

Stormwater Glossary



The following terms and words are commonly used when discussing polluted runoff:

Best management practice (BMP) – Any treatment practice that reduces pollution from stormwater. A BMP can be either a physical structure, like a rain barrel, a rain garden, or pervious pavement, or a management practice, such as picking up after your pet or not littering.

Bioretention area, bioretention cell – A best management practice that is a shallow, landscaped depression that receives and treats stormwater with the goal of discharging water of a quality and quantity similar to that of a forested watershed. Bioretention cells typically consist of vegetation, soils, an optional underdrain, and an outlet structure. Also called rain gardens or ocean friendly gardens.

Bioswales – Shallow, gently sloping channels with broad, vegetated side slopes (usually grass). They are always located above the water table to help with drainage.

Cistern – A storage tank designed to store rainwater for later use. Also known as a rainwater harvesting system.

Constructed wetland – A wetland that is designed to provide water quality treatment of stormwater.

Erosion – A natural process by either physical processes, such as water or wind, or chemical means that moves soil or rock deposits from one source and transports it to another. Excessive erosion is considered an environmental problem that is very difficult to reverse. See **Turbidity**.

Evaporation – The process by which water changes from liquid to gas and is “lost” to the atmosphere.

Evapotranspiration – When water is released by a plant and evaporates from leaves and soil.

Filter strip – Densely vegetated, uniformly graded areas that spread out, slow down, and soak in runoff from impervious surfaces.

Hydric soils – Soils that form under saturated (wet) conditions. When saturated conditions exist, unique chemical properties develop. A common characteristic of hydric soils is the presence of a rotten-egg odor, indicating the presence of hydrogen sulfide gas.

Impervious Surface – Also known as an impermeable surface, this is something that water does not rapidly pass through. A few examples of impervious surfaces are roofs, streets, sidewalks, and driveways.

Infiltration – The process by which water (surface water, rainfall, or runoff) enters the soil.

Low impact development (LID) – A way of developing urban lands that attempts to maintain pre-development hydrologic function at a site. This decreases the amount of stormwater that flows into our tidal creeks.

Permeable pavement – A modified form of asphalt or concrete with a top layer that allows water to pass through.

Pervious Surface – The opposite of an impervious surface, pervious surfaces allow water to pass through them. Rain gardens, pervious pavement, lawns, and gardens are all pervious surfaces.

Rain barrel – A storage tank where roof runoff is diverted and stored. Rain barrels are often smaller than cisterns, and the water is generally used for outdoor purposes, like watering a lawn or garden.

Rain garden – Often used interchangeably with bioretention, however it typically refers to a less formal design and installation process. Typically implemented in residential areas by homeowners.

Rainwater harvesting (RWH) – Also known as rainwater harvesting systems, rain barrels and/or cisterns are systems that intercept, divert, store, and release rainfall for later use as a water supply.

Sediment – Soil, rock, or biological material particles formed by weathering, decomposition, and erosion. Sediment is transported by runoff to our tidal creeks. Excess sediment in our waterways causes **turbidity**.

Stormwater – Water that originates from impervious surfaces during rain events; often associated with urban areas. Also called runoff.

Stormwater management – The management of runoff, often using stormwater treatment practices and best management practices to manage quality and control release into our waterways.

Turbidity - The cloudiness or haziness of a fluid caused by large numbers of individual particles (sediment) that are generally invisible to the naked eye, similar to smoke in the air. The measurement of turbidity is a key test of water quality.

Watershed – A unit of land that drains to a single body of water. Boundaries are determined by water flowing from higher elevations to lower ones. In our area, watersheds drain into tidal creeks, and then into the Intracoastal Waterway and Atlantic Ocean or Cape Fear River.

Wetland – Land that has **hydric soil** and wetland vegetation, and is periodically saturated with water.