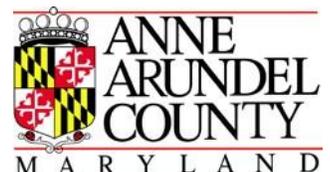




Anne Arundel County

Watershed Protection and Restoration Fee (WPRF)
Stormwater Remediation Fee Credit Agreement

Guidance Document



Section 1 – Background

Anne Arundel County's water resources – its streams, rivers, wetlands, and Chesapeake Bay - play an important role in the quality of life we enjoy. They provide us a sense of place, recreation, support tourism, and are used by industry. These waters, however, are vulnerable to pollution from a wide variety of human activities. In fact, all of Anne Arundel County's waterways are considered "impaired" because of excessive levels of pollution, largely a result of untreated stormwater runoff.

Land Use plays an important role in how pollution ends up in our waterways. Impervious surfaces such as roads, building footprints, parking lots, driveways and other hard surfaces prevent rainfall from seeping into the ground, resulting in the potential for large volumes of stormwater to run off more rapidly and more directly into our local streams and rivers. Pollutants carried with this runoff reduce water quality and negatively impact stream health. Research shows that as the impervious surface area in a watershed increases, the ecological integrity of surrounding streams deteriorates.

The County recognizes that stormwater from public and private property , needs to be treated through the installation and retrofit of stormwater management practices, or best management practices (BMP's), to help keep our waterways clean and meet Federal and State stormwater pollution mandates.

Section 2 – Purpose

The WPRP established the WPRF Stormwater Remediation Fee Credit Agreement to provide credit to single-family property owners that have installed small-scale (e.g., under 5,000 Sq.ft land disturbance) stormwater BMP's on their property.

The WPRF Stormwater Remediation Fee Credit Agreement is an agreement by and between the property owner and the County, where currently there is no Inspection and Maintenance Agreement for private stormwater management and a County grading permit was not required for the installation practice(s), and the property owner would like to apply for credit for the stormwater practice(s) through the WPRF Credit Program. The agreement would allow single-family property owners to apply for credit towards the WPRF. The agreement also enables the County to review eligible practices for potential credit.

Section 3 – Eligible Stormwater BMP's

The primary objective of the WPRF Credit Program is to encourage property owners to proactively manage stormwater on their property by incorporating sustainable stormwater management practices that are used to meet or exceed the requirements found in the "2000 Maryland Stormwater Design Manual, Volume I and II" and Supplements. This manual can be found at www.aarivers.org under "Watershed Resources".

Customers may receive credit for installing and maintaining stormwater BMP's that limit nutrient loading (primarily phosphorus, nitrogen, and sediment) and decrease the quantity of stormwater entering the County's waterways. The following examples are typical single-family property stormwater BMP's, however, other BMP's may be eligible.

Stormwater BMP	Description
Rain Garden	A shallow depressed landscaped area with perennials and native vegetation that allows stormwater runoff from impervious surfaces to be filtered.
Permeable Pavement	Permeable pavement provides a solid ground surface, structurally strong enough to take heavy loads, like large vehicles, while at the same time they allow water to filter through the surface and reach the underlying soils.

	Permeable pavers are ideal for patios, sidewalks, and driveways. The voids in the surface of the paving allow water to drain through and infiltrate into the soil below. The underlying in-situ soils should be suitable for infiltration.
Rainwater Harvesting	Rainwater harvesting is a method by which rainwater that falls upon a surface (usually a rooftop) is collected and routed to a storage facility for future use. To be eligible for credit, rainwater harvesting systems must include not only the cistern, but also a reliable means of using or releasing the captured stormwater e.g., dedicated use. Rain barrels do not qualify for credit.
Disconnected Impervious Surface	Disconnected impervious surface is the practice of directing stormwater runoff from a built-upon area to properly sized, sloped and vegetated pervious surfaces for treatment via infiltration and filtration. Both roofs and paved areas can be disconnected with slightly differing designs.

Section 4 – Calculating WPRF Credit

In general, the amount of credit granted is dependent on the amount of impervious area being treated in relation to the total amount of impervious area on the property and also the water quality volume (WQv) treated in relation to the 1" water quality volume per MDE Stormwater Guidelines. By law, the maximum credit for any property is 50% of the WPRF. The calculation is as follows:

$$\text{Total Credits} = (\text{impervious area treated} / \text{total impervious area}) * 0.5 \text{ (i.e. maximum credit of 50\%)}$$

For example:

A resident has installed a 500 sq. ft. rain garden designed for treating 1" water quality volume for 500 sq. ft. of impervious area. The property has 2,000 sq. ft. of impervious area and is currently charged a WPRF of \$89.25 annually. As the rain garden is designed to treat the full 1" water quality volume the credit is calculated as follows:

$$(500/2000)*0.5 = .125 \text{ or } 12.5\%.$$

Since the current WPRF for the property is \$89.25 the amount of credit is calculated as:

$$\$89.25 * 0.125 = \$11.16; \text{ Therefore, the new WPRF for this property is } \$78.09.$$

Example	Total Impervious Area (Sq. ft.)	Impervious Area Treated (Sq. ft.) ¹	Credit Calculation (Max. of 50% of WPRF)	Credit Reduction	Final Fee
Residential - WPRF = \$89.25	2,500	2,500	$(2500/2500)*0.5 = 0.5$	$\$89.25*0.5 = \44.63	$\$89.25 - \$44.63 = \$44.62$
Residential - WPRF = \$178.50	5,000	2,500	$(2500/5000)*0.5 = 0.25$	$\$178.50*0.25 = \44.63	$\$178.50 - \$44.63 = \$133.87$
Residential - WPRF = \$89.25	2,000	500	$(500/2000)*0.5 = 0.125$	$\$89.25*0.125 = \11.16	$\$89.25 - \$11.16 = \$78.09$
Residential - WPRF = \$35.70	2,000	500	$(500/2000)*0.5 = 0.125$	$\$35.70*0.125 = \4.46	$\$35.70 - \$4.46 = \$31.24$

¹ Assumes BMP provides full WQv (i.e. 1 inch) treatment. Credit is lowered proportionally to the actual WQv treated in relation to the full WQv.

Section 5 –WPRF Credit Application Details

Single-family property owners installing stormwater BMP's that do not need County grading permit approval (i.e. under 5,000 sq. ft. of disturbance) and do not need an Inspection/Maintenance Agreement for Private Stormwater Management, can enter into the WPRF Credit Agreement as a part of the WPRF Credit Program application process. The below should be submitted as part of your complete application:

- Completed WPRF Credit Application
- Completed Single Family Residential Property Stormwater BMP Summary Sheet
- Photographs of BMP and Drainage Area
- A signed WPRF Stormwater Remediation Credit Agreement

Please visit www.aarivers.org for the most updated forms and submittal instructions.

The County will review and evaluate all completed WPRF Credit Agreements and supporting documentation within 90 days of receipt. Applicants will be notified in writing regarding the outcome of the evaluation.

Credit Renewal -Maintenance of BMPs

The proper design and construction of a BMP is essential to its ability to detain runoff and adequately remove pollutants from the stormwater. Equally important is the proper operation and upkeep of such a facility. Without proper maintenance, a BMP will not function as it is intended and, in some instances, may cause a host of problems from endangering the public to nuisance odors to reduced property values.

The applicant will continue to receive credit for up to three years. A renewal application **does not** need to be submitted to the County provided the practices continue to be operated and maintained in accordance with the most recent credit application. Functional verification of the stormwater BMP's is required to continue receiving stormwater remediation fee credit. It is the applicant's responsibility to insure continuing maintenance and good working condition of the stormwater BMPs on their property.

Transfer

In the event that the Owner transfers the Property to a new owner(s), WPRF credits cannot be transferred from current/existing property owner to the future/new property owner. Also, the credit Agreement shall automatically terminate and no longer be effective, and the stormwater remediation fee credit shall no longer apply towards the WPRF imposed for the Property. The new property owner may apply for WPRF credit by submitting new credit application, along with all supporting documents, for review and approval.

Enforcement

Inspections and documentation are the primary methods employed to monitor approved credits. Failure to maintain and operate the stormwater management practice in strict compliance with County Approved Plans, Maintenance Agreements, County Standards, Stormwater Management Practices and Procedures Manual, and/or the "2000 Maryland Stormwater Design Manual, Volume I and II" and Supplements will result in the loss of the credit.