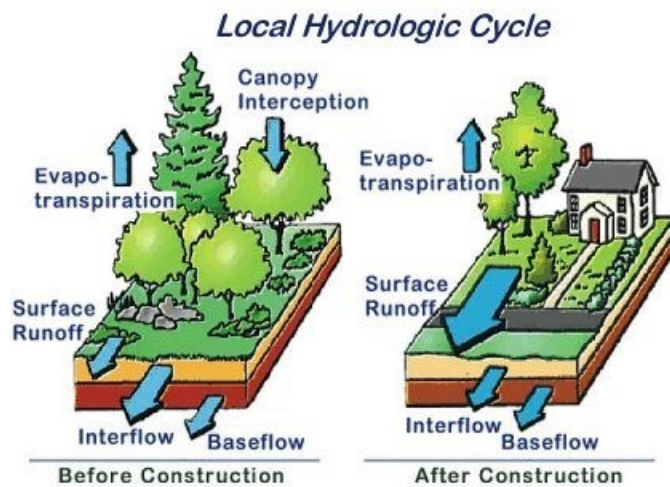


Why Stormwater Matters: Impacts of Runoff on Maryland's Watersheds

Urban development has a great impact on the quality of Maryland's waters. The situation worsens after construction. Rooftops, roads, parking lots, driveways and other impervious surfaces prevent rainwater from soaking into the ground. As a result, most rainfall is converted into runoff. The increase in runoff can be too much for natural drainage systems to handle. As a result, the natural drainage system suffers excessive erosion or is altered using concrete-lined channels or enclosed storm drains to collect and carry runoff away. The stormwater runoff is subsequently discharged to downstream waters such as streams, reservoirs, lakes or estuaries.



Water Quality is affected by the accumulation of trash, oil and rubber from cars, fertilizers and pesticides applied to lawns, sediment from bare or poorly vegetated ground and other pollutants entering streams, rivers and the Chesapeake Bay. Inflow of sediment can cloud water, blocking sunlight from submerged plants. Sediment also settles to the bottom of streams, clogging the gravel beds used by fish for laying their eggs. Nutrients, such as phosphorus and nitrogen, from fertilizers enter the water

and promote unusually rapid algae growth. As this algae dies, its decomposition reduces or eliminates oxygen needed by fish, shellfish, and other aquatic life for survival.

The overriding condition that governs the quantity of stormwater runoff is the amount of impervious surfaces located on your property (driveways, roofs, carports, sidewalks, etc.) While the effect of one property on the quality and quantity of stormwater runoff may seem insignificant, the cumulative impact from hundreds of thousands of similar properties across the State continues to be destructive to water quality.

Unless specifically exempted (agricultural land management practices, additions/modifications to existing single family detached residential structures, or disturbance less than 5,000 square feet of land area), any development project that disturbs more than 5,000 square feet of land area must address both the water quality and groundwater recharge volume requirements identified in the Design Manual. These developments must also address the two-year storm if located on the Eastern Shore of the Chesapeake Bay. While the impact of most single lot residential construction on stormwater runoff is minimal, the owner must demonstrate compliance with these requirements.