

APPENDIX "R" GLOSSARY

Acute Toxicity - Pollution levels which may result in fatalities to aquatic organisms if they were to be maintained for at least an hour.

Algae Bloom - Conditions which exist when algae propagates rapidly.

Anadromous - Fish species which migrate between salt and fresh waters.

Aquifer - an underground layer of permeable soil which stores groundwater.

Bacterium - Any of the class of microscopic plants having round, rod like, spiral, or filamentous single-celled or non-cellular bodies often aggregated into colonies for mobile by means of flagella, living in soil, water, organic matter, or the bodies of plants and animals and being autotrophic, saprophytic or parasitic in nutrition and important to man because of their chemical effects and as pathogens.

Basin - a drainage area for a stream reach. A small area within a watershed.

Beneficial uses - Advantageous uses of water, both ground and surface, which are believed to be essential or desirable.

Benthic - Bottom feeding or dwelling aquatic organisms.

Biocide - a chemical agent capable of killing living organisms.

Bioswale - A shallow vegetated stormwater channel that slows the flow of water and provides filtration.

BOD - Biochemical/Biological Oxygen Demand. A water quality measure intended to determine the amount of oxygen required for aerobic microorganisms to decompose the organic matter in a standard water quality sample.

Buffer - An area set aside to minimize conflicts between incompatible activities.

Bulkhead - A retaining wall that is used to protect an upland slope from wave action taking place on the beach.

Channelization - the act of routing surface water into a single, straight, uniform conveyance. It is intended to move water efficiently and prevent flooding.

Chronic Toxicity - Pollution levels which would result in fatalities to aquatic organisms if they were maintained for three days.

Comprehensive Land Use Plan - A public policy document compiled with the assistance of the general public to give guidance and direction to local government jurisdictions with regard to land use development and preservation.

Composite Stock - A fish population supported by both spawning and hatchery rearing.

Copper Sulfate - A compound used to control aquatic plant and algae growth.

Cultured Stock - A fish population which depends upon spawning, incubation, hatching, or rearing in a hatchery or net pen.

Dissolved Oxygen - the amount of oxygen incorporated into water. Many bacteria and aquatic organisms require dissolved oxygen in order for their respiratory systems to function.

Diversions - an engineered structure which channels water away from its original course and into a holding pond or an alternate channel.

Drywell - a subterranean chamber usually having stones or gravel inside and used to collect rainwater runoff as a means of avoiding standing water or soil erosion.

Ecosystem - an interconnected natural community which may be characterized by the climate and plant life it hosts.

Epibenthic - the water just above the bottom sediments of a lake or sea.

Escapement - the number of returning adult salmon which are available to reproduce.

Estuary - where a freshwater stream or river meets saltwater. These are usually flat, wide areas due to the deposition of silts carried down the stream and are tidally influenced.

Eutrophication - A process acting on lakes in which increased nutrient levels result in escalating plant and algal growth.

Evapotranspiration - the path through which water enters the atmosphere, either through the direct evaporation of surface water or through plants as vapor is transpired through their leaves.

Fecal Coliform Bacteria - A specific type of bacteria which is found only in the intestines of warm-blooded mammals. While fecal coliform bacteria themselves pose only a moderate threat to human health, they are used in water quality sampling as an indicator of the presence of more dangerous pathogens.

Glacial Outwash - gravelly deposits left behind in the wake of a melting glacier. These deposits have little silt or finely grained materials incorporated into them. They are comprised primarily of rounded rocks which are usually less than a foot in diameter. They provide an excellent source of gravel but offer limited water filtration.

Glacial Till - commonly known as hardpan, this is a layer of soil and rock which has been compacted by the advance of a glacier and exhibits many of the characteristics of concrete.

GMA--Growth Management Act - legislation passed by the State of Washington in 1990 requiring all urban counties to develop comprehensive land use plans and implementing regulations.

Habitat - the specific area or environment in which a particular organism or ecological community lives. Beaches, marshes, old-growth forests, and prairies are all examples of habitats.

Hydrologic Regime - the runoff, stream flow patterns, and volumes of water at work within a stream system.

Impervious Surface - a land cover which does not allow for easy penetration by water. Common surfaces include asphalt, concrete, and roofs. Compaction of soil on driveways and lawns may reduce their permeability also.

Incubation Box - a small box often placed in streams which is used to foster salmon eggs until they hatch.

Instream - conditions within the water of a stream.

Intertidal - that area of land which is influenced by tidal action and are alternately flooded and exposed.

Land Cover - the character of the surface of an area of land. Land cover most often refers to the vegetation occurring on a site, such as forest or pasture, but also distinguishes between pavement, water, rock, and cleared properties.

Land Slides - Rapid downward movement of a mass of rock, earth, or artificial fill on a slope.

Macro Invertebrate - small, spineless organisms which may still be seen with the use of a microscope. They typically include worms, insects, and larvae.

Macrophyte - A rooted plant. This term is typically used to differentiate between algae and other plant forms in aquatic environments.

Mg/kg = micrograms per kilogram - this is a form of measure used in sediment samples which evaluate the amount of pollutant in soil, a dry substance, rather than water.

mg/L - milligrams per liter, (10^3)

Mixed Stock - a fish run which supports both wild and hatchery reared fish

Nearshore - areas of saltwater which are associated with shoreline but are never actually exposed during tidal retreats.

Nitrate - an element within the nitrogen cycle, it is the breakdown product of ammonia when oxygen and aerobic bacteria are available.

Nitrite - an element of the nitrogen cycle, it is the continued breakdown product of nitrate with additional exposure to bacteria and oxygen.

Nitrogen Cycling - the process through which atmospheric nitrogen is converted into organic nitrogen, then into ammonia, nitrite, nitrate, and back again.

Nonpoint - pollution which cannot be characterized by a specific source, often the result of the combined impact of a number of small contributors.

NPDES - National Pollutant Discharge Elimination System - a permit process resulting from the Clean Water Act that requires all major point source pollution dischargers to apply for permits. Jurisdictions of over 100,000 people must have permits for stormwater discharges.

Nutrient - an element of the environment which fuels organic life. The most common nutrients required for plant life are nitrogen, phosphorous, and potassium. Excessive amounts of these nutrients may cause plants and algae to grow aggressively in stream beds and lakes.

On-Site Sewage System - most often refers to a septic tank, any system for treating water conveyed human waste on or near the same location at which it is generated.

Outfall - the discharge location for a sewer, storm drain, or stream.

Pathogen - a bacteria, fungus, or virus which causes disease.

Percolation System - a system that allows the oozing, or trickling through a permeable substance: to seep.

Pesticide - any chemical which kills pests such as fungi, insects, and rodents. They may be used in both interior and landscaping applications.

PSP--Paralytic Shellfish Poisoning - an affliction of the nervous system which is caused by eating contaminated shellfish and is capable of resulting in death.

QA/QC - Quality Assurance/Quality Control - Documented procedures which are followed by water quality testing laboratories to assure accurate, consistent results.

Riparian Zone - the bank and adjoining upland of a creek or river.

Riprap - large boulders intentionally placed to stabilize banks and shorelines, but may also provide support to shoreline structures such as rail lines and roads.

Shore Drift - How wind-generated waves strike the shoreline determines the direction of sediment transport, resulting in a process called "Shore Drift."

Shoreline Armoring - The "generic" term associated with the building of bulkheads or other structures used in the same manner as bulkheads.

Slag - a by-product of the copper smelting process which was produced by Asarco. It has the appearance of dark grey gravel. It contains high levels of metals which may pose a serious health and environmental threat if exposed to acidic conditions, allowing those metals to be released into the environment.

Soil, Mass Movement - A rapid or slow, but continual downward movement of soil, usually identified as rotation, sheet, flow or topple.

Soil, Erosion - The process of erosion

Soil Association - soils in Pierce County have been classified into different types which share similar characteristics. Based on the soil association found in an area it is possible to predict how well it drains, its ability to support septic tanks, its erosion potential, and the likelihood of associated wetlands.

Spawn - the reproductive process for salmon which involves returning to freshwater streams, creating a nest in the gravel, laying eggs, fertilizing those eggs, and dying.

Subtidal - that nearshore area which is not exposed during tidal recessions

Subwatershed - a significant drainage area within a Water Resource Inventory Area or Watershed. May include one or more basins.

Surfactants - a product found in detergents and soaps. These are used in water quality sampling as an indication of potential water quality problems and their sources.

Swimmer's Itch - an uncomfortable skin condition caused by a microscopic aquatic parasite typically associated with ducks. These parasites land on human skin in the water, but when they are exposed to open air, they burrow into the skin a short way and then die, resulting in skin irritation.

Total Coliform Bacteria - these are bacteria which are present throughout the environment. They include Fecal Coliform Bacteria. Total coliform bacteria tests are performed by drinking water purveyors to monitor potential contamination of drinking water supplies.

Toxic Algae - a form of blue-green *Anabaena* algae which, under certain circumstances, produces a toxic by product. These algae are related to those which cause Red Tide conditions.

Turbidity - a measure of water clarity which uses a rope and a black and white painted disk that is lowered into the water. Turbid waters typically contain high levels of silt and sediment.

Ug/L = micrograms per liter (10⁶)

Upland - those areas not under water or associated with a water body.

WAC 173-201A - the State Water Quality Standards, this rule provides numeric standards for the surface water quality in Washington State.

WAC 400-12 - the Nonpoint Rule, written and approved by the Puget Sound Water Quality Authority, the Nonpoint Rule directs watershed planning efforts within those counties surrounding Puget Sound.

Watershed - a large area in which all surface water drains to a common outlet. All of the area within a Water Resource Inventory Area as defined by the Washington State Department of Fish and Wildlife

Wild Stock - a fish run that has not been influenced by recent hatchery intervention

303(D) - A section of the Clean Water Act which requires states to report on the condition of water bodies within the state and the extent to which they are being adversely impacted by pollution.