Glossary

Advection	Transfer or change of a property of the atmosphere (e.g., humidity) by the horizontal movement of a mass of fluid (e.g., air current).
Allelopathic	Suppression of growth of one plant species as a result of the release of a toxic substance by another plant species.
Ammonification	Process in which organic forms of nitrogen (e.g., nitrogen present in dead plant material compounds) are converted to ammonium ($NH4^+$) by decomposing bacteria.
Bankful discharge	Stream discharge that fills the channel to the top of the banks and just begins to spread onto the floodplain. Bankful discharges occur on average every 1 to 1.5 years in undisturbed watersheds and are primarily responsible for controlling the shape and form of natural channels.
Bedload	Sediment particles that are transported as a result of shear stress created by flowing water, and which move along, and are in frequent contact with, the streambed.
Biotic integrity	Condition where the biologic or living community of an aquatic or terrestrial system is unimpaired and species diversity and richness expected for that system are present.
Bole	Trunk of a tree.
California Bearing Ratio	Test using a plunger of a specific area to penetrate a soil sample to determine the load bearing strength of a road subgrade.
Cation exchange capacity	Amount of exchangeable cations that a soil can adsorb at pH 7.0 expressed in terms of milliequivalents per 100 grams of soil (me/100 g).
Compost maturity	Term used to define the effect that compost has on plant growth. Mature compost will enhance plant growth; immature compost can inhibit plant growth.
Compost stability	Level of microbial activity in compost that is measured by the amount of carbon dioxide produced by a sample in a sealed container over a given period of time.
Critical shear stress	Lift and drag forces that move sediment particles. Forces are created as faster moving water flows past slower water.
Denitrification	Reduction of nitrate (commonly by bacteria) to di-nitrogen gas.

Desorb	To remove (a sorbed substance) by the reverse of adsorption or absorption.
Diurnal oxygen fluctuations	Fluctuations in dissolved oxygen in water as photosynthetic activity increases during the day and decreases during the night.
Effective impervious area (EIA)	Subset of total impervious area that is hydrologically connected via sheet flow or discrete conveyance to a drainage system or receiving body of water. The Washington State Department of Ecology considers impervious areas in residential development to be ineffective if the runoff is dispersed through at least 100 feet of native vegetation using approved dispersion techniques.
Endocrine disruptors	Substances that stop the production or block the transmission of hormones in the body.
Evapotranspiration	Collective term for the processes of water returning to the atmosphere via interception and evaporation from plant surfaces and transpiration through plant leaves.
Exfiltration	Movement of soil water from an infiltration integrated management practice to surrounding soil.
Exudates	Substances exuded from plant roots that can alter the chemical, physical and biological structure of the surrounding soil.
Hydrologically functional landscape	Term used to describe a design approach for the built environment that attempts to more closely mimic the overland and subsurface flow, infiltration, storage, evapotranspiration, and time of concentration characteristic of the native landscape of the area.
Hydroperiod	Seasonal occurrence of flooding and/or soil saturation that encompasses the depth, frequency, duration, and seasonal pattern of inundation.
In-line bioretention	Bioretention area that has a separate inlet and outlet.
Invert	Lowest point on the inside of a sewer or other conduit.
Liquefaction	Temporary transformation of a soil mass of soil or sediment into a fluid mass. Liquefaction occurs when the cohesion of particles in the soil or sediment is lost.
Mycorrhizal	Symbiotic association of the mycelium of a fungus with the roots of a seed plant.
Nitrification	Process in which ammonium is converted to nitrite and then nitrate by specialized bacteria.
Off-line bioretention	Bioretention area where water enters and exits through the same location.

Phytoremediation	The utilization of vascular plants, algae and fungi to control, break down, or remove wastes, or to encourage degradation of contaminants in the rhizosphere (the region surrounding the root of the plant).
Reaction range	Length of the pin or pile in a minimal excavation foundation system that is in direct contact with and bears against the soil to support the above-ground structure.
Saturated hydraulic conductivity	Ability of a fluid to flow through a porous medium under saturated conditions; is determined by the size and shape of the pore spaces in the medium, their degree of interconnection, and by the viscosity of the fluid. Hydraulic conductivity can be expressed as the volume of fluid that will move in unit time under a unit hydraulic gradient through a unit area measured at right angles to the direction of flow.
Seral stage	Any stage of development or series of changes occurring in the ecological succession of an ecosystem or plant community from a disturbed, un-vegetated state to a climax plant community.
Soil bulk density	Ratio of the mass of a given soil sample to the bulk volume of the sample.
Soil stratigraphy	Sequence, spacing, composition, and spatial distribution of sedimentary deposits and soil strata (layers).
Stage excursions	Departures, or changes, in pre-development water depth (either higher or lower) that occur after development takes place.
Threshold discharge area	Onsite area draining to a single natural discharge location or multiple natural discharge locations that combine within one-quarter mile downstream (as determined by the shortest flow path).
Time of concentration	Time that surface runoff takes to reach the outlet of a sub-basin or drainage area from the most hydraulically distant point in that drainage area.
Total impervious area (TIA)	Total area of surfaces on a developed site that inhibit infiltration of stormwater. The surfaces include, but are not limited to, conventional asphalt or concrete roads, driveways, parking lots, sidewalks or alleys, and rooftops.
Transmissivity	Term that relates to movement of water through an aquifer. Transmissivity is equal to the product of the aquifer's permeability and thickness (m^2/sec).
Tree canopy dripline	Outer most perimeter of a tree canopy; defined on the ground by a vertical line from the perimeter of the leaves of a tree canopy to the ground directly below.

Frequently used acronyms

AASHTO .....American Association of State Highway and Transportation Officials

ASTM.....American Society for Testing and Materials

CEC .....Cation exchange capacity

CN.....Curve number

CRZ .....Critical root zone

IMPs .....Integrated management practices

SMMWW .....*Stormwater Management Manual for Western Washington*

USDA.....United States Department of Agriculture

WAC .....Washington Administrative Code

WWHM.....Western Washington Hydrologic Model