

## GLOSSARY

**Base flow:** The portion of stream flow that is not runoff and results from seepage of water from the ground into a channel slowly over time. The primary source of running water in a stream during dry weather.

**Best Management Practice:**

**(BMP), nonstructural** Strategies implemented to control stormwater runoff that focus on pollution prevention such as alternative site design, zoning and ordinances, education, and good housekeeping measures.

**Best Management Practice:**

**(BMP), structural** Engineered devices implemented to control, treat, or prevent stormwater runoff pollution.

**Better site design:** A collection of site planning, design, and development strategies that help reduce adverse impacts to the natural environment by recreating, to a certain extent, the original hydrology and plant community of the predevelopment site.

**Biochemical Oxygen Demand:**

**(BOD)** The amount of oxygen used by microorganisms in the break-down or decay of organic matter in a water body.

**Biofiltration:** The use of vegetation (usually grasses or wetland plants) to filter and treat stormwater runoff as it is conveyed through an open channel or swale.

**Bioretention:** The use of vegetation in retention areas designed to allow infiltration of runoff into the ground. The plants provide additional pollutant removal and filtering functions while infiltration allows the temperature of the runoff to be cooled.

**Buffer zone:** A designated transitional area around a stream, lake, or wetland left in a natural usually vegetated state so as to protect the water body from runoff pollution. Development is often restricted or prohibited in a buffer zone.

**Catchbasin:** An inlet to a storm or combined sewer equipped with a sediment sump, and sometimes a hood, on its outlet pipe to the sewer. Catchbasins can collect some of the sediment and debris washed off the streets, and help to provide a water seal against the venting of sewer gases. Catchbasins should be cleaned out regularly to function properly.

**Channel erosion:** The widening, deepening (called channel scour), and upstream cutting of a stream channel caused by moderate and extreme flow events. Channel erosion is one way that a stream reacts to changes in flow patterns

**Conservation Design:** Site design that incorporates conservation measures such as on-site tree preservation, concentrating homes on a limited percentage of the site, serving natural areas and open space, and reducing the amount of impervious cover.

**Constructed stormwater wetland:** A water quality BMP, designed to have similar characteristics and functions to a natural wetland, with the specific purpose of treating stormwater runoff through uptake, retention, and settling.

**Detention:** The storage and slow release of stormwater following a precipitation event by means of an excavated pond, enclosed depression, or tank. Detention is used for pollutant removal, stormwater storage, and peak flow reduction. Both wet and dry detention methods can be applied.

**Eutrophication:** Nutrient enrichment (nitrogen, phosphorus, and carbon) from sewage effluent, runoff, or atmospheric deposition to surface waters. This process can increase the growth potential for algae and aquatic plants. Excessive eutrophication can leave water-bodies devoid of most life, impede navigation, and result in aesthetic nuisances.

**Evapotranspiration:** The loss of water to the atmosphere through the combined processes of evaporation and transpiration, the process by which plants release water they have absorbed into the atmosphere.

**Filter Strip:** Grassed strips situated along roads or parking areas that remove pollutants from runoff as it passes through, allowing some infiltration, and reductions of velocity.

**Floodplain:** Can be either a natural feature or statistically derived area adjacent to a stream or river where water from the stream or river overflows its banks at some frequency during extreme storm events.

**Groundwater:** Water that flows below the ground surface through saturated soil, glacial deposits, or rock.

**Hydrology:** The science addressing the properties, distribution, and circulation of water across the landscape, through the ground, and in the atmosphere.

**Impervious surface:** A surface that cannot be penetrated by water such as pavement, rock, or a rooftop and thereby prevents infiltration and generates runoff.

**Imperviousness:** The percentage of impervious cover within a defined area.

**Infill development:** Development of vacant lots or enhancement of urban properties.

**Infiltration:** The process or rate at which water percolates from the surface into the ground. Infiltration is also a general category of BMP designed to collect runoff and allow it to flow through the ground for treatment.

**Load Allocation (LA):** The portion of a receiving water's loading capacity that is estimated to come from either existing or future nonpoint sources of pollution or natural background sources.

**National Pollutant Discharge Elimination System (NPDES):** A provision of the Clean Water Act that prohibits discharge of pollutants into waters of the United States unless a special permit is issued by the EPA, a state, or (where delegated) a tribal government and/or Indian reservation.

**Natural buffer:** A variable width area maintained with natural vegetation between a pollutant source and a water body that provides natural filtration and other forms of protection.

**Outfall:** The point of discharge from a river, pipe, drain, etc. to a receiving body of water.

**Porous pavement and pavers:** Alternatives to conventional asphalt that utilize a variety of porous media, often supported by a structural matrix, concrete grid, or modular pavement, which allow water to percolate through to a sub-base for gradual infiltration.

**Runoff:** Water from rainfall, snowmelt, or otherwise discharged that flows across the ground surface instead of infiltrating the ground.

**Smart Growth:** Development that uses a variety of strategies to enhance existing communities and protect community character in a way that is compatible with the natural environment and attracts economic development. It encourages more town-oriented, transit-focused, and pedestrian-friendly new development while restoring vitality to existing developed areas.

**Stormwater:** Water derived from a storm event or conveyed through a storm sewer system.

**Surface water:** Water that flows across the land surface, in channels, or is contained in depressions on the land surface (e.g. runoff, ponds, lakes, rivers, and streams).

**Swale:** A natural or human-made open depression or wide, shallow ditch that intermittently contains or conveys runoff. Can be used as a BMP to detain and filter runoff.

**Transferrable Development Rights:** A form of incentive for developers in which the developer purchases the rights to an undeveloped or underdeveloped piece of property in exchange for the right to increase the number of dwelling units on another site. Often used to concentrate development density in certain land areas.

**Total Maximum Daily Load (TMDL):** A tool for establishing the allowable loadings of a given pollutant in a surface water resource to meet predetermined water quality standards.

**Urban (metropolitan) runoff:** Runoff derived from urban or suburban land-uses that is distinguished from agricultural or industrial runoff sources.

**Water (hydrologic) cycle:** The flow and distribution of water from the sky, to the earth's surface, through various routes on or in the earth, and back to the atmosphere. The main

components are precipitation, infiltration, surface runoff, evapotranspiration, channel and depression storage, and ground water.

**Watershed:** The land area, or catchment, that contributes water to a specific water body. All the rain or snow that falls within this area flows to the water bodies as surface runoff, in tributary streams, or as groundwater.

**Wet detention ponds:** A BMP consisting of a permanent pool of water designed to treat runoff by detaining water long enough for settling, filtering, and biological uptake. Wet ponds are also often designed to have an aesthetic or recreational value.

**Xeriscaping™:** An alternative landscaping technique that focuses on water conservation through plant selection and site design.

**X-year storm event:** The storm event that has a probability of recurring on average once every X-years based on records from previous years,

**Acronyms:**

BMP: Best Management Practice

BOD: Biochemical Oxygen Demand

CFR: Code of Federal Regulations

EPA: United States Environmental Protection Agency

ESC: Erosion and Sediment Control

FEMA: Federal Emergency Management Agency

MS4: Municipal Separate Storm Sewer System

NPDES: National Pollutant Discharge Elimination System

Source: Glossary items are from *Stormwater Strategies – Community Responses to Runoff Pollution*:  
Natural Resources Defense Council.

And

*Rapid Watershed Planning Handbook. A Comprehensive Guide for Managing  
Urbanizing Watersheds*: Center for Watershed Protection