

# Glossary

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**Aggradation** - The geologic process by which the level of a streambed is raised by deposition of sediment eroded and transported from other areas.

**Agriculture (land use category)** - Includes irrigated cropland and dryland farming (grains).

**Air Pollutant** - Dust, fumes, mist, smoke, other particulate matter, vapor, gas, odorous substance, or any combination of these.

**Alluvial** - Composed of alluvium or deposited by a stream or running water.

**Alluvial Fan** - A cone-shaped deposit of alluvium made by a stream where it runs out onto a level plain, usually at a mountain front, or meets a slower stream.

**Alluvium** - A general term for all deposits resulting from the operations of modern rivers and creeks, including the sediments laid down in riverbeds, floodplains, and fans at the foot of mountain slopes.

**Ambient Air Quality Standard** - An established concentration, exposure time, and frequency of occurrence of air contaminant(s) in the ambient air which shall not be exceeded.

**Ambient Level** - The existing level of air pollutants, noise, or other environmental factors used to describe background conditions (i.e., conditions before a project is implemented).

**Anadromous** - Migrating from salt water to spawn in fresh water, as do salmon.

**Andesite** - A dark extrusive volcanic rock very similar in appearance to basalt, but different in chemical composition. It is commonly found in the Cascade Mountains.

**Aquifer** - A body of rock or sediments that contains sufficient saturated permeable material to yield economical quantities of water to wells and springs.

**Argillite** - A fine-grained rock whose degree of induration (hardness) is somewhat higher than mudstone or claystone, but softer than shale.

**Background** - The distance at which visual elements lose detailed distinctions, where the emphasis

is on the outline of a form.

**Basalt** - A dark extrusive volcanic rock very similar in appearance to andesite, but different in chemical composition. It is primarily found in the Columbia Basin.

**Bankfull Width** - The mean water width that occurs during a bankfull streamflow event, when streamflow completely fills the stream channel up to the top of the bank.

**Bathymetric** - Relating to measurement of depth below water.

**Bedload Transport** - Movement of sediment on or near the streambed due to currents.

**BMPs** - A practice or combination of practices that are determined to be the most effective and practicable (including technological, economic, and institutional considerations) means of controlling point and nonpoint pollutants at levels compatible with environmental quality goals (Soil Conservation Society of America 1982 in EPA 1993).

**Breccia** - A volcanic rock made of angular coarse fragments in a matrix of basalt, andesite or tuff.

**Cairn** - A pile of stones set up as a monument or landmark.

**Clearance Survey** - A survey conducted by a qualified wildlife biologist to determine the presence or absence of specific species and/or their nest sites. Clearance surveys are conducted prior to conducting land disturbing activities. Information gained from clearance surveys is generally valid for the year that they are conducted, since wildlife use patterns often change from year to year.

**Colluvium** - Loose deposits at the foot of a slope or cliff, brought there principally by gravity.

**Confined Aquifer** - An aquifer where groundwater is generally subject to pressure greater than atmospheric.

**Conglomerate** - A coarse sedimentary rock consisting of rounded fragments cemented together by another mineral substance.

**Critical Habitat Unit** - The specific areas designated by the USFWS as essential to the conservation of a threatened or endangered species and/or which may require special management considerations or protection (Endangered Species Act, Section 3[5][A]).

**Cryptogamic Crust** - A layer of intermixed mosses, lichens, algae, and microfungi that grow on the ground surface between grasses and shrubs. Cryptogamic crusts in Washington are found on shrub-steppe communities in eastern Washington and prairies in the Puget Trough Lowlands of western Washington. Cryptogamic crusts can provide for soil surface stabilization and reduction of soil erosion, improvement of soil fertility, retention of soil moisture, and may help to minimize the establishment of non-native herbaceous plants.

**Decibel (dB)** - A unit of measure for sound.

**dBA** - Stands for **AA**-weighted decibels. This decibel scale is used to approximate the way

human hearing responds more to some sound frequencies than to others.

Debris Flow - A general designation for a rapid flowage involving earth, rock and vegetation.

Debris Avalanche - A sudden movement downslope of the soil mantle and overlying vegetation on steep slopes.

Designated Critical Habitat - See Critical Habitat Unit.

Dissolved Oxygen - The concentration of free molecular oxygen in the water column, often measured because it is important for fish and other aquatic life.

Dormant (landslide) - A landslide that is not presently active; that is, no fresh signs of movement. However, it could reactivate in the future.

Downcutting - The lowering of a stream channel due to scouring by streamflow.

Emergent Wetland - Any area of a vegetated wetland where non-woody vegetation (e.g., cattail, grasses, sedges) comprises at least 30 percent areal cover.

Emission - The release of air contaminants into the ambient air.

Emission Standard - A requirement established under the federal Clean Air Act which limits the quantity, rate, or concentration of emissions of air contaminants on a continuous basis.

Flood Basalt - A term applied to basaltic lavas that occur as vast composite accumulations of horizontal or subhorizontal flows over great sectors of the earth's surface on a regional scale.

Fluvial - An adjective pertaining to rivers or river action; synonymous with alluvial.

Forb - Non-woody plants that commonly have green stems and leaves and produce flowers. Forbs do not include grasses and grasslike plants.

Foreground - The area of the view in which the viewer is a direct participant, and where features can be distinguished with clarity not possible in the middleground and background. See Middleground and Background.

Forest (land use category) - Includes public or private forest lands and tree farms, and may be designated for recreational uses.

Forested Wetland - Any area of vegetated wetland where woody vegetation over 20 feet tall and dominated by trees (e.g., alder, cedar, hemlock, cottonwood, some willow species) comprises at least 30 percent areal cover.

Fugitive Dust - A particulate emission made airborne by forces of wind, human activity, or both. Unpaved roads, construction sites, and tilled land are examples of areas that originate fugitive dust.

g - A unit of acceleration equal to the acceleration of gravity, approximately 32 feet per second per

second.

Glacial Till - A non-sorted, non-stratified, compact sediment carried or deposited by a glacier, consisting of silt, sand and gravel with scattered cobbles and boulders, and locally slightly clayey.

Glacial Outwash - Glacial sediments, commonly sand and/or gravel, deposited by meltwater streams issuing from a glacier.

Granite - A light colored, hard intrusive igneous rock made essentially of quartz and feldspar.

Graywacke - A hard dark sandstone with large quartz and feldspar particles set in a clayey matrix.

Headscarp - The upper boundary of a landslide that is normally defined by a vertical and/or horizontal rupture in the ground surface or a sharp break in topography. In an old landslide, such a feature may not still be open or retain its angularity.

Herbaceous - Annual or perennial plants that do not produce woody stems or branches. Herbaceous plants include grasses and forbs.

Holocene - The more recent of the two epochs of the Quaternary period, from the end of the Pleistocene to the present. See Pleistocene.

Horizontal Directional Drill (HDD) - A method for installation of pipes beneath rivers, lakes, wetlands and landslides in which a drill is remotely directed, generally in an arcuate line, below the obstruction and a pipe is then pulled back through the hole created by the drill.

Hydrofracturing - The process of opening cracks and bedding planes by pumping of water or other fluid at high pressure, resulting in increased permeability in the geologic formation.

Hydrostatic Test - A test of the strength and leak resistance of a vessel or pipe by internal pressurization with a test liquid, such as water.

Intermittent Stream - A stream that flows in a well-defined channel in response to precipitation and is dry for part of the year.

Lacustrine - An adjective pertaining to sediments produced by or formed in a lake.

Lake Missoula Floods - Immense outpourings of water unleashed on central and eastern Washington between about 12,000 and 15,000 years ago when glacial ice dams burst, releasing the waters of impounded glacial Lake Missoula.

Large Woody Debris (LWD) - Logs, stumps, rootwads, and branches that are on, in, or near a stream channel.

Late-Successional Forest (old-growth) - A forest in its mature and/or old-growth stages. Typical characteristics are moderate to high canopy closure, a multilayered and multispecies canopy dominated by large overstory trees, numerous large snags, and abundant coarse woody debris (such as fallen trees) on the ground. Typically, stands 80 to 120 years old are entering this stage

(definition from the Snoqualmie Pass Adaptive Management Area Plan FEIS, USFS/USFWS 1997).

Leq - Stands for ~~A~~equivalent constant decibel level~~@~~. In noise analysis, Leq is used to develop averages of varying noise levels over a given period.

Level of Service (LOS) - A measure of operational conditions within a traffic stream and their perception by motorists and passengers. Factors such as vehicle speeds, traffic flow, and the comfort of drivers are considered in determining LOS. Six levels of service are defined, ranging from LOS A (best operating conditions) to LOS F (worst conditions).

Lithic - Of or pertaining to stone.

Loess - A homogeneous, non-stratified wind-blown deposit consisting predominantly of silt and fine sand.

Major Source - Any stationary source which emits or has the potential to emit 100 tons per year of any air contaminant regulated by the state or federal Clean Air Acts.

Mass Wasting - A general term for a variety of processes by which large masses of earth material are moved by gravity either slowly or quickly from one place to another.

Metagabbro - A dark hard intrusive igneous rock that has been altered by heat and/or pressure below the earth's surface.

Micron - A unit of measurement equal to a millionth of a meter, or about 0.00004 inch.

Middleground - The area of the view where visual elements begin to join, and where visual detail becomes lessened as compared to the foreground view. See Foreground.

Nonattainment Area - A geographic area which has been designated by EPA as exceeding a national ambient air quality standard or standards for one or more of the criteria pollutants.

Nitric Oxide - A gas that reacts with oxygen to form nitrogen dioxide.

Nitrogen Dioxide (NO<sub>2</sub>) - A reddish-brown gas that is a component of smog.

Nitrogen Oxides (NO<sub>x</sub>) - A group of compounds containing varying proportions of nitrogen and oxygen; one of these, nitrogen dioxide, is a primary component of smog.

Noise Attenuation - A reduction in noise caused by distance, absorption of noise by vegetation or buildings, or other factors.

Old-Growth. See Late-Successional Forest.

Ozone Precursors - Chemicals that react in the atmosphere, in the presence of sunlight, to form ozone; automobile exhaust is a common source of ozone precursors.

Particulate Pollutants - Air pollutants consisting of suspended particles; health concerns focus on those particles small enough to reach the lungs when inhaled.

Perennial Stream - A stream that flows most of the year in a well-defined channel.

Pollutant Emissions - The amount (usually stated as a weight) of one or more specific compounds introduced into the atmosphere by a pollution source or group of sources.

Piezometric Surface - An imaginary surface representing the total head of groundwater in a confined aquifer that is defined by the level to which water will rise in a well.

Pleistocene - The earlier of two epochs comprising the Quaternary Period, spanning the time period from about 2 million to 10,000 years before the present.

Primary Pollutant - A pollutant that is emitted directly from an emission source into the atmosphere. See Secondary Pollutant.

Priority Habitats and Species (PHS) - A non-regulatory designation by the WDFW of species and habitat types that are priorities for management and preservation. The WDFW maps PHS information, including known locations of nest sites, wintering areas, and other important habitats and species locations. However, PHS maps are not considered a complete inventory of habitats and species.

Quaternary - The geologic time period extending from about 2 million years ago to the present. It is subdivided into the Pleistocene and Holocene epochs.

Rangeland (land use category) - Includes land which is used for, or is suitable for grazing of livestock; also includes arid lands which are marginally suited or unsuited for either crops or grazing.

Reactive Organic Gases (ROGs) - The components of organic gases that react with nitrogen oxides to form ozone.

Receptors - Sites or facilities that could be affected from additional noise, pollution, or other changes generated by a project.

Recreation (land use category) - Includes both public and private recreation areas and facilities, and may be forested or within an area used for forest harvest.

Rhyolite - A light-colored, fine-grained to glassy extrusive volcanic rock.

Riparian Area - The area adjacent to streams, rivers, lakes, and ponds which provides important fish and wildlife habitat and water quality.

Rural Residential (land use category) - Land which has been developed for residential use on larger parcels, typically in excess of two acres and often much larger. Land may be used for agriculture or left in forested conditions, but the primary use of the land would not be considered commercial agriculture or forestry. Small commercial or light-manufacturing may be present.

Sandstone - A cemented or otherwise compacted sedimentary rock comprised predominantly of quartz grains the size of sand.

Scouring - Erosion of streambed by the action of flowing water.

Scrub-Shrub - A plant community dominated by shrubs that are commonly less than 20 feet tall. Scrub-shrub communities in eastern and western Washington include species such as willow, alder, salmonberry, and spiraea.

Scrub-Shrub Wetland - Any area of a vegetated wetland where woody vegetation less than 20 feet tall (e.g., willows, spiraea, salmonberry) comprises at least 30 percent of the areal cover.

Secondary Pollutant - A pollutant, such as ozone, formed through chemical reactions in the atmosphere. A secondary pollutant differs from a primary pollutant, such as carbon monoxide, which is emitted directly into the atmosphere.

Sensitive Species - Those species of plants or animals that are not listed under the Endangered Species Act but have been identified by either the USFS, USFWS, or WDFW as species of concern requiring special management emphasis to prevent them from becoming threatened or endangered in the future.

Shale - A laminated sedimentary rock in which the constituent particles are predominantly of clay.

Shrub-Steppe - A vegetation type found in the northern part of the Great Basin area of the United States where low precipitation and cold winters occur. Shrub-steppe communities are dominated by short perennial bunchgrasses, cold desert shrubs, and in undisturbed regions a cryptogamic crust.

Siltstone - A fine-grained consolidated sedimentary rock comprised predominantly of silt.

Slump - A form of landslide in which the mass moves down and out as a generally coherent unit.

Sulfur Dioxide (SO<sub>2</sub>) - A compound that reacts with sunlight and other pollutants, contributing to atmospheric haze.

Tectonics - Pertaining to features related to the deformation of the earth's crust.

Tertiary - The older of the two geologic periods comprising the Cenozoic Era, spanning the time period from about 65 million to 2 million years before present.

Toxic Air Pollutant - Any Class A or B toxic air pollutant listed in WAC 173-460-150 and 173-460-160.

Tuff - A rock formed of compacted volcanic fragments, generally smaller than 4 mm in diameter.

Unconfined Aquifer - An aquifer where the water table is exposed to the atmosphere.

Underfit Channel - A stream that appears too small to have eroded the valley in which it flows.

Urban (land use category) - Land which has been developed at varying densities, typically with suburban subdivision characteristics and some commercial or industrial uses

Volatile Organic Compound (VOC) - Any of several compounds of carbon which participate in atmospheric photochemical reactions, forming secondary pollutants. See Secondary Pollutant.

Water Table - The surface of a body of unconfined groundwater at which the pressure is equal to that of the atmosphere.

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