

FOR IMMEDIATE RELEASE

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## **STORMWATER: WHAT THE HECK IS IT AND WHY SHOULD WE CARE?**

In some parts of the country, people call stormwater by another name - hydrofilth – which pretty much explains the problem of stormwater. It is dirty.

But what is it? The definition is quite simple (and rather dry)! Stormwater is rain and snow, not absorbed by plants and soil, which travels across land to the nearest waterbody.

Since it has always rained, people often ask why stormwater gets so much attention now. The answer is really quite simple. Humans in recent years have drastically affected the water cycle.

“As we build more to accommodate a growing population, more of the earth is covered with parking lots, houses and other impervious surfaces. Water that used to soak into the soil now runs off in great volumes, carrying toxic pollutants on the land directly to our reservoirs, swimming holes and beaches. Once only a meager 10% of rain water ran off the land, because it used to percolate through wooded areas into the soil where roots and soil microbes would cleanse it. Now 60-90% of the stormwater runs off carrying bacteria and toxins from the land right into our local waterbodies,” said Debbie Cook, manager of the Greenscapes program at the North and South Rivers Watershed Association.

Just about anything left on the land can be swept by rain into our streams and ponds. Pet waste, cigarette butts, fertilizers, pesticides, plastic water bottles, automobile oil and gas – all can end up where we swim, drink or go fishing.

Research has shown that water quality can be ‘threatened’ when just 12-20% of the land is covered with impervious surfaces. Almost every town has sections full of asphalt parking lots and buildings, theoretically ‘threatening’ water quality. Lawns compound the problem, acting like ‘green asphalt’ and generating up to 90% of the runoff as pavement. Today’s lawns are compacted by lawn equipment and lawn chemicals that deplete the microbial activity in the soil, which used to keep the soils aerated and porous.

So what can be done to keep this ‘hydrofilth’ out of our water? Homeowners can make a big difference right in their own backyards. A simple step is to add compost and aerate soils to reduce compaction. Planting trees, shrubs and ‘natural’ areas will help immensely because the roots are efficient water recyclers. Raingardens hold water in large depressions, allowing it to percolate into the soil. (Several large-scale raingardens can be seen in the parking lots at Dick’s Sporting Goods at Hanover Mall and Target on 53). Permeable pavers and porous asphalt also help water soak into the soil. As part of a demonstration project, permeable pavers have been

installed at Pembroke's town hall and porous asphalt has been installed at the Pembroke's Oldham Pond boat landing.

Citizens can also help their town's efforts to clean up stormwater, ( hydrofilth). Acquiring open space, especially near waterbodies, is very effective, since forests and meadows help restore the water cycle. Advocating for zoning bylaws and building regulations that encourage less pavement and other impervious surfaces is also effective. For example, towns could require parking lots to be built of porous asphalt and reserve parking be built from plastic paving grids that support vehicles but allow grass to grow. Finally, citizens should advocate to adequately fund storm drain and street cleaning, and the construction of an effective stormwater infrastructure.

"You'll be hearing a lot more about stormwater regulation and management in the future," said Samantha Woods, North and South Rivers Watershed Association Executive Director. "Under the Clean Water Act, the EPA issues permits to each of our communities that requires them to assess, fix and maintain stormwater pipes and drains to remove pollutants from our waterbodies. As you can imagine our communities are wondering how to deal with these new regulations."

She added, "Stormwater is often called the forgotten utility, because unlike our water and sewage, we generate it, but we forget about it and don't treat it, and our streams, ponds and water supplies pay the price."

"As our communities get more and more built up, we can no longer ignore the effects of untreated polluted rain water pouring into our streams and ponds if we want healthy fish runs and clean drinking water. Stormwater can no longer be pushed to the bottom of a town's priority list. Good, cost-saving solutions are available, and we need to use them."