



Glossary of Watershed Terms

Best Management Practice (BMP): A structural or nonstructural practice that is designed to prevent or reduce the discharge of pollutants to waterbodies and to minimize the impacts of changes in land use on surface and groundwater systems. Structural best management practices refer to basins or facilities engineered for the purpose of reducing the pollutant load in stormwater runoff, such as bioretention or constructed wetlands. Nonstructural best management practices refer to land use or development practices that minimize the impact on receiving stream systems such as the preservation of open space and stream buffers, and disconnection of impervious surfaces. BMPs also include treatment requirements, operating procedures, and practice to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

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

Biotic Integrity: The quality of the communities of organisms such as fish and invertebrates living in streams or lakes, as compared to those naturally occurring.

Erosion: (1) Detachment of soil particles under the influence of water and/or wind. (2) The wearing away and removal of materials of the earth's crust by natural means. (3) The process by which flood waters lower the ground surface in an area by removing upper layers of soil. As usually employed, the term includes weathering, solution, corrosion, and transportation. The agents that accomplish the transportation and cause most of the wear are running water, waves, moving ice, and wind currents. Most writers include under the term all the mechanical and chemical agents of weathering that loosen rock fragments before they are acted on by the transportation agents; a few authorities prefer to include only the destructive effects of the transporting agents.

Eutrophication: The process by which a body of water becomes enriched in dissolved nutrients (as phosphates) that stimulate the growth of aquatic plant life usually resulting in the depletion of dissolved oxygen.

Floodplain: Those land areas in and adjacent to streams and watercourses subject to continuous or periodic inundation from flood events.

Geographic Information System (GIS): A method of overlaying spatial land and land use data of different kinds. The data are referenced to a set of geographical coordinates and encoded in a computer software system. GIS is used by many localities to map utilities and sewer lines and to delineate zoning areas.

Grassed Swale: An earthen conveyance system that is broad and shallow with check dams and vegetated with erosion-resistant and flood-tolerant grasses, engineered to remove pollutants from stormwater runoff by filtration through grass and infiltration into the soil.

Headwater: The source of a stream or watershed.

Hydrology: A science dealing with the properties, distribution, and circulation of water on and below the earth's surface and in the atmosphere.

Imperviousness or 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.

Nonpoint Source Pollution: Contaminants such as sediment, nitrogen, phosphorous, hydrocarbons, heavy metals, and toxics whose sources cannot be pinpointed but rather are washed from the land surface in a diffused manner by stormwater runoff.

Riparian Buffer: Strips of grass, shrubs, and/or trees along the banks of rivers and streams filter polluted runoff and provide a transition zone between water and human land use. Buffers are also complex ecosystems that provide habitat and improve the stream communities they shelter.

Runoff: The portion of precipitation that flows across the land surface that ultimately reaches streams often with dissolved or suspended material.

Sediment: Material, both mineral and organic, that is in suspension, is being transported, or has been moved from its original site of origin by water or wind. Sediment piles up in reservoirs, rivers and harbors, reducing channel depth, impeding navigability, destroying wildlife habitat and clouding water so that sunlight cannot reach aquatic plants.

Stormwater: Stormwater discharges are generated by runoff from land and impervious areas such as paved streets, parking lots, and building rooftops during rainfall and snow events that often contain pollutants in quantities that could adversely affect water quality.

Total Maximum Daily Load (TMDL): A TMDL is a tool used to improve the water quality of water bodies that do not meet water quality standards and are listed as 303d impaired waters. The TMDL limits the pollutant loads allowable from each pollutant contributor in the watershed to levels that will ensure that the water quality standard is achieved.

Urbanization: The process of changing the landscape from one dominated by natural, undeveloped areas to developed areas with less natural area and more paved surfaces.

Water Quality Standard (WQS): A law or regulation that consists of the beneficial use or uses of a waterbody, the numeric and narrative water quality criteria that are necessary to protect the use or uses of that particular waterbody, and an antidegradation statement. Waters on the Maryland 303d list are designated as impaired for not meeting WQS.

Watershed: The area of land that catches rain and snow and drains or seeps into a marsh, stream, river, lake or groundwater. Each watershed is made up of smaller subwatersheds.