

Glossary

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| 100-year floodplain | Areas with a 1 percent chance of flooding annually. |
| air toxics | Pollutants known or suspected to cause cancer or other serious health effects. |
| allision | The striking of a vessel with a fixed structure, such as a dock or vessel at berth. |
| ambient noise | Sum of all noise (from human and naturally occurring sources) at a specific location over a specific period. |
| anadromous | A life history strategy of fish that includes migration between fresh- and salt-water, in which reproduction and egg deposition occurs in freshwater while rearing to the adult stage occurs in the ocean. |
| annual average daily traffic | Measure of traffic level; refers to the total volume of traffic that passes an intersection or crossing each year divided by 365 days. |
| anthropogenic | Relating to, or resulting from the influence of human beings on the environment. |
| aquifer | Geologic layers that hold and transmit groundwater. |
| archaeological resources | Features and deposits located on or below the ground surface that are evidence of prior human occupation or use in a particular area. |
| attainment | Designation by the U.S. Environmental Protection Agency indicating a region's criteria pollutant concentrations meet federal air quality standards. |
| automatic block signal | A railroad electronic signal system that can control when a train can advance into the next section of track. |
| a-weighted decibel | Adjustable measure of noise level that approximates the frequency response of the human ear. |
| ballast | Crushed stone on which rail ties are laid and distributes the load from the rail ties and facilitates drainage. |
| ballast water | Water held in tanks on ships to provide stability and maneuverability. Commonly used to regulate weight of a ship that has been emptied of cargo. |
| baseline volume | The volume (such as trains or vehicles) before adding other volumes (such as trains or vehicles related to an action). |
| benthic habitat | The habitat occurring on the bottom or bed of a body of water, including the sediment surface and some sub-surface layers. |
| berm | A raised bank or strip bordering a river or canal. |
| best management practice | Methods or techniques found to be the most effective and practical means in achieving an objective while making the optimum use of resources. |

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| black mud | Substance generated during the production of aluminum from the operation of the cryolite recovery process. |
| bubble curtain | An underwater system which produces a curtain of bubbles which acts as a barrier against shock waves, debris, or fish. |
| buffer bin | A mechanical apparatus used during the transfer of coal from the stockpile areas to ships and allow for the diversion of coal. |
| bulk commodity | Cargo transported unpackaged in large quantities in either liquid or granular form. |
| bunkering | The process of refueling a ship. |
| carbon dioxide-equivalent | A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential. |
| Cascadia Subduction Zone | A fault line between the North America tectonic plate and the Juan de Fuca plate beneath the Pacific Ocean. |
| centralized traffic control | Railroad control system where electrical circuits monitor the location of trains, allowing dispatchers to control train movements from a remote location, usually a central dispatching office. |
| coal dust nuisance impacts | Coal dust that affects the aesthetics, look, or cleanliness of a surfaces but not the health of humans and the environment. |
| coal tar pitch | Amorphous black or brown residue produced by the distillation or heat treatment of coal tar. |
| Columbia River Datum | Vertical datum established in 1911 for the Columbia River from the lower river to the Bonneville Dam. |
| conveyors | A mechanical apparatus for moving articles or bulk material from place to place by moving belt or a chain of receptacles. |
| criteria air pollutants | Common air pollutants regulated by the National Ambient Air Quality Standards: ozone, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide, and lead. |
| critical area | Area protected by local jurisdictions through critical area regulations. Includes wetlands, areas with a critical recharging effect on aquifers used for potable water, fish and wildlife habitat conservation areas, frequently flooded areas, and geologically hazardous areas. |
| cultural resource | Broad range of resources that represent or convey a place's heritage or help tell the story of a region's past and are considered important to a community and worth preserving, such as a building, structure, object, site, landscape, or district associated with human manipulation of the environment. |

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| culturally significant property | Site or location considered culturally important to the history of a group of people, or are locations where culturally important events or practices are known to have occurred. |
| cumulative impact | Impact that would result from the incremental addition of an action to impacts from past, present, and reasonably foreseeable future actions. |
| day-night average noise level (Ldn) | A 24-hour average noise level with a 10-decibel upward adjustment of noise levels occurring at night to account for most peoples' sensitivity to noise at night. |
| deadweight tonnage | A measure of how much weight a ship is carrying or can safely carry; the sum of the weights of cargo, fuel, fresh water, ballast water, provisions, passengers, and crew. |
| decibel | Unit for measuring sound pressure level. |
| deepwater zone | Areas of the main channel waterward of shallow water. |
| depressional wetland | Wetlands located in topographic depressions where surface water can accumulate. |
| distinct population segment | The smallest division of a taxonomic species permitted to be protected under the federal Endangered Species Act. |
| downgradient | The direction that groundwater flows. |
| draft | The depth of water to which a ship sinks according to its load. The Columbia River's deep draft navigation system provides for a 43-foot-deep by 600-footwide channel inside the Columbia River Bar. |
| dredge prism | Area of the bottom of a waterbody where substrate material will be removed during dredging. Typically a three-dimensional area, measured in cubic feet or cubic yards. |
| dredging | To clean out the bed of a harbor, river, or other area of water, by scooping out mud, weeds and other material with a dredge, or in-water excavating machine. |
| dry fog | Liquid droplets between 1-10 microns. Dry fog does not moisten exposed surfaces. |
| emergent vegetation | A plant rooted in the bed of a body of water, with stem and leaves extending above the surface of the water. |
| equivalent sound level (Leq) | Average sound energy level for a specified unit of time, frequently 1 hour. |
| eulachon | A small, anadromous fish from the eastern Pacific Ocean. Also called smelt, candlefish, or hooligan. |
| evolutionarily significant unit | A population of organisms that is considered distinct for purposes of conservation. |
| floodplain | An area of land adjacent a river or stream which floods during periods of high water discharge. |

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| floodway | Channel and adjacent floodplain that contain floodwaters. |
| flow lane disposal | The discharge of dredged materials into in-river sites known to naturally scour during period of tide change or high water conditions. |
| fugitive emissions | Emissions that are not emitted from a stack, vent, or other specific point that control discharge. |
| General Land Office plat map | A map showing divisions of land produced by the General Land Office, which became the Bureau of Land Management in 1946. |
| geographic information systems | A system designed to capture, store, manipulate, analyze, manage, and present all types of spatial or geographical data. |
| geotechnical boring | Below-ground boring to obtain soil strata. Typically done for geotechnical investigations, to establish soil compressibility, strength, and other characteristics likely to influence construction activities. |
| global warming potential | Measure of how effective a greenhouse gas is at trapping heat. |
| grade crossing/at-grade crossing | A location at which a road or street crosses a railroad at the same level, rather than over or under using a bridge or tunnel. |
| greenhouse effect | This retention of energy by the atmosphere. |
| greenhouse gases | Air pollutants that trap solar energy in the atmosphere and contribute to global warming and climate change. |
| groundwater | Water beneath the Earth's surface. |
| Handymax-class vessels | Vessels with deadweight tonnage of up to 60,000 tons with a draft of between 36 and 39 feet |
| hazardous air pollutants | Air pollutants that are known or suspected of causing health effects. |
| historic resources | Elements of the built environment, such as buildings or structures, or human-made objects or landscapes that are listed in, or eligible for listing in the National Register of Historic Places. Defined by the regulations for implementing Section 106 of the National Historic Preservation Act. |
| horn noise | Sound of locomotive warning horns for public safety. |
| hydrogeomorphic classification | A functional assessment approach for classifying wetlands. |
| impervious surface area | Artificial structures, such as pavements that are covered by impenetrable materials such as asphalt, concrete, brick, stone, as well as rooftops. |
| lading weight | Weight of commodity in a rail car, such as coal. |

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| level of service | A qualitative measure of traffic flow. |
| locomotive | Rail transport vehicle that provides the motive power for a train. |
| main line | Railroad track that is used for through trains or is the principal artery of the railroad system from which yards, sidings, and spurs are connected. |
| manifest train | A freight train with a mixture of car types and cargoes. |
| megawatt | Standard of energy equal to 1 million watts, or 1,000 kilowatts. |
| noise contour | Line plotted on a map that shows equal noise levels. |
| nonpoint-source pollution | Pollution that originates from diffuse sources, such as land runoff, precipitation, atmospheric deposition, drainage, seepage or hydrologic modification. |
| outfall | The point where a river, drain, or sewer empties into another body of water. |
| palustrine wetland | An inland wetland which lacks flowing water, contains ocean-derived salts in concentrations of less than 0.5 parts per thousand, and is non-tidal. |
| Panamax vessel | Vessel with a deadweight tonnage between 60,000 and 100,000 tons and with a draft of between 42 and 49 feet. |
| particulate matter | Complex mixture of particles and liquid droplets. |
| piling | A pole made of wood, concrete, or steel which is driven deep into the ground to serve as structural support for human-made structures. |
| pinniped | A classification of fin-footed marine mammal which includes seals, sea lions, and walruses. |
| pollutant | A substance or energy introduced into the environment that has undesired effects, or adversely affects the usefulness of a resource. |
| positive train control | A system for monitoring and controlling train movements to improve safety. |
| potline | An electrically-connected row of reduction pots used in aluminum smelting. |
| practical capacity (railroad) | Number of trains that can be accommodated in a given time period, determined by signal type, number of tracks, and geometric limitations. |
| priority habitat and species | As defined by the Washington Department of Fish and Wildlife, habitat types or elements with unique or significant value to a diverse assemblage of species. Priority species are those species that require protective measures for their survival due to their population status, sensitivity to habitat alteration, and/or recreational, commercial, or tribal importance. |
| profile, shaped profile (coal) | Shape of loaded coal in a rail car. |

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| rail yard | Series of railroad tracks for storing, sorting, or loading/unloading, railroad cars and/or locomotives. |
| reclaimers | Machine that collects coal from the stockpile pads and begins the process of transferring coal to the docks for loading onto vessels. |
| riparian | Of, relating to, or situated on the banks of a river. |
| sedimentation | Process by which particles settle to the bottom of a water body. |
| seismicity | The occurrence or frequency of earthquakes in a region. |
| settlement ponds | Ponds using sedimentation to remove matter and turbidity from wastewater and used to control water pollution. |
| shallow water zone | Includes areas waterward of the active channel margin (0 feet to -20 feet Columbia River Datum). |
| sheet flow | A flow over water over the ground which is not confined to channels or streams. |
| short ton | 2,000 pounds. Distinct from tonne (1,000 kilograms) and long ton (2,240 pounds). |
| siding | Train passing lane that connects on both ends to the main line. |
| smelting | The extraction of a metal from ore by a process involving heating and melting. |
| smolt | A young salmon first migrating from fresh water to the ocean. |
| spent potliner | A waste material generated by aluminum smelting. |
| spur | A short railway line branching off of a larger line. |
| stackers | Machine that deposits coal on the stockpile pads. |
| stockpile pads | Discrete areas designed for the storage of coal. Stockpile pads are used to stage coal unloaded from train, prior to loading onto vessels. |
| substrate | Mineral and organic material forming the bottom of a waterway or waterbody; also the base or substance upon which an organism is growing. |
| sump | A low place that collects runoff liquids such as water or chemicals. |
| Superfund site | A polluted location requiring a long-term response to clean up hazardous material contaminations. |
| swale | A low piece of land, particularly a marshy depression between ridges. |
| switching | A railroad operation within and near the limits of a rail yard; generally consists of breaking down and building up trains, storing and classifying rail cars, and serving industries within and near yard limits. |
| topper agent | Coating applied to the coal placed in a rail car after loading to reduce fugitive emissions. |

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| track class | Railroad classification system for railroad tracks that identify maximum speeds, as defined by the Federal Railroad Administration. |
| traffic warrant control | Railroad control system where train crews obtain authority to occupy and move on a main track from the dispatcher usually by phone, radio, or electronic transmission to the locomotive. |
| train accident rate | One or more railroads that have sustained combined track, equipment, and/or structural damage in excess of the reporting threshold. The Federal Railroad Administration accident reporting threshold was \$10,500 in 2015. |
| transfer tower | Tower capable of redirecting, transferring or separating coal to different conveyors. |
| tribal resources | Tribal fishing and gathering practices and treaty rights, specifically, the collective rights and access to traditional areas associated with a tribe's sovereignty or formal treaty rights. |
| tsunami | A seismic sea wave. |
| turbidity | Relative clarity of a water body. |
| turning basin (vessel) | Wider areas along a channel dredge to the same depth as the channel to maneuver or turn vessels |
| unit train | A train in which all cars carry the same commodity and are shipped from the same origin to the same destination. |
| upland | Land or an area of land lying above the level where water flows or where flooding occurs. |
| vehicle peak hour | The hour of the day with the highest traffic volume. |
| viewshed | The geographical area visible from a particular location. |
| visual quality | Characteristic of the visual landscape as measured by vividness, intactness, and unity. |
| volatile organic compounds | Organic compounds that have a high vapor pressure at room temperature, which gives them a low boiling point. |
| watershed | Confined area in which moving surface waters are interconnected and all drain to the same location. |
| wayside noise (railroad) | Combined effect of locomotive noise and rail car/wheel noise |
| wetland | Land where the degree of water saturation determines resident plant and animal communities and soil conditions. |
| wick drain | A device for draining pore water from soft, compressible soils. |