Glossary/Key Terms

Algae: Organisms that are closely related to higher plants that perform photosynthesis and are commonly found in or near water.

Aquatic Macroinvertebrates: A group of organisms found in or near water that are large enough to be seen with the naked eye, yet lack a backbone.

BMP (Best Management Practices): Effective, practical methods which prevent or reduce the movement of sediment, nutrients, pesticides and other pollutants from the land to surface or ground water.

Chesapeake Bay: The largest estuary in North America.

Condensation: When water is converted from its vapor phase into liquid phase - when it changes from a gas to a liquid.

Dissolved Oxygen: Microscopic bubbles of oxygen that can be found within water.

Downstream: In, at or towards the end of a stream where it flows into a larger body of water.

Ecosystem: A community of living organisms and their interrelated physical and chemical environment.

Erosion: The wearing away of the land by water, wind or ice.

Estuary: The location where fresh water from a stream or river mixes with salt water from an ocean. Subject to the rise and fall of tides.

Eutrophication: Having water rich in nutrients that promote excessive growth of plant life, like algae. The algae overproduce and die off resulting in decomposition of the algae which reduces the dissolved oxygen content in the water. This may cause other organisms, such as fish and macroinvertebrates, to suffocate and die.

Evaporation: When water changes from a liquid to a gas or vapor. It is how water moves from the ground into the sky. Ninety percent of the moisture or water in the air comes from evaporating oceans, rivers and other bodies of water.

Fertilizer: A synthetic or non-synthetic product developed to enhance plant growth and health. High concentrations of fertilizer can be damaging to aquatic environments and creatures.

Groundwater: The water that flows beneath the ground, and comes to the surface in seeps and springs.

Headwaters: The upstream sources of water for a river or watershed.

Karst: An area that contains rocks called limestone or dolomite under the ground where water has dissolved or eroded the rocks in some places, making cracks, fissures, sinkholes, underground streams and caverns in the rocks.

Nitrogen: An element whose atomic number on the periodic chart is 7 and symbol is N. It is a required nutrient for many organisms, especially plants.

Non-Point Source Pollution: Spread out over a wide area and is not concentrated in one area. It is caused by rainfall or snowmelt moving over and through the ground. As the runoff moves across areas like farms, fields, yards, roads and towns, it picks up and carries away pollution that can run into and harm rivers.

Nutrient: A compound or ingredient that is a source of nourishment to a living organism. If there are too many nutrients like nitrogen and phosphorous in a river, it can cause overgrowth of plants and algae.

pH: A classification of acid or base materials on a scale of 0 to 14, with 7 representing neutrality; numbers less than 7 indicate increasing acidity; and numbers greater than 7 represent increasing alkalinity (basic conditions).

Pesticide: A synthetic or non-synthetic product designed to control unwanted insects, animals, weeds or pathogens.

Point Source Pollution: You can see the pollution going directly in the river and you can 'point' to the source. This kind of pollution can come from factories, sewage treatment plants, storm drains and leaking septic systems.

Pollution: A harmful chemical or material that contaminates or "dirties" water, soil or air.

Precipitation: Rain, snow, sleet or hail that falls to the ground from the clouds. It then flows, melts or runs across the land as runoff or it soaks into the ground.

Riparian Forest Buffer: Areas where there are shrubs and trees help to hold the banks of the river in place and prevent erosion. They also slow down and filter polluted or dirty water before it gets into the river. Trees next to the river also keep the water shaded and cool and provide food and shelter for animals and insects.

Sediment: Soil that washes into streams and rivers.

Spring: A place where water naturally flows from under the ground.

Transpiration: The loss or passage of water into the air or atmosphere from plants (similar to sweating). Ten percent of the moisture or water in the air is released from plants through transpiration.

Stream: Any body of running water moving under gravity's influence through clearly defined natural channels to progressively lower levels.

Silt: Soil particles carried by runoff from unstable stream banks, construction sites, plowed fields, and residential areas.

Upstream: In, at or toward the source of a stream.

Watershed: An area of land that drains to a particular body of water such as a river, bay or ocean.

Water Quality: Refers to characteristics of water that make it suitable for human and ecological uses, such as drinking, swimming and maintaining healthy fish