salt water in estuaries.	CWT
Stratification (D2)	(2) selecting a sub-set of items that share a given feature from a wider group of items. Example: Creek Stations can be stratified by presence of canopy (and thus be separated from a larger group of Stations that may or may not have canopy).	CWT
Stratum	Latin: a layer. Plural: strata. Stratified means layered or sorted by certain properties.	CWT
Study Question – (a.k.a. ‘monitoring objective’ or ‘specific objective’)	a specific question or hypothesis that a study is intended to answer. One monitoring project can have several study questions.	CWT

Term or Word	Definition	Definition source
Substratum	Refers to a surface. This includes the material comprising the streambed or the surfaces to which plants or animals may attach or live upon.	CWT
Super-Saturated	Filled to a point beyond the point of capacity.	CWT
Suspended Sediments	Particles of soil, sediment, living material, or detritus suspended in the water column	CWT
Taxon (plural Taxa)	A level of classification within a scientific system that categorizes living organisms based on their physical characteristics.	CWT
Taxonomic Key	A reference guide used to identify organisms. They are available in varying degrees of complexity and detail.	CWT
Temperature	A measure of the hotness or coldness of anything as usually determined by a thermometer. Temperature is a determining factor for biological and chemical processes.	CWT
Tide	The alternating rise and fall of the ocean and estuary surface, caused by the gravitational pull of the sun and the moon upon the earth.	CWT
Time-weighted composite sample	A composite sample made of equal sized subsamples collected at fixed time increments.	CWT
Titration	A method of measuring the concentration of an analyte in a solution by adding small, precise quantities of a reagent (a.k.a titrant) that reacts with it until it is exhausted (i.e., reaches an endpoint) and the amount of titrant used is recorded. Endpoints are often indicated by a color change.	CWT
Titration	Used in a titration, the titrator forcefully expels the reagent (titrant) by using a manual or mechanical plunger. The amount of titrant used is calculated by subtracting the original volume in the titrator from the volume left when the endpoint has been reached.	CWT
TMDL (D1)	total Maximum Daily Loads - the maximum amounts of pollutants waterbodies can receive and still meet water quality standards	CWT
TMDL (D2)	The total allowable pollutant load to a receiving water such that any additional loading will produce a violation of water-quality standards (USEPA Region 5).	NWQMC
Tolerance (D1)	The ability of an organism to withstand a particular condition, e.g., pollution-tolerant indicates the ability to live in polluted waters.	CWT
Tolerance (D2)	Leeway or variation from a standard. The permissible deviation from a specified value.	Dictionary, by Bill Ray
Tolerance Limits	The boundary or interval of leeway, variation or deviation from the specified value or standard.	Dictionary, by Bill Ray
Total Coliforms	A group of closely related bacterial genera that all share a useful diagnostic feature: the ability to metabolize (ferment) the sugar lactose, producing both acid and gas as byproducts.	CWT
Toxic Waste	Discarded material that is capable of causing serious injury, illness, or death. These toxic materials can be poisonous, carcinogenic, or otherwise harmful to living things.	CWT

Term or Word	Definition	Definition source
Transparency	A measure of water clarity as defined by how far we can see through it. Secchi disks and transparency tubes are commonly used to measure the transparency of water.	CWT
Tributaries	A body of water that drains into another, typically larger, body of water.	CWT
True Value	A value thought to represent the real value of a measurable property. Standard solutions represent the True value and are used for the calibration of instruments, or to check whether their reading is accurate.	CWT
Turbidimeter	An instrument for measuring turbidity in which a standard suspension is used for reference.	CWT
Turbidity	A measure of how much the suspended material in water results in the scattering and absorption of light rays. Turbidity is determined by measurements of light diffraction and its "quantity" is reported in nephelometric turbidity units (NTU).	CWT
Variance	A statistical term used in the calculation of standard deviation, variance is the sum of the squares of the difference between the individual values of a set and the arithmetic mean of the set, divided by one less than the numbers in the set.	CWT
Volume	The space occupied in three dimensions.	CWT
Volumetric Flask	A flask that holds a predetermined amount of liquid	CWT
Voucher Collection	A preserved archive of organisms that have been collected and identified. In addition to preserved specimens, the collection may involve photography or microscopy.	CWT
Water Clarity	Measurement of how far an observer can see through water. The greater the water clarity, the further you can see through the water.	CWT
Water Column	The water between the surface and the bottom of a river, lake, estuary, or ocean.	CWT
Water Quality Benchmarks	Also called WQ Criteria, WQ Objectives, or WQ Standards. Maximum concentrations of constituents that should not be exceeded in a given water body. The actual values are often derived to be protective of aquatic life.	CWT
Water Quality Criteria	Criteria that comprise numerical and narrative criteria. Numerical criteria are scientifically derived ambient concentrations developed by the USEPA or the States for various pollutants of concern so that human health and aquatic life can be protected.	NWQMC
Water Quality Parameters	Any of the measurable qualities or contents of water. Includes temperature, salinity, turbidity, nutrients, dissolved oxygen, and others; also known as characteristics.	CWT
Water Quality Standards	A law or regulation that consists of the beneficial designated use or uses of a water body, the numerical and narrative water-quality criteria that are necessary to protect the use or uses of that particular water body, and an antidegradation statement (USEPA Region 5).	NWQMC

Term or Word	Definition	Definition source
Watershed	The entire area of land from which the runoff of water (and all the sediments and dissolved materials such as nutrients or contaminants it contains) drains into a given river, lake, estuary, or ocean.	CWT
Watershed	The land area that drains into a stream, river, lake, estuary, or coastal zone (USEPA Region 5).	NWQMC
Wetlands (D1)	Lands that are often transitional areas between terrestrial and aquatic systems, with enough surface or groundwater to support a complex chain of life, including microorganisms, vegetation, reptiles, fish, and amphibians.	CWT
Wetlands (D2)	Habitat that is transitional between terrestrial and aquatic where the water table is usually at or near the land surface or land that is covered by shallow water. Wetlands have one or more of the following characteristics: at least periodically, the land supports predominantly hydrophytic plants; the substrate is predominantly undrained hydric soil; and the substrate is nonsoil and is saturated with water or covered by shallow water at sometime during the yearly growing season (USFS).	NWQMC
Whirl-pak bag	Sterilized, clear polyethylene bags used to collect water samples for analysis.	CWT
Zooplankton	Aquatic microorganisms that are free floating or capable of movement. Zooplankton feed primarily on phytoplankton and bacteria, are can be either adult microorganisms, or larval forms of fish or shellfish.	CWT