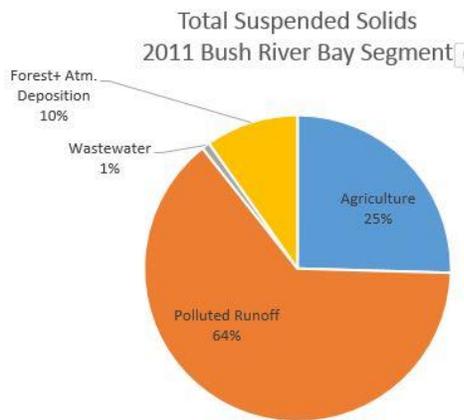




December 2013

HARFORD COUNTY HAS A PROBLEM: POLLUTED RUNOFF FOULS OUR WATER, CLOSES OUR BEACHES, THREATENS OUR HEALTH

Polluted runoff is a major source of water pollution in Harford County, especially to streams and rivers that flow through populated areas, such as the Bush River and its tributaries. Runoff is the reason we have closed beaches and swimming advisories each summer. It's the reason the county health department warns all residents to avoid contact with county rivers and streams for a full 48 hours after a significant storm because runoff carries dangerous levels of bacteria into swimming areas. Unhealthy bacteria levels were recorded at least 25 times on the Severn River alone this past summer, some readings as high as 15 times higher than safety limits. We've nearly finished upgrading sewage plants. Now it's time to fix our stormwater systems.



On its webpage, Servicemaster Restore says:
“Water damage is the most common disaster to affect Harford County and Baltimore County homes.”

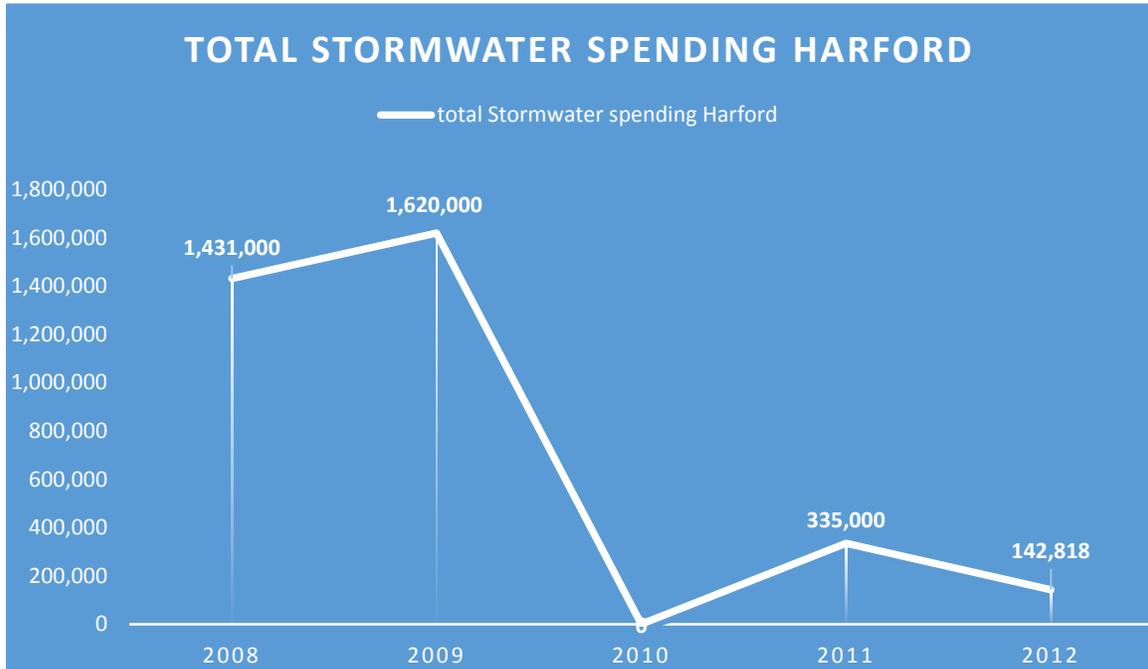
Source: CB Watershed 5.3 2011 progress run edge of stream load estimates.

Fifteen projects that would have helped ease the problems from polluted runoff in Harford County were put on hold this year alone. The projects (and amount shortchanged):

- 8) Joppatowne Area Watershed Restoration (\$1,500,000)
- 9) Lilly Run Watershed Restoration (\$250,000)
- 10) Maintenance/Repair of Dams (\$65,000)
- 11) Plumtree Run Watershed Restoration (\$2,000,000)
- 12) Sams Branch Watershed Restoration (\$750,000)
- 13) Stormwater Enhancement (\$75,000)
- 14) Stormwater Pollution Prevention (\$500,000)
- 15) Watershed/Stream Assessment Studies (\$500,000)

- 1) Wheel Creek Watershed Restoration (\$200,000)
- 2) Woodland Run Stream Restoration (\$400,000)
- 3) South Bond Water Quality Demonstration (\$120,000)
- 4) Declaration Run Watershed Restoration (\$1,250,000)
- 5) Deer Creek Watershed Restoration (\$500,000)
- 6) Edgewood Plaza Retrofit and Stream Restoration (\$250,000)
- 7) Watershed Restoration/Improvements (\$9,250,000)

Historically, Harford's spending on this problem has fluctuated



Source: NPDES MS4 2009-2011 Annual Report, Harford County, MD, Aug. 2, 2012

In fact, this year the county has allocated ZERO capital funds to address this problem, apart from the funding that will result from the reasonable stormwater fee. (Source – Hudson Myers, deputy director, Harford Division of Highways and Stormwater Management). When everyone contributes, everyone will benefit. In fact, the University of Maryland Environmental Finance Center estimates, for instance, that for every \$100 million nearby Anne Arundel invests in stormwater improvements, the county will gain \$220 million in economic benefits and almost 800 jobs.

Innovative solutions are sitting on county drawing boards. What's been missing: funding.

Stay strong on stormwater fees.

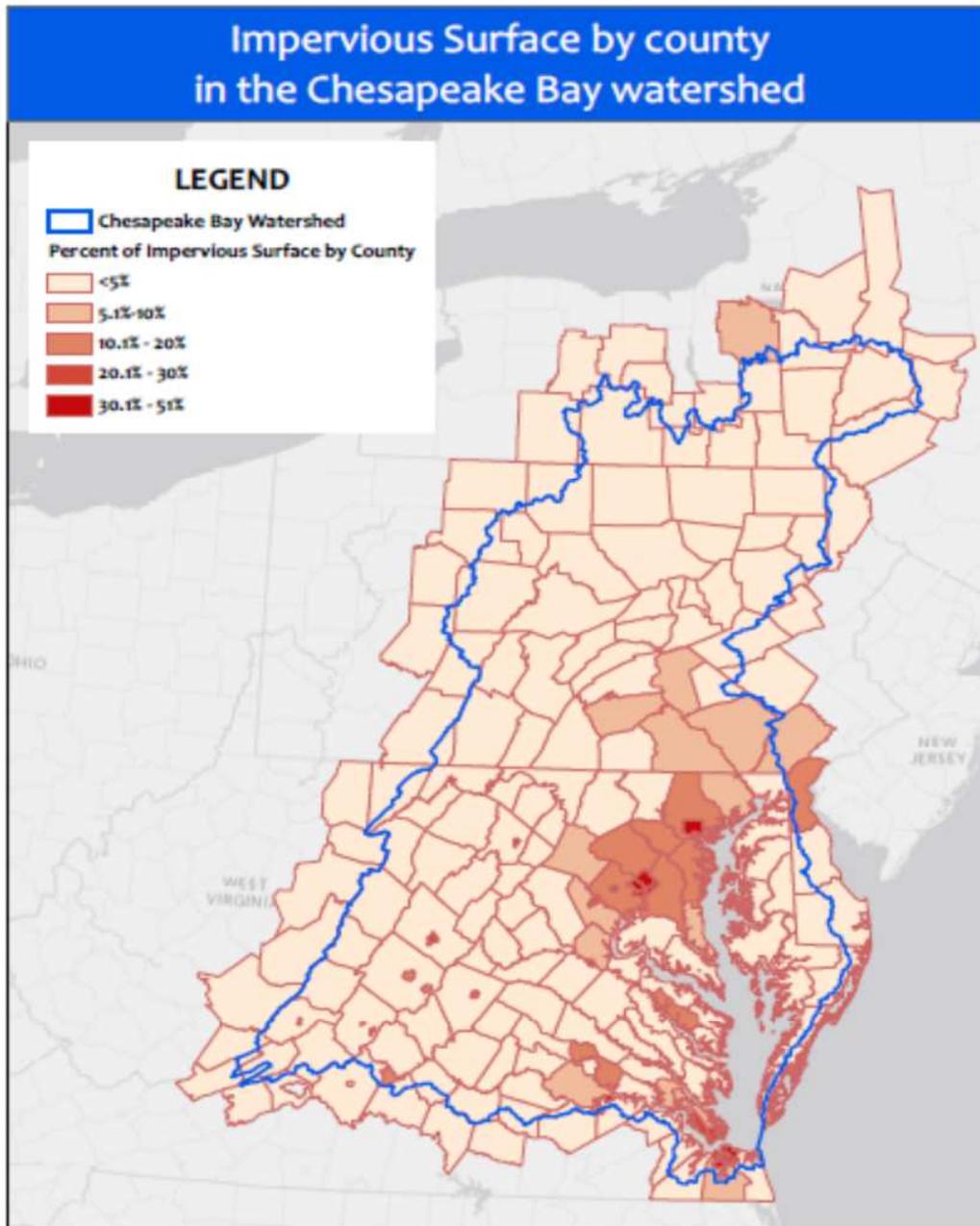


CHESAPEAKE BAY FOUNDATION
Saving a National Treasure

Founded in 1967, the Chesapeake Bay Foundation is a nonprofit 501(c)(3) conservation organization dedicated to saving a national treasure—the Chesapeake Bay and its rivers and streams. Its motto, Save the Bay, defines the organization's mission and commitment. With headquarters in Annapolis, MD, offices in Maryland, Virginia, Pennsylvania, and the District of Columbia, and 17 field centers, CBF works throughout the Chesapeake Bay's 64,000-square-mile watershed to build an informed citizenry, advocate pollution-reduction strategy, and enforce the law. CBF is supported by more than 200,000 active members and has a staff of 170 full-time employees. Approximately 80 percent of CBF's \$23.6 million annual budget is privately raised.

CHESAPEAKE BAY FOUNDATION • Philip Merrill Environmental Center • 6 Herndon Avenue • Annapolis, MD 21403
410/268-8816 • 301/261-2350 (from D.C. metro) • cbf.org

SOURCES OF POLLUTION IN HARFORD COUNTY



Map produced by Natalie Larson, CBF, using data from Claggett, P. R., Irani, F. M., and R.L. Thompson, 2013. *Estimating the Extent of Impervious Surfaces and Turf Grass Across Large Regions*, Journal of the American Water Resources Association, Vol. 49(5): 1752-1688 (<http://dx.doi.org/10.1111/jawr.12110>)



CHESAPEAKE BAY FOUNDATION

Saving a National Treasure

POLLUTED RUNOFF IN HARFORD COUNTY

The Bush River in Harford County was a favorite crabbing spot for many and, until recently, one of the watersheds with the highest water quality in the region. According to the Maryland Department of Environment, it is now listed as an “impaired water” under the Clean Water Act. In the Bush River, underwater grasses fell from just a little more than 141 acres in 2002 to just more than 48 acres in 2012.¹ Given Maryland’s Bush River restoration target of 356 acres, this seems like cause for concern and underscores the need for a solution. The single greatest source of nitrogen and sediment pollution in the Bush River is not agriculture, not septic systems, not wastewater treatment systems. It is 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. For example, the Bush River, a favorite crabbing spot for many and historically one of the rivers with the highest water quality in the Chesapeake Bay watershed, is now listed as an “impaired water” under the Clean Water Act, due in large part to polluted runoff.

Today, polluted runoff is the only major source of water pollution still on the rise. Using the 2009 baseline, urban runoff contributed **27%** of the total Nitrogen in Harford County.² 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 no money, except for the money that would be collected under the local fee program, to the priority projects the County has already planned in next year’s budget.

Harford County has local water bodies that are not currently meeting water quality standards. Maryland Department of Environment has established clean up plans for Bynum Run which is impaired for suspended sediments. Bynum Run has 71 % of it’s watershed in urban land use making it the primary contributor to the impairment.³ Similarly, Swan Creek is impaired for nitrogen and phosphorus. Pollutants impairing these local streams also contribute to the Bay’s persistent dead zone. Sediments from Conowingo can be a problem for underwater grasses in the Susquehanna flats and those impacts are under intense scrutiny as part of the re-licensing of the Conowingo dam. However, the impaired segments of these other local waterways are not

¹ University of Maryland Center for Environmental Sciences.

² Harford County Maryland Phase II Watershed Implementation Plan, July 2012.

³ MD Dept. of the Environment Bynum Run Water Quality Analysis for Eutrophication, 2006; MD Dept. of the Environment Bynum Run Sediment TMDL, 2011.

connected to Conowingo and must still be addressed if we are to improve local waters and the Bay. Significant contribution to pollutant loadings comes from urban polluted runoff, ruining treasured local waters such as Bush River and Gunpowder River.

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

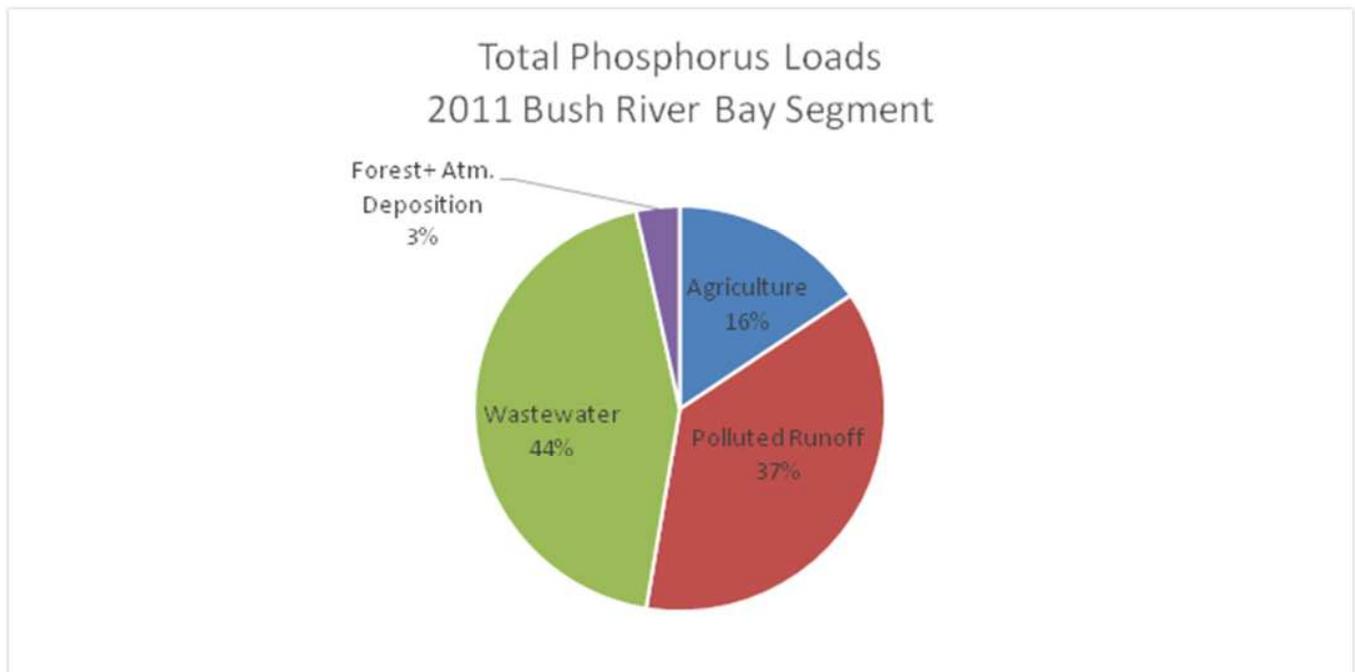
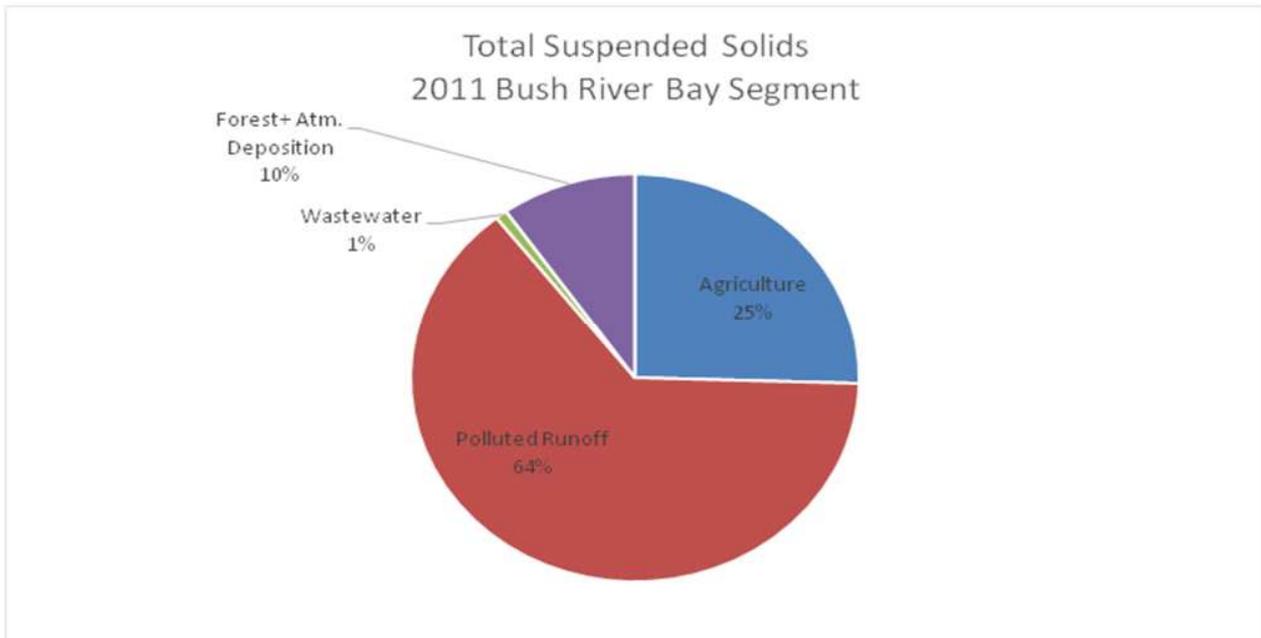
A COOPERATIVE EFFORT

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 (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.

SOURCES OF POLLUTION IN HARFORD COUNTY

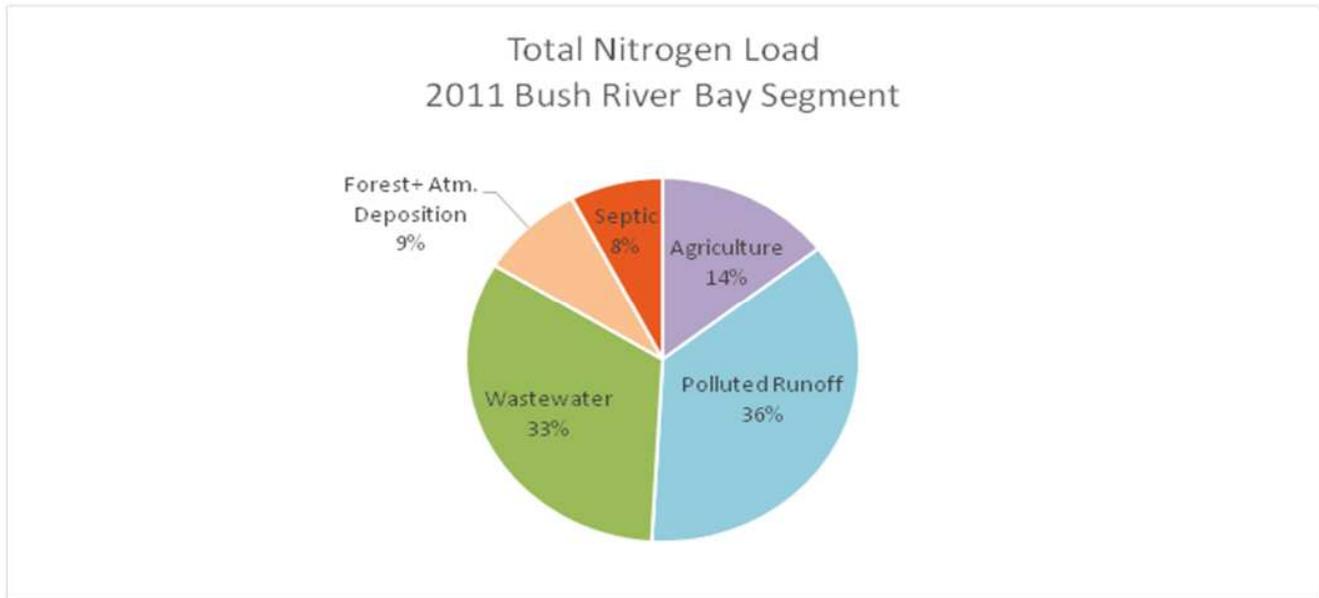
BUSH RIVER



Bush River segment includes - Bush River, Lower Winters Run, Atkisson Reservoir and Bynum Run.

Pie Charts produced by Molly Clark, CBF, using outputs from Maryland Assessment and Scenario Tool (MAST), Olivia H. Devereux, Interstate Commission on the Potomac River Basin.

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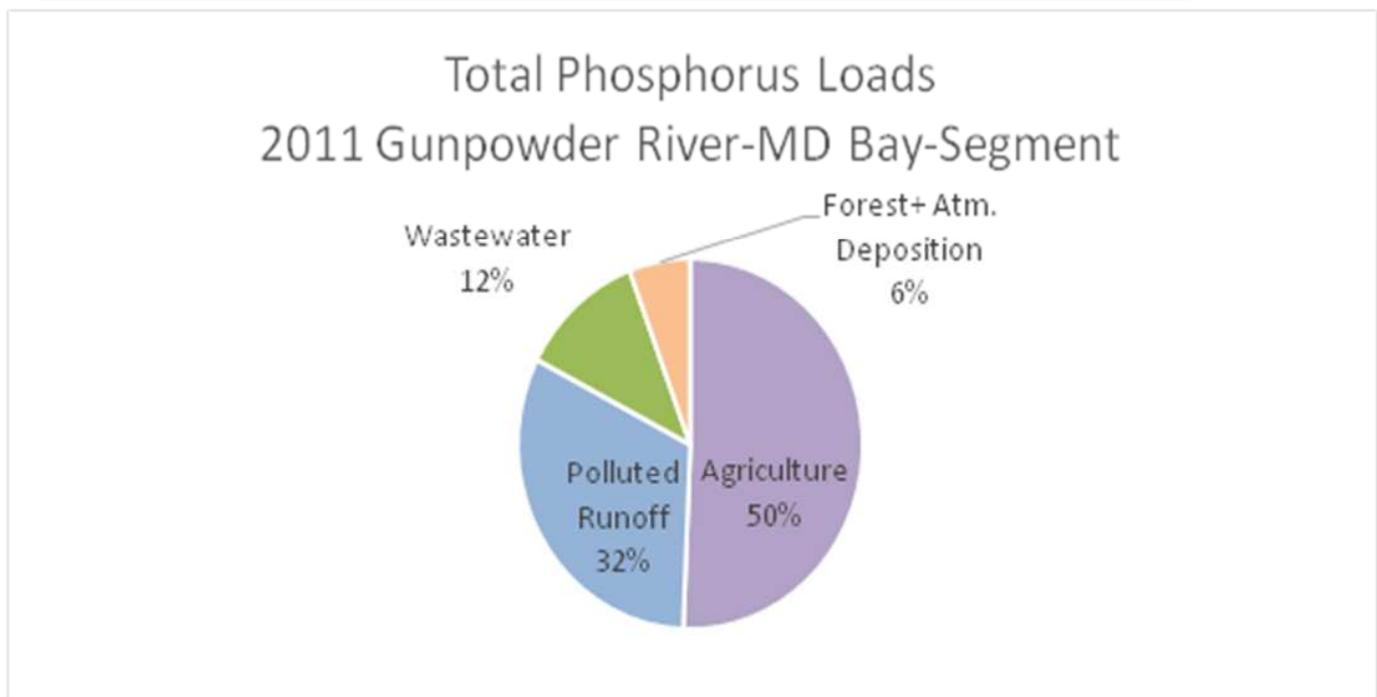
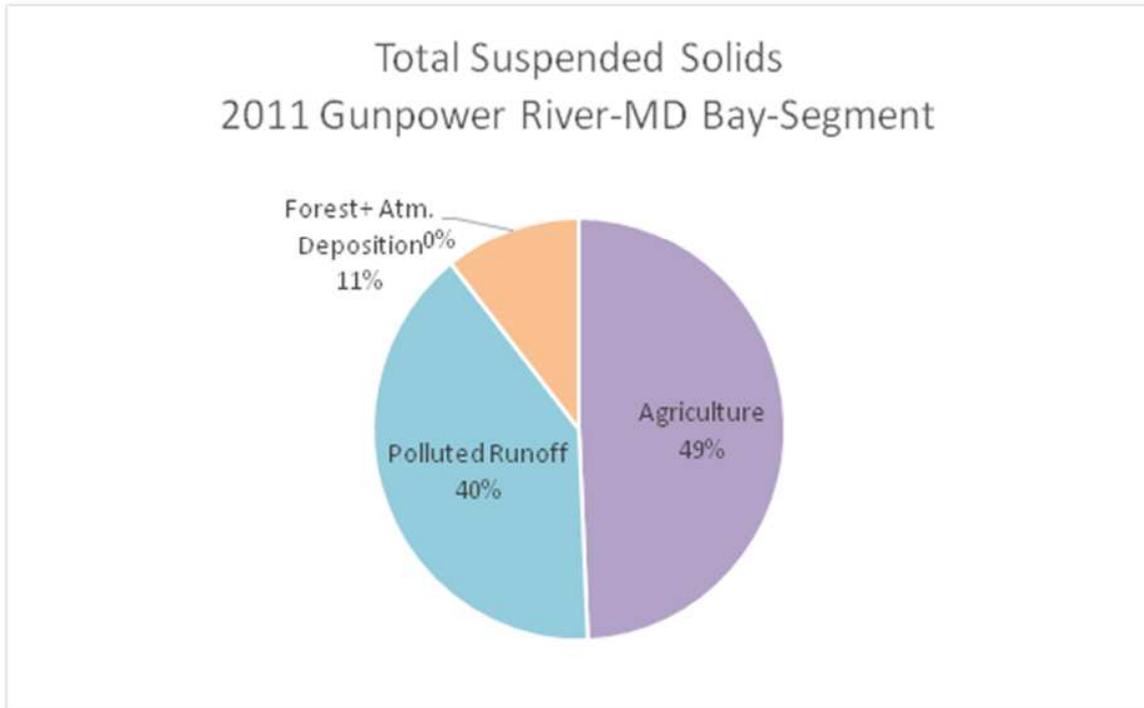


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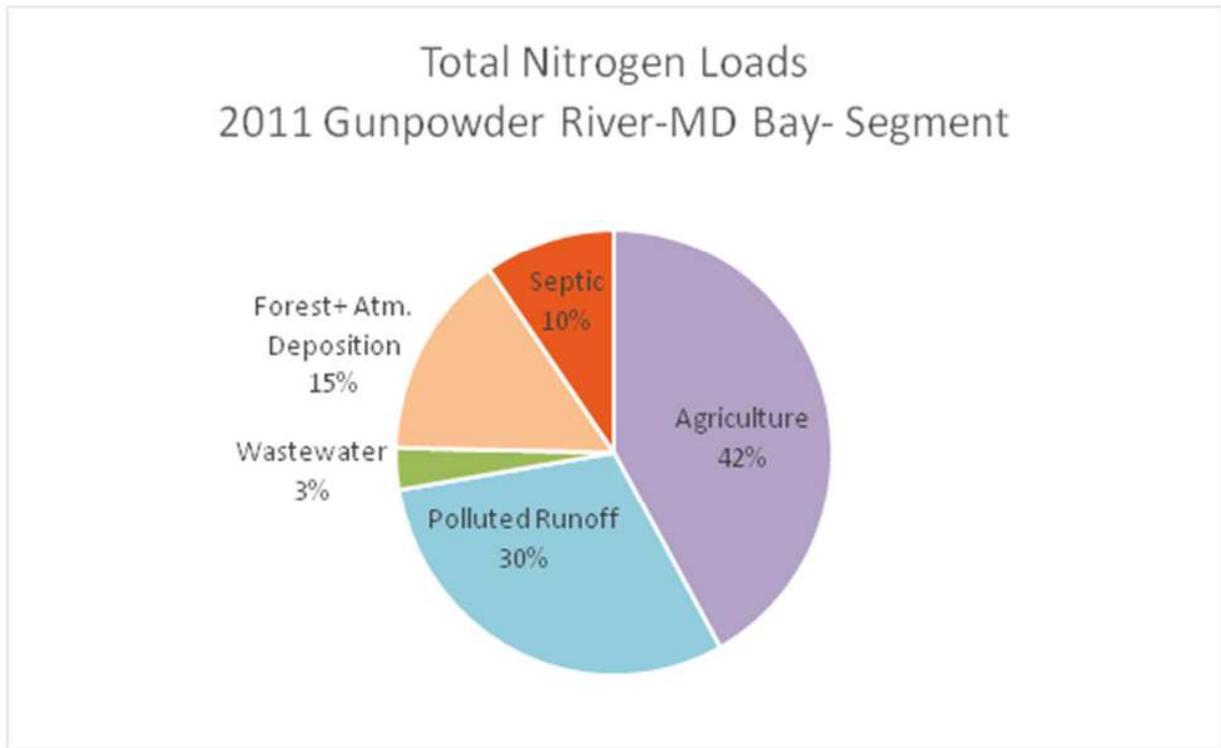
GUNPOWDER RIVER



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