DEFINITIONS

Note: *All definitions are used in this manual and are intended to be consistent with City Code Chapters 17.34, 17.36, 17.38, and 17.39. Some references to specific chapters or sections of the manual are included to help the user navigate the manual.*

Above-Ground Storage of Liquid Materials (**Section 4.8**): Places with exterior storage (either permanent or temporary) of liquid chemicals, food products, waste oils, solvents, process wastewaters, or petroleum products in above-ground containers, in quantities of 50 gallons or more.

Applicant: Any person, company, or agency that applies for a permit through the City of Portland. Includes all parties represented by the applicant.

Approved Receiving System (Discharge Point): Any system approved by BES to receive stormwater runoff or other discharges. Receiving systems include, but are not limited to, groundwater; onsite, offsite, or public stormwater, sanitary, or combined sewers; and waters of the state.

Batch Discharge**:** The controlled discharge of a discrete, contained volume of water or wastewater. Batch discharges into the public sewer system must conform to the requirements of City Code Chapters 17.34: Industrial Wastewater Discharges and 17.39: Stormwater Discharge.

BDS: Bureau of Development Services, City of Portland.

BES: Bureau of Environmental Services, City of Portland.

Bioretention Facility: A facility that uses soils and both woody and herbaceous plants to remove pollutants from stormwater runoff. Examples of bioretention facilities in this manual include vegetated swales, flow-through and infiltration planters, vegetated filters, and vegetated infiltration basins.

Bulk Fuel Terminal**:** Any area with its primary function dedicated to the storage and distribution of fuel to distributors (such as gas stations).

Bulk Material Transportation Route**:** Any path routinely used to transport materials regulated in **Section 4.6 & 4.7** onto, off of, or within a site.

Bulk Materials**:** Non-containerized materials.

Capacity: The flow volume or rate that a facility (e.g., pipe, pond, vault, swale, ditch, drywell, etc.) is designed to safely contain, receive, convey, reduce pollutants from, or infiltrate to meet a specific performance standard. Performance standards for pollution reduction, flow control, conveyance, and infiltration/discharge vary by facility, depending on location.

Catch Basin: A structural facility located just below the ground surface, used to collect stormwater runoff for conveyance purposes. Generally located in streets and parking lots, catch basins have grated lids, allowing stormwater from the surface to pass through for collection. Catch basins also include a sumped bottom and submerged outlet pipe (downturned 90 degree elbow, hood, or baffle board) to trap coarse sediment and oils.

Combined (or Combination) Sewers: Pipes that convey both sanitary sewage and stormwater.

Connection: Connecting a private sanitary sewage or drainage facility to the public sanitary sewer or drainage system.

***Containerized*:** The storage of any product, byproduct, or waste that is completely held or included on all sides, within a discrete volume or area.

***Containment*:** The temporary storage of potentially contaminated stormwater or process wastewater when a City sanitary sewer is not available for appropriate discharge.

Contaminated Dewatering: The discharge at the point of connection to a conveyance system after some level of treatment (such as vegetated water quality facility or device, air sparging for VOCs, electrocoagulation for solids, flocculation with Chitosan media for solids, or pH adjustment with weak caustics), when the resulting treated flow still does not meet local standards. Local standards include Portland Harbor or Columbia Slough source control strategies, and/or OAR 340 Table 33A, and/or City Code Chapter 17.39. If the discharge meets the specified regulatory criteria either before or after treatment, it will be considered for storm sewer discharge for discharge purposes under this manual. For discharge to a City sanitary or combined sewer system, the temporary or permanent discharge is considered contaminated if it does not meet the City's sanitary local limits per City Code Chapter 17.34 and therefore requires sanitary pretreatment permitting.

Control Structure: A device used to hold back or direct a calculated amount of stormwater to or from a stormwater management facility. Typical control structures

include vaults or manholes fitted with baffles, weirs, or orifices. See **Chapter 2** for information regarding the design of control structures.

Conveyance: The transport of stormwater or wastewater from one point to another.

Covered Vehicle Parking Areas (**Section 4.12**): Vehicle parking structures used to cover parked vehicles, other than single-level covers such as canopies, overhangs, and carports.

CSO (Combined Sewer Overflow): A discharge of a mixture of sanitary sewage and stormwater at a point in the combination sewer system designed to relieve surcharging flows.

DEQ: Oregon Department of Environmental Quality.

Design Storm: Design criteria used for sizing stormwater management facilities and their conveyance. Design storms are a combination of the design storm return period (which refers to the frequency) and the storm duration (which defines the rainfall depth or intensity). A prescribed hyetograph and total precipitation amount (for a specific duration recurrence frequency) are used to estimate runoff for a hypothetical storm for the purposes of analyzing existing drainage, designing new drainage facilities, or assessing other impacts of a proposed project on the flow of surface water. The minimum design storms are selected by the permit authority to reflect required levels of protection, the local climate, and catchment conditions.

Design Water Surface Elevation: The elevation at the upper limit of the maximum depth and the lower limit of the freeboard, which corresponds to the overflow elevation. It can be considered the initial outlet elevation or over-topping elevation of the facility where an outlet is not included. The design water surface elevation is the upper limit of the capacity of the stormwater facility. Each cell of the facility may have a different design water surface elevation. The design water surface elevation can be relative to the final discharge point, a known actual elevation onsite, or can be set to zero.

Detention Facility: A facility designed to receive and hold stormwater and release it at a slower rate, usually over a number of hours. The entire volume of stormwater that enters the facility is eventually released.

Detention Tank, Vault, or Oversized Pipe: A structural subsurface facility used to provide flow control for a particular drainage basin. See **Chapter 2** for information regarding the design of detention tanks, vaults, and oversized pipes.

Development: Any human-induced change to improved or unimproved real estate, whether public or private, for which a permit is required, including but not limited to construction, installation, or expansion of a building or other structure; land division; street construction; drilling; and site alteration such as dredging, grading, paving, parking or storage facilities, excavation, filling, or clearing. Development encompasses both new development and redevelopment.

Development Footprint: The new or redeveloped area covered by buildings or other roof structures and other impervious surface areas, such as roads, parking lots, and sidewalks.

Discharge Point: The ultimate destination for the stormwater leaving a particular site, also known as the stormwater disposal point. Discharge can be through:

1. onsite infiltration (surface infiltration facilities, drywells, sumps, and soakage trenches) or
2. offsite flow to ditches, drainageways, streams, public or private separate stormwater piped systems, or combination sewers. See **Sections 1.3 and 1.4** for information regarding discharge requirements.

Discharge Rate: The rate of flow expressed in cubic feet per second (cfs).

Disposal: See definition of *Discharge Point*.

Drainage Basin: A specific area that contributes stormwater runoff to a particular point of interest, such as a stormwater management facility, drainageway, wetland, river, or pipe.

Drainageway: An open linear depression, whether constructed or natural, that functions for the collection and drainage of surface water. It may be permanently or temporarily inundated.

Driveway**:** The area that provides vehicular access to a site. A driveway begins at the property line and extends into the site. In parking areas, the driveway does not include vehicular parking, maneuvering, or circulation areas.

Drywell: A structural subsurface cylinder or vault with perforated sides and/or bottom, used to infiltrate stormwater into the ground. See **Chapter 2** for information regarding the design and use of drywells.

Ecoroof: A lightweight low-maintenance vegetated roof system consisting of waterproofing material, growing medium, and vegetation; used in place of or over the top of a conventional roof. Ecoroofs provide stormwater management by capturing,

filtering, and evaporating rainfall. Ecoroofs are also called extensive green roofs. See **Chapter 2** for information regarding the design of ecoroofs.

Equipment and/or Vehicle Washing Facilities (**Section 4.9**): Designated equipment and/or vehicle washing or steam cleaning areas. This includes smaller activity areas, such as wheel-washing stations.

Extended Wet Detention Pond: A surface vegetated basin with a permanent pool of water and additional storage volume, used to provide pollution reduction and flow control for a particular drainage basin. The permanent pool of water provides a storage volume for pollutants to settle out. During large storm events, stormwater temporarily fills the additional storage volume and is slowly released over a number of hours, reducing peak flow rates. See **Chapter 2** for information regarding the design of extended wet detention ponds.

Exterior Materials Storage Area**:** Any outdoor materials storage location that is not completely enclosed by a roof and sidewalls.

Exterior Storage of Bulk Materials (**Section 4.10**): Outdoor areas used to stockpile materials that may erode and/or contribute pollutants to stormwater runoff.

Filter Fabric: A woven or non-woven water-permeable material, generally made of synthetic products such as polypropylene, used in stormwater management and erosion and sediment control applications to trap sediment or to prevent fine soil particles from clogging the aggregates.

Flow Control: The practice of limiting the release of peak flow rates and volumes from a site. Flow control is intended to protect downstream properties, infrastructure, and natural resources from the increased stormwater runoff peak flow rates and volumes resulting from development. See **Section 1.3**.

Flow Control Facility: Any structure or drainage device that is designed, constructed, and maintained to collect, retain, infiltrate, or detain surface water runoff during and after a storm event for the purpose of controlling post-development quantity leaving the site.

Flow-through Planter: A structural facility filled with topsoil and gravel and planted with vegetation. The planter is completely lined and sealed, with a perforated collection pipe placed under the soil and gravel. The planter has an overflow that must be directed to an acceptable discharge point. The stormwater planter receives runoff from impervious surfaces, which is filtered and retained for a period of time. See **Chapter 2** for information regarding the design of flow-through planters.

Freeboard: The vertical distance between the design water surface elevation (overflow elevation) and the elevation at which overtopping of the structure or facility that contains the water would occur.

Fuel Dispensing Facilities (**Section 4.7**): Areas where fuel is transferred from bulk storage tanks to vehicles, equipment, and/or mobile containers (including fuel islands, above-ground fuel tanks, fuel pumps, and the surrounding pad). This definition applies to large-sized gas stations as well as single-pump fueling operations.

***Greenstreets*:** Public stormwater facilities that accept runoff from the right-of-way. See definition of *Street Swale*.

Groundwater: Subsurface water that occurs in soils and geological formations that are fully saturated. Groundwater fluctuates seasonally and includes perched groundwater. Groundwater related discharges include, but are not limited to, subsurface water from site remediation and investigations, well development, Brownfield redevelopment, discharges from footing and foundation drains, rainwater infiltration into excavations, and subsurface water associated with construction or property management dewatering activities.

Growing Medium: Non-native soil mixture made up of sand, loam, and compost; used on the surface of stormwater facilities, as described in **Appendix F.3.**

***Hazardous Material*:** Any material or combination of materials that, because of the quantity, concentration, or physical, chemical, or infectious characteristics, may cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating reversible illness; or that may pose a present or potential hazard to human health, safety, or welfare, or to animal or aquatic life or the environment when improperly used, stored, transported or disposed of, or otherwise managed. For purposes of chemical regulation by this manual, moderate to high toxicity and confirmed human carcinogenicity are the criteria used to identify hazardous substances. (Note: This manual does not use the Resource Conservation and Recovery Act [RCRA] definition of hazardous. For the purpose of this manual, hazardous material is intended to include hazardous, toxic, and other harmful substances.)

Impervious Surface/Area: Any surface that has a runoff coefficient greater than 0.8 (as defined in the City's 2006 *Sewer and Drainage Facilities Design Manual*). Types of impervious surface include rooftops, traditional asphalt and concrete parking lots, driveways, roads, sidewalks, and pedestrian plazas. *Note:* Slatted decks are considered pervious. Gravel surfaces are considered pervious unless they cover impervious surfaces or are compacted to a degree that causes their runoff coefficient to exceed 0.8.

Infiltration: The percolation of water into the ground. Infiltration is often expressed as a rate (inches per hour), which is determined through an infiltration test.

Infiltration Planter: A structural facility filled with topsoil and gravel and planted with vegetation. The planter has on open bottom, allowing water to infiltrate into the ground. Stormwater runoff from impervious surfaces is directed into the planter, where it is filtered and infiltrated into the surrounding soil. See **Chapter 2** for information regarding the design of infiltration planters.

Infiltration Test: Infiltration tests are conducted to determine the feasibility of onsite stormwater percolation for every new development. Three methods are described in the manual: the falling head test, the double-ring infiltrometer test, and the pit test. See **Appendix F.2** for more information regarding requirements.

Inlet: 1) A structure located just below the ground surface, used to collect stormwater runoff. Generally located in streets and parking lots, inlets have grated lids, allowing stormwater from the surface to pass through for collection. 2) The initial entry into an overflow from a stormwater facility. 3) The point at which stormwater from impervious surfaces or conveyance piping enters a stormwater management facility.

Landscaping: See definition of *Stormwater Facility Landscaping*.

Long-term Dewatering: When groundwater is drained or pumped from a subsurface or surface system. For site development, long-term is defined as dewatering that occurs during the longevity of the constructed subsurface system. Other permanent dewatering activities are defined as greater than three (3) years. Long-term dewatering includes, but is not limited to, groundwater remediation systems and development/construction sites.

Manufactured Stormwater Treatment Technology: A proprietary structural facility or device used to remove pollutants from stormwater. Refer to **Chapter 2** and **Appendix B** for approval criteria related to manufactured stormwater treatment technologies.

Material Transfer Areas/Loading Docks (**Section 4.6**): Areas designed to accommodate a truck/trailer being backed up to or into them, and used specifically to receive or distribute materials to and/or from trucks/trailers. Includes loading/unloading facilities with docks, and large bay doors without docks.

Maximum Depth: The greatest vertical distance between the design water surface elevation (overflow elevation) and the top of the growing medium of a surface facility

or the base of a subsurface facility, which creates a reservoir capable of providing safe storage capacity of stormwater. Also referred to as the storage depth.

Offsite Stormwater Facility: Any stormwater management facility located outside the property boundaries of a specific development but designed to provide stormwater management benefits for that development.

Onsite Stormwater Facility: Any stormwater management facility located within the property boundaries of a specific development and designed to provide stormwater management benefits for that development.

Open Channel: A fluid passageway that allows part of the fluid to be exposed to the atmosphere.

Operations and Maintenance (O&M): The continuing activities required to keep stormwater management facilities and their components functioning in accordance with design objectives. See **Chapter 3** regarding operations and maintenance requirements for stormwater management facilities.

Outfall: A location where collected and concentrated water is discharged. Outfalls can include discharge from stormwater management facilities, drainage pipe systems, and constructed open channels. See **Chapter 2** for information regarding the design of outfalls.

Overflow Elevation: See definition for ***Design Water Surface Elevation.***

Partial Infiltration: When the total infiltration design storm (or another specified design storm as required) is unable to be completely percolated into the ground, a portion of the storm must be percolated for fulfillment of partial infiltration.

***Parking Area*:** The area of a site devoted to the temporary or permanent storage, maneuvering, or circulation of motor vehicles. Parking areas do not include driveways or areas devoted exclusively to non-passenger loading.

PDOT: Portland Department of Transportation

Perched Groundwater: As defined in the City's Water Pollution Control Facility (WPCF) permit: Groundwater held above the regional or main (permanent) water table by a less permeable underlying earth or rock material.

Permeable Pavement: See definition of *Pervious Pavement*.

Pervious: Any surface determined to have a runoff coefficient less than 0.8; a surface modified in a way to encourage infiltration of water (as defined in the City's 2006 *Sewer and Drainage Facilities Design Manual*).

Pervious Pavement: The numerous types of alternative pavement systems that allow stormwater to percolate through them and into subsurface drainage systems or the ground (e.g., permeable pavers, pervious asphalt, and pervious concrete). See **Chapter 2** for design requirements related to pervious pavement. Also referred to as porous or permeable pavement.

Pollutant: An elemental or physical material that can be mobilized or dissolved by water or air and creates a negative impact to human health and/or the environment. Pollutants include suspended solids (sediment), heavy metals (such as lead, copper, zinc, and cadmium), nutrients (such as nitrogen and phosphorus), bacteria and viruses, organics (such as oil, grease, hydrocarbons, pesticides, and fertilizers), floatable debris, and increased temperature.

Pollution Reduction: **The Pollution Reduction storm event is representative of 90% of the average annual rainfall and is used to size facilities for the pollution reduction stormwater management requirement (see Section 1.3.3). Refer to Appendix E for additional discussion of the pollution reduction storm precipitation. Also known as the water quality storm.**

Pollution Reduction Facility: A structure, landscape, or drainage device that is designed, constructed, and maintained to collect and filter, retain, or detain surface water runoff during and after a storm event for the purpose of maintaining or improving surface and/or groundwater quality.

Pollutants of Concern: Watershed-specific parameters identified by the Oregon Department of Environmental Quality (DEQ) as having a negative impact on the receiving water body. Pollutants of concern can include suspended solids, heavy metals, nutrients, bacteria and viruses, organics, volatiles, semi-volatiles, floatable debris, and increased temperature.

Porous Pavement: See definition of *Permeable Pavement*.

***Post-Construction Subsurface Drainage*:** Foundation, footing, or perimeter piping and drainage systems installed to collect subsurface water and convey it to a point of use or disposal. Subsurface water is defined as groundwater. See definition of G*roundwater*.

Post-Construction Surface Drainage: Piped storm drainage systems and stormwater facilities used to convey stormwater runoff to a point of use or disposal when construction is complete.

Post-Developed Condition: As related to new or redevelopment: A site's ground cover and grading after development.

Practicable: Available and capable of being done, as determined by the BES Director, after taking into consideration cost, resources, existing technology, and logistics in light of overall project purpose.

Pre-Developed Condition: As related to new development: A site's ground cover and grading prior to development. As related to redevelopment: A site's ground cover and grading prior to any development taking place (i.e., Lewis & Clark days).

Presumptive Approach Calculator (PAC): Calculation tool used to size vegetated stormwater facilities. The PAC assumes that the 2-year, 24-hour event must be met for water quality, and the 10-year, 24-hour event must be met for flow control. See **Appendix C** for the PAC and the User's Manual.

Public Facility: A street, right-of-way, sewer, drainage, stormwater management, or other facility that is either currently owned by the City or will be conveyed to the City for maintenance responsibility after construction. A new stormwater management facility that receives direct stormwater runoff from a public right-of-way becomes a public (City-maintained) facility unless the right-of-way is not part of the City's road maintenance system.

Public Works Project: Any development conducted or financed by a local, state, or federal governmental body, including local improvements and public improvements, as defined in City Code Title 17: Public Improvements.

Raingarden: See definition of *Vegetated Infiltration Basin.*

Rainwater Harvesting: The practice of collecting and using stormwater for purposes such as irrigation and toilet flushing. For the purpose of this manual, harvesting is a stormwater facility only if the system is used for water quality or flow control, as determined by BES. When harvesting is proposed as a stormwater facility, the Performance Approach must be used to show how Chapter 1 requirements of the manual are met. See **Chapter 2** for information regarding rainwater harvesting.

Rational Method: The method used to estimate the peak rate of runoff from a drainage basin, using the formula: Q=CiA. Q is the peak discharge, cubic feet per second; C is

the runoff coefficient; i is the rainfall intensity, inches per hour; and A is the drainage area, acres (as defined in the City's 2006 *Sewer and Drainage Facilities Design Manual*).

Redevelopment: Any development that requires demolition or complete removal of existing structures or impervious surfaces at a site and replacement with new impervious surfaces. Maintenance activities such as top-layer grinding, repaving (where all pavement is not removed), and reroofing are not considered to be redevelopment. Interior remodeling projects and tenant improvements are also not considered to be redevelopment. Utility trenches in streets are not considered to be redevelopment unless more than 50 percent of the street width is removed and repaved.

Regrading: Applies to areas that are excavated to a depth at or below the top of the subgrade and replaced with new pavement. The subgrade is taken to be the crushed surfacing directly below the pavement layer (asphalt concrete pavement, Portland cement concrete pavement, bituminious surface treatment). If the removal and replacement of existing pavement goes below the pavement layer, the new surfacing is considered to be regrading.

Repaving: Applies to areas that are not excavated to a depth at or below the top of the subgrade (pavement repair work included) and are replaced in kind. The subgrade is taken to be the crushed surfacing directly below the pavement layer (asphalt concrete pavement, Portland cement concrete pavement, bituminious surface treatment). If the removal and replacement of existing pavement does not go below the pavement layer, as with typical PCCP grinding or ACP planing, the new surfacing is considered to be repaving.

Reservoir: The volume available for holding runoff prior to overflow. For vegetated surface facilities it is defined as the volume between the top of the growing medium, the design water surface elevation (overflow elevation), and the edges of the facility (whether sloped or vertical).

Retention Facility: A facility designed to receive and hold stormwater runoff. Rather than storing and releasing the entire runoff volume, retention facilities permanently retain a portion of the water onsite, where it infiltrates, evaporates, or is absorbed by surrounding vegetation. In this way, the full volume of stormwater that enters the facility is not released offsite.

Retrofit: Installation of a new stormwater facility to treat stormwater from existing impervious area, including, but not limited to, roofs, patios, walkways, and driving or parking surfaces.

***Roadway*:** Any paved surface used to carry vehicular traffic (cars/trucks, forklifts, farm machinery, or any other large machinery).

Roof Garden: A heavyweight roof system of waterproofing material with a thick soil and vegetation cover. Roof gardens can provide stormwater management by capturing, filtering, and evaporating rainfall. See the ecoroof section of **Chapter 2** for information regarding the design of roof gardens as stormwater management facilities.

Runoff Coefficient: A unitless number between zero and one that relates the average rate of rainfall over a homogenous area to the maximum rate of runoff, as defined in Table 6.5 of the City's 2006 *Sewer and Drainage Facilities Design Manual*.

Safety Factor: A safety factor is based on a risk/value assessment that evaluates the specific conditions anticipated in an application, the failure mode of the construction material, unexpected construction deficiencies, and potential cost of system failure. The safety factor is applied to the maximum performance limit to calculate a lower value, which is then used as a design value. A safety factor must be used to provide reasonable assurance of acceptable long-term system performance.

Sand Filter: A structural facility with a layer of sand, used to filter pollutants from stormwater. See **Chapter 2** for information regarding the design of sand filters.

Santa Barbara Urban Hydrograph (SBUH): A hydrologic method used to calculate runoff hydrographs. See **Appendix C** for information regarding the use of the SBUH method.

Seasonally High Groundwater Level: As defined in the City's Water Pollution Control Facility (WPCF) permit: The highest level that the permanent groundwater table or perched groundwater may reach on a seasonal basis.

Soakage Trench: A linear excavation backfilled with drain rock, used to filter pollutants and infiltrate stormwater. See **Chapter 2** for information regarding the design of soakage trenches.

Solid Waste Containers: Compactors, dumpsters, compost bins, grease bins, and garbage cans.

Solid Waste Storage Area: An indoor or outdoor area where solid waste containers are collectively stored **(Section 4.5)**. Solid wastes include both food and non-food waste or recycling.

Stormwater: Water runoff that originates as precipitation on a particular site, basin, or watershed. Also referred to as runoff.

Stormwater Facility Landscaping: The vegetation (plantings), topsoil, rocks, and other surface elements associated with stormwater management facility design. See **Chapter 2 and Appendix F** for stormwater facility landscaping requirements.

Stormwater Management: The overall culmination of techniques used to reduce pollutants from, detain, retain, or provide a discharge point for stormwater to best preserve or mimic the natural hydrologic cycle, to accomplish goals of reducing combined sewer overflows or basement sewer backups, or to fit within the capacity of existing infrastructure.

Stormwater Management Facility: A technique used to reduce pollutants from, detain and/or retain, or provide a discharge point for stormwater to best preserve or mimic the natural hydrologic cycle, to accomplish goals of reducing combined sewer overflows or basement sewer backups, and/or to fit within or improve the capacity of existing infrastructure.

Stormwater Reuse: See definition of *Rainwater Harvesting*.

Street Swale: A vegetated swale located next to a public or private street for the purpose of managing stormwater. See **Chapter 2** for information regarding the design of street swales. Also known as *GreenStreets*.

Sump: A large public drywell (see definition) used to infiltrate stormwater from public streets. Sumps are generally 48 inches in diameter and 30 feet deep. The term *sump* is also used in reference to any volume of a facility below the point of outlet, in which water can accumulate. See **Chapter 2** for information regarding the use and design of sumps.

Surcharge: A flow condition, i.e. pressure flow, resulting when the downstream hydraulic capacity is less than the upstream inflow causing water to accumulate and rise above the inside crown of a pipe or facility. It also refers to the greatest measured distance from the water surface above the pipe to the pipe crown.

Surface Conveyance: The transport of stormwater on the ground surface from one point to another.

Surface Infiltration Facility: A vegetated facility designed to receive and infiltrate stormwater runoff at the ground surface to meet stormwater infiltration/discharge

requirements. Pollution reduction and flow control requirements can also be met with surface infiltration facilities.

***Temporary Dewatering*:** When groundwater or stormwater is temporarily drained or pumped from a subsurface or surface system. For site development, temporarily is defined as the duration of time during the preconstruction or construction site work. Other temporary dewatering activities are defined as less than three (3) years. Specific activities include, but are not limited to, construction dewatering, dewatering wells, trench systems or sediment control ponds. Remediation sites are covered under the temporary connections definition in Title 17.36.

Temporary Structure: A structure shall be deemed temporary if it is a separate and distinct entity from all other structures and it is created and removed in its entirety, including impervious area associated with the structure, within a continuous period of three years or less. Paved areas such as parking lots that are developed alongside structures are not considered temporary for the purpose of this manual.

Tenant Improvements: Structural upgrades made to the interior or exterior of buildings. Tenant improvements may trigger **Chapter 4** source controls if they take place on sites with specified activities.

Time of Concentration (T of C or TOC): The amount of time it takes stormwater runoff to travel from the most distant point (measured by travel time) on a particular site or drainage basin to a particular point of interest. See **Appendix C** for calculations related to time of concentration.

Topsoil: See *Growing Medium*. Also refer to the 2007 City of Portland *Standard Construction Specifications*.

Total Infiltration: When the entire designated design storm is able to be completely percolated into the ground.

Total Suspended Solids (TSS): Matter suspended in stormwater, excluding litter, debris, and other gross solids exceeding 1 millimeter in diameter.

Underground Injection Control (UIC): A federal program under the Safe Drinking Water Act, delegated to the Oregon Department of Environmental Quality (DEQ), which regulates the injection of water below ground. The intent of the program is to protect groundwater aquifers, primarily those used as a source of drinking water, from contamination. See **Section 1.4** for information regarding the UIC program.

Vegetated Facilities: Stormwater management facilities that rely on plantings as an integral component of their functionality. Plantings can provide wildlife habitat and enhance many facility functions, including infiltration, pollutant removal, water cooling, flow calming, and erosion prevention.

Vegetated Filter: A gently sloping, densely vegetated area used to filter, slow, and infiltrate sheetflow stormwater. See **Chapter 2** for information regarding the design of vegetated filters.

Vegetated Infiltration Basin: A vegetated facility that temporarily holds and infiltrates stormwater into the ground. See **Chapter 2** for information regarding the design of vegetated infiltration basins.

Vegetated Swale: A long and narrow, trapezoidal or semicircular channel, planted with a variety of trees, shrubs, and grasses. Stormwater runoff from impervious surfaces is directed through the swale, where it is slowed and in some cases infiltrated, allowing pollutants to settle out. Check dams are used to create small ponded areas to facilitate infiltration. See **Chapter 2** for information regarding the design of vegetated swales.

Water Body: Water bodies include coastal waters, rivers, sloughs, continuous and intermittent streams and seeps, ponds, lakes, aquifers, and wetlands.

Water Quality: See definition of *Pollution Reduction*.

Water Quality Limited [303(d) listing]: Waters identified by DEQ that do not meet water quality standards. Total Maximum Daily Load (TMDL) must be developed for these waters to satisfy Clean Water Act (CWA) requirements. The most recent EPA-approved Section 303(d) list for Oregon can be found at **www.deq.state.or.us/wq/assessment/assessment.htm.**

Water Course: A channel in which a flow of water occurs, either continuously or intermittently, with some degree of regularity. Water courses may be either natural or artificial.

Water Table: As defined in the City's Water Pollution Control Facility (WPCF) permit: The upper surface of an unconfined water body, the surface of which is at atmospheric pressure and fluctuates seasonally. The water table is defined by the levels at which water stands in wells that penetrate the water body.

Wellhead Protection Area: An abbreviated term usually used to refer to the Columbia South Shore Well Field Wellhead Protection Area (see **Section 1.3.4 and Exhibit 1.7**).

The Water Bureau regulates the storage, use, and transportation of hazardous/toxic materials in this groundwater resource protection area.

Wet Pond: A vegetated basin with a permanent pool of water, used to provide pollution reduction for a particular drainage basin. The permanent pool of water provides a storage volume for pollutants to settle out. See **Chapter 2** for information regarding the design of wet ponds.

Wetland: An area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands include swamps, marshes, bogs, and similar areas, except those constructed as pollution reduction or flow control facilities. Specific wetland designations are made by the U.S. Army Corps of Engineers and the Oregon Department of State Lands.