



CHESAPEAKE BAY FOUNDATION
Saving a National Treasure

POLLUTED RUNOFF IN PRINCE GEORGE'S COUNTY

Prince George's County is a highly suburbanized county, leading to a very high percentage of hard, or impervious, surfaces. The County also drains into several major tributaries that provide fresh water to the Chesapeake Bay, including the Potomac and Patuxent Rivers. Serious water quality problems arise when just 10% of a creek, stream, or river's watershed is covered with impervious surfaces.¹ In fact, sensitive species can be affected in watersheds with less than 10% imperviousness.² In Prince George's County, most watersheds exceed 10% of impervious surface. The amount of impervious surface in a watershed causes such serious impairments primarily because of polluted runoff.

Polluted runoff contaminates our local rivers and streams and threatens local drinking water. Water running off of roofs, driveways, lawns and parking lots picks up trash, motor oil, grease, excess lawn fertilizers, pesticides, dog waste and other pollutants and washes them into the streams and rivers flowing through our communities. This pollution causes a multitude of problems, including toxic algae blooms, harmful bacteria, extensive dead zones, reduced dissolved oxygen, and unsightly trash clusters. These problems result in beach closures, fish consumption advisories, and in some cases complete closure of fisheries. Polluted runoff is a serious problem for the waterways in Prince George's County. For example, a study done on the County's portion of the Anacostia River concluded that the major source of pollutants, including nutrients, sediment and bacteria, is from polluted runoff and leaks from the aging sanitary sewer system. This pollution has led to fish consumption advisories for bluegill and small mouth and large mouth bass in the Prince George's portion of the Anacostia.

Today, polluted runoff is the only major source of water pollution still on the rise. Using the 2009 baseline, urban runoff contributed **29%** of the total Nitrogen in Prince George's County.³ Low water quality in Prince George's County has led to fourteen water quality cleanup plans approved by the Maryland Department of Environment. All of the impaired waters and associated water quality cleanup plans have strong connections to polluted runoff as the source of impairment.

In the Upper Patuxent, which is impaired for fecal coliform bacteria and sediment, eleven of the fifteen stations sampled for benthic and/or fish index of biotic integrity scored poor to very poor (i.e., significantly lower than 3.0). These impairments are strongly linked to the amount of

¹ Schueler, T.R. and H.K. Holland. *The Importance of Imperviousness*. Watershed Protection Techniques 1(3): 100-111. 1994.

² *Id.*

³ Chesapeake Bay Model 5.3.2

impervious surfaces in the watershed.⁴ In the Patuxent River Upper Watershed in Prince George's County, 47% of the land-use is urban.⁵

Similarly, the Anacostia watershed is impaired for PCBs, trash, nutrients, sediments, and fecal coliform. Most sub-watersheds within Prince George's County range from 19-37% impervious surfaces, which has devastating impacts on water quality due to polluted runoff. In the non-tidal Piscataway, fecal coliform bacteria impairments are strongly linked to the 16.7% urban imperviousness.⁶

Under permits required by the Clean Water Act, Prince George's County is obligated to restore some of this impervious surface. The new permit recently issued to the County requires 20% restoration, on top of the 10% restoration that was required under the previous permit. The combined 30 percent retrofit requirements in the previous and existing round of stormwater permits amount to 7,109 acres of untreated impervious area, which does not include any city of Bowie, state, or federal areas. Restoration does not come cheap, and the need for dedicated funding through a stormwater utility fee is greater than ever.

In addition to meeting permit requirements, cleaning up our local water bodies has an immediate positive effect for the people of Prince George's County, including reduction of swimming closures, improved fishing opportunities, reduced flooding and creating local jobs. The great thing is, taking care of Prince George's local waterways also takes care of its obligations for the Bay.

A COOPERATIVE EFFORT

All the Bay watershed states are now required to reduce runoff pollution to their local rivers and streams and the Bay – since this pollution source is the only major one that is actually growing. Each state has a specific plan in place to do so, and is now undertaking actions to make this happen. Since implementing this plan at the local level costs money, localities all around the watershed are developing different means to pay these costs. Only the ten largest and most urban jurisdictions were *required* to set fees in order to address their polluted runoff problems. They have the most land that doesn't allow water to filter slowly (i.e. impervious area), and they are also the only jurisdictions in Maryland charged with meeting very strict federal Clean Water Act permits. As requested by the Maryland Association of Counties, each jurisdiction got the freedom to set its

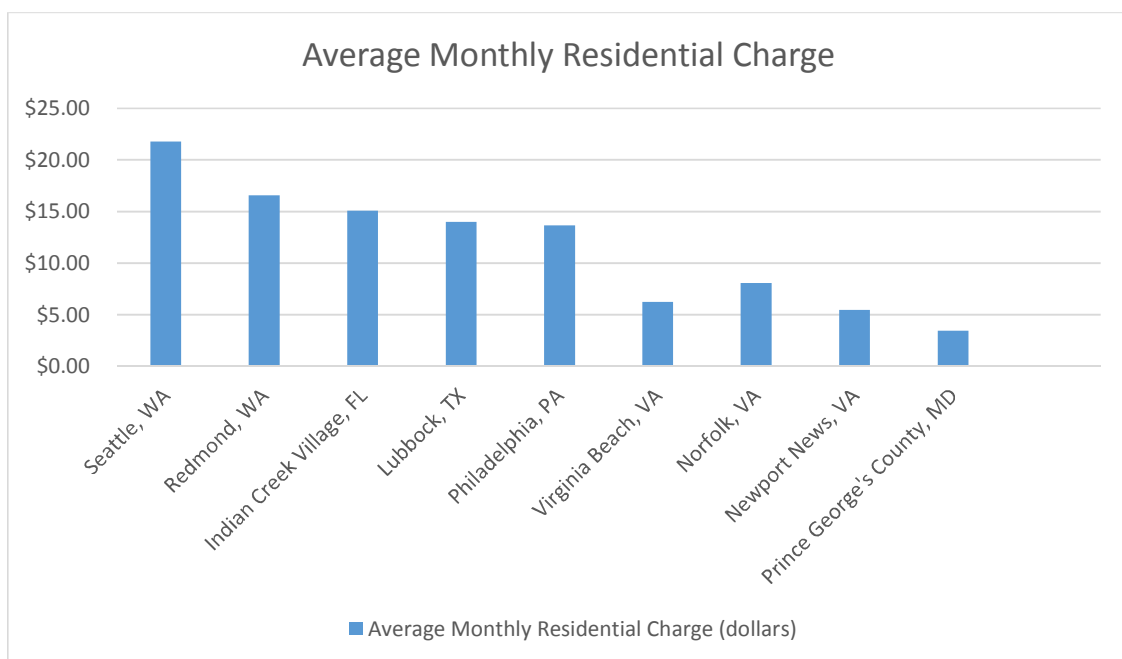
⁴ MDE Watershed Report for Biological Impairment of the Patuxent River Upper Watershed, 2010.

⁵ Based on the Maryland Dept. of Planning 2002 GIS land-use data for the Prince George's County.

⁶ U.S. Environmental Protection Agency. "Surf Your Watershed." Available at: <http://cfpub.epa.gov/surf/locate/index.cfm>.

own set of fees, according to its own polluted runoff needs. That’s why businesses with the same “footprint” might have to pay a different amount in one jurisdiction or another.

The benefit to communities far outweigh the speculative concern that businesses will relocate. While businesses might wish to locate in Delaware, Pennsylvania, or Virginia instead of Maryland, it’s not likely a stormwater fee that will move them to do that. And, if they do, they might be surprised to learn that eighteen local jurisdictions in Virginia, eight local governments in West Virginia, at least two municipalities in Delaware (including the largest, Wilmington), and several in Pennsylvania already have stormwater fee systems in place – and these numbers are growing. Across the United States, there are **at least 1,400 local jurisdictions with stormwater utility fees in place.**⁷ A recent survey of jurisdictions with a stormwater utility fee found that the top three reasons such a fee was imposed were: to comply with regulatory requirements to reduce polluted runoff; to increase revenue stability; and to deal with the increasing costs of addressing polluted runoff.⁸ These top three reasons are equally applicable to the Maryland jurisdictions, and make implementing stormwater utility fees equally important. Even so, Maryland’s stormwater fees are not the costliest in the nation. In fact, they are not even at the higher end of the nationwide range.



STAY STRONG ON STORMWATER FEES!

⁷ Campbell, Warren. *Western Kentucky University Stormwater Utility Survey 2013*. Western Kentucky University, 6 July 2013. Web. 19 Nov. 2013.

⁸ Black & Veatch. *2012 Storm Water Utility Survey*. Black & Veatch, 2013. Web. 19 Nov. 2013. <<http://bv.com/docs/management-consulting-brochures/2012-stormwater-utility-survey>>.