

Stormwater Management Terms & Definitions

Best Management Practices (BMPs): Activities or structural improvements that help reduce the quantity and improve the quality of stormwater runoff. BMPs include treatment requirements, operating procedures and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Clean Water Act: Legislation that provides statutory authority for the NPDES program, which is Public law 92-500; 33U.S.C. 1251 et seq. Also known as the Federal Water Pollution Control Act.

Drinking water: Water, treated or untreated, which is intended for human use and consumption and considered to be free of harmful chemicals and disease-causing bacteria, cysts, viruses, or other microorganisms.

Environmental Protection Agency (EPA): The mission of the Environmental Protection Agency is to protect human health and the environment. Since 1970, EPA has been working for a cleaner, healthier environment for the American people. <http://www.epa.gov/epahome/aboutepa.htm>

Erosion: Removal of soil particles by wind and water. Often the eroded debris (silt or sediment) becomes a pollutant via stormwater runoff. Erosion occurs naturally but can be intensified by human activities such as farming, development, road-building, and timber harvesting.

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

Household hazardous materials: Common everyday products that people use in and around their homes-including paint, paint thinner, herbicides, and pesticides-that, due to their chemical nature, can be hazardous if not properly disposed.

Hydrology/Hydrologic Cycle - The science of hydrologic cycle is addressing the properties, distribution, and circulation of water across the landscape, through the ground, and in the atmosphere.

Impervious Surface or Cover: The characteristic of a material which prevents the infiltration or passage of liquid through it. This may apply to roads, streets, parking lots, rooftops and sidewalks.

Litter: Litter is any solid waste object (disposable item or resource) that can be held or carried in a person's hand that is left behind or placed in an inappropriate location. Any such material or item disposed of in an inappropriate manner is to be regarded as litter - the end outcome of an environmentally undesirable disposal action.

National Pollutant Discharge Elimination System (NPDES): Established by Section 402 of the Clean Water Act, this federally mandated system is used for regulating point source and stormwater discharges.

Natural Filter: A grassed, wooded or vegetative strip that acts as a filter for the runoff before the water enters a stream.

Non-Point Source Pollution: Pollutants from many diffuse sources. Nonpoint-source pollution is caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters, and even underground sources of drinking water.

Nutrients: A substance that provides food or nourishment, such as usable proteins, vitamins, minerals or carbohydrates. Fertilizers, particularly phosphorus and nitrogen, are the most common nutrients that contribute to eutrophication.

Pathogens: Microorganisms that can cause disease in other organisms or in humans, animals, and plants. They may be bacteria, viruses, or parasites and are found in sewage, in runoff from animal farms or rural areas populated with domestic and/or wild animals, and in water used for swimming. Fish and shellfish contaminated by pathogens, or the contaminated water itself, can cause serious illnesses.

Point Source Pollution: Pollutants from a single, identifiable source such as a factory or refinery; also called single-point-source pollution. Most of this pollution is highly regulated at the state and local levels.

Pollutants: A contaminant existing at a concentration high enough to endanger the environment or the public health or to be otherwise objectionable.

Stormwater pollution: Water from rain, irrigation, garden hoses or other activities that picks up pollutants (cigarette butts, trash, automotive fluids, used oil, paint, fertilizers and pesticides, lawn and garden clippings and pet waste) from streets, parking lots, driveways and yards and carries them through the storm drain system and straight to the ocean. Also included are oils, grease and metals.

Runoff: That portion of the precipitation on a drainage area that is discharged from the area in the stream channels. Types include surface runoff, ground water runoff or seepage. Drainage or flood discharge that leaves an area as surface flow or as pipeline flow.

Sanitary sewer (different from the storm sewer system): A system of underground pipes that carries sanitary waste or process wastewater to a treatment plant.

Storm Drain System: A vast network of underground pipes and open channels designed for flood control, which discharges straight to the ocean.

Sediment: Solid material, both mineral and organic, that is being transported or has been moved from its site of origin by air, water, gravity, or ice and has come to rest on the earth's surface either above or below sea level. Soil, sand, and minerals washed from land into water, usually after rain. Sediment can destroy fish-nesting areas, clog animal habitats, and cloud waters so that sunlight does not reach aquatic plants.

Storm drain: An opening leading to an underground pipe or open ditch for carrying surface runoff, separate from the sanitary sewer or wastewater system.

Stormwater: Precipitation that accumulates in natural and/or constructed storage and stormwater systems during and immediately following a storm event.

Stream: A body of water, confined within a bed and banks and having a detectable current. Stream is the umbrella term used in the scientific community for all flowing natural waters. In a river or stream, the water is influenced by gravity and flows downhill to reduce its potential energy. The movement of water in a stream is called the current and varies from place to place and time to time dependent upon the volume of water, the slope, and shape and other characteristics of the bed.

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, channel and depression storage, and groundwater.

Water Quality: Water is essential to human life and to the health of the environment. As a valuable natural resource, it comprises marine, estuarine, freshwater (river and lakes) and groundwater environments, across coastal and inland areas. Water has two dimensions that are closely linked - quantity and quality. Water quality is commonly defined by its physical, chemical, biological and aesthetic (appearance and smell) characteristics. A healthy environment is one in which the water quality supports a rich and varied community of organisms and protects public health. Water quality in a body of water influences the way in which communities use the water for activities such as drinking, swimming or commercial purposes. More specifically, the water may be used by the community for:

1. supplying drinking water
2. recreation (swimming, boating)
3. irrigating crops and watering stock
4. industrial processes
5. navigation and shipping
6. production of edible fish, shellfish and crustaceans
7. protection of aquatic ecosystems
8. wildlife habitats
9. scientific study and education

Watershed: Geographical area that drains to a specified point on a water course, usually a confluence of streams or rivers, can also be known as drainage area, catchments, or a river basin.

Wetland: An area that is inundated or saturated by surface water or groundwater at a frequency, duration, and depth sufficient to support a predominance of emergent plant species adapted to growth in saturated soil conditions.