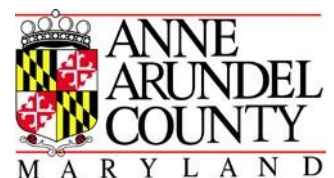




# Anne Arundel County

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 the 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 Bureau of Watershed Protection and Restoration (BWPR) established the Watershed Protection and Restoration Fee (WPRF) Stormwater Remediation Fee Credit Agreement to provide credit to property owners that have installed small-scale (i.e., under 5,000 square feet of 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 of the practice(s), and the property owner would like to apply for credit for the stormwater practice(s) through the WPRF Credit Program. The agreement enables these property owners to apply for credit towards the WPRF. It also outlines a landowner's responsibility for maintaining the stormwater practice(s) and allows the County reasonable access for inspection.

## **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](#).

Property owners may receive credit for installing and maintaining stormwater BMPs 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 small-scale stormwater BMPs, however other BMPs may be eligible. If you have questions regarding the eligibility of a practice not on this list, please contact BWPR at 410-222-7536 or [wprf@aacounty.org](mailto:wprf@aacounty.org).

Stormwater BMP	Description
<b>Dry Well</b>	Excavated pits filled with gravel or stone that provide temporary storage of runoff from rooftops.
<b>Infiltration Trench</b>	Trenches filled with stone that allow stormwater to infiltrate into surrounding soils.
<b>Rain Garden</b>	A shallow depressed landscaped area with perennials and native vegetation that allows stormwater runoff from impervious surfaces to be filtered.
<b>Permeable Pavement</b>	Permeable pavement provides a solid ground surface, structurally strong enough to take heavy loads, like large vehicles, while at the same time allowing 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.
<b>Rainwater Harvesting</b>	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 for a dedicated use.
<b>Disconnected Impervious Surface</b>	Disconnected impervious surface is the practice of directing stormwater runoff from an impervious surface 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:

Credit % = (Treated Impervious/Site's Total Impervious) x Treatment Value x 50% (i.e. maximum credit of 50%)

*Where the Treatment Value equals 100% if at least 1" of rainfall is treated by the eligible practices. If less than 1", use the percentage of 1" treated for the Treatment Value*

For example:

A resident has installed a 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:

Credit % = (500 sq ft / 2,000 sq ft) x 100% x 50% = 0.125 or 12.5%.

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

Credit Amount =  $\$89.25 \times 12.5\% = \$11.16$   
 New WPRF for this property =  $\$89.25 - \$11.16 = \$78.09$ .

Additional examples:

WPRF Before Credit	Total Impervious (Sq. ft.)	Impervious Treated (Sq. ft.)	Rainfall Treated (inches)	Credit Calculation	Credit Reduction	Final Fee
\$89.25	2,500	2,500	1"	$(2500/2500) \times 100\%$ $\times 50\% = 50\%$	$\$89.25 \times 50\%$ $= \$44.63$	$\$89.25 - \$44.63$ $= \$44.62$
\$178.50	5,000	2,000	1"	$(2000/5000) \times 100\%$ $\times 50\% = 20\%$	$\$178.50 \times 20\%$ $= \$35.70$	$\$178.50 - \$35.70$ $= \$142.80$
\$35.70	1,500	1,200	0.5"	$(1200/1500) \times 50\%$ $\times 50\% = 20\%$	$\$35.70 \times 20\%$ $= \$7.14$	$\$35.70 - \$7.14$ $= \$28.56$

### Section 5 –WPRF Credit Application Details

Property owners installing small-scale stormwater BMPs that do not need County grading permit approval (i.e. under 5,000 sq. ft. of disturbance) and do not need an Inspection and Maintenance Agreement for Private Stormwater Management must enter into the WPRF Credit Agreement as a part of the WPRF Credit Program application process.

Please visit [www.aarivers.org](http://www.aarivers.org) for the most updated forms and submittal instructions or to apply using our online application system.

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 WPRF Credit will continue to be applied annually provided the practice(s) continue to be operated and maintained in accordance with current applicable stormwater management guidelines and agreements. It is the applicant’s responsibility to ensure continuing maintenance and good working condition of the stormwater BMPs on their property.

The County reserves the right to inspect, at any time, stormwater management practices associated with a WPRF Credit. Those inspections will be in accordance with the WPRF Stormwater Remediation Fee Credit Agreement and will occur at a minimum of once every three years.

#### Transfer

In the event that the Owner transfers the Property to a new owner(s), the WPRF Stormwater Remediation Fee Credit Agreement that the Owner had with the County shall automatically terminate and no longer be effective as this type of agreement does not transfer. The new owner will be contacted by the County and will be given a chance to enter into a new WPRF Stormwater Remediation Fee Credit Agreement in order to continue the application of the credit. If the new

owner does not enter into a new Agreement in the specified time frame, the credit will be revoked as this Agreement is a condition of approval. If the credit is revoked for this reason, it does not prevent the new owner from re-applying for a Fee Credit on the property in the future.

### **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. Property owners will be notified if their practice is out of compliance and given the opportunity for corrective action before the associated credit is revoked.