

ACRONYMS

#:1	Slope Ratio Horizontal:Vertical
AASHTO	American Association of State Highway and Transportation Officials
ATB	Asphalt-Treated Base
BA	Biological Assessment
BMP	Best Management Practice
BOD	Biological Oxygen Demand
CNPPC	Coastal Nonpoint Pollution Control Program
COD	Chemical Oxygen Demand
CWA	Clean Water Act
CZARA	Coastal Zone Act Reauthorization Amendments of 1990
CZMA	Coastal Zone Management Act of 1972
DEQ	Department of Environmental Quality
DFW	Department of Fish and Wildlife
DSL	Division of State Lands
EA	Environmental Assessment
ECRM	Erosion Control and Revegetation Mats
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
EPCM	Erosion and Pollution Control Manager
ESCP	Erosion and Sediment Control Plan

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FHWA	Federal Highway Administration
HDPE	High Density Polyethylene
IDR	Intensity-Duration-Recurrence
m	Meter
m ²	Square Meters
m ³	Cubic Meters
mg/l	Milligram per Liter
mm	Millimeter
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
OAR	Oregon Administrative Rules
ODL	Oregon Drainage Law
ODOT	Oregon Department of Transportation
ORS	Oregon Revised Statutes
OSU	Oregon State University
QA/QC	Quality Assurance/Quality Control
QPL	Qualified Products List
PCB	Polychlorinated Biphenyl
PCP	Pollution Control Plan

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PLS	Pure Live Seed
POTW	Publicly Owned Treatment Works
ppm	Parts per Million
RUSLE	Revised Universal Soil Loss Equation
TRM	Turf Reinforcement Mats
US	United States
USACE	United States Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USLE	Universal Soil Loss Equation

GLOSSARY OF TERMS

AASHTO Classification	The official classification of soil materials and soil aggregate mixtures for highway construction used by the American Association of State Highway and Transportation Officials.
Acid Soil	A soil with a preponderance of hydrogen ions (and probably aluminum) in proportion to hydroxyl ions. Specifically, soil with a pH value less than 7.0. For most practical purposes, a soil with a pH value of less than 6.6.
Adsorption	The adhesion of a substance to the surface of a solid or liquid. Heavy metals, such as zinc and lead, often adsorb onto particles.
Alluvial Soils	Soils developed from transported and relatively recently deposited material (alluvium) characterized by a weak modification (or none) of the original material by soil-forming processes.
Alluvium	A general term for all detrital material deposited or in transit by streams, including gravel, sand, silt, clay, and all variations and mixtures of these. Unless otherwise noted, alluvium is unconsolidated.
Anadromous	Fishes that ascend rivers from the sea for breeding.
Annual Storm	The highest peak storm discharge that is expected in any given year.
Apron	A pad of non-erosive material designed to prevent scouring from developing at the outlet ends of culverts, outlet pipes, grade stabilization structures, and other water-control devices.
Aquifer	An underground porous, water-bearing geological formation. The term is generally restricted to materials capable of yielding an appreciable supply of water.
Barrel	A conduit placed through a dam, levee, or a dike to control the release of water.
Bearing Capacity	The maximum load that a material can support before failing.

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Bedrock	The relatively solid rock in place either on or beneath the surface of the earth. It may be soft, medium, or hard and have a smooth or irregular surface.
Berm	A constructed barrier of compacted earth.
Best Management Practices (BMPs)	Physical, structural, or managerial practices employed to avoid or mitigate damage or potential damage from the contamination or pollution of surface waters or wetlands. Structural BMPs are actual physical installations rather than procedural or managerial BMPs, such as good housekeeping and employee training.
Capillary Action	The tendency of drier soil particles to attract moisture from wetter portions of soil.
Catch Basin	A grated inlet, curb opening, or combination inlet with or without a sump that admits storm water to a sewer or subdrain.
CD	Cross-machine direction; direction perpendicular to the machine or manufacture direction.
Channel	A natural stream or excavated ditch that conveys water.
Channel Stabilization	Protecting the sides and bed of a channel from erosion by controlling flow velocities and flow directions using jetties, drops, or other structures, or by lining the channel with a suitable liner such as vegetation, riprap, concrete, or other similar material.
Channelization	Alteration of a stream channel by widening, deepening, straightening, or paving certain areas to improve flow characteristics.
Check Dam	A small dam constructed in a gully or other small watercourse to decrease flow velocity, minimize channel scour, and promote sediment deposition.
Chute	A high-velocity, open channel for conveying water down a steep slope without erosion, usually paved.

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Clay	(a) Soil fraction consisting of particles less than 0.002 mm in diameter. (b) A soil texture class that is dominated by clay or at least has a larger proportion of clay than either silt or sand.
Cohesion	The capacity of a soil to resist shearing stress, exclusive of functional resistance.
Cohesive Soil	A soil that, when unconfined, has considerable strength when air-dried and significant strength when saturated.
Coir	Fiber made from coconut husks.
Compost	Organic residue or a mixture of organic residues and soil that has undergone biological decomposition until it has become relatively stable humus.
Conventional Pollutants	Contaminants (other than nutrients) such as sediment, oil, and vehicle fluids.
Contour	An imaginary line on the surface of the earth connecting points of the same elevation.
Cut	Portion of land surface or area from which earth has been removed or will be removed by excavating; the depth below the original ground surface to the excavated surface.
Cut-and-Fill	Process of earth grading by excavating part of a higher area and using the excavated material for fill to raise the surface of an adjacent lower area.
Cutoff Trench	A long, narrow excavation (keyway) constructed along the centerline of a dam, dike, levee, or embankment and filled with relatively impervious material intended to reduce seepage of water through porous strata.
Cutting	A leaf, stem, or branch cut from a plant to establish a new plant.
Dam	A barrier to confine or impound water for storage or diversion, to prevent gully erosion, or for retention of soil, sediment, or other debris.

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Debris Dam	A barrier built across a stream channel to retain logs, tree limbs, sand, gravel, silt or other material.
Design Highwater	The elevation of the water surface at peak flow conditions of the design flood.
Design Life	The period of time for which a facility is expected to perform its intended function.
Design Storm	Selected storm of a given frequency used for designing a design storm system. Hypothetical storm derived from intensity-duration-frequency curves. A prescribed hyetograph and total precipitation amount (for a specific duration recurrence frequency) used to estimate runoff in order to analyze existing drainage, design new drainage facilities, or assess impacts of a proposed project on surface water flow.
Desilting Area	An area of grass, shrubs, or other vegetation used for including deposition of silt and other debris from flowing water; located above a stock tank, pond, field, or other area needing protection from sediment accumulation.
Detention	Storage and subsequent release of excess storm water runoff.
Detention Facility	An above or below ground facility, such as a pond or tank, that temporarily stores storm water runoff and releases it at a controlled rate. There is little or no infiltration of the stored storm water.
Detention Time	The theoretical time required to displace the contents of a tank or unit at a given rate of discharge (volume divided by rate of discharge).
Dewatering	The removal of water temporarily impounded in a holding basin.
Dike	An embankment to confine or control water, often built along the banks of a river to prevent overflow of lowlands; a levee.

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Discharge	Usually the rate of water flow; a volume of fluid passing a point per unit time commonly expressed as cubic feet per second, cubic meters per second, gallons per minute, or millions of gallons per day.
Dispersion, Soil	The breaking down of fine soil aggregates into individual particles, resulting in single-grain structure. Ease of dispersion influences the erodibility of soils. Generally speaking, the more easily dispersed the soil, the more erodible it is.
Diversion	A channel with a supporting ridge on the lower side constructed at the top, across, or at the bottom of a slope for the purpose of controlling surface runoff.
Diversion Dike	A barrier built to divert surface runoff.
Drain	A buried slotted or perforated pipe, or other conduit (subsurface drain), or a ditch (open drain) for carrying off surplus groundwater or surface water.
Drainage	The removal of excess surface water or groundwater from land by means of ditches or subsurface drains.
Drainageway	A natural or artificial depression that carries surface water to a larger water course or outlet such as a river, lake, or bay.
Drop Inlet	Overall structure in which the water drops through a vertical riser connected a discharge conduit or storm sewer.
Drop Spillway	Overall structure in which the water drops over a vertical wall onto an apron at a lower elevation.
Dry Pond	A facility that provides storm water quantity control by detaining runoff in a detention basin, then releasing the runoff at allowable rates.
Earth Dam	Dam constructed of compacted suitable soil materials.
Elongation	The increase in length produced in the gauge length produced by a tensile load.

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Embankment	A man-made deposit of soil, rock, or other material often used to form an impoundment.
Emergency Spillway	Usually a vegetated earth channel used to safely convey flood discharges around an impoundment structure.
Energy Dissipater	A device used to reduce the energy of flowing water to prevent erosion.
Environment	The sum total of all the external conditions that may act upon a living organism or community to influence its development or existence.
Erodibility	Susceptibility to erosion.
Erosion	<p>The wearing away of the land surface by water, wind, ice, gravity, or other geological agents. The following terms are used to describe different types of water erosion:</p> <ul style="list-style-type: none">• Accelerated erosion – Erosion much more rapid than normal or geologic erosion, primarily as a result of the activities of man.• Channel erosion – The erosion process whereby the volume and velocity of flow wears away the bed or banks of a well-defined channel.• Gully erosion – The erosion process whereby runoff water accumulates in narrow channels and, over relatively short periods, removes the soil to considerable depths, ranging from 1 to 2 feet to as much as 75 to 100 feet.• Rill erosion – An erosion process in which numerous small channels only several inches deep are formed; occurs mainly on recently disturbed and exposed soils. See Rill.• Splash erosion – The spattering of small soil particles caused by the impact of raindrops on wet soils. The loosened and spattered particles may or may not be subsequently removed by surface runoff.• Sheet erosion – The gradual removal of a fairly uniform layer of soil from the land surface by runoff water.

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Erosion and Sediment Control	Any temporary or permanent measures taken to reduce erosion, control siltation and sedimentation, and ensure that sediment-laden water does not leave a site.
Erosion and Sediment Control Plan (ESCP)	Plans, specification, and BMP details intended to prevent and control erosion and sediment related to the project construction activities.
Estuary	Area where fresh water meets salt water, (e.g., bays, mouths of rivers, salt marshes and lagoons). Estuaries serve as spawning and feeding grounds for large numbers of marine organisms and provide shelter and food for birds and wildlife.
Evapotranspiration	The combined loss of water from an area by evaporation from the soil surface and by transpiration of plants.
Excess Rainfall	The amount of rainfall that runs directly off an area.
Filter Blanket	A layer of sand or gravel designed to prevent the movement of fine-grained soils.
Filter Fabric	A woven or non-woven, water permeable material generally made of synthetic products, such as polypropylene, and used in erosion and sediment control applications to trap sediment or prevent the movement of fine soil particles. Often used instead of a filter blanket.
Flood Peak	The highest stage or greatest discharge attained by a flood event. Thus, peak stage or peak discharge.
Floodplain	The lowland that borders a stream and is subject to flooding when the stream overflows its banks.
Flood Stage	The stage at which overflow of the natural banks of a stream begins.
Floodway	A channel, either natural, excavated, or bounded by dikes and levees, used to carry flood flows.
Flume	A constructed channel lined with erosion-resistant materials used to convey water on steep grades without erosion.

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Fluvial Sediment	Those deposits produced by stream or river action.
Foundation Drain	A pipe, or series of pipes, that collects groundwater from the foundation or footing of structures to improve stability.
Freeboard	Vertical clearance between the normal operating level and the top of an open conduit or channel. Vertical distance between the design water surface elevation and the elevation of the barrier retaining the water.
Frequency of Storm (design storm frequency)	The anticipated period in years that will elapse before another storm of equal intensity and/or total volume will recur: a 10-year storm can be expected to occur on the average once every 10 years.
Gabion	A wire-mesh cage, usually rectangular, filled with rock and used to protect channel banks and other sloping areas from erosion.
Gauge	Device for measuring precipitation, water level, discharge, velocity, pressure, temperature, etc. (e.g., a rain gauge). A measure of the thickness of metal (e.g., diameter of wire or wall thickness of steel pipe).
Geotextile	Any permeable textile used with foundation, rock, earth, or any other geotechnical engineering-related material as an integral part of a man-made project, structure or system.
Grade	(a) The slope of a road, a channel, or natural ground. (b) The finished surface of canal bed, roadbed, top of embankment, or bottom of excavation; any surface prepared to a design elevation for the support of construction such as paving or the laying of a conduit. (c) To finish the surface of a canal bed, roadbed, top of embankment, or bottom of excavation, or other land area to a smooth, even condition.
Grade Stabilization Structure	A structure for the purpose of stabilizing the grade of a gully or other watercourse, thereby preventing further head-cutting or lowering of the channel bottom.
Gradient	Change of elevation, velocity, pressure, or other characteristics per unit length; slope.

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Grading	The cutting or filling of the land surface to a desired slope or elevation.
Grass	A member of the botanical family <i>Gramineae</i> , characterized by blade-like leaves that originate as a sheath wrapped around the stem.
Grassed Waterway	A natural or constructed waterway, usually broad and shallow, covered with erosion-resistant grasses and used to safely conduct surface water from an area.
Ground Cover	(Horticulture) Low-growing, spreading plants useful for low-maintenance landscape areas.
Habitat	The environment in which the life needs of a plant or animal are supplied.
Harmful Pollutant	A substance that has adverse effects on an organism. Adverse effects include immediate death, chronic poisoning, impaired reproduction, and other conditions.
Head	The height of water above any plain of reference. The energy, either kinetic or potential, possessed by each unit weight of a liquid, expressed as the vertical height through which a unit weight would have to fall to release the average energy possessed. Used in various compound terms such as pressure head or velocity head.
Head loss	Energy loss due to friction, eddies, changes in velocity, elevation or direction of flow.
Headwater	The source of a stream. The water upstream from a structure or point a stream.
Heavy Metals	Metals having a high specific gravity, present in municipal and industrial wastes, that pose long-term environmental hazards. Such metals include cadmium, chromium, cobalt, copper, lead, mercury, nickel, and zinc.

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Hydrologic cycle	The circuit of water movement from the atmosphere to the earth and back to the atmosphere through various stages or processes such as precipitation, interception, runoff, infiltration, percolation, storage, evaporation, and transpiration.
Hydrology	The science of the behavior of water in the atmosphere, on the surface of the earth, and underground.
Hyetograph	A graph of runoff rate, inflow rate or discharge rate past a specific point in time. A graph of flow versus time.
Impact basin	A device used to dissipate the energy of flowing water to reduce erosion. Generally constructed of concrete partially submerged with baffles to dissipate velocities.
Impervious	A surface that water can not easily penetrate. Can include graveled surface as well as paved surfaces.
Infiltration	The downward movement of water from the surface to the subsoil.
Inoculum	A culture of microorganisms intentionally introduced into a medium such as seed, soil, or compost.
Invert	The inside bottom of a culvert or other conduit.
Keyway	A cutoff trench dug beneath the entire length of a dam to cut through soil layers that may cause seepage and possible dam failure.
Laminar Flow	Flow at relatively slow velocity in which fluid particles slide smoothly along straight lines everywhere parallel to the axis of a channel or pipe.
Land Capability	The suitability of land for use. Land capability classification involves consideration of: the risks of land damage from erosion and other causes; and, the difficulties in land use owing to physical land characteristics, including climate.
Land Use Controls	Methods for regulating the uses to which a given land area may be put, including such things as zoning, subdivision regulation, and floodplain regulation.

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Legume	Any member of the pea or pulse family, which includes peas, beans, peanuts, clovers, alfalfas, sweet clovers, lespedezas, vetches, black locust, and kudzu. Practically all legumes are nitrogen-fixing plants.
Liquid Limit	The moisture content at which the soil passes from a plastic to a liquid state.
Loam	A soil textural classification in which the proportions of sand, silt, and clay are well balanced. Loams have the best properties for cultivation of plants.
Material Safety Data Sheets (MSDS)	Data sheets which come with materials. The sheets contain information such as pH, flashpoint, reactivity, first aid recommendations and indicate material classification and handling requirements.
MD	Machine direction; in textiles, the direction in a machine-made fabric parallel to the direction the fabric followed in the manufacturing machine.
Mean Depth	Average depth; cross-sectional area of stream or channel divided by its surface or top width.
Mean Velocity	The average velocity of a stream flowing in a channel or conduit at a given cross-section or in a given reach. It is equal to the discharge divided by the cross-section area of the reach.
Microclimate	The climate specifically associated with a very small area such as a crevice in a rock outcropping.
Mitigation	Means, in the following order of importance: <ol style="list-style-type: none">1. Avoiding the impact altogether by not taking a certain action or part of an action2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts.3. Rectifying the impact by repairing, rehabilitating or restoring the affected environment.4. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.5. Compensation for the impact by replacing, enhancing, or providing substitute resources or environments.

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Mulch	A natural or artificial layer of plant residue or other materials covering the land surface that conserves moisture, holds soil in place, aids in establishing plant cover, and minimizes temperature fluctuations.
National Pollutant Discharge Elimination System (NPDES)	The part of the Federal Clean Water Act that requires permits (NPDES permits) for point and nonpoint source discharges.
Natural Drainage	The flow patterns of storm water runoff over the land in its pre-development state.
Nitrogen Fixation	The conversion of atmospheric nitrogen into stable compounds usable by plants. Carried out by bacteria that colonize the roots of most legumes.
Nonpoint Source Pollution	Pollution that enters a water body from diffuse origins on the watershed and does not result from discernible, confined, or discrete conveyances.
Normal Depth	Depth of flow in an open conduit during uniform flow for the given conditions.
Nutrients	Essential chemicals for plant and animal growth. Excessive amounts can lead to water quality degradation and algae blooms. Some nutrients are toxic at high concentrations.
Open Drain	Natural watercourse or constructed open channel that conveys drainage water.
Orifice	An opening with closed perimeter, usually of regular form, through which water may flow, generally to control outlet flow.
Outfall	The point, location, or structure where wastewater or drainage discharge from a sewer to a receiving body of water.
Outlet	Point of water disposal from a stream, river, lake, tidewater, or artificial drain.

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Outlet channel	A waterway constructed or altered primarily to carry water from man-made structures, such as smaller channels, tiles, lines, and diversions.
Peak Discharge	The maximum, instantaneous flowrate during a storm, usually in reference to a specific design storm event.
Permeability	A generic term for the ability of a material to conduct a fluid.
Permeable Soils	Soil materials with filtration rate of 10 minutes per inch or better. Such soils allow infiltration and reduce or eliminate surface and storm water runoff. Classified as SCS (Soil Conservation Services) Type A.
Permeability Rate	<p>The rate at which water will move through a saturated soil. Permeability rates are classified as follows:</p> <ul style="list-style-type: none">• Very slow – Less than 0.06 inches per hour.• Slow – 0.06 to 0.20 inches per hour.• Moderately slow – 0.20 to 0.63 inches per hour.• Moderate – 0.63 to 2.0 inches per hour.• Rapid – 6.3 to 20.0 inches per hour.• Very rapid – More than 20.0 inches per hour.
Permittivity	For a geotextile, the volumetric flow rate of water per unit cross-section area, per unit head, under laminar flow conditions, in the normal direction through the fabric.
Plasticity Index	The numerical difference between the liquid limit and the plastic limit of soil; the range of moisture content within which the soil remains plastic.
Plastic Limit	The moisture content at which a soil changes from a semi-solid to a plastic state.
Point Source	Any discernible, confined and discrete conveyance, including but not limited to any pipe ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.

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Point Source Pollutants	Pollution that enters a water body resulting from discernible confined or discrete conveyances.
Pollution Control Plan (PCP)	Consists of PCP form, narrative, site map, and details describing measures to prevent pollution related to contractor activities. Special Provision 00170.30(c) spells out the contractor's responsibilities related to pollution control.
Pervious	Allowing movement of water.
Porosity	The volume of pore space in soil or rock.
pH	A numerical measure of hydrogen ion activity. The neutral point is pH 7.0. All pH values below 7.0 are acid and all above 7.0 are alkaline.
Rainfall Intensity	The rate at which rain is falling at any given instant, usually expressed in inches per hour.
Rational Method	A means of computing storm drainage flow rates, Q, by use of the formula $Q=CIA$, where C is a coefficient describing the physical drainage area, I is the rainfall intensity, and A is the area.
Receiving Stream	The body of water into which runoff or effluent is discharged.
Recharge Basin	A basin provided to increase infiltration for the purpose of replenishing groundwater supply.
Retention	The process of collecting and holding surface and storm water runoff with no surface overflow.
Retention/Detention Facility	A type of drainage facility designed either to hold water for a considerable length of time and then release it by evaporation, plant transpiration, or infiltration into the ground; or to hold surface and storm water runoff for a short period of time, and then release it to the surface and storm water management system.
Retention Structure	A natural or artificial basin that functions similar to a detention structure except that it maintains a permanent water supply.

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Riparian	Pertaining to banks of streams, wetlands, lakes or tide waters.
Riparian Rights	A principle of common law that requires any user of waters adjoining or flowing through his lands must so use and protect them that he will enable his neighbor to utilize the same waters undiminished in quantity and undefiled in quality.
Riser	The inlet portions of a drop inlet spillway that extends vertically from the pipe conduit barrel to the water surface.
Runoff	That portion of precipitation that flows from a drainage area on the land surface, in open channels, or in storm water conveyance systems.
Salmonid	A member of the fish family <i>salmonidae</i> . Includes Chinook, coho, chum, sockeye and pink salmon, cutthroat, steelhead, rainbow, Dolly varden, brook, kokanee and whitefish.
Sand	(a) Soil particles between 0.05 and 2.0 mm in diameter. (b) A soil textural class inclusive of all soils which are at least 70% sand and 15% or less clay.
Saturation	In soils, the point at which a soil or an aquifer will no longer absorb any amount of water without losing an equal amount.
Scour	The clearing and digging action of flowing water, especially the downward erosion caused by stream water in sweeping away mud and silt from the stream bed and outside bank of a curved channel.
Sediment	Fragmented material originated from weathering and erosion of rocks and unconsolidated deposits. The material is transported by, suspended in, or deposited by water.
Sedimentation	Deposition or formation of sediment.
Sediment Delivery Ratio	The fraction of the soil eroded from upland sources that actually reaches a stream channel or storage reservoir.
Sediment Discharge	The quantity of sediment, measured in dry weight or by volume, transported through a stream cross-section in a given time.

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	Sediment discharge consists of both suspended load and bedload.
Sediment Pool	The reservoir space allotted to the accumulation of sediment during the life of the structure.
Seedbed	The soil prepared by natural or artificial means to promote the germination of seed and the growth of seedlings.
Seedling	A young plant grown from seed.
Settling Basin	An enlargement in the channel of a stream to permit the settling of debris carried in suspension.
Sheet Erosion	Relatively uniform removal of soil from an area without the development of conspicuous water channels.
Sheetflow	Relatively uniform flow over a plane surface without concentration of water into conspicuous channels.
Shoot	The above ground portion of a plant.
Silt	(a) Soil fraction consisting of particles between 0.002 and 0.05 mm in diameter. (b) A soil textural class indicating more than 80% silt.
Siltation	Process by which a river, lake, or other water body becomes clogged with sediment. Siltation can clog gravel beds and prevent successful salmon spawning.
Slope	Degree of deviation of a surface from the horizontal; measured as a numerical ratio or percent. Expressed as a ratio, the first number is the horizontal distance (run) and the second is the vertical distance (rise), e.g., 2:1. Slope can also be expressed as the rise over the run. For instance, a 2:1 slope is a 50 percent slope.
Soil	The unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium for the growth of land plants.
Soil Horizon	A horizontal layer of soil that, through processes of soil formation, has developed characteristics distinct from the layers above and

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below.

Soil Profile	A vertical section of the soil from the surface through all horizons.
Soil Stabilization	Use of rock lining, vegetation, or other methods to prevent soil movement when loads are applied to the soil.
Soil Structure	The relation of particles or groups of particles that impart to the whole soil a characteristic manner of breaking; some types are crumb structure, block structure, platy structure, and columnar structure.
Soil Texture	The physical structure or character of soil determined by the relative proportions of the soil separates (sand, silt and clay) of which it is composed.
Spillway	A passage, such as a paved apron or channel, for surplus water over or around or through a dam or similar structure. An open or closed channel, or both, used to convey excess water from a reservoir. It may contain gates, whether manually or automatically controlled, to regulate the discharge of excess water.
Storm Frequency	The statistical time interval between major storms of predetermined intensity and runoff volumes for which storm sewers and other structures are designed and constructed to handle hydraulically without surcharge or backflow.
Storm Sewer	A sewer that carries storm water, surface drainage, street wash, and other wash waters, but excludes sewage and industrial wastes. Also called a storm drain.
Stormwater	That portion of precipitation that does not percolate into the ground or evaporate, but flows via overland flow, interflow, channels, or pipes into a defined surface water channel, or a constructed infiltration facility.
Stormwater Facility	A constructed component of a storm water drainage system, designed or constructed to perform a particular function, or multiple functions. Storm water facilities include pipes, swales, ditches, culverts, street gutters, detention basins, retention basins, constructed wetlands, and other facilities.

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Streambanks	The usual boundaries, not the flood boundaries, of a stream channel. Right and left banks are named facing downstream.
Stream Gauging	The quantitative determination of stream flow using gauges, current meters, weirs, or other measuring instruments at selected locations. See Gauging station.
Subcritical Flow	Flow at relatively low velocity where the wave from a disturbance can move upstream. Froude No. less than 1.
Subsoil	The B horizons of soils with distinct profiles. In soils with weak profile development, the subsoil can be defined as the soil below which roots do not normally grow.
Subsurface Drain	A pervious backfilled trench usually containing stone and perforated pipe for intercepting groundwater or seepage.
Sub-Watershed	A watershed subdivision of unspecified size that forms a convenient natural unit.
Surface Runoff	Precipitation that falls onto the surfaces of roofs, streets, the ground, etc., and is not absorbed or retained by that surface, but collects and runs off.
Suspended Solids	Organic or inorganic particles suspended in and carried by water: sand, mud, clay, as well as other solids.
Swale	An elongated depression in the land surface that is at least seasonally wet, is usually heavily vegetated, and is normally without flowing water. Swales conduct storm water into primary drainage channels and may provide some groundwater recharge.
Tile Drain	Pipe made of perforated plastic, burned clay, concrete, or similar material, laid to a designed grade and depth, to collect and carry excess water from the soil.
Tile Drainage	Land drainage by means of a series of tile lines laid at a specified depth, grade and spacing.

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Time of Concentration	The time period necessary for surface water runoff to reach the outlet of a sub-basin from the hydraulically most remote point in the tributary drainage area.
Toe of Dam	The base, or bottom, of the sloping faces of a constructed dam at the point of intersection with the natural ground surface - normally a much flatter slope. A dam has an inside toe (the impoundment or upstream side) and an outside toe (the downstream side).
Toe of Slope	The base or bottom of a slope at the point where the ground surface abruptly changes to a significantly flatter grade.
Topography	General term to include characteristics of the ground surface, such as plains, hills, mountains, degree of relief, steepness of slopes, and other physiographic features.
Topsoil	The dark-colored surface layer of the A horizon of a soil. When present it ranges in depth from a fraction of an inch to 2 or 3 feet; equivalent to the plow layer of cultivated soils. Commonly used to refer to the surface soil layer(s), enriched in organic matter and having textural and structural characteristics favorable for plant growth.
Total Solids	Solids in water, sewage, or other liquids including dissolved, filterable and nonfilterable solids. The residue left when moisture evaporates and the remainder is dried at a specified temperature.
Total Suspended Solids (TSS)	The entire amount of organic and inorganic particles dispersed in water. TSS are the larger particles in the water that are more easily removed by sedimentation than smaller particles that cause turbidity.
Toxicity	The characteristic of being poisonous or harmful to plant animal life. The relative degree or severity of this characteristic.
Trash Rack	A structural device used to prevent debris from entering a pipe spillway or other hydraulic structure.
Transmissivity	The volumetric flow rate per unit thickness under laminar flow conditions, in the in-plane direction of the fabric.

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Turbidity	Is caused by silt and clay particles, particles smaller than 0.02 mm, suspended in water. Measurement of turbidity can be done by turbidimeter, which measures light-beam scatter caused by small, suspended particles and converts it to NTU (national turbidity units).
Turf	Surface soil supporting a dense growth of grass and associated root mat.
Unified Soil Classification System	A classification system based on the identification of soils according to their particle size, gradation, plasticity index, and liquid limit.
Vactor Waste	The waste material in the bottom of a catch basin.
Vegetative Stabilization	Protection of erodible or sediment-producing areas with: <ul style="list-style-type: none">• Permanent seeding, producing long-term vegetative cover.• Short-term seeding, producing temporary vegetative cover.• Sodding, producing areas covered with a turf of perennial sod-forming grass.
Watercourse	A definite channel with bed and banks within which concentrated water flows, either continuously or intermittently.
Water Quality	A term used to describe the chemical, physical, and biological characteristics of water, usually in respect to its suitability for a particular purpose.
Water Resources	The supply of groundwater and surface water in a given area.
Watershed Area	All land and water within the confines of a drainage divide.
Water Table	The free surface of the groundwater. That surface subject to atmospheric pressure under the ground, generally rising and falling with the season, or from other conditions such as water withdrawal.
Weir	Device for measure or regulating the flow of water.
Weir Notch	The opening in a weir for the passage of water.

GLOSSARY OF TERMS

Wet Pond	A facility treating storm water by utilizing a permanent pool of water to remove conventional pollutants from runoff. Treatment mechanisms include sedimentation, biological uptake and plant filtration.
Wet Season	October to April.