

GLOSSARY

- A -

Accretion means the process of growing or increasing by the gradual accumulation of additional layers, such as layers of sediment.

Adverse Impact means an impact that can be measured or is tangible and has a reasonable likelihood of causing moderate or greater harm to ecological functions or processes or other elements of the shoreline environment.

Aeolian means produced by the wind.

Agriculture is the cultivation of animals, plants, fungi and other life forms for food, fiber, and other products used to sustain life.

Alluvial Fan means a fan-shaped deposit of sediment and organic debris formed where a stream flows or has flowed out of a mountainous upland onto a level plain or valley floor. Sediment is deposited because of a sudden change in sediment transport capacity (e.g., significant change in slope or confinement).

Alluvium is a general term for clay, silt, sand, gravel, or similar other unconsolidated materials, deposited during comparatively recent geologic time by a stream or other body of running water, as a sorted or semi-sorted sediment in the bed of the stream or on its floodplain or delta.

Alteration means any human-induced change in an existing condition. Alterations include, but are not limited to, grading, filling, channelizing, dredging, clearing (vegetation), draining, construction, compaction, excavation, or any other activity that changes the character of the area.

AMSL means above mean sea level.

Anadromous Fish means fish species that spend most of their life cycle in salt water, but return to fresh water to reproduce.

Anticlinal means occurring at right angles.

Armoring means the addition of structures or material along the shoreline to decrease the impact of waves and currents or to prevent the erosion of banks or bluffs.

Associated Wetlands means wetlands that are in proximity to and either influence or are influenced by a shoreline stream, lake or tidal water. This influence includes, but is not limited to, one or more of the following: periodic inundation, location within a floodplain, or hydraulic continuity (WAC 173-22-040).

Avulsion means a sudden cutting off or separation of land by a flood breaking through a meander or by a sudden change in current whereby the stream deserts its old channel for a new one.

- B -

Bank is the terrain alongside the bed of a river, creek, or stream.

Base Flow is the portion of streamflow that comes from "the sum of deep subsurface flow and delayed shallow subsurface flow."

Basin means the area drained by a river and its tributaries or a depressed area with no surface outlet.

Benthic is the ecological region at the lowest level of a body of water such as an ocean or a lake, including the sediment surface and some sub-surface layers.

Biota is the plant and animal life of a region.

Boat Ramp means an inclined slab, set of pads, rails, planks, or graded slope used for launching boats with trailers or occasionally by hand.

BPA means Bonneville Power Administration.

Buffer means the area adjacent to a shoreline and/or critical area that separates and protects the area from adverse impacts associated with adjacent land uses.

Bulkhead means a wall-like shoreline structure, such as a revetment, that is placed parallel to the shoreline (at or near the OHWM) primarily for stabilizing shorelines, retaining uplands and fills prone to sliding or sheet erosion, and protecting uplands and fills from erosion by waves or currents.

- C -

Candidate means a species considered for listing as threatened or endangered under the Endangered Species Act, indicating that there is a possibility that the species has potential to be at risk of becoming threatened or endangered in the foreseeable future.

CESRF means Cle Elum Supplementation and Research Facility.

cfs means cubic feet per second.

Channel Migration Zone means the area along a river or stream within which the channel can reasonably be expected to migrate over time as a result of normally occurring processes. It encompasses the area of current and historic lateral stream channel movement that is subject to erosion, bank destabilization, rapid stream incision, and/or channel shifting, as well as adjacent areas that are susceptible to channel erosion.

Channelization means the straightening, relocation, deepening or lining of stream channels, including construction of continuous revetments or levees, for the purpose of preventing gradual, natural stream meander and progression.

Climate encompasses the statistics of temperature, humidity, atmospheric pressure, wind, rainfall, atmospheric particle count and other meteorological elemental measurements in a given region over long periods of time.

CMZ means Channel Migration Zone.

Comprehensive Plan means the guiding policy document for all land use and development regulations in a defined area and for regional services throughout the area including transit, parks, trails, utilities, environment and natural resources protection, cultural resource protection, and providing open space.

Confined Aquifer means an aquifer that has an overlying layer of impermeable material such as rock or clay, that prevents water from infiltrating to the aquifer directly through surface soils.

Confluence means a place of meeting of two or more streams; the point where a tributary joins the main stream.

Conifer cone-bearing seed plants with vascular tissue; all extant conifers are woody plants, the great majority being trees.

Conservation means the prudent management of rivers, streams, wetlands, wildlife and other environmental resources in order to preserve and protect them. This includes the careful use of natural resources to prevent depletion or harm to the environment.

Contaminant means any chemical, physical, biological, or radiological substance that does not occur naturally in groundwater, air, or soil or that occurs at concentrations greater than natural levels.

County means Kittitas County, Washington.

CRBG means Columbia River Basalt Group.

Critical Aquifer Recharge Area or CARA means an area with a critical recharging effect on aquifers used for potable water, including areas where an aquifer that is a source of drinking is vulnerable to contamination that would affect the potability of the water, or is susceptible to reduced recharge (WAC 365-190-030(3)).

Critical Areas includes the following areas and ecosystems: (a) wetlands; (b) areas with a critical recharging effect on aquifers used for potable water; (c) fish and wildlife habitat conservation areas; (d) frequently flooded areas; and (e) geologically hazardous areas. "Fish and wildlife habitat conservation areas" does not include such artificial features or constructs as irrigation delivery systems, irrigation infrastructure, irrigation canals, or drainage ditches that lie within the

boundaries of and are maintained by a port district or an irrigation district or company.

Critical Habitat means habitat areas with which endangered, threatened, sensitive or monitored plant, fish, or wildlife species have a primary association (e.g., feeding, breeding, rearing of young, migrating). Such areas are identified herein with reference to lists, categories, and definitions promulgated by the Washington Department of Fish and Wildlife as identified in WAC 232-12-011 or 232-12-014; in the Priority Habitats and Species (PHS) program of the Department of Fish and Wildlife; or by rules and regulations adopted by the U.S. Fish and Wildlife Service, National Marine Fisheries Service, or other agency with jurisdiction for such designations.

CSIR means Central Washington University's Center for Spatial Information and Research.

Culvert is a device used to channel water.

- D -

Dam means a barrier or controlling and appurtenant works across a stream or river that does or can confine, impound, or regulate flow or raise water levels for purposes such as flood or irrigation water storage, erosion control, power generation, or collection of sediment or debris.

DDD means dichloro-diphenyl-dichloroethane.

DDE means dichloro-diphenyldichloro-ethylene.

DDT means dichloro-diphenyl-trichloroethane.

Degradation means to lower, or make inferior, the function(s) of the shoreline or natural resources. As it pertains to riverine morphology, "degradation" means the lowering of a streambed due to such factors as increased scouring.

Denitrification means the conversion of nitrate (NO_3^-) to gaseous nitrogen (N_2) by bacteria. In wetlands and riparian zones, denitrification can remove excess nitrogen resulting from agricultural runoff and residential fertilizers.

Deposition means the laying, placing, or accumulation of any material.

Delta means the landform at the mouth of a river.

Detrital as it pertains to geology is the adjective form of "detritus," which is loose rock or mineral material that is worn off or removed by mechanical means; especially fragmented material such as sand, silt, and clay that is derived from older rocks and moved from its place of origin.

Development means a use consisting of the construction or exterior alteration of structures, dredging, drilling, dumping, filling; removal of any sand, gravel or minerals; bulkheading; driving of pilings; placing of obstructions; or any project of a permanent or temporary nature that interferes with the normal public use of the surface of the waters overlying lands subject to the Shoreline Management Act at any stage of water level.

Dike or **Diking** means an artificial wall, embankment, ridge, or mound, usually of earth or rock fill, built around a relatively flat, low lying area to protect it from flooding.

Dissolved Oxygen means the amount of oxygen, in parts per million by weight, dissolved in water, generally expressed in milligrams per liter (mg/L).

Distinct Population Segment or **DPS** means a subgroup of a vertebrate species that is treated as a species for purposes of listing under the Endangered Species Act. It is required that the subgroup be separable from the remainder of and significant to the species to which it belongs.

Dock means all platform structures or anchored devices in or floating upon waterbodies to provide moorage for pleasure crafts or landing for water-dependent recreation, including but not limited to floats, swim floats, floatplane moorages, and water ski jumps. Launch ramps are excluded.

Dredging is the removal or excavation of bottom sediments and is carried out at least partly underwater.

- E -

Ecological Functions or **Shoreline Functions** means the work performed or role played by the physical, chemical, and biological processes that contribute to the maintenance of the aquatic and terrestrial environments that constitute the shoreline's natural ecosystem. See WAC 173-26-201 (2)(c). Functions include, but are not limited to, habitat diversity and food chain support for fish and wildlife, groundwater recharge and discharge, high primary productivity, low flow stream water contribution, sediment stabilization and erosion control, storm and floodwater attenuation and flood peak desynchronization, and water quality enhancement through biofiltration and retention of sediments, nutrients, and toxicants. These beneficial roles are not listed in order of priority.

Ecology means Washington State Department of Ecology.

Ecoregion is a large area of land or water containing geographically distinct assemblage of species and communities.

Ecosystem is a biological environment consisting of all the organisms living in a particular area, as well as all the nonliving, physical components of the environment with which the organisms interact, such as air, soil, water and sunlight.

Ecosystem Processes or Ecosystem-wide Processes means the suite of naturally occurring physical and geologic processes of erosion, transport, and deposition; they can include specific chemical processes that shape landforms within a specific shoreline ecosystem and determine both the types of habitat and the associated ecological functions.

Ecotone is a transitional area between different ecosystems.

Embankment means a linear structure, usually of earth or gravel, constructed to extend above the natural ground surface and designed to prevent water from overflowing a level tract of land.

Emergent means non-woody, erect wetland plant species that typically grow emerging from flooded areas and shallow marshes.

Emergent Wetland means a wetland with at least 30 percent of the surface area covered by erect, rooted, herbaceous vegetation as the uppermost vegetative strata.

Endangered as it relates to species or habitats means listed and protected under the Endangered Species Act, indicating that the described species is in danger of extinction throughout all or a significant portion of its range.

Enhancement means actions performed within an existing degraded shoreline, critical area and/or buffer to intentionally increase or augment one or more functions or values of the existing area. Enhancement actions include, but are not limited to, increasing plant diversity and cover, increasing wildlife habitat and structural complexity (snags, woody debris), installing environmentally compatible erosion controls, or removing non-indigenous plant or animal species.

Environment Designation means a categorical classification of a land parcel that reflects the biological and physical character of the shoreline, as well as the type of development that has or should take place in a given area.

Erosion means a process whereby wind, rain, water and other natural agents mobilize, transport, and deposit soil particles.

ESA means Environmental Science Associates.

Escapement means that portion of an anadromous fish population that escapes the commercial and recreational fisheries and reaches the freshwater spawning grounds.

Evapotranspiration is a term used to describe the sum of evaporation and plant transpiration from the Earth's land surface to atmosphere.

Evolutionarily Significant Unit or ESU means a population of organisms that is considered distinct for purposes of conservation. Delineating ESUs is important when considering conservation actions. This term can apply to any species, subspecies, geographic race, or population.

- F -

FC or Fecal Coliform means a group of bacteria that are commonly associated with feces produced by humans, mammals and birds and that can be found in untreated sewage water.

FEMA means Federal Emergency Management Agency.

FERC means Federal Energy Regulatory Commission.

Fill means any solid or semi-solid material that when placed, changes the grade or elevation of the receiving site, including the addition of soil, sand, rock, gravel, sediment, earth retaining structure, or other material to an area waterward of the OHWM, in wetlands, or on shorelands in a manner that raises the elevation or creates dry land.

Fish and Wildlife Habitat Conservation Areas (FWHCA) are areas that serve a critical role in sustaining needed habitats and species for the functional integrity of the ecosystem, and which, if altered, may reduce the likelihood that the species will persist over the long term. These areas may include, but are not limited to, rare or vulnerable ecological systems, communities, and habitat or habitat elements including seasonal ranges, breeding habitat, winter range, and movement corridors; and areas with high relative population density or species richness. Counties and cities may also designate locally important habitats and species.

Float means a floating platform similar to a dock that is anchored or attached to pilings.

Flood or Flooding means a general and temporary condition of partial or complete inundation of normally dry land areas due to the overflow of inland waters and/or the unusual and rapid accumulation of runoff of surface waters from any source.

Floodplain or FEMA Floodplain means all federally-designated lands along a river or stream that may be inundated by the base flood of a river or stream.

Floodway means the area, as identified in a master program, that either:

1. has been established in federal emergency management agency flood insurance rate maps or floodway maps, or
2. those portions of a river valley lying streamward from the outer limits of a watercourse upon which flood waters are carried during periods of flooding that occur with reasonable regularity, although not necessarily annually

Flow Regime encompasses the following characteristics of stream flow and their interactions: magnitude, timing, frequency, duration, and rate of change.

Fluvial means of or pertaining to a river; a system that is influenced by a river or rivers.

Food Web is a map that depicts who eats whom in an ecological community.

Forest Land means all land that is capable of supporting a merchantable stand of timber and is not being actively used, developed, or converted in a manner that is incompatible with timber production.

Forested Wetland means a wetland that supports a forested canopy over more than 30 percent of the habitat area as defined by the U.S. Fish and Wildlife Service Classification System for wetlands.

Frequently Flooded Areas means lands in the floodplain subject to a one percent or greater chance of flooding in any given year, or within areas subject to flooding due to high groundwater, and those lands that provide important flood storage, conveyance and attenuation functions. These areas include, but are not limited to, streams, rivers, lakes, wetlands, and areas where high groundwater forms ponds on the ground surface, as designated and classified by a local government in accordance with WAC 365-190-110. Classifications of frequently flooded areas include, at a minimum, the 100-year floodplain designations of the Federal Emergency Management Agency and the National Flood Insurance Program.

- G -

GDE means groundwater dependent ecosystems.

Geologically Hazardous Areas means areas that, because of their susceptibility to erosion, sliding, earthquake, or other geological events, pose unacceptable risks to public health and safety and may not be suited for commercial, residential, or industrial development.

Glacial Outwash means the stratified detritus (chiefly sand and gravel) removed from a glacier by meltwater streams and deposited in front of or beyond the terminal moraine or along the margin of an active glacier.

Glacial Plain is an extensive flat plain of glacial till that forms when a sheet of ice becomes detached from the main body of a glacier and melts in place depositing the sediments it carried.

Glacial Till is unsorted glacial sediment.

Glaciation means having been covered with a glacier or subject to glacial epochs in the past.

Gradient means the degree of inclination, or rate of ascent or descent, of an inclined part of the earth's surface with respect to the horizontal; it is the steepness of a slope. It is expressed as a ratio (vertical to horizontal), a fraction (such as meters/kilometers or feet/miles), a percentage (of horizontal distance), or an angle (in degrees).

Groundwater means all the water that exists beneath the land surface or beneath the bed of any stream, lake or reservoir, or other body of surface water, whatever may be the geological formation or structure in which such water stands or flows, percolates, or otherwise moves.

- H -

Habitat means the natural environment in which an organism normally lives or occurs.

Hazardous Area means any shoreline area which is hazardous for intensive human use or structural development due to inherent and/or predictable physical conditions such as, but not limited to, geologically hazardous areas, frequently flooded areas, and coastal high hazard areas.

Headwater means the source and upper part of a stream, especially of a large stream or river, including the upper drainage basin.

Historic Site means those sites that are eligible or listed on the Washington Heritage Register, National Register of Historic Places or any developed historic registry formally adopted by a local government.

Hydraulics is a topic in applied science and engineering dealing with the mechanical properties of liquids.

Hydric Soil means a soil that is saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions in the upper part. The presence of hydric soil shall be determined following the methods described in the approved federal wetland delineation manual and applicable regional supplements, pursuant to WAC 173-22-035.

Hydrology means of or pertaining to the movement, distribution or quality of water on the earth.

Hydromodification means a human-made alteration to a streambank that changes or affects the natural flow of water through the channel/stream corridor. Bank armoring, levees, revetments and channelization are examples of hydromodifications.

Hyporheic refers to the saturated soil environment around a stream or river that exchanges water, nutrients, and organisms with surface waters.

- I -

ICR means Shoreline Inventory and Characterization Report.

Impairment means damage that compromises or reduces the strength or quality of the item. It is commonly used as a classification of water under the Clean Water Act

meaning poor water quality.

Impervious Surface means a hard surface area that either prevents or retards the entry of water into the soil mantle. Common impervious surfaces may include, but are not limited to, rooftops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled macadam or other surfaces which similarly impede the natural infiltration of stormwater. Impervious surfaces do not include surfaces created through proven low impact development techniques.

Industrial refers to the production of an economic good (either material or a service) within an economy.

Intermittent refers to streams that flow during only part of the year (i.e., seasonal streams).

Inundation means spreading of water over land that is not normally submerged.

Invasive Species means a species that is (1) non-native (or alien) to a specific geographic area; and (2) whose introduction causes or is likely to cause economic or environmental harm or harm to human health. Invasive species can be plants, animals, and other organisms (e.g., microbes). Human actions are the primary means of invasive species introductions.

Invertebrate is an animal without a backbone.

- J -

Juvenile Salmon are immature salmon; fry.

- K -

KRD means Kittitas Reclamation District.

- L -

Lacustrine means pertaining to lakes.

Lake means a body of standing water in a depression of land or expanded part of a stream, of 20 acres or greater in total surface area, including reservoirs. A lake is bounded by the OHWM, or where a stream enters the lake, the extension of the lake's OHWM within the stream.

Landslide is a general term covering a wide variety of mass movement landforms and processes involving the downslope transport, under gravitational influence, of soil and rock material en masse; it includes debris flows, debris avalanches, earthflows, mudflows, slumps, mudslides, rockslides, and rock falls.

Landslide Hazard Areas means areas that, due to a combination of site conditions like slope inclination and relative soil permeability, are susceptible to mass wasting.

Large Woody Debris or **LWD** means the large trees, sticks and branches that fall into streams and rivers. They can divert water and provide microhabitats for organisms.

Limnetic means relating to the pelagic or open part of a body of fresh water.

Liquefaction means a phenomenon in which the strength and stiffness of a soil is reduced by earthquake shaking or other rapid loading.

Littoral means relating to or located on a shoreline.

Loess means wind-blown soil deposits.

- M -

MAF means million acre-feet.

Mean Annual Flow means the average flow of a river or stream (measured in cubic feet per second) from measurements taken throughout the year. If available, flow data for the previous 10 years should be used in determining mean annual flow.

Mesic refers to a moderately moist area.

Microclimate is a local atmospheric zone where the climate differs from the surrounding area.

Migration (salmonid) means the systematic movement of a salmon population from their natal freshwater streams, out to the open ocean, and back to the same stream where they hatched.

Mitigation means individual actions that may include a combination of the following measures, listed in order of preference:

- Avoiding an impact altogether by not taking a certain action or parts of actions;
- Minimizing impacts by limiting the degree or magnitude of an action and its implementation;
- Rectifying impacts by repairing, rehabilitating, or restoring the affected environment;
- Reducing or eliminating an impact over time by preservation and maintenance operations during the life of the action;
- Compensating for an impact by replacing or providing substitute resources or environments; and
- Monitoring the mitigation and taking remedial action when necessary.

Mooring means the location where a vessel can fasten to a fixed object such as a pier or quay, or to a floating object such as an anchor buoy.

Moraine is any glacially formed accumulation of unconsolidated glacial debris (soil and rock) which can occur in currently glaciated and formerly glaciated regions, such as those areas acted upon by a past glacial maximum.

Mouth is a part of a stream where it pours into another stream, river, lake, reservoir, sea, or ocean.

- N -

Natal means relating to the time or place of birth.

Native Vegetation means plant species that are indigenous and historically found in the local area.

NFIP means National Flood Insurance Program.

Non-point Source means a diffuse source of contaminants, without a single point of origin, introduced into a receiving stream.

Nutrient Cycling is a pathway by which a chemical element or molecule moves through both biotic (biosphere) and abiotic (lithosphere, atmosphere, and hydrosphere) compartments of Earth.

Nutrient Loading is the increased nutrient (nitrogen and phosphorus) loading to waterbodies that leads to degraded water quality and ecosystem health.

- O -

OCPs means organochlorine pesticides.

Oligotrophic means low in nutrients.

Open Space means any parcel or area of land or water not covered by structures, hard surfacing, parking areas and other impervious surfaces except for pedestrian or bicycle pathways, or sites dedicated for active or passive recreation, visual enjoyment or critical area development buffers.

Ordinary High Water Mark or **OHWM** means that mark that will be found by examining the bed and banks of a lake or stream and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation as that condition exists on June 1, 1971, as it may naturally change thereafter, or as it may change thereafter in accordance with approved development. In any area where the OHWM cannot be found, the OHWM adjoining fresh water shall be the line of mean high water. For braided streams, the OHWM is found on the banks forming the outer limits of the depression within which the braiding occurs.

ORV means off-road vehicle.

Overwater Structure means any manmade structure that hangs over a surface water body such as a dock, deck, bridge, or building.

- P -

Palustrine means wetlands that include inland marshes and swamps as well as bogs, fens, tundra and floodplains. Palustrine systems include any inland wetland which lacks flowing water, contains ocean-derived salts in concentrations of less than 0.05%, and is non-tidal.

Pathogen is a microbe or microorganism such as a virus, bacterium, prion, or fungus that causes disease in its animal or plant host.

PBDEs means polybrominated diphenyl ethers.

PCBs means polychlorinated biphenyls.

Perennial refers to a stream or river that flows year-round.

Physiography is one of the two major subfields of geography.

Pilings means either wood, reinforced concrete or steel cylinders that are driven deep and embedded into the ground to serve as an intrinsic part of a deep foundation for a structure.

Point Source means a stationary location or fixed facility from which contaminants are discharged; it is a single identifiable source of contamination.

Pool / riffle means an area of stream or river habitat, which is seemingly stagnant at the surface but in reality, water is flowing downstream. A riffle is an area where the water flows through the channel at a higher velocity due to a moderate gradient.

Precipitation is rain, sleet, hail, snow and other forms of water falling from the sky.

Pre-contact Materials means archeological items that originated prior to European contact.

Preservation means actions taken to ensure the permanent protection of existing, ecologically, culturally, or historically important areas, structures, or species that a local government has deemed worthy of long-term protection.

Primary Production is the production of organic compounds from atmospheric or aquatic carbon dioxide, principally through the process of photosynthesis.

Priority Habitat means a habitat type with a unique or significant value to one or more species. An area classified and mapped as priority habitat must have one or more of the following attributes: comparatively high fish or wildlife densities; comparatively high fish or wildlife species diversity; fish spawning habitat; important wildlife habitat; important fish or wildlife seasonal range; important fish

or wildlife movement corridors; rearing and foraging habitat; refuge; limited availability; high vulnerability to habitat alteration; unique or dependent species; or shellfish beds. A priority habitat may be described by its unique vegetation type or by a dominant plant species that is of primary importance to fish and wildlife (such as oak woodlands or eelgrass meadows). A priority habitat may also be described by a successional stage (such as old growth and mature forests). Alternatively, a priority habitat may consist of a specific habitat element (such as talus slopes, caves, snags) of key value to fish and wildlife. A priority habitat may contain priority and/or non-priority fish and wildlife (WAC 173-26-020(28)).

Priority Species means species requiring protective measures and/or management guidelines to ensure their persistence at genetically viable population levels. Priority species are those that meet any of the criteria listed in WAC 173-26-020.

Protection means the practice of conserving and guarding valued resources in order to preserve and ensure their existence in the future.

Public Access means the public's right to get to and use the State's public waters, the water/land interface and associated shoreline area. It includes physical access that is either lateral (areas paralleling the shore) or perpendicular (an easement or public corridor to the shore), and/or visual access facilitated by scenic roads and overlooks, viewing towers and other public sites or facilities.

- R -

Ravine means a small, narrow, deep depression, smaller than a gorge or a canyon but larger than a gully; it is usually carved by running water.

Reach means a segment of shoreline and associated planning area that is mapped and described as a unit (for purposes of inventorying conditions) due to homogenous (similar) characteristics that include land use and/or natural environment characteristics.

Recharge means the process involved in the absorption and addition of water from the unsaturated zone to groundwater.

Reclamation means U.S. Bureau of Reclamation.

Recreation means an experience or activity in which an individual engages for personal enjoyment and health. Most shore-based recreation is outdoor recreation such as: fishing, hunting, clamming, beach combing, and rock climbing; various forms of boating, swimming, hiking, bicycling, horseback riding, camping, picnicking, watching or recording activities such as photography, painting, bird watching or viewing of water or shorelines, nature study and related activities.

Reestablishment as it pertains to natural resources means measures taken to intentionally restore an altered or damaged natural feature or process including:

- Active steps taken to restore damaged wetlands, streams, protected habitat, and/or their buffers to the functioning condition that existed prior to an unauthorized alteration;
- Actions performed to reestablish structural and functional characteristics of the critical area that have been lost by alteration, past management activities, or other events; and
- Restoration of wetland functions and values on a site where wetlands previously existed, but are no longer present due to lack of water or hydric soils.

Refuge means a place that provides shelter or protection from danger or distress.

Resident Fish means a fish species that completes all stages of its life cycle within fresh water and frequently within a local area.

Residential Development means buildings, earth modifications, subdivision and use of land primarily for human residence including, but not limited to, single-family and multifamily dwellings, mobile homes and mobile home parks, boarding homes, family daycare homes, adult family homes, retirement and convalescent homes, together with accessory uses common to normal residential use. Camping sites or clubs, recreational vehicle parks, motels, hotels and other transient housing are not included in this definition.

Restore, Restoration or Ecological Restoration means the reestablishment or upgrading of impaired ecological processes or functions. This may be accomplished through measures including, but not limited to, revegetation, removal of intrusive structures and removal or treatment of toxic materials. Restoration does not imply a requirement for returning ecological processes, functions or areas to aboriginal or pre-European settlement conditions.

Retention means the portion of rainfall that does not escape a drainage basin as surface runoff; some of the water is retained in local soils and aquifers.

Riprap means dense, hard, angular rock that can be used for revetments or other flood control works.

Riparian Corridor or Riparian Zone means the area adjacent to a waterbody (stream or lake) that contains vegetation that influences the aquatic ecosystem, nearshore area and/or fish and wildlife habitat by providing shade, fine or large woody material, nutrients, organic debris, sediment filtration, and terrestrial insects (prey production). Riparian areas include those portions of terrestrial ecosystems that significantly influence exchanges of energy and matter with aquatic ecosystems (i.e., zone of influence). Riparian zones provide important wildlife habitat. They provide sites for foraging, breeding and nesting; cover to escape predators or weather; and corridors that connect different parts of a watershed for dispersal and migration.

Riparian Vegetation means vegetation that tolerates and/or requires moist conditions and periodic free flowing water, thus creating a transitional zone between aquatic and terrestrial habitats which provides cover, shade and food sources for aquatic and terrestrial insects for fish species. Riparian vegetation and root systems stabilize streambanks, attenuate high water flows, provide wildlife habitat and travel corridors, and provide a source of limbs and other woody debris to terrestrial and aquatic ecosystems, which, in turn, stabilize streambeds.

RM or River Mile means the distance measured from the mouth of a river, traveling upstream.

Rootwad is the lower trunk and root fan of a large tree.

Runoff means surface waters that flow overland during rain events and storms.

- S -

Salmon or Salmonid is the common name for several species of fish of the family *Salmonidae*. The family includes salmon, trout, and char. Pacific salmon species are anadromous; they are born in fresh water, migrate to the ocean, then return to fresh water to reproduce. Some species of sockeye and rainbow and cutthroat trout have nonanadromous populations.

Scrub-shrub Wetland means a class of wetland that is in a transition to becoming a forested wetland. It can have a variety of water regimes and is typified by a mix of woody and shrublike vegetation less than 20 feet tall.

Sediment Transport is the movement and carrying away of sediment by natural agents, especially the conveyance by stream.

Serpentine Soils are an uncommon type of soil found in mountainous areas. They are rocky soils with unique chemical concentrations that are not conducive to the growth of most plants. Certain plants are specially adapted to grow in serpentine areas.

Shoreline Environment Designation is a mechanism identifying specific shoreline areas for regulatory purposes as specified in WAC 173-26-211. Examples of designations include: Shoreline Residential, Rural Conservancy, Urban Conservancy, Natural, and Aquatic.

Shoreline Modification means any human activity that changes the structure, hydrology, habitat, and/or functions of a shoreline. Bulkheads, piers, docks, shoreline stabilization systems, berms, and dikes are all examples of shoreline modifications. Shoreline modifications can also include other actions, such as clearing, grading, or application of chemicals.

Shoreline Planning means to integrate the land use patterns, physical and biological characterizations, and relevant regulations and policies to help managers delineate and categorize development opportunities for a shoreline.

Shoreline Stabilization is structural or non-structural modifications to the existing shoreline intended to reduce or prevent erosion of uplands or beaches. They are generally located parallel to the shoreline at or near the OHWM.

Shorelands or Shoreland Areas mean those lands extending landward for 200 feet in all directions as measured on a horizontal plane from the OHWM; floodways and contiguous floodplain areas landward 200 feet from such floodways; and all wetlands and river deltas associated with the streams, lakes and tidal waters which are subject to the provisions of Chapter 90.58 RCW.

Shorelines are all of the water areas of the state as defined in RCW 90.58.030, including reservoirs and their associated shorelands, together with the lands underlying them except:

- Shorelines of statewide significance;
- Shorelines on segments of streams upstream of a point where the mean annual flow is 20 cubic feet per second (cfs) or less and the wetlands associated with such upstream segments; and
- Shorelines on lakes less than 20 acres in size and wetlands associated with such small lakes.

Shoreline Jurisdiction means all shorelines of the state and shorelands.

Shorelines of Statewide Significance means the shorelines identified in RCW 90.58.030 which because of their elevated status require the optimum implementation of the Shoreline Management Act's policies. East of the Cascade crest, this includes all rivers with a mean annual flow of greater than 200 cfs and lakes with surface areas of 1,000 acres or more.

Shorelines of the State means the total of all "shorelines" and "shorelines of statewide significance" within the state subject to the Shoreline Management Act and its implementing mechanism, the Shoreline Master Program.

Sinuosity is a measure of deviation of a path between two points from the shortest possible path.

Site means a defined area that can include a parcel or combination of contiguous parcels, or right-of-way under the applicant's ownership.

Slope means the inclined surface of any part of the earth's surface, delineated by establishing its toe and top and measured by averaging the inclination over at least 10 feet of vertical relief.

SMA means Shoreline Management Act.

Smolt means a young salmon or sea trout, about two years old, that is at the stage of development where it assumes the silvery color of the adult and is ready to migrate to the sea.

SMP means Shoreline Master Program

Spalling means breaking off in fragments.

Spatial is the boundless, three-dimensional extent in which objects and events occur and have relative position and direction.

Spawn is the eggs of aquatic animals.

Spring means a place where groundwater flows naturally from a rock or the soil onto the land surface or into a surface waterbody.

State Priority Habitat and Species are habitats and species considered to be priorities for conservation and management. Priority habitats are habitat types or elements with unique or significant value to a diverse assemblage of species. Priority species require protective measures for their survival due to their population status, sensitivity to habitat alteration, and/or recreational, commercial, or tribal importance.

Stormwater means water that accumulates on land as a result of storms and can include runoff from urban areas such as roads and roofs.

Streams are those areas where surface waters produce a defined channel or bed. A defined channel or bed is an area that demonstrates clear evidence of the annual passage of water and includes, but is not limited to, bedrock channels, gravel beds, sand and silt beds, and defined channel swales. The channel or bed need not contain water year-round. This definition includes drainage ditches or other artificial watercourses where natural streams existed prior to human alteration, and/or the waterway is used by anadromous or resident salmonid or other fish populations.

Structural Complexity is considered to be a measure of the number of different attributes present and the relative abundance of each of these attributes.

Structural Downfold means a folded geologic structure that is concave upward formed by tectonic processes. Also known as a syncline.

Substrate means the underlying bed layer that makes up the bottom of a lake or stream, frequently composed of rock, gravel, sand, organic material, or a combination of these materials.

- T -

Terminus is an extreme point or element.

Terrestrial refers to things related to land or the planet Earth.

Threatened means listed and protected under the federal Endangered Species Act, indicating that the described species is likely to become endangered in the foreseeable future.

TMDL means Total Maximum Daily Load.

303(d) list comprises those waters that are in the polluted water category, for which beneficial uses— such as drinking, recreation, aquatic habitat, and industrial use – are impaired by pollution.

Top means the top of a slope; or the highest point of contact above a landslide hazard area.

Topography is the study of Earth's surface shape and features.

Total Maximum Daily Load or **TMDL** is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet established water quality standards, and an allocation of that amount to the pollutant's sources. Water quality standards are set by States, Territories, and Tribes. They identify the uses for each waterbody, for example, drinking water supply, contact recreation (swimming), and aquatic life support (fishing), and the scientific criteria to support that use. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and non-point sources.

Tributary means a stream feeding, joining, or flowing into a larger stream or into a lake.

TWSA means Total Water Supply Available.

- U -

UGA means urban growth area.

Unconfined Aquifer means an aquifer that receives infiltration directly through the overlying soil.

Unconsolidated Material means loosely arranged, not stratified.

Upland means dry lands landward of OHWM.

Urban Growth Area (UGA) means a local government's regulatory measure for delineating an area for urban growth over a period of time. Land within UGA boundaries is made available for urban levels of development, while land outside the UGA remains primarily for rural farming, forestry, or low-density residential development.

Utilities means all lines and facilities used to distribute, collect, transmit, or control electrical power, natural gas, petroleum products, information (telecommunications), water, and sewage.

- V -

VHG means vertical hydraulic gradient.

- W -

WAC means Washington Administrative Code.

Water-Dependent Use means a use that requires direct access to the water to accomplish its primary function. In other words, a use or portion of a use, which cannot exist in a location that is not adjacent to the water and which is dependent on the water by reason of the intrinsic nature of its operations. Examples include commercial fishing, marinas, aquaculture, shipbuilding yard, ferry terminal.

Water-Enjoyment Use means a use that does not require access to the water, but is enhanced by a waterfront location, such as a restaurant or aquarium. This includes uses that facilitate public access to the shoreline as a primary characteristic of the use; or uses that provide for recreational use or aesthetic enjoyment of the shoreline for a substantial number of people. The use must be open to the general public and the shoreline-oriented space within the project must be devoted to the specific aspects of the use that foster shoreline enjoyment.

Water-Related Use means a use that does not require direct access to the water, but provides goods or services associated with water-dependent uses (e.g., boater supply, kayak rental). In other words, a use or portion of a use which is not intrinsically dependent on a waterfront location but whose economic viability is dependent upon a waterfront location because:

- (a) The use has a functional requirement for a waterfront location such as the arrival or shipment of materials by water or the need for large quantities of water; or
- (b) The use provides a necessary service supportive of the water-dependent uses and the proximity of the use to its customers makes its services less expensive and/or more convenient.

Waterbody means a body of still or flowing water, identified at its outer limits by the OHWM.

Water Quality means the characteristics of water, including flow or amount and related physical, chemical, aesthetic, recreation-related, and biological characteristics.

Watershed means a geographic region within which water drains into a particular river, stream or body of water.

Watershed Processes are the movement of water, sediment, nutrients, pathogens, toxic, compounds, and wood through the landscape.

WDFW means Washington Department of Fish and Wildlife.

Wetlands means areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands.

Windthrow means a natural process by which trees are uprooted or sustain severe trunk damage by the wind.

WRIA means Water Resource Inventory Area and refers to watersheds within the State of Washington.

WSDOT means Washington State Department of Transportation.

- Y -

YRBWEP means Yakima River Basin Water Enhancement Project.