GLOSSARY

Best Management Practices (BMP): Structural and/or managerial practices, schedules of activities, prohibitions of practices, and maintenance procedures, that when used singly or in combination, prevent or reduce the release of pollutants to waters.

Bioretention: An area that provides onsite retention of stormwater through the use of vegetated depressions to collect, store, and infiltrate runoff; sometimes called raingardens.

Buffer: A naturally vegetated zone adjacent to a stream, wetland, or shoreline where development is restricted or controlled to minimize its effects on sensitive resources.

Cluster Development: Concentration of buildings in specific areas to minimize infrastructure and development costs while achieving the allowable density. This approach allows the preservation of natural open space for recreation, common open space, and environmentally sensitive features.

Concentrated Flow: Runoff that accumulates or converges into well-defined channels, whether man-made or formed naturally by erosion. The opposite of concentrated flow is sheet flow, where flowing water is distributed evenly over the ground surface.

Conservation Agreement (easement): A legal agreement between a property owner and a conservation or government organization that protects the conservation value of the parcel by permanently limiting the uses and changes an owner may make. The conservation organization or agency agrees to monitor the property and enforce the restrictions.

Conservation Design: A design system that takes into account the natural landscape and ecology of a development site and facilitates development while maintaining the most valuable natural features and functions of the site. Conservation design includes a collection of site design principles and practices that can be combined to create environmentally sound development. The main principles for conservation design are:

- flexibility in site design and lot size,
- thoughtful protection and management of natural areas,
- reduction of impervious surface areas, and
- sustainable stormwater management.

Detention Pond: A low-lying area that is designed to temporarily hold a set amount of water while slowly draining to another location.

Eutrophication: A process whereby water bodies, such as lakes, estuaries, or slow-moving streams receive excess nutrients that stimulate excessive plant growth (algae and/or nuisance plants weeds). This enhanced plant growth, often called an algal bloom, reduces dissolved oxygen in the water when dead plant material decomposes and can cause other organisms to die.

Hydrograph: Charts that display the change of a hydrologic variable over time, for example the flow of a stream over time, the amount of runoff from a site or in a watershed over time.

Hydrologic Cycle: The transfer of water from precipitation to surface water and groundwater, to storage and runoff, and eventually back to the atmosphere is an ongoing cycle. When rain falls to the earth's surface it either infiltrates the soil and slowly moves through the ground or quickly runs over the surface into the nearest body of water. The ability of water to infiltrate the soil depends on many factors and the most important ones include the characteristics of the storm, properties of the soil, the type and amount of vegetation in the area, and the type of land use.

Hydrology: The study of the movement, distribution, and quality of water on the earth, focusing on both the hydrologic cycle and water resources.

Hydrologic Unit: The USGS organizes watersheds or drainage basins of the United States into a hydrologic system that divides and subdivides the United States into successively smaller watersheds. These levels of subdivision are used for organization of hydrologic data and are called hydrologic units.

Impervious Area: A surface area, such as a parking lot or rooftop, that prevents or retards water from entering the soil causing water to run off the surface in greater quantities and at an increased rate of flow.

Infiltrate: To filter into or through, as in stormwater filtering into a retention area and the water filtering into the soil.

Living Shoreline: A shoreline management practice that provides erosion control benefits; protects, restores or enhances natural shoreline habitat; and helps maintain coastal processes through the strategic placement of plants, stone, sand fill and other structural and organic materials (e.g. bio-logs, oyster reefs).

Low Impact Development: a comprehensive set of stormwater management principles and practices that utilize a wide range of site planning and treatment techniques to manage both runoff volume and water quality. In the broadest sense, LID includes optimizing conservation measures, impact minimization techniques, use of engineered at-the-source treatment practices and pollution prevention to achieve stormwater management objectives. LID is a decentralized approach (as opposed to centralized end-of-pipe treatment) where small scale techniques are distributed and integrated throughout the site to retain, detain, treat and use runoff in a manner that more closely mimics the natural water balance. LID makes multifunctional use of the landscape to increase its ability to capture, assimilate, sequester and cycle pollutants.

Nonpoint Source Pollution: Water pollution caused by rainfall or snowmelt moving over and through the ground and carrying with it a variety of pollutants associated with human land uses. This includes the nutrients that runoff the ground from any land use - croplands, feedlots, lawns, parking lots, streets, forests, etc. - and enter waterways. It also includes nutrients that enter through air pollution, through the groundwater, or from septic systems.

Open Space: land in a predominantly open and in an undeveloped condition that is suitable for any of the following: natural areas, wildlife and native plant habitat; wetland or watershed areas, stream corridors, passive, low impact activities and/or little or no land disturbance.

Permeable: Soil or other material that allows the infiltration or passage of water or other liquids.

Point Source Pollution: Water pollution sources that may be traced to a specific source, such as a sewer line or a discharge pipe of an industrial facility. Pollution coming from a single identifiable source such as discharge pipes from industry or sewer plants or other means of conveyance including ditches, channels, sewers, and containers.

Purchase of Development Rights (PDRs): A land protection tool that pays landowners to protect their land from development. Under this program, the development right is retired upon purchase rather than transferred and the parcel remains as agricultural land or open space permanently.

Rain Gardens: See Bioretention

Retrofit: Stormwater practices designed to mitigate erosive flows, reduce pollutants in stormwater runoff, and promote conditions for improved aquatic habitat. Sometimes stormwater retrofits are inserted in an developed landscape where little or no prior stormwater controls existed.

Riparian Buffer: A complex assemblage of plants and other organisms in an environment adjacent to water. It may include stream banks, floodplain, and wetlands, as well as sub-irrigated sites forming a transitional zone between upland and aquatic habitat. A riparian buffer intercepts nonpoint source pollution from shallow groundwater and surface runoff and controls the physical and chemical environment of adjacent aquatic ecosystems.

Sheet Flow: Flowing water evenly distributed over the ground surface. Sheet flow increases the ability of water to infiltrate the soil.

Smart Growth: A planning and development approach integrating a set of ten basic principles:

1. Mix land uses
2. Take advantage of compact building design
3. Create a range of housing opportunities and choices
4. Create walkable neighborhoods
5. Foster distinctive, attractive communities with a strong sense of place
6. Preserve open space, farmland, natural beauty, and critical environmental areas
7. Strengthen and direct development towards existing communities
8. Provide a variety of transportation choices
9. Make development decisions predictable, fair, and cost effective
10. Encourage community and stakeholder collaboration in development decisions

Stakeholder: A person or organization that has a legitimate interest in a project or entity. This person or organization will, or is likely to, be affected by the design, installation, or final execution of the project

Stormwater (or stormwater runoff): Precipitation or snowmelt that does not infiltrate into the ground or evaporate but flows over the land surface onto roadways, parking lots, and other impervious surfaces and is typically routed into drain or sewer system, which lead directly into lakes, rivers, streams and coastal waters untreated.

Swale: An open drainage channel designed to detain or infiltrate stormwater runoff.

Watershed: The topographic boundary within which water drains into a particular river, stream, wetland, or body of water. A watershed may also be referred to as a basin, catchment, or drainage basin.

Watershed Management: A comprehensive approach to protecting and restoring water resources with a focus on hydrological rather than political boundaries. Decisions are based on all the water resources, all the water uses and all the threats to water quality throughout a common geographical area. A watershed is defined as the area of land drained by a single network of streams, rivers and estuaries.

Wetland: The federal Clean Water Act definition is: "those areas that are inundated or saturated by surface or ground water 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." Wetlands vary widely because of regional and local differences in soils, topography, climate, hydrology, water chemistry, vegetation, and other factors, including human disturbance.