

Chapter 9

Glossary

Term	Definition
303d list	A list of surface waters in Washington State that do not meet applicable surface water quality standards. The list is prepared by the Washington State Department of Ecology.
anadromous fish	Fish such as salmon that migrate from the sea upstream to breed in freshwater streams or rivers.
best management practice (BMP)	A method that can be used to minimize the amount of pollution entering surface waters. Best management practices may include schedules of compliance, operation and maintenance procedures, and treatment requirements.
bollard	A type of post used to block motorized vehicles from driving into specific areas but allowing pedestrians, bicycles, etc. to pass through.
Build Alternatives	A general term for the Corridor Alternative, East Alternatives, and the Continuation of the Interim Use Trail Alternative.
candidate species	Federal candidate species are those that the federal agencies have concluded should be proposed for addition to the federal endangered species list, but issuance of the proposed rule is precluded. State candidate species are those that WDFW will review for possible listing as state endangered, threatened, or sensitive.
channel morphology	The physical form of the stream, such as pools, riffles (turbulent areas), and glides (smooth, fast-flowing areas). Ideally, there is a 1:1 ratio for the numbers of pools to riffles. Channel morphology also concerns channel shape (e.g., U or V shaped) and whether the stream channel is incised (cut deeply into the ground surface), potentially preventing fish from accessing areas of the floodplain that might provide refuge during high flows.
coniferous	Trees that produce cones, such as pine and fir trees.
corridor	Term used to describe the former railroad right of way.
<u>culvert</u>	<u>A conduit used to enclose a flowing body of water, used to allow water to pass underneath a road, railway, or embankment.</u>

Term	Definition
debris flow	A flowing mixture of water-saturated debris that moves downslope under the force of gravity. The materials in a debris flow range in size from clay to boulders. Debris flows are created when loose masses of unconsolidated wet debris become unstable as a result of rainfall, melting snow, etc. The flows tend to move downslope along stream valleys or other channels.
deciduous	Plants that lose their leaves during part of the year (as opposed to evergreen plants, which keep their leaves or needles throughout the year).
depressional closed wetlands	Wetlands that form in topographic depressions with closed contours on at least three sides. Elevations within the wetland are lower than the surrounding landscape. They may have an outlet (depressional outflow) or not (depressional closed). Groundwater and precipitation are the major sources of hydrology. These wetlands can function to detain water.
dewatering	A method used to lower the groundwater table in localized areas to allow construction of footings and walls without having water on the site. In general, pumps are used to lower the groundwater table and the water is discharged to a surface water feature.
dissolved oxygen	A measure of the amount of oxygen in the water that is available to be used by aquatic organisms.
endangered species	A species that is in danger of extinction within the foreseeable future throughout all or a significant portion of its range.
environmental justice	An analysis conducted by federal agencies to identify and address as appropriate any disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations.
ephemeral stream	A stream that flows for only part of the year.
fecal coliform	A type of bacteria found in the intestinal tracts of mammals. The presence of high numbers of fecal coliform bacteria in a water body can indicate the recent release of untreated wastewater and/or the presence of animal feces. These organisms may also indicate the presence of pathogens that are harmful to humans.

Term	Definition
full acquisition	The complete acquisition of a property. Full acquisition would likely occur for the East Lake Sammamish Trail project when the project substantially interferes with and thus damages the property to a degree that it removes all economic value.
geologically hazardous area	Areas that because of their susceptibility to erosion, sliding, earthquake, or other geologic events are not suited for development consistent with public health and safety. Geologically hazardous areas include seismic hazards, steep slopes, landslide hazard areas, erosion hazards, and coal mines.
glide	A smooth, fast-flowing area in a stream.
hydroperiod	How long and how often water is present in a wetland (i.e., the duration and frequency of ponding and saturation).
impervious surfaces	Constructed surfaces such as pavement, driveways, roads, and rooftops that do not allow rainfall to soak into the ground. Instead, water runs off of these surfaces and can enter water bodies such as streams and wetlands either directly or by being discharged from stormwater detention ponds or other facilities constructed to manage runoff.
Interim Use Trail	A gravel trail, located on the former railbed, which varies in width from 8 to 12 feet wide. All permits necessary to construct the Interim Use Trail within the Cities of Redmond and Issaquah were obtained, and construction of the Interim Use Trail in these areas was completed in early 2004. Construction of the remaining segment of Interim Use Trail in the City of Sammamish is expected to be completed in 2005 following issuance of necessary permits. Construction of the Interim Use Trail has involved various improvements to the existing railbed, such as removing the remaining rail ties; adding gravel to the surface of the railbed; installing fencing, signage, and litter receptacles; and repairing and maintaining existing ditches and culverts. <u>Construction of the Interim use Trail was completed in April 2006.</u>
intermittent stream	A stream that flows for only part of the year.
L ₉₀	The sound level that is exceeded 90 percent of the time during a given time interval.
large woody debris	Larger pieces of wood (logs, rootwads, etc.) within the stream that provide a diverse habitat for fish and contribute to the formation of habitat units (pools).

Term	Definition
L _{eq}	The equivalent sound level, or the level of a <i>constant</i> sound that contains the same <i>energy</i> as the actual sound, which fluctuates over time. The Leq can be thought of as a sound-energy average. But unlike a simple arithmetic average that can understate both the highest and lowest values of a range, the Leq considers <i>all</i> the sound energy that occurs during an interval (e.g., an hour). Thus, the Leq considers high sound levels more heavily because they contain more sound energy.
level of service (LOS)	An estimate of the quality and performance of transportation facility operations in a community. The degree of congestion and delay is rated using the letter “A” for the least amount of congestion, ranging to the letter “F” for the highest amount of congestion. LOS D or better is considered acceptable for most jurisdictions. At LOS E, intersections operate at capacity.
modified slope wetlands	Wetlands located where road and railroad construction has modified topography and runoff patterns of wetland on sloping land. These wetlands retain some characteristics of slope wetlands but also function like the depressional class wetlands. They depend on groundwater discharge and have a unidirectional flow, but due to ditching, excavation, berming, and culverts they also detain water and convey it through a restricted outlet. Thus they function as depressional outflow wetlands.
non-point pollution	Water pollution that comes from a number of small sources (such as stormwater runoff from roadways, excess fertilizers from lawns and agricultural fields, etc.). Point-source pollution, in contrast, comes from a single large source (such as a factory).
nutrient enrichment	The presence of excessive amounts of nutrients, such as nitrogen and ammonia, which can lead to degradation of water quality and algal blooms.
palustrine	Refers to wetlands that contain fresh water (rather than salt water) and that are either (1) dominated by trees, shrubs, and/or emergent vegetation (rooted plants that may be temporarily or permanently flooded at the base but have parts extending above the water surface), or (2) cover less than 20 acres and have a water depth of less than 6.6 feet.
palustrine emergent (PEM)	Palustrine emergent (PEM) wetlands are dominated by erect, herbaceous vegetation (plants whose stems do not produce woody, persistent tissue and generally die back at the end of each growing season).

Term	Definition
palustrine forested (PFO)	Palustrine forested (PFO) wetlands are dominated by woody vegetation greater than 20 feet in height.
palustrine scrub-shrub (PSS)	Palustrine scrub-shrub (PSS) wetlands are dominated by woody vegetation less than 20 feet in height.
partial acquisition	Acquisition of only a portion of a property. Partial acquisitions would occur for the East Lake Sammamish Trail project when only a portion of the property is required by the project and the remaining portion of the site retains its economic value.
perennial stream	A stream that flows year-round.
pH	A measure of the acidity or alkalinity of a solution. The pH scale ranges from zero to 14. A pH of 7 is neutral. More alkaline or basic solutions have a higher pH, while more acidic solutions have a lower pH.
peak hour	The hour of the day when the highest traffic volumes occur at an intersection or roadway segment. The specific peak hour varies from intersection to intersection but generally occurs for a single hour between 7 and 9 a.m. for the a.m. peak hour and 4 and 6 p.m. for the p.m. peak hour.
railbed	The term used in instances where physical studies or analyses were conducted prior to the construction of the Interim Use Trail.
raptors	A general term for a bird of prey (hawk, eagle, owl, etc.).
resident fish	Fish that remain within a body of water throughout the year.
riffle	A turbulent area in a stream.
riparian area	An area along a stream or other water body that is transitional between aquatic and terrestrial environments. The microclimate, soil, and vegetation are typically influenced by both surface water and groundwater.
riparian vegetation	Plants growing within the riparian area (immediately along the stream channel). A well vegetated riparian zone provides shade and organic material to the stream, keeping stream temperatures at levels acceptable for salmonids and supporting the stream food web. Trees in the riparian area can eventually fall into the stream and contribute to the large woody debris described above.

Term	Definition
riverine flow-through wetlands	Wetlands located in the floodplains of streams. These wetlands experience overland flooding and seasonally high groundwater. Many of the riverine flow-through wetlands in the study area have been altered by construction. Many of these modified areas are associated with fish-bearing streams, while others do not provide fish habitat.
salmonid	General term for salmon, trout, and steelhead.
scour	Removal of gravel and finer materials from the substrate of a stream by fast-moving water.
shoreline management master program	A shoreline plan created by a local government in compliance with the Washington State Shoreline Management Act. The plan designates what types of uses may be allowed along different portions of the shorelines within the community.
slope wetlands	Wetlands located on hillside slopes with unidirectional water flow down the slope. The principal water sources for slope wetlands are groundwater and/or precipitation. These wetlands do not have the ability to retain water; they drain without observable bed, bank, or constrained outlets.
soft-surface trail	A portion of the trail that is covered with a type of surface other than asphalt, such as gravel.
state sensitive species	Any wildlife species native to Washington that is vulnerable or declining and is likely to become endangered or threatened throughout a significant portion of its range within the state without cooperative management or removal of threats.
state species of concern	Includes species listed as state endangered, state threatened, state sensitive, or state candidate, as well as species listed or proposed for listing by the USFWS or NOAA Fisheries.
streambank stability	Whether the streambank is physically stable or showing signs of erosion, sloughing, or slumping.
substrate	Materials that compose the bed of the stream. Gravel and small cobbles are generally the most suitable for spawning, while large amounts of sediment and fine materials may smother fish eggs and fill pools.
threatened species	A species that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

Term	Definition
turbidity	A measure of the amount of particles suspended in water. Increasing the turbidity of the water reduces the amount of light that penetrates the water column. High levels of turbidity are typically harmful to aquatic organisms.
understory	The shrubs and herbs that make up the lower layers of vegetation beneath the forest canopy.
urban growth area	Areas designated by counties in Washington state under the Growth Management Act within which urban growth is encouraged and outside of which growth can occur only if it is not urban in nature. Areas must be designated that are sufficient to accommodate projected growth for 20 years. Public services and utilities must be provided to serve the projected growth.
wetlands	Those 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.
wetland buffers	Upland areas surrounding wetlands that provide protection to the biological, chemical, and hydrologic functions of the wetlands.
wetland functions	The functions of wetlands are the “things that wetlands do” such as filtering sediment from storm runoff, ameliorating flooding, providing wildlife habitat, etc.
wetland mitigation bank	A wetland area that is created, restored, or enhanced to create a “bank” of wetland “credits” prior to impacts occurring. The credits can then be “withdrawn” to compensate for unavoidable impacts to wetlands resulting from projects at other sites in the future.