Residential Stormwater BMPs & Resources in Anne Arundel County

Sally Albright, Education & Outreach Coordinator pwalbr00@aacounty.org | 410-222-0136

Anne Arundel County Bureau of Watershed Protection & Restoration

BWPR is the Bureau within DPW responsible for the work associated with the County's clean water obligations under its Municipal Separate Storm Sewer System (MS4) permit and the Chesapeake Bay Total Maximum Daily Load (TMDL).

Services Provided:

- Maintaining/retrofitting County stormwater infrastructure
- Planning and implementation of Capital Improvement Restoration Projects
- Monitoring/evaluation of local water quality
- Connecting County residents with stormwater management resources

Learn More: www.aarivers.org

www.facebook.com/AABWPR



Anne Arundel County Watershed Stewards Academy

The Watershed Stewards Academy (WSA) is a local non-profit advocacy organization supported by BWPR, AACPS, and other watershed partners.

Mission: To train and mobilize community leaders to drive change for sustainable landscapes and clean waters.

Services Provided: WSA's hands-on certification courses give residents tools to implement environmental restoration/outreach projects in their communities.

Learn More: <u>www.aawsa.org</u>

https://www.facebook.com/H2Oshedstewards



Chesapeake Bay Trust

The Chesapeake Bay Trust (CBT) is a nonprofit, grant-making organization.

Mission: To engage and empower diverse groups to take actions that enrich natural resources and local communities of the Chesapeake Bay region.

Services Provided: The Trust works with many funding partners (local, State, and Federal) to collaboratively support natural resource projects.

Learn More: <u>www.cbtrust.org</u>



AACo/CBT Watershed Restoration Grant Program

Program Focus	Projects must accomplish on-the-ground restoration that treats rainwater runoff from impervious surfaces at a cost-effective price or demonstrates the accomplishment of another metric that will help the County (and now, City!) meet local water quality and runoff reduction improvement goals.
Eligible Applicants	501c non-profit organizations
Eligible Projects	"Construction-ready" (90+% designed) nature-based stormwater projects on community- or County-owned property, including stream restorations, living shorelines, rain gardens, and other stormwater BMPs.
Funding Range	up to \$300,000 per proposal, \$1M total to award annually
Timeline	RFP opens in November, due date in March (pre-app site visit in February), awards in May

Learn more: https://cbtrust.org/grants/anne-arundel-county-watershed-restoration/





Loch Haven Shoreline/Beach

Before (March 2020)

- Community beach was eroding ~3-ft per year
- LHCA previously had to place sandbags as a temporary/emergency measure







Loch Haven Shoreline/Beach

After (May 2021)

- ~250 LF living shoreline
- 0.1 acres tidal wetland habitat
- LHCA hosted volunteer planting days and invited school groups to tour
- 50/50 public-private partnership







Ulmstead Park Rain Garden

Before (January 2020)

 ~11,000 sq-ft (0.3 ac) of untreated runoff from the parking lot created a channel through the community's waterfront park, needed regular clearing/re-mulching







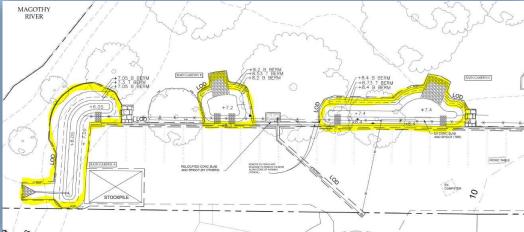
Ulmstead Park Rain Garden

After (April 2021)

- 3 rain garden cells, ~800 sq-ft total BMP area
- 100% parking lot runoff captured/treated
- Signage includes native plant ID tags
- UCID hosting volunteer planting day







Residential Property Tax Incentive Opportunities

For County residents installing stormwater BMPs on their private property, there are two (2) local property tax incentives available, both relating to fee reductions/reimbursements via the line item for the "Watershed Protection & Restoration Fee" in their annual property taxes.

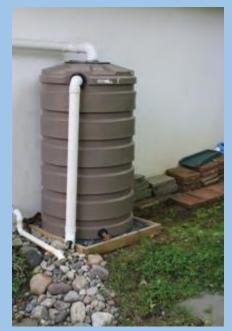
1. Stormwater Management Property Tax Credit

- A one-time reimbursement of up to 10% of the initial cost for installing a stormwater BMP on private property.
- O Learn more: https://www.aacounty.org/departments/public-works/wprp/stormwater-property-tax/index.html

2. Watershed Protection & Restoration Fee (WPRF) Credit

- Up to 50% off your property's WPRF property tax (% depends on the treatment capacity of the BMP), which is annually renewable in perpetuity as long as the BMP is functional and maintained by the property owner. BMPs receiving this credit are subject to a triennial inspection (with proper notice) by I&P.
- Learn more: https://www.aacounty.org/departments/public-works/wprp/wprf-credit-program/

Residential BMP Examples - Rain Barrel/Cistern



Source: AAWSA Rainwater Harvesting Manual



Source: Blue Barrel Systems



Source: AAWSA Rainwater Harvesting Manual



Residential BMP Examples - Riparian Buffer Planting

Stop mowing at least 10' (best case, up to 100') from the water's edge!





Check out WSA's **Backyard Buffers** and **Groves of Gratitude** programs!

Residential BMP Examples - Conservation Landscape





Also check out WSA's Re-Plant & and Re-Pollinate Anne Arundel programs!

Source: http://aawsa.org/conservation-landscapes/

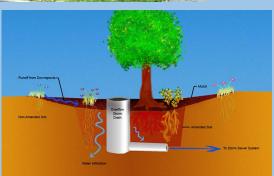
Residential BMP Examples - Rain Garden





Underdrain or no underdrain?

Required if water drains <1/2"/hour



Source: Minnesota Stormwater Manual

Residential BMP Examples – Permeable or Pervious Hardscape



"Permeable" – space is made between pavers to allow infiltration "Pervious" – pavers are made of porous material

Source: AAWSA Permeable Hardscapes Manual

Residential BMP Examples – Living Shoreline







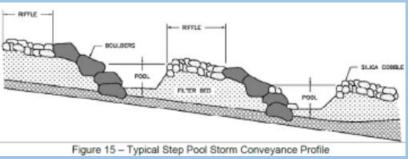
Consider a Living Shoreline instead! →





Residential BMP Examples - Step Pool Conveyance (SPSC)





Other Helpful Web Resources

- ✓ WSA Rainscaping Manual
- ✓ WSA "From My Backyard to Our Bay" Guide
- ✓ WSA County Permitting Cheat Sheet
- ✓ Learn more about becoming a Clean Water Community!
- ✓ Learn more about becoming a Master Watershed Steward!
- ✓ Check out WSA's <u>Stormwater Success courses</u>, offered annually!
- ✓ Anne Arundel County Stormwater BMP Maintenance Guide
- ✓ Anne Arundel County Native Plant List
- ✓ Anne Arundel County Landscaping Manual
- ✓ Anne Arundel County Waterfront Homeowners Guide
- ✓ Anne Arundel County Responsible Boating Guide
- ✓ Find local watershed partners, access AACo resources, and more at www.aarivers.org/ on our Education & Outreach page

Stay in touch!

Sally Albright, CBLP

BWPR Education & Outreach Coordinator

<u>pwalbr00@aacounty.org</u> | 410-222-0136

