

# Stormwater Glossary & Definitions

## Adequate channel

A channel that will convey the designated frequency storm event without overtopping the channel bank nor causing erosive damage to the channel bed or banks.

## Aquatic bench

A 10- to 15-foot wide bench around the inside perimeter of a permanent pool that ranges in depth from zero to 12 inches. Vegetated with emergent plants, the bench augments pollutant removal, provides habitats, conceals trash and water level fluctuations, and enhances safety.

## Best management practice (BMP)

Schedules of activities, prohibitions of practices, including both a structural or nonstructural practice, maintenance procedures, and other management practices to prevent or reduce the pollution of surface waters and groundwater systems from the impacts of land-disturbing activities. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

## Alternate "Best management practice (BMP)"

A practice or combination of practices that are the most effective and practicable (including technological, economic, and institutional considerations) means of controlling point or nonpoint source pollutants at levels compatible with environmental quality goals.

## Bioretention basin

A water quality BMP engineered to filter the water quality volume through an engineered planting bed, consisting of a vegetated surface layer (vegetation, mulch, ground cover), planting soil, and sand bed, and into the in-situ material.

## Bioretention filter

A bioretention basin with the addition of a sand filter collector pipe system beneath the planting bed.

## Channel

A natural or manmade waterway.

## Constructed wetlands

Areas intentionally designed and created to emulate the water quality improvement function of wetlands for the primary purpose of removing pollutants from stormwater.

## Construction activity

Any clearing, grading or excavation associated with large construction activity or associated with small construction activity.

## CWA

The federal Clean Water Act (33 USC §1251 et seq.)

## EPA

The United States Environmental Protection Agency.

## Grassed swale

An earthen conveyance system which is broad and shallow with erosion resistant grasses and check dams, engineered to remove pollutants from stormwater runoff by filtration through grass and infiltration into the soil.

### **Illicit discharge**

Generally means any discharge to a municipal separate storm sewer that is not composed entirely of stormwater, except discharges pursuant to a VPDES or VSMP permit (other than the VSMP permit for discharges from the municipal separate storm sewer) or discharges resulting from fire fighting activities.

### **Impervious cover**

A surface composed of any material that significantly impedes or prevents natural infiltration of water into soil. Impervious surfaces include, but are not limited to, roofs, buildings, streets, parking areas, and any concrete, asphalt, or compacted gravel surface.

### **Infiltration facility**

A stormwater management facility that temporarily impounds runoff and discharges it via infiltration through the surrounding soil. While an infiltration facility may also be equipped with an outlet structure to discharge impounded runoff, such discharge is normally reserved for overflow and other emergency conditions. Since an infiltration facility impounds runoff only temporarily, it is normally dry during nonrainfall periods. Infiltration basin, infiltration trench, infiltration dry well, and porous pavement shall be considered infiltration facilities.

### **Land disturbance or Land-Disturbing Activity**

A manmade change to the land surface that potentially changes its runoff characteristics including any clearing, grading, or excavation associated with a construction activity regulated pursuant to the federal Clean Water Act.

### **Large municipal separate storm sewer system**

Generally means all municipal separate storm sewers that are located in an incorporated place with a population of 250,000 or more as determined by the latest decennial census by the Bureau of Census.

### **Local stormwater management program or Local Program**

A statement of the various methods employed by a locality to manage the quality and quantity of runoff resulting from land-disturbing activities and shall include such items as local ordinances, permit requirements, policies and guidelines, technical materials, inspection, enforcement, and evaluation consistent with the Virginia Stormwater Management Program. The ordinance shall include provisions to require the control of after-development stormwater runoff rate of flow, the proper maintenance of stormwater management facilities, and minimum administrative procedures.

### **Municipal separate storm sewer**

Generally means a conveyance or system of conveyances otherwise known as a municipal separate storm sewer system, including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains.

### **MS4 or Municipal Separate Storm Sewer System**

All separate storm sewers that are defined as "large" or "medium" or "small" municipal separate storm sewer systems or designated under 4VAC50-60-380 A 1.

### National Pollutant Discharge Elimination System (NPDES)

The national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements under §§307, 402, 318, and 405 of the CWA. The term includes an approved program.

### Nonpoint Source Pollutant Runoff Load or Pollutant Discharge

The average amount of a particular pollutant measured in pounds per year, delivered in a diffuse manner by stormwater runoff.

### Outfall

When used in reference to municipal separate storm sewers, a point source at the point where a municipal separate storm sewer discharges to surface waters and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other surface waters and are used to convey surface waters.

### Percent impervious

The impervious area within the site divided by the area of the site multiplied by 100.

### Point source

Any discernible, confined, and discrete conveyance including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

### Pollutant

Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 USC §2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.

### Pollution

Such alteration of the physical, chemical or biological properties of any state waters as will or is likely to create a nuisance or render such waters...

1. Harmful or detrimental or injurious to the public health, safety or welfare, or to the health of animals, fish or aquatic life
2. Unsuitable with reasonable treatment for use as present or possible future sources of public water supply
3. Unsuitable for recreational, commercial, industrial, agricultural, or other reasonable uses, provided that

- An alteration of the physical, chemical, or biological property of state waters, or a discharge or deposit of sewage, industrial wastes or other wastes to state waters by any owner which by itself is not sufficient to cause pollution, but which, in combination with such alteration of or discharge or deposit to state waters by other owners, is sufficient to cause pollution;
- The discharge of untreated sewage by any owner into state waters; and
- Contributing to the contravention of standards of water quality duly established by the State Water Control Board, are "pollution" for the terms and purposes of the Virginia Stormwater Management Act.

### Post-development

Refers to conditions that reasonably may be expected or anticipated to exist after completion of the land development activity on a specific site or tract of land.

### Pre-development

Refers to the conditions that exist at the time that plans for the land development of a tract of land are approved by the plan approval authority. Where phased development or plan approval occurs (preliminary grading, roads and utilities, etc.), the existing conditions at the time prior to the first item being approved or permitted shall establish predevelopment conditions.

### Runoff or Stormwater Runoff

The portion of precipitation that is discharged across the land surface or through conveyances to one or more waterways.

### Sand filter

A contained bed of sand that acts to filter the first flush of runoff. The runoff is then collected beneath the sand bed and conveyed to an adequate discharge point or infiltrated into the in-situ soils.

### Small Municipal Separate Storm Sewer System or Small MS4

All separate storm sewers that are (i) owned or operated by the United States, a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under §208 of the CWA that discharges to surface waters.

### Source

Any building, structure, facility, or installation from which there is or may be a discharge of pollutants.

### Stormwater

Precipitation that is discharged across the land surface or through conveyances to one or more waterways and that may include stormwater runoff, snow melt runoff, and surface runoff and drainage.

### Stormwater Detention Basin or Detention Basin

A stormwater management facility that temporarily impounds runoff and discharges it through a hydraulic outlet structure to a downstream conveyance system. While a certain amount of outflow may also occur via infiltration through the surrounding soil, such amounts are negligible when compared to the outlet structure discharge rates and are, therefore, not considered in the facility's design. Since a detention facility impounds runoff only temporarily, it is normally dry during non-rainfall periods.

### Stormwater Extended Detention Basin or Extended Detention Basin

A detention basin that temporarily impounds runoff over a specified period of time to a downstream conveyance system for the purpose of water quality enhancement or stream channel erosion control.

### Stormwater Extended Detention Basin-Enhanced or Extended Detention Basin-Enhanced

An extended detention basin modified to increase pollutant removal by providing a shallow marsh in the lower stage of the basin.

### Stormwater management facility

A device that controls stormwater runoff and changes the characteristics of that runoff including, but not limited to, the quantity and quality, the period of release or the velocity of flow.

### Stormwater management plan

A document containing material for describing how existing runoff characteristics will be maintained by a land-disturbing activity and methods for complying with the requirements of the local program or this chapter.

### SWMP or Stormwater Management Program

A program established by a locality that is consistent with the requirements of the Virginia Stormwater Management Act and associated guidance documents.

### Stormwater Pollution Prevention Plan" (SWPPP) or Plan

A document that is prepared in accordance with good engineering practices and that identifies potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges. In addition the document shall describe and ensure the implementation of best management practices and other practices that will be used to reduce pollutants in stormwater discharges.

### Stormwater Retention Basin or Retention Basin

A stormwater management facility that includes a permanent impoundment, or normal pool of water, for the purpose of enhancing water quality and, therefore, is normally wet, even during nonrainfall periods. Storm runoff inflows may be temporarily stored above this permanent impoundment for the purpose of reducing flooding, or stream channel erosion.

### Vegetated filter strip

A densely vegetated section of land engineered to accept runoff as overland sheet flow from upstream development. It shall adopt any natural vegetated form, from grassy meadow to small forest. The vegetative cover facilitates pollutant removal through filtration, sediment deposition, infiltration and absorption, and is dedicated for that purpose.

## Virginia Pollutant Discharge Elimination System (VPDES) permit or VPDES permit

A document issued by the State Water Control Board pursuant to the State Water Control Law authorizing, under prescribed conditions, the potential or actual discharge of pollutants from a point source to surface waters and the use or disposal of sewage sludge.

## Virginia Stormwater Management Act or Act

Article 1.1 of Chapter 6 of Title 10.1 of the Code of Virginia.

## Virginia Stormwater Management Program (VSMP)

The Virginia program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing requirements pursuant to the federal Clean Water Act, the Virginia Stormwater Management Act, this chapter, and associated guidance documents.

## Virginia Stormwater Management Program (VSMP) permit

A document issued by the permit-issuing authority pursuant to the Virginia Stormwater Management Act and this chapter authorizing, under prescribed conditions, the potential or actual discharge of pollutants from a point source to surface waters. Under the approved state program, a VSMP permit is equivalent to a NPDES permit.

## Water Quality Volume

The volume equal to the first 1/2 inch of runoff multiplied by the impervious surface of the land development project.

## Watershed

A defined land area drained by a river or stream or system of connecting rivers or streams such that all surface water within the area flows through a single outlet.

## Wetlands

The areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.