

ANNE ARUNDEL COUNTY

Key Facts

Population¹	560,133	(5 th of 10)
Impervious Acreage²	29,311	(3 rd of 10)
Current Permit		
Date of Issuance/Expiration	Feb 2014 / Feb 2019	
Impervious Acreage Restoration Goal	5,862 acres	
Spending		
Projected Annual Average ³	\$56.9 million	
Spending as a Percentage of County Budget ⁴	2.5%	(1 st of 10)
Spending as a Percentage of Median Household Income ⁵	0.3%	(3 rd of 10)
Average Annual Residential Fee	\$85	

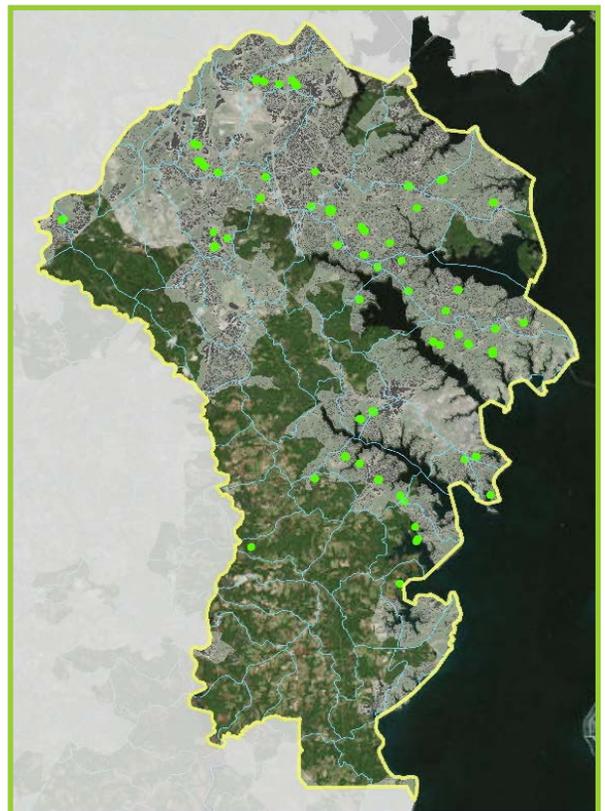
Summary of County Stormwater Plan and Effort

Summary: Anne Arundel County has made a significant future commitment to implementing its municipal separate storm sewer system (“MS4”) permit and restoring its many local creeks, streams, and tributaries that empty directly to the Chesapeake Bay. However, the county is off to a slow start as it has failed to meet previous permit requirements. Additionally, the county should be cautious about relying too heavily on alternative impervious surface restoration projects and practices rather than investing in the installation of high impact stormwater control projects with multiple community and environmental benefits. Finally, the county should explain why it has submitted a plan that only achieves about two-thirds of the pollution reduction requirements in its permit and is leaving as a placeholder in its plan the stated intention to claim credits from a future nutrient trading program which does not presently exist.

Basics: Anne Arundel County received its current MS4 permit under the Clean Water Act by the Maryland Department of the Environment (MDE) on February 2, 2014. This permit requires, among other things, that the county restore 20 percent of the untreated impervious surfaces within its MS4 system by the end of the five-year permit term, expiring in February 2019.

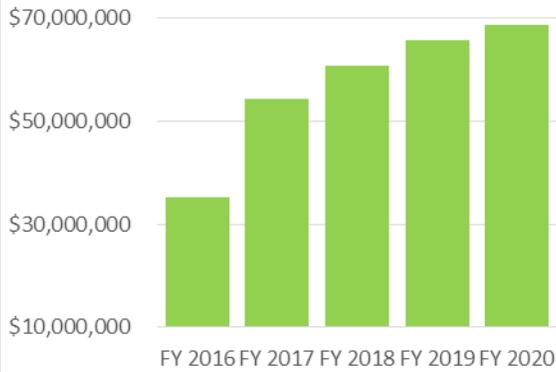
According to the county, its MS4 system contained 29,311 acres of untreated impervious surfaces, of which the county must restore 5,862 acres (20 percent). As of early 2016, Anne Arundel County estimates that it has restored 550 acres during the current permit term, equivalent to less than 10 percent of the permit requirement, with about half of the term remaining.

Level of Effort: Fortunately, the county has significantly increased recent efforts to achieve the impervious surface restoration requirements of its permit. For example, while the county estimates that it spent about \$17.4 million in fiscal 2014 to treat impervious surfaces under its MS4 permit, it more than



Urban areas are shown in light gray shading and impervious surfaces are shown as dark gray dots. Sub-watersheds are delineated with light blue lines. Completed impervious surface and watershed restoration projects are shown in bright green.

Restoration Spending



doubled such spending to \$42 million in fiscal 2015 and plans to further ramp up this level of effort to an average of more than \$60 million over the next three fiscal years.

This commitment to restoring the county’s waterways and natural landscapes is made possible in part by its stormwater remediation fee, which the county has wisely chosen to preserve in light of all of the environmental, economic, and community benefits that it provides. The county has also relied significantly on the use of bonds through its Capital Improvement Program to finance the implementation of its MS4 permit and the county’s Watershed Protection and Restoration Program. The use of bonds to finance stormwater and watershed restoration projects with long-term benefits is another wise choice by the county, particularly given the

relatively low borrowing costs and AAA bond rating that the county enjoys.

Restoration Strategy: The Anne Arundel County impervious surface and watershed restoration strategy has relied, to date, on installing a relatively diverse mix of “green infrastructure” projects that treat or eliminate impervious surfaces, as well as alternative watershed restoration projects that restore streams, wetlands, and marshes. However, the county plans to emphasize street sweeping over the next two years to reduce pollution from roadways while engineers and contractors finish designing and begin constructing the substantial number of green infrastructure and stream restoration projects in the pipeline.

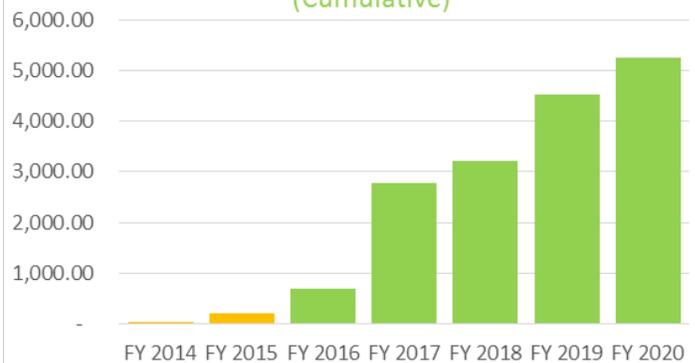
Ideally, county stormwater plans should include a diverse mix of water quality restoration projects and practices, but with a significant emphasis on carefully designed and site-specific projects that allow rainwater and snow melt to infiltrate into the ground and that filter out harmful nutrients, sediment, and toxic substances. Building this green infrastructure into the urban landscape has proven to be one of the most beneficial and high impact environmental policies that local governments can undertake and can provide a significant boost to the local economy.

Green infrastructure encompasses a vast number of generally small-scale projects, including rain gardens, wet ponds, bioretention filter cells, infiltration trenches, and many others recognized by civil and environmental engineers and scientists. These practices not only prevent water pollution, but create a more natural urban landscape that produces enumerable co-benefits for the local environment and community.

MDE also allows counties to take credit for annual practices such as street sweeping and storm drain cleaning and alternative projects and practices like stream restoration, shoreline management, tree planting, and even addressing septic systems to meet MS4 permit requirements. And while none of these practices are as valuable as investments in green infrastructure, they do at least pose some direct benefit to the environment.

By contrast, Anne Arundel County’s plan also relies on an environmental accounting gimmick that could potentially deliver no benefits to the county, environmental or otherwise. This gimmick is based on a draft “nutrient trading” manual that Maryland proposed in draft form in January 2016. However, Maryland has not established its nutrient trading program, and it is not lawful for the county to use credits from such a program for purposes of complying with its permit at this time.

Acres Restored by Projects (Cumulative)



Notes

- ¹July 2014 Estimate, Maryland Department of Planning
- ²MS4 Annual Report and Financial Assurance Plan (FAP)
- ³FAP
- ⁴Uniform Financial Reporting for Fiscal 2013 and FAP
- ⁵U.S. Census and FAP

*For More Information
Contact: [Evan Isaacson](#)*