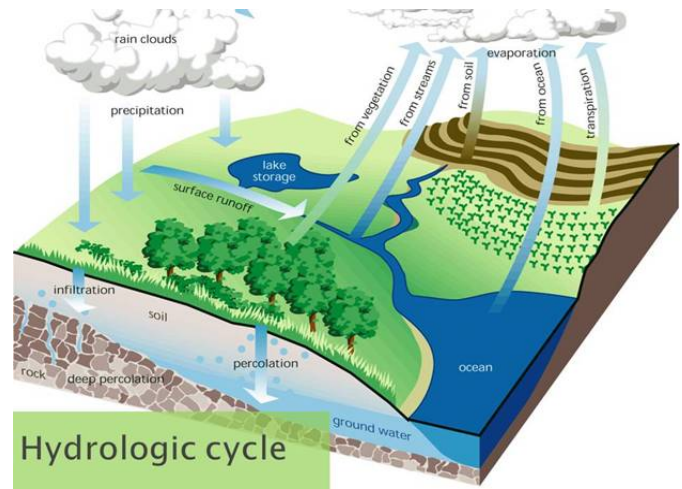


Stormwater

Upper Moreland Township lies primarily in the Pennypack Creek Watershed. Have you realized that low lying areas around Upper Moreland Township's streams are frequently flooded during heavy rains. In addition to an increase in the volume of water flowing in our streams, increased nutrients, sediments, pathogens (e.coli), toxic contaminants, debris and thermal stresses enter the streams. While it will take the cooperation of our upstream neighbors to fully see the effects of effective stormwater management, the residents of Upper Moreland Township can do their part to help the watersheds of our township.

Stormwater is water that originates during precipitation events and snow/ice melt. Stormwater can soak into the soil, be held on the surface and evaporate, or runoff and end up in nearby streams, rivers, or other water bodies. When rain hits saturated or impervious ground it begins to flow overland downhill. Surface runoff is the flow of water that occurs when excess stormwater, meltwater, or other sources flows over the earth's surface. As watersheds urbanize, vegetation is replaced by impervious surfaces, thus reducing the area where infiltration to groundwater can occur. Thus, more stormwater runoff occurs that must be



collected by extensive drainage systems that combine curbs, storm sewers, and ditches to carry stormwater runoff directly to streams.

As it flows over the land surface, stormwater picks up potential pollutants that includes road salts, sediment, nutrients (from lawn fertilizers), bacteria (from animal and human waste), pesticides (from lawn and garden chemicals), metals (from rooftops and roadways), and petroleum by-products (from leaking vehicles). Pollution originating over a large land area without a single point of origin and generally carried by stormwater is considered non-point pollution. Point sources of pollution originate from a single point, such as a municipal or industrial discharge pipe. Polluted stormwater runoff can be harmful to plants, animals, and people.

Forests, Wetlands, Meadows, Riparian Buffers and Raingardens reduces the amount of runoff, slows discharge, adsorb and decrease pollutants, provides increased habitats for wildlife. Trees and wild grasses root systems allow more water to infiltrate the ground and can remove from two gallons of water per day (wild grasses, shrubs) to 50 to 300 gallons of water a day (trees) through evapotranspiration. Evapotranspiration is the movement of water through a plant from roots to leaves to the atmosphere.

Please remember that Upper Moreland Township's stormwater Sewer System provides a direct link to the streams. Clean up after you pet and keep your car properly maintained and not leaking fluids to reduce contaminants. Consider rain barrels and rain gardens to reduce stormwater volumes. Review the Township's Fall Newsletter regarding the leaf pickup schedule.

<http://www.epa.gov/oaintrnt/stormwater/index.htm>

<http://www.stormwaterpa.org/>