



CHESAPEAKE BAY FOUNDATION

Saving a National Treasure

POLLUTED RUNOFF IN ANNE ARUNDEL COUNTY

Anne Arundel County has a wealth of waters, including the Magothy River, the Upper Patuxent River, the Rhode River, the Severn River, the South and West Rivers, the Patapsco River, and of course, over 500 miles of Chesapeake Bay shoreline. Unfortunately, every one of the aforementioned rivers is “impaired” under the Clean Water Act, meaning they do not meet water quality standards for their intended use. For most of those rivers, the lion’s share of pollution comes from 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. For example, the Severn River used to be an excellent waterway for yellow perch fishing. Now, due to poor water quality, the yellow perch fishery in the Severn River is closed and very few yellow perch remain.

Today, polluted runoff is the only major source of water pollution still on the rise. Using the 2009 baseline, urban runoff contributed **26%** of the total Nitrogen in Anne Arundel County.¹ Without a dedicated funding source like the fee, it will be a challenge for the County to address local water quality issues. **In fact, the County has allocated almost 77 million dollars to much needed projects in the County solely by leveraging the funding from the polluted runoff fees.** If the state delays or repeals the statutory requirement for local jurisdictions subject to a municipal separate storm sewer system (MS4) permit to implement a stormwater utility fee, it could have serious impacts on Anne Arundel’s ability to secure the funding for their planned projects. Delaying or repealing the stormwater utility fee could also result in Anne Arundel violating their MS4 permit obligations.

The table below shows the County has fallen short in reducing polluted runoff with current funding. It has built some excellent best management practices (BMPs) to reduce pollution from streets, parking lots and other impervious surfaces, but it has failed its MS4 permit obligations. The permit required Anne Arundel to restore 10 percent of its impervious acres over a five-year permit cycle. The county accomplished 6.2 percent over *eight years*. And the next permit will require DOUBLE the rate of improvement in the next five years. While AAC has an excellent

¹ Chesapeake Bay Model 5.3.2

restoration program, **funding is clearly insufficient to reduce polluted runoff, and to make the county's rivers and creeks clean as required by the permit.**

Watersheds	Impervious acres	Impervious acres managed by BMP	% Impervious acres restored by county	Remaining impervious acres not restored
Patapsco tidal	8,626	1,320	9.3	4,958
Patapsco non-tidal	4,166	713	1.9	2,014
Little Patuxent	4,408	incomplete	1.4	2,419
Severn River	8,183	1,877	9.0	2,834
Magothy River	4,425	930	4.6	2,622
South River	4,430	1,384	16.2	1,505
Bodkin Creek	614	111	0.0	354
Upper Patuxent	1,225	174	2.6	727
Herring Bay	824	incomplete	0.0	651
West River	492	incomplete	1.0	383
Rhode River	473	incomplete	0.6	341
Middle Patuxent	1,172	incomplete	0.0	779
Total	39,255		6.2	19,586

Source: Anne Arundel County NPDES MS4 Annual Report 2012—Table 12.

Cleaning up our local waterbodies has an immediate positive effect for the people of Anne Arundel County apart from satisfying permit obligations, including reduction of swimming closures, improved fishing opportunities, reduced flooding and creating local jobs. The great thing is, taking care of Anne Arundel County's local waterways also takes care of its obligations for the Bay.

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 (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 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. 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.

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.**² 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.³ These top three reasons are equally applicable to the Maryland jurisdictions, and make implementing stormwater utility fees equally important.

² Campbell, Warren. *Western Kentucky University Stormwater Utility Survey 2013*. Western Kentucky University, 6 July 2013. Web. 19 Nov. 2013.

³ 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>>.

Why is polluted runoff such an issue in Maryland?

Maryland's cities and suburban areas contain some of the highest concentrations of impervious surfaces in the whole Chesapeake Bay watershed. (See enclosed map titled "Impervious Surface by Watershed"). The concentrated areas of urban and suburban development in Maryland are also very close in proximity to the Bay compared to urbanized areas in most of Pennsylvania and Virginia, especially in Anne Arundel County where many communities are within one mile of the Bay shoreline. That's why Maryland has the biggest job to do when it comes to polluted runoff and why the Maryland Legislature passed the Stormwater Utility Fee legislation.

Why is a local stormwater utility fee fairer than a cookie cutter state mandate?

The Maryland Legislature was responsive to local insistence that local governments know best what retrofits are needed to address polluted runoff and how to set fees that would pay for needed restoration projects. Anne Arundel County's existing program directs fees to solving local water quality problems and gives the public a role to play in how it is spent and accounted for. Property owners have the flexibility to reduce their fees through onsite mitigation and creative, cost-effective solutions can arise when people participate in their own retrofits. Businesses like fishing guides, landscape architects, engineers, landscape contractors, tourism professionals and watermen will benefit from locally created jobs, locally sourced materials and improved water quality and fishing. Lastly, failing to address polluted runoff locally now would shift the burden of a much greater expense later onto farmers, wastewater treatment rate payers and private citizens.

Why do we need to spend all of this money in Anne Arundel County to save the Bay?

Anne Arundel has 19 separate local water bodies that are not currently meeting water quality standards. Maryland Department of Environment has established clean-up plans for seven of these segments that are impaired for bacteria pollution, mostly because of high levels of impervious surfaces in the watershed. Polluted runoff also contributes 81% of the suspended sediments in the Severn River.⁴ Under the state's pending new Phase 1 stormwater permit, Anne Arundel County will be expected to reduce or treat 7564 impervious surface acres over the next 5 years.⁵ These responsibilities apply to Anne Arundel County alone and cannot be offset by any other sector or region of the Bay's watershed.

⁴ Chesapeake Bay Model 5.3.2

⁵ Calculated from 20% reduction requirement and Anne Arundel County's impervious surface acreage as of 2000 of 37,820 acres.