

BEST MANAGEMENT PRACTICES MANUAL



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CHAPTER 6 GLOSSARY OF TERMS

The following definitions of best management practice terms were derived from various references to provide technical assistance, if needed, for ITD projects and projects using the Idaho Standards for Public Works Construction. Other agency definitions may supersede the definitions in this manual. Agency sources include the following:

- Natural Resource Conservation Service (NRCS)
- AASHTO
- Idaho Division of Environmental Quality BMP Manual
- EPA Office of Wastewater Management Manuals
- City of Boise Stormwater Treatment Manual
- ITD Standard Specifications

A	
ABUTMENT	(1) An anchorage for a bridge; the part of the structure that directly receives loading, thrust or pressure. (2) A structure that supports the end of a bridge span, and provides lateral support for embankment material on which the roadway rests immediately adjacent to the bridge.
ADJACENT STEEP SLOPE	A slope with a gradient of fifteen percent (15%) or steeper within 500 feet of the site (refer to NPDES permitting).
ADSORPTION	The adhesion of a substance to the surface of a solid or liquid; often used to extract pollutants by causing them to be attached to such adsorbents as activated carbon or silica gel. Hydrophobic or water-repulsing adsorbents are used to extract oil from waterways when oil spills occur. Heavy metals such as zinc and lead often attach onto sediment particles.
AGGREGATE	Processed mineral material consisting of crushed or screened rock.
ANGLE OF REPOSE	The maximum slope or angle at which loose cohesionless material remains stable.
ANGLE OF REPOSE (COMPACTED)	(Construction) The maximum slope or angle at which compacted material remains stable.
APRON	A floor or lining to protect a surface from erosion, i.e., at pipe inlets, the pavement below chutes, flumes, spillways, culverts, pipe outlets, or at the toes of dams.
ASPECT	The direction that a slope faces.
ANTI-SEEP COLLAR	A device constructed around a pipe or other conduit that is placed through a dam, levee, or dike for the purpose of reducing seepage losses and piping failures.

B	
BACKFILL	Soil or aggregate used to refill a trench or excavation.
BANKFULL DISCHARGE	A flow condition where the stream flow completely fills the stream channel to the top of the bank. In undisturbed watersheds, the discharge conditions occur every 1 ½ to 2 years and control the shape and form of natural channels.
BASE FLOOD	A flood having a one percent (1%) chance of being equaled or exceeded in any given year (also referred to as the 100-year flood).
BASE FLOOD ELEVATION	The water surface elevation of the base flood. The base flood elevation shall be referenced to the National Geodetic Vertical Datum of 1929 (NGVD).
BASIN PLAN	A plan and all implementing regulations and procedures including, but not limited to, land use management adopted by ordinance for managing surface and stormwater quality and quantity management facilities and features within individual subbasins.
BENCH	(1) A relatively level step excavated into earthen material on which fill is to be placed. (2) A relatively level step excavated into a slope to break the slope length for erosion control purposes.
BENEFICIAL USE	Any of the various uses which may be made of the water of an area, including but not limited to, domestic water supplies, industrial water supplies, agricultural water supplies, navigation, recreation in or on the water, cold water biota, salmonid spawning, wildlife habitat, and aesthetics.
BERM	A raised and elongated area of earth or rock for erosion control intended to divert or direct the flow of water.
BEST MANAGEMENT PRACTICE (BMP)	Physical, structural, managerial, and educational practices that, when used singly or in combination, reduce the quantity of eroded material and/or chemical and biological contaminants in stormwater runoff.
BIOENGINEERING	Restoration or reinforcement of slopes and stream banks with living plant materials.
BIOFILTRATION	The process of filtration, infiltration, adsorption, and biological uptake of pollutants in stormwater that takes place when runoff flows over and through vegetated areas.
BIOLOGICAL CONTROL	A method of controlling pest organisms by means of introduced or naturally occurring predatory organisms, sterilization, the use of inhibiting hormones, or other means, rather than by mechanical or chemical means.
BORROW	Earthen material acquired for the use in embankment or grading on a site.
BORROW SOURCE	The excavated area resulting from the extraction of borrow soil materials.
BROADCAST SEEDING	Scattering seed on the surface of the soil by hand (dry) or by hydro-application (wet). Contrast with drill seeding, which places seed in rows in the soil.

BUFFER	The zone contiguous to a sensitive area that is required for the continued maintenance, function, and structural ability of the sensitive area. The critical functions of a riparian buffer (those associated with an aquatic system) include shading, input of organic debris and coarse sediments, uptake of nutrients, stabilization of banks, interception of fine sediments, overflow during high water events, protection from disturbance by humans and domestic animals, maintenance of wildlife habitat, and room for variant of aquatic system boundaries over time due to hydrological or climatic effects. The critical functions of terrestrial buffers include protection of slope stability, attenuation of surface water flows from stormwater runoff, and precipitation/erosion control.
BUFFER STRIP	Strips of erosion-resistant vegetation between a waterway, or other natural area, and an area of more intensive use. Buffer strip areas decrease the velocity of stormwater runoff, which helps to prevent soil erosion.

C	
CN	Natural Resource Conservation Service's Curve Number (CN). The CN describes the runoff characteristics of a particular soil type.
CATCH BASIN	A chamber or well, usually built at a curb line of a street, for the admission of surface water to a sewer or subdrain. The catch basin has at its base a sediment sump designed to retain grit and detritus below the point of overflow.
CATCH LINE/POINT	The line or point where a severe slope intercepts a different or gentler slope.
CATCHMENT	Surface drainage area.
CAT EX	Categorical exclusion is used to classify a project where the environmental impacts are "not significant."
CHANNEL	A natural stream that conveys water, or a ditch or channel excavated for the flow of water.
CHANNEL EROSION	The widening, deepening, and headward cutting of small channels and waterways due to erosion caused by moderate to large flows.
CHANNEL STABILIZATION	Erosion prevention and stabilization of velocity distribution in various channels using liners, drops, weirs, check dams, vegetation, and other measures.
CHECK DAM	Small dam constructed in a ditch, channel, or other small watercourse to stabilize the grade, reduce water velocity, and control erosion.
CHUTE	An open channel for conveying high velocity water to a lower level without causing erosion.
CLAY	(1) A soil separate with mineral soil grains less than 0.002 in millimeter in equivalent diameter. (2) A soil texture group within the Unified Soils Classification System. (3) (Engineering) A fine-grained soil that has a high plasticity index in relation to the liquid limits.
CLAY LENS	A naturally occurring, localized area or layer of clay that acts as an impermeable barrier to runoff infiltration.
CLEARING	The removal of vegetation, structures, or other objects.

CLOSED DEPRESSION	An area which is low-lying and either has no, or such a limited, surface water outlet that during storm events, the area acts as a retention basin.
COHESION	The capacity of a soil to resist sheer stress, exclusive of functional resistance.
COMMENCEMENT OF CONSTRUCTION	The initial disturbance of soils associated with clearing, grubbing, grading, or excavating activities or other construction activities.
COMPACTION	The densification of soil or aggregate materials by mechanical means.
CONSTRUCTED WETLAND	A wetland that is constructed on a site that previously was not a wetland. Constructed wetland is designed specifically to remove pollutants from stormwater runoff.
CONDUIT	Any channel or pipe for transporting the flow of water.
CONTOUR	An imaginary line or a line on a map or chart that connects points of equal value, e.g. elevation of the land surface.
CONTOUR GRADING PLAN	A drawing showing an arrangement of contours, intended to integrate construction and topography, improve appearance, retard erosion, and improve drainage.
CONVENTIONAL POLLUTANTS	Contaminants (other than nutrients) such as bacteria, sediment, oil, and vehicle fluids.
CONVEYANCE	Any natural or man-made channel or pipe in which concentrated flows of water are transported.
CONVEYANCE SYSTEM	The drainage facilities, both natural and man-made, which collect, contain, and provide for the flow of surface and stormwater from the highest points on the land down to a receiving water. Natural elements of the conveyance system include swales and small drainage courses, streams, rivers, lakes, and wetlands. Man-made elements of the conveyance system include gutters, ditches, pipes, channels, chutes, flumes, and most retention/detention facilities.
COVER CROP	Plants that provide temporary erosion control and soil stabilization.
CREATED WETLAND	A wetland that is created on a site that previously was not a wetland. A created wetland replaces wetland habitat that was unavoidably destroyed during the design and construction phase of a project. The created wetland usually is not for the treatment of stormwater runoff as opposed to a constructed wetland.
CREEP	Slow mass movement of soil and soil material down relatively steep slopes primarily under the influence of gravity, but facilitated by saturation with water, strong winds, and/or alternate freezing and thawing.
CRITICAL HABITAT	(Engineering) Any public wildlife refuge and the specific areas within the geographical area occupied by a species of plant or animal, at the time it is listed as a threatened or endangered species, on which are found those physical or biological features essential to the conservation of the species. Critical habitat areas, as noted above, may require special management considerations or protection. Specific areas, outside the geographical area occupied by a species at the time it is listed, may upon a determination by the Director of the U.S. Fish and Wildlife Service, also become areas that are essential for the conservation of the species.
CULVERT	(1)(Engineering) Any structure under the roadway with a clear opening of 20 ft. or less measured along the center of the roadway. (2) A covered channel or large diameter pipe that directs water flow below the ground surface.

CUT	An excavation. The difference between a point on the original ground and a designated point of lower elevation on the final grade.
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D	
DAM	A barrier to impound or raise water for storage or diversion, to create a hydraulic head, to prevent gully erosion, or for the retention of soil, rock, or sediments.
DEBRIS	A term applied to the loose material arising from the disintegration of rocks, vegetative material, or trash that is transportable by water or wind.
DEPRESSION STORAGE	The amount of precipitation that is trapped in depressions on the surface of the ground.
DEQ	Idaho Department of Environmental Quality
DESIGNED SLOPE	A planned slope that has been designed based on engineering practices. For the purpose of Best Management Practices, a designed slope shall be based upon the parameters of soil or rock characteristics of the slope or embankment, geotechnical stability, and the topsoil stability. All project slopes should be checked to ensure that the slopes meet the requirements dictated by soil, rock, and topsoil characteristics.
DESIGN STORM	A rainfall event of specific return frequency and duration that the storm is used to calculate the runoff volume and peak discharge rate for a BMP.
DETENTION	The temporary storage of storm runoff in a BMP, which is used to control the peak discharge rates and which promotes the treatment of pollutants.
DETENTION STRUCTURES	Water holding structures, which control the rate that stormwater drains after a storm event, allowing for sedimentation of suspended solids and treatment of other pollutants.
DIKE	An embankment of earth or other material constructed to confine, divert or, control surface water in a drainage system.
DISCHARGE	A release or flow of water from a conveyance or storage facility.
DIVERSION	A diversion is a temporary or permanent structure consisting of a channel or ditch and a ridge or pipe constructed across a sloping land surface on the contour or with predetermined grades to intercept and divert surface runoff before it gains sufficient volume and velocity to cause erosion.
DRAIN	(1) A buried pipe or other conduit (closed drain). (2) A ditch for carrying off surplus surface or ground water (open drain).
DRAINAGE	The removal of excess surface water or groundwater from land by means of surface or subsurface drains.
DRAINAGE BASIN	A geographic and hydrologic sub-unit of a watershed.
DRAINAGE CHANNEL	A drainage pathway with a well-defined bed and banks indicating frequent conveyance of surface and stormwater runoff.
DRAINAGE COURSE	A pathway for watershed drainage characterized by wet soil vegetation and often with an intermittent flow.
DRAINAGE DIVIDE	The boundary between one drainage basin and another.

DRAINAGE EASEMENT	A legal encumbrance that is placed against a property's title to reserve specified privileges for the users and beneficiaries of the drainage facilities contained within the boundaries of the easement.
DRAINAGE PATTERN	The configuration or arrangement of streams within a drainage basin or other area.
DRILL SEEDING	Planting seed with a drill in relatively narrow rows, generally less than a foot apart. Contrast with broadcast seeding.
DROP-INLET SPILLWAY	Overfall structure in which water drops through a vertical riser connected to a discharge conduit.
DRY POND	A facility that provides stormwater quantity control by containing excess runoff in a detention basin, then releasing the runoff at allowable levels.

E	
EASEMENT (for CONSTRUCTION, DRAINAGE, PLANTING SLOPE, etc.)	A legal agreement to use or control the property of another for designated purposes.
ECTC	Erosion Control Technical Council
EMERGENCY SPILLWAY	A channel used to safely convey flood discharges in excess of the capacity of the principal outlet.
ENERGY DISSIPATER	A device used to reduce the excess energy of flowing water.
ERODIBLE MATERIAL or SURFACE	(Engineering) Exposed earthen material, except solid rock, that may be carried or displaced by wind, rainfall, snowmelt, or mechanically applied water.
EROSION	The wearing away of soil by wind and water. Erosion occurs naturally from weather or runoff, but land-clearing practices related to farming, residential or industrial development, road building, mining, or timber cutting can intensify the runoff.
EROSION AND SEDIMENT CONTROL	Any temporary or permanent measure(s) that is taken to reduce erosion, control siltation and sedimentation and minimize sediment-laden water.
EROSION AND SEDIMENT CONTROL PLAN	A plan which fully indicates necessary land treatment and structural measures, including a schedule of the timing for their installation, and that will effectively minimize soil erosion and sediment yield.
EXCAVATION	Any activity by which earth, sand, gravel, rock, or any other similar material is dug into, cut, quarried, uncovered, removed, displaced, relocated, and including the conditions resulting therefrom.
EXCELSIOR	Wood shavings. Originally a trade name.
EXFILTRATION	The downward movement of runoff through the bottom of an infiltration BMP into the soil layer, or the downward movement of water through soil.
EXISTING GRADE	The grade prior to grading operations.
EXISTING SITE CONDITIONS	The conditions (ground cover, slope, drainage patterns, etc.) of a site as they existed on the first day that the project entered the design phase.

EXPERIMENTAL BEST MANAGEMENT PRACTICE (BMP)	A BMP that has not been tested and evaluated in collaboration with federal, state and local governments, and technical experts.
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F	
FERTILIZER	Any organic or inorganic material of natural or synthetic origin that is added to a soil to supply certain elements essential to the growth of plants.
FIBRIC PEATS	Those peats in which the undecomposed fibrous organic materials are easily identifiable. The most common fibric peat is sphagnum moss, which is extremely acidic.
FILL	A deposit of earth material placed by artificial means; any act by which earth, sand, gravel, rock, or any other material is placed, pushed, dumped, pulled, transported, or moved to a new location above the natural surface of the ground or on top of the stripped surface, and including the conditions resulting therefrom. The difference in elevation between a point on the original ground and a designated point of higher elevation on the final grade.
FILTER BLANKET	A layer of sand and/or gravel designed to prevent the movement of fine-grained soils.
FILTER STRIP	Strip of vegetation that retards flow of runoff water, causing deposition of transported material, thereby reducing sediment flow.
FINISH GRADE	The final grade of the site that conforms to the plans and specifications or as approved.
FIRST FLUSH	A concept that says the first +/- inch of runoff from any given storm event will carry over 95% of the pollutants transported because of that event.
FLOATABLES	In stormwater, floatables are pollutants that may contain significant amounts of heavy metals, pesticides, and bacteria. Typically resulting from street refuse or industrial yard waste, floatables also create an aesthetic "eye sore" in waterways or detention basins.
FLOOD FREQUENCY	The frequency with which the flood of interest may be expected to occur at a site in any average interval of years. Frequency analysis defines the "-year flood" as being the flood that will, over a long period of time, be equaled or exceeded on the average once every "n" years.
FLOOD FRINGE	That portion of the floodplain outside of the floodway, which is covered by floodwaters during the base flood. The flood fringe is generally associated with standing water rather than rapidly flowing water.
FLOOD PEAK	The highest value of the stage or discharge attained by a flood; thus, peak stage or peak discharge.
FLOODPLAIN	The relatively flat area adjoining the channel of a natural stream, which has been or may be covered by floodwater.
FLOOD STAGE	The stage at which overflow of the natural banks of a stream begins.
FLOODWAY	The channel of the river or stream and those portions of the adjoining flood plains that is reasonably required to carry and discharge the base flood flow. The portions of the adjoining floodplains, which are considered "reasonably required" is defined by flood hazard regulations.

FORB	Any herbaceous plant other than a grass or sedge.
FREEBOARD	The vertical distance between the design water surface elevation and the elevation of the barrier that contains the water.
FREQUENCY OF STORM EVENT	The anticipated period of years that will elapse, based on average probability of storms in the design region, before a storm of a given intensity and/or total volume will recur, i.e., a 10-year storm can be expected to occur on the average of once every 10 years

G	
GABION	A wire basket or cage filled with rock or other non-erodible material.
GAGE	Device for registering precipitation, water level, discharge, velocity, pressure, temperature, etc.
GAGING STATION	A selected section of a stream channel equipped with a gage, recorder, or other facilities for determining stream flows.
GAUGE	A measure of the thickness of metal or other materials; e.g., diameter of wire, wall thickness of steel pipe, etc.
GENERAL PERMIT	A permit issued under the NPDES program to cover a certain class or category of stormwater discharges
GEOSYNTHETICS	A planar product manufactured from a polymeric material used with soil, rock, or other geotechnical-related materials as an integral part of a civil engineering project, structure, or system.
GEOTEXTILES	Permeable geosynthetic comprised solely of textiles.
GOOD HOUSEKEEPING	Keeping a clean construction site, including neat and orderly storage and disposal of chemicals, pesticides, fertilizers, fuels, regular garbage, rubbish, construction waste, and sanitary waste, that is being stored at the site. Prompt clean up and disposal of any spills of sediments, liquid, or dry materials that have occurred. Clean up of sediments and debris that have been tracked by vehicles onto nearby roadways or have been transported by wind or stormwater about the site.
GRADE	(1) The slope of a road, channel or natural ground. (2) The finished surface of a canal bed, roadbed, top of embankment, or bottom of the excavation. Any surface prepared for the support of construction, like paving or laying a conduit. (3) To finish the surface of a canal bed, roadbed, top of embankment, or bottom of excavation.
GRADIENT	Change of elevation, velocity, pressure, or other characteristics per unit length of slope.
GRADING	Any stripping, cutting, filling, or any combination thereof and shall include the land in its cut or fill condition.
GROUNDWATER	Surface water or subsurface water in the zone of saturation.
GROUND WATER TABLE	The free surface of the ground water or that surface subject to atmospheric pressure under the ground, generally rising and falling with the season, the rate of withdrawal, the rate of restoration and other conditions. The ground water table is seldom static.

GRUBBING	The process of removing roots, stumps and low growing vegetation.
GULLY	A channel or miniature valley cut by concentrated runoff but through which water commonly flows only during and immediately after heavy rains or during the melting of snow. The distinction between a gully and a rill is one of depth. A gully is sufficiently deep so that it would not be obliterated by normal tillage operations, whereas a rill is of lesser depth and would be smoothed by ordinary farm tillage.

H	
HABITAT	The place where a given organism lives.
HARMFUL POLLUTANT	A substance that has adverse effects to an organism including immediate death, chronic poisoning, impaired reproduction, cancer, or other effects.
HAZARDOUS WASTE	Waste products that can pose a substantial or potential hazard to human health or the environment when improperly managed. Possesses at least one of four characteristics (flammable, corrosivity, reactivity, or toxicity) or appears on special EPA lists.
HAUL ROAD	A temporary road, generally unimproved, used to transport material to and from construction sites, material sources, and waste areas.
HEAVY METALS	Metals of high specific gravity, present in municipal and industrial wastes, which pose long-term environmental hazards. Such metals may include cadmium, chromium, cobalt, lead, mercury, nickel, and zinc.
HEMETIC PEATS	Peats which are intermediate in their properties between those of the fibric and sapric categories. Hematic peats are typically more decomposed than fibric peats but less so than sapric. Similarly, hydraulic conductivity and color of hemic peat are generally intermediate between those of the other two peat categories.
HIGH-WATER MARK	Water level characteristic of highest seasonal flow elevation.
HIGHWAY	(Engineering) The entire right-of-way.
HYDRAULIC JUMP	Sudden rise in water level from a flow stage below critical depth to flow stage above critical depth, during which the velocity passes from supercritical to subcritical.
HYDROGRAPHS	A graph of runoff, inflow, or discharge rate, past a specific point over time.
HYDROLOGIC SOIL GROUPS	A soil characteristic classification system defined by the U.S. Natural Resource Conservation Service in which a soil may be categorized into one of four soil groups (A, B, C, or D) based upon infiltration rate and other properties.
HYDROLOGY	The science of the behavior of water in the atmosphere, on the surface of the earth, and underground.
HYDROPERIOD	A seasonal occurrence of flooding and/or soil saturation. The hydroperiod encompasses depth, frequency, duration, and seasonal pattern of inundation.
HYETOGRAPH	A graph of precipitation versus time.

I	
ILLICIT CONNECTION	Any physical connection to a publicly maintained storm drain system composed of non-stormwater that has not been permitted by the public entity responsible for the operation and maintenance of the system.
ILLICIT DISCHARGE	Any discharge to the storm drain system that is entirely composed of stormwater except discharges pursuant to a NPDES permit; discharges resulting from fire fighting activities, and discharges further exempted by a specific agency, municipality, or governmental ordinance.
IMPERMEABLE AREA	Surfaces, such as pavements, driveways, patios, parking lots, storage areas, sidewalks, rooftops, bedrock layers, or certain soil types which prevent or retard the infiltration of water into the soil.
INDIVIDUAL PERMIT	A permit issued under the NPDES program for a specific facility whereby the unique characteristics of that facility may be addressed through the imposition of special conditions or requirements.
INFILTRATION	The flow of a liquid through pores or other openings, connoting a flow into a soil.
INFILTRATION TRENCH	A drainage facility to dispose of surface and stormwater runoff designed to allow surface and stormwater runoff to be absorbed into the ground.
INJECTION WELL	Any excavation or artificial opening into the ground which meets the following three criteria: (1) it is a bored, drilled, or dug hole, is a driven mine shaft, or driven well point; and (2) it is deeper than its largest line surface dimension; and (3) is used for or intended to be used for injection of material.
INLET	The upstream end of any structure or conveyance through which water or any other substance may flow.
INTERCEPTOR DIKES OR BERMS	Dikes or berms (ridges of compacted soil) that are used to keep upslope runoff from crossing areas where there is a high risk of erosion. Inceptor dikes or berms reduce the amount and speed of flow and then divert the flow to a stabilized outlet.
INTERCEPTOR DITCH	(Diversion Channel) A channel or ditch excavated at the top of cuts, at the toe of slopes, or at other critical areas to intercept surface flows and direct the runoff to a stabilized outlet.
INVERT	The lowest point on the inside of a pipe or other conduit.
ISOPLUVIAL MAP	A map with lines representing constant depth of total precipitation for a given frequency.

K	
KEY	(1) A designated compacted backfill placed in an excavation beneath an embankment to prevent displacement. (2) The serration or roughening of a slope to anchor topsoil or other materials onto the surface.

L	
LAG TIME	The interval between the center of mass of the storm precipitation and the peak flow of the resultant runoff.
LAND DISTURBANCE	Any activity involving the clearing, grading, demolition, filling, and any other activity that causes land to be exposed to the danger of erosion.
LANDSLIDE	The failure of a slope in which the movement of soil mass takes place along interior surfaces or planes of stress.
LEACHATE	Liquid that percolates through soil and contains substances in solution or suspension.
LEACHING	Removal of the more soluble materials from the soil by percolating waters.
LEGUME	A member of the legume or pulse family, Leguminosae. One of the most important and widely distributed plant families. The fruit is a “legume” or pod that opens along two sutures when ripe. Flowers are usually papilionaceous (butterfly-like). Leaves are alternate, have stipules and are usually compound. Includes many valuable food and forage species, such as the peas, beans, peanuts, clovers, alfalfas, sweet clovers, lespedezas, vetches, and kudzu. Practically all legumes are nitrogen-fixing plants.
LEVEL SPREADERS	A shallow excavation at the outlet end of a conveyance with a level section for diffusing the outflow.
LINING	A protective covering in a channel, reservoir, or a conduit to withstand pressure, resist erosion, or otherwise improve conditions of flow.
LOW FLOW CHANNEL	An incised or paved channel from inlet to outlet in a dry basin, which is designed to carry low runoff flows and/or base flow, directly to the outlet without detention.

M	
MAJOR STORM	A precipitation event that is larger than the typically largest rainfall for a year.
MASS WASTING	The movement of large volumes of earth material downslope.
MAP	Mean Annual Precipitation
MEAN DEPTH	Average depth; cross-sectional area of a 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. The mean velocity is equal to the discharge divided by the cross-section area of the reach.
MEASURE	A portion or component part of a practice; e.g., flexible channel liner is a measure included in the channel protection BMP category.
MEDIAN	The portion of a divided highway separating the roads for traffic in opposite directions.

MITIGATION	<p>Mitigation means, in the following order of preference:</p> <ol style="list-style-type: none"> 1. Avoiding the impact altogether by not taking a certain action or part of an action. 2. 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.
MONITOR	To systematically and repeatedly measure or observe and document something in order to track changes.
MONITORING	The collection of data by various methods for the purpose of understanding natural systems and features, evaluating the impacts of development proposals on such systems, and assessing the performance of mitigation measures imposed as conditions of development.
MULCH	A natural or artificial material placed on exposed soil to provide protection from the elements or exposure to the elements. Mulch can provide desirable moisture and temperature relationships to facilitate plant growth and may prevent the unwanted invasion of undesirable vegetation.

N	
NGVD	National Geodetic Vertical Datum.
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)	The part of the federal Clean Water Act to control the discharge of pollutants to waters of the United States, which requires point source discharges to obtain permits, referred to as NPDES Permits.
NATIVE SPECIES	A species that is a part of an area's original fauna or flora.
NATURAL LOCATION	The location of those channels, swales, and other non-manmade conveyance systems as defined by the first documented topographic contours existing for the subject property, from either maps or photographs or such other means as appropriate.
NRCS	Natural Resource Conservation Service, U.S. Department of Agriculture.
NEW DEVELOPMENT	Includes the following activities: land-disturbing activities, structural development, including construction, installation or expansion of a building or other structure, and creation of impervious surfaces.
NONPOINT SOURCE POLLUTION	Pollution caused by diffuse sources that are not regulated as point sources and normally are associated with agriculture, silviculture and urban runoff, etc. Nonpoint source pollution does not result from the discharge at a specific, single location (such as a pipe), but generally results from land runoff, precipitation, atmospheric deposition, or percolation.

NORMAL DEPTH	The depth of uniform flow that is a unique depth of flow for any combination of channel characteristics and flow conditions.
NOTICE OF INTENT (NOI)	(1) An application to notify the EPA of a facilities intention to be covered by a general permit. The general permit exempts a facility from having to submit an individual or group application. (2) A notice filed with the EPA prior to the beginning of construction or ground disturbing operations.
NOTICE OF TERMINATION (NOT)	<i>The notification to the EPA that construction has ceased and the stabilization requirements have been met.</i>
NPDES PERMIT	An authorization, license or equivalent control document issued by the EPA or an approved state agency to implement the requirements of the NPDES program.
NURSE CROP	A temporary vegetative cover to facilitate the establishment of permanent vegetation.
NUTRIENTS	Essential chemicals needed by plants or animals for growth. Excessive amounts of nutrients can lead to degradation of water quality and algal blooms. Some nutrients can be toxic at high concentrations.

O

OFF-SITE	Any area lying upstream of the site that drains onto the site and any area lying downstream of the site to which the site drains.
OPERATOR	The party or parties that either individually or taken together meet the following criteria: (1) They have operational control over site specifications (including the ability to make modifications in specifications); and (2) They have day to day operational control of site activities necessary to ensure compliance with plan requirements and permit conditions.
OSHA	Occupational Safety and Health Administration. A branch of the United States federal government.
OUTLET (OUTFALL)	Point of water discharge from a stream, river, lake, tidewater, or artificial drain.
OUTLET PROTECTION	Stone, riprap, or aprons that are installed to reduce the velocity of water flows, thereby reducing erosion and scouring at outlets.
OVERBURDEN	(Engineering) Surface soil or granular material which may or may not be suitable for construction purposes and which overlays other material suitable for road or bridge construction.
OVERFLOW	A conveyance to direct water outflow.
OVERLAND FLOW	Water, usually storm runoff, flowing in a thin layer over the ground surface. Synonym: sheet flow.
OVERTOPPING	To flow over the limits of a containment or conveyance feature.

P	
PEAK DISCHARGE	The maximum instantaneous rate of flow during a storm event, usually in reference to a specific design storm event.
PEAT MATERIALS	Generally differentiated because of their state of decomposition, acidity, absorbency, botanical origin, and ash content. The USDA classification system is normally used for specifying peat for peat-sand filters. Under the USDA system, peats may be placed into one of three categories: fibric, hemic or sapric.
PERCOLATION	The downward movement of water through soil.
PERMEABILITY	The quality of a material that enables water or air to move through it. Usually expressed in terms of inches/hour or inches/day.
PERMEABILITY RATE	The rate at which water will move through a saturated soil.
PERMEABLE SOILS	Soil materials with a sufficiently rapid infiltration rate so as to greatly reduce or eliminate surface and stormwater runoff. These soils are generally classified as NRCS hydrologic soil Types A and B.
PERMIT	An authorization, license, or equivalent control document issued by EPA on an approved State agency to implement the requirements of an environmental regulation.
PERMIT ISSUING AUTHORITY (or PERMITTING AGENCY)	The EPA Regional office, which issues environmental permits to regulated activities.
PERVIOUS SURFACE	A vegetated area of the urban landscape where rainfall or water is intercepted by vegetation and infiltrates into soil or a humus layer.
PIPE SLOPE DRAIN	A flexible or rigid pipe that carries concentrated runoff from the top to the toe of a slope.
PLUNGE POOL	An open structure or excavation at the foot of an overflow, chute, slope drain, or spillway to reduce the energy of the descending stream. Also referred to as a stilling basin.
POINT SOURCE	A 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.
POLLUTANT	Any dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discharged equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into the air or water.
PRACTICABLE	Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.
PRACTICE	A category of activities that are utilized to control erosion and sediment discharge from a site, i.e., slope protection, retention basin, channel protection, etc.
PRECIPITATION	Any form of rain or snow.

PRETREATMENT	The removal of material such as gross solids, grit, grease and scum from flows prior to physical, biological, or physical treatment processes to improve treatability. Pretreatment may include screening, grit removal, stormwater and oil separators.
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R	
RAINFALL INTENSITY	The rate at which rain is falling at any given instant, usually expressed in millimeters or inches per hour.
REACH	A length of stream or river channel with uniform characteristics.
RECEIVING WATERS	Bodies of water or surface water systems receiving water from upstream constructed or natural systems.
RECHARGE	The flow downward to ground water from the infiltration of surface and stormwater runoff.
REGIONAL	An action, (for stormwater management purposes) which involves more than one discrete property.
REGIONAL DETENTION FACILITY	A stormwater quantity control structure designed to correct existing excess surface water runoff problems of a basin or subbasin. Also used when a detention facility detains stormwater runoff from a number of different businesses, developments, or areas within a catchment.
RELEASE DATE	The computed peak rate of surface and stormwater runoff for a particular design event and drainage area conditions.
REGULATORY FLOODWAY	(Engineering) The area regulated by federal, state or local requirements. The channel of a river or other watercourse and the adjacent land areas that must be reserved in an open manner, i.e., unconfined or unobstructed, either horizontally or vertically, to provide for the discharge of the base flood so the cumulative increase in water surface elevation is no more than a designated amount.
RETAINING STRUCTURE	A structure or system that retains earth materials.
RETAINING STRUCTURE, ENGINEERED	A retaining structure, the design of which, is supported by engineering analysis as well as plans and specifications that are signed and sealed by a Professional Engineer licensed in the State of Idaho.
RETENTION	The holding of runoff without release except by means of evaporation, infiltration, or bypass.
RETENTION BASIN	Measures, such as vaults, ponds, swales, or constructed wetlands, designed to maintain a pool of water.
RETURN INTERVAL	A statistical term for the average time of expected interval that an event of some kind will equal or exceed given conditions (e.g., a stormwater flow that occurs every 2 years).
REJET MATTRESS	A facing of stone or rip rap in wire baskets or cages, placed along the edge of a stream, lake, or in a channel to stabilize the area and protect it from erosion.
RILL	A small intermittent watercourse with steep sides, usually only a few inches deep, that is caused by an increase in surface water flow.

RILL EROSION	An erosion process in which small watercourses only several inches deep are formed. Rill erosion occurs mainly on recently disturbed soils.
RIPRAP	Durable, angular field or quarry stones of approved quality, sound, hard, free from seams and other structural defects that are placed for protection against the erosive action of water or wind.
RIPARIAN	Pertaining to the banks of streams, wetlands, lakes, or tidewater.
RISER	A vertical pipe attached to a horizontal drainpipe that is extended through a dike or berm and used to control the discharge.
ROADBED	(Engineering) That portion of the graded roadway upon which the subbase, base, surfacing, pavement, shoulders, curb, sidewalks, median, or other incidental facilities are constructed.
ROADSIDE	(Engineering) The area adjoining the outer edge of the roadway within the right-of-way. Areas between the roadways of a divided highway shall also be considered roadside.
ROADWAY	That portion of the highway within the limits of construction.
ROUNDING, SLOPE	The shaping or smoothing of slope contours to blend with the natural ground.
RUNOFF	The surface water flow or rate of flow over a given watershed after a storm event or snowmelt.
RUNON	Storm water surface flow or other surface flow that enters property other than where it originated.

S	
SAND	(1) A soil separate with particle size between 0.05 and 2.0 millimeters in diameter. (2) Any one of five soil separates: very coarse sand, coarse sand, medium sand, fine sand, and very fine sand. (3) A soil textural group within the Unified Soil Classification System.
SAPRIC PEAT	The most highly decomposed peat material. In sapric peats, the original plant fibers have mostly disappeared. The water-holding capacity of sapric peat is commonly less than that of either fibric or hemic peat. Sapric peats are typically very dark gray to black in color and are quite stable in physical properties.
SCOUR	Used to describe the wearing away of soils by high velocity water.
SEDIMENT	Solid material, both mineral and organic, that is in suspension and is being transported or has been moved from its site of origin by air, water, gravity, or ice.
SEDIMENT DETENTION BASIN	A measure that retains flows sufficiently to cause deposition or settling of transported sediment.
SEDIMENT LOAD	The quantity of sediment, which may be measured in dry weight or by volume, that is transported through a stream cross section in a given time. Sediment load consists of both load and bedload.
SEDIMENTATION	The process by which mineral or organic matter is removed from its site of origin, transported, and re-deposited by water, wind, ice, or gravity.

SEDIMENT TRAP BASIN	A basin, pond, or structure designed to retain runoff long enough or to create conditions that allow the sediments to settle.
SEEDBED	The soil prepared by natural or artificial means to facilitate the germination of seeds and the growth of seedlings.
SEEPAGE	(1) Water escaping through or emerging from the ground along an extensive line or surface identified as a seep as contrasted with a spring where the water emerges from a localized spot. (2) The process by which water percolates through the soil.
SHEET EROSION	The removal of a uniform layer from the surface by runoff water.
SHEET FLOW	Water, usually storm runoff, flowing in a thin layer over the ground surface. Synonym: overland flow.
SHORT CIRCUITING	The passage of runoff through a BMP in less than the design treatment time.
SHOULDER	(Engineering) The portion of the roadway contiguous with the traveled way for accommodation of stopped vehicles, for emergency use, and for lateral support of base and surface courses.
SIDE SLOPES	The slope of the side of a channel, dam, basin, or embankment. Side slope is customarily named with the horizontal distance first, then the vertical distance, e.g., 1.5H:1V meaning a horizontal distance of 1.5 units to each 1 unit vertical.
SILT	(1) A soil separate consisting of particles between 0.05 and 0.002 millimeters in equivalent diameter. (2) A soil textural group in the Unified Soil Classification System.
SILTATION	The process by which a body water becomes filled with sediment.
SILT FENCE	A temporary measure for sediment control usually consisting of posts with a geotextile and a wire backing, if necessary, stretched across the posts and embedded into the ground.
SITE, CONSTRUCTION	Any lot, or parcel of land, or contiguous combination thereof, under the same ownership, where the work is performed or permitted.
SLASH	The branches, bark, tops, cull logs, and broken or uprooted trees on the ground after logging or brush clearing.
SLOPE	The degree of deviation of a surface from the horizontal, usually expressed in a ratio, percent, or degrees. The face of an embankment, fill, or cut section.
SLOPE CHARACTERISTICS	Slopes may be characterized as concave (decreases in steepness in lower portion), uniform or convex (increase in steepness at the base). Erosion is strongly affected by shape and is ranked in order of increasing erodibility from concave to uniform to convex.
SLOPE DRAINS	Temporary or permanent devices that are used to carry water down cut or embankment slopes. May be pipe, pipe half-sections, paved, or special plastic lining.
SLOUGH	Localized downward movement of a shallow soil mass, generally less than one meter in thickness. Caused by saturation or wet conditions of the soil.
SLUMP	(1) Small rotational failure of the slope surface. (2) The downslope movement of a soil mass under wet or saturated conditions; a micro-landslide that produces a microrelief in soils.

SOD	A closely-knit ground cover composed primarily of grasses.
SOIL	(1) The unconsolidated mineral and organic matter on or near the surface of the earth. (2) (EPA) Any unconsolidated material that will pass through a 4.75 mm or smaller sieve.
SOIL GROUP	A classification of soils by the Natural Resource Conservation Service into four potential runoff groups. The groups range from A soils, which are very permeable and produce little or no runoff, to D soils, which are not very permeable and produce much more runoff.
SOIL PERMEABILITY	The ease with which gases, liquids, or plant roots penetrate or pass through a layer of soil.
SOIL SEPARATES	A Natural Resource Conservation Service classification of mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes of separates recognized in the United States are as follows: very coarse sand (2.0 to 1.0 millimeter); coarse sand (1.0 to 0.5 millimeter); medium sand (0.5 to 0.25 millimeter); fine sand (0.25 to 0.10 millimeter); very fine sand (0.10 to 0.05 millimeter); silt (0.005 to 0.002 millimeter); and clay (less than 0.02 millimeter).
SOIL STABILIZATION	The use of measures such as rock lining, vegetation, or other engineered structures to prevent the movement of soils.
SOIL STRUCTURE	The combination or arrangement of primary soil particles into secondary particles, units, or peds.
SOIL SURVEY	A general term for the systematic examination of soils in the field and in laboratories; their description and classification; the mapping of kinds of soil; the interpretation of soils according to their adaptability for various crops, grasses and trees; and their behavior under use or treatment for plant production or for other purposes.
SOIL TEXTURE	Soil textural class names of soils are based upon the relative percentages of sand, silt, and clay.
SOURCE CONTROL	A practice or structural measure to prevent sediment or pollutants from entering stormwater runoff.
SPILLWAY	A passage such as a paved apron or channel for surplus water over or around a dam or similar obstruction. An open or closed channel or both, used to convey excess water from a reservoir. It may contain gates, either manually or automatically controlled, to regulate the discharge of excess water.
SPRIGGING	The planting of a portion of the stem and/or root of plants or vegetation.
STABILIZATION	The proper placing, grading and/or covering of soil, rock, or earth to ensure its resistance to erosion, sliding, or other movement.

STANDARD INDUSTRIAL CLASSIFICATION (SIC)	<p>Classifies establishments by type of activity in which they are engaged for purposes of facilitating the collection, tabulation, presentation, and analysis of data relating to establishments. The standard industrial classification is used for promoting uniformity and comparability in the presentation of statistical data collected by various agencies of the United States Government, state agencies, trade associations, and private research organizations.</p> <p>The Standard Industrial Classification for establishments differs from a classification for enterprises (companies) or products. An enterprise consists of all establishments having more than fifty percent (50%) common direct or indirect ownership.</p> <p>Other classifications have been developed for use in the classification of commodities or products and for occupants.</p> <p>The Standard Industrial Classification is intended to cover the entire field of economic activities: agriculture, forestry, fishing, hunting and trapping, mining; construction; manufacturing; transportation, communications, electric, gas and sanitary services; wholesale trade; retail trade; finance, insurance and real estate; personal, business, professional, repair, recreation and other services; and public administration.</p>
STEEP SLOPE	Slopes steeper than 3H:1V.
STILLING BASIN	An open structure or excavation at the foot of an overflow, chute, slope drain, or spillway to reduce the energy of the descending stream. Also referred to as a plunge pool.
STORM DRAIN INLET PROTECTION	A filtering measure placed around any inlet or drain to trap sediment and protect the inlet. The storm drain inlet protection serves to prevent the silting-in of inlets, storm drainage systems, and receiving channels.
STORM DRAIN SYSTEM	Includes, but is not limited to, those facilities located within a municipality and owned or operated by a public entity by which stormwater may be collected and conveyed to waters of the United States, including any roads with drainage systems, public streets, inlets, curbs, gutters, piped storm drains, and retention and detention basins, which are not part of a Publicly Owned Treatment Works as defined at 40 CFR Section 122.2.
STORM FREQUENCY	The statistically probable time interval between major storms of predetermined intensity and volumes of runoff for which storm sewers and other structures are designed and constructed to handle hydraulically without supercharging and back-flooding, e.g., a 2-year, 10-year, or a 100-year storm event.
STORMWATER	Runoff from a storm event, or snowmelt that flows off the land surface from impervious surfaces or that cannot be adsorbed, evaporated, or naturally percolated into the soil.
STORMWATER QUALITY	A term used to describe the chemical, physical, and biological characteristics of stormwater.
STORMWATER QUANTITY	A term used to describe the volume characteristics of stormwater.
STORMWATER SITE PLAN	A plan that shows the measures that will be taken during and after project construction to provide erosion and sediment control and stormwater management.

STREAM GAGING	The quantitative determination of stream flow using gages, current meters, weirs, or other measuring instruments at selected locations.
STREAMS	Those areas where surface waters flow sufficiently to produce a defined channel or bed and bank. A defined channel or bed is indicated by hydraulically sorted sediments or the removal of vegetative litter or loosely rooted vegetation by the action of moving water. The channel or bed need not contain water year round.
STRIPPING	Any activity that significantly disturbs vegetated or otherwise stabilized soil surface including clearing and grubbing operations.
STRUCTURE	(Engineering) Structures shall consist of bridges, culverts, headwalls, retaining walls, pipelines, buildings, catch basins, manholes, and any incidental construction not otherwise defined herein.
SUBBASIN	Drainage areas that drain to a watercourse or water body named and noted on common maps and which is contained within a basin.
SUBGRADE	(Engineering) The surface of the roadbed or that surface noted on the plans as "subgrade".
SUSPENDED SOLIDS	Organic or inorganic particles that are suspended in and carried by water. The term includes sand, mud, and clay particles, as well as other solids in stormwater.
SUBSURFACE DRAIN	A perforated pipe or conduit placed beneath the surface of the ground at a designated depth and grade, used to drain an area, by either lowering the water table, or serving as a conveyance for springs or other subsurface water.
SURFACE WATER	All water naturally open to the atmosphere such as rivers, lakes, reservoirs, streams, wetlands, impoundments, seas, estuaries, springs, wells, or other collectors that are directly influenced by surface water.
SWALE	A depression in the land surface that is seasonally wet, vegetated, and normally without flowing water. Swales may direct stormwater flows into drainage channels and/or allow some of the stormwater to infiltrate into the ground.

T	
TACKIFIER	<i>A manufactured cohesive material that when applied to the surface of soil, bonds the soil particles together or when mixed with or applied on top of various mulches, bonds the mulch fibers together and/or to the soil surface. Can be used for dust control. Sometimes referred to as soil binder.</i>
TEMPORARY SEEDING	Seeding for the purpose of growing a short-term vegetative cover crop on disturbed sites.
TIME OF CONCENTRATION	The time necessary for surface runoff to reach the outlet of a subbasin from the hydraulically most remote point in the tributary drainage area.
TOE	(Engineering) The lower edge of a slope.
TOPOGRAPHY (LAY-OF-THE-LAND)	The configuration of the earth's surface, including the shape and position of its natural and man-made features.
TOPSOIL	The surface soil that is suitable for the germination of seeds and the support of vegetative growth.

TOPSOIL STABILITY	Stability of the topsoil layer with respect to erosion and minor sloughing.
TOTAL MAXIMUM DAILY LOAD (TMDL)	The sum of individual waste (sediment) load allocations for point sources and load allocations for nonpoint sources and natural background.
TOTAL SOLIDS	The solids in water, sewage, or other liquids, including the dissolved, filterable and non-filterable solids. The residue left when the moisture is evaporated and the remainder is dried at a specific temperature, usually 130°C.
TOTAL SUSPENDED SOLIDS (TSS)	A measure of the amount of particulate matter within a water sample.
TRANSPIRATION	The process by which water vapor is released into the atmosphere by the foliage or other parts of a living plant.
TREATMENT	The act of applying a procedure to remove sediment or pollutants.

U

UNSTABLE SLOPES	Those slopes that have failed in the past or exhibit a potential for failure.
URBANIZED AREA	Areas designated and identified by the U.S. Bureau of Census according to the following criteria: an incorporated place and density settled surrounding area that together have a maximum population of 50,000.
URBAN RUNOFF	Storm water that passes through and out of developed areas.
USEPA	The United States Environmental Protection Agency.

V

VEGETATIVE FILTER STRIP	A Best Management Practice measure that is designed to provide biofiltration of stormwater.
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W

WASTE (CONSTRUCTION)	Excessive materials (waste) resulting from highway or building construction.
WATER QUALITY STANDARDS	Minimum requirements of purity of water for various uses.
WATER QUALITY VOLUME	The water quality volume is generally used to define the amount of stormwater runoff from any given storm that should be captured and treated in order to remove a majority of stormwater pollutants on an average annual basis.
WATERS OF THE UNITED STATES	<p>(a) All waters, which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters, which are subject to the ebb and flow of the tide.</p> <p>(b) All interstate waters, including interstate “wetlands.”</p> <p>(c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, “wetlands,” sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including such waters:</p> <ol style="list-style-type: none"> 1. Which are or could be used by interstate or foreign travelers for

	<p>recreation or other purposes;</p> <p>2. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or</p> <p>3. Which are used or could be used for industrial purposes by industries in interstate commerce.</p> <p>(d) All impoundments of water otherwise defined as waters of the United States under this definition;</p> <p>(e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;</p> <p>(f) The territorial sea; and</p> <p>(g) “Wetlands” adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (d) of this definition.</p>
WATERSHED	All the land and water within the confines of a drainage basin(s).
WATER TABLE	The upper surface or top of the saturated portion of the soil or bedrock layer. The water table indicates the uppermost extent of ground water.
WETLANDS	Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support and, under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.
WET POND	A facility that treats stormwater for water quality by utilizing a permanent pool of water to remove sediments or pollutants from runoff through settlement, biological uptake or plant filtration.
WET TANKS/VAULTS	Underground storage facilities that treat stormwater for water quality.