

Stormwater Utility Credit Manual



Town of Blacksburg, Virginia
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GLOSSARY

Agricultural property means undeveloped property used for the tilling, planting or harvesting of agricultural, horticultural or forest crops or land used for raising livestock.

Best management practice or BMP means schedules of activities, prohibitions of practices, including both structural and nonstructural practices, maintenance procedures, and other management practices to prevent or reduce surface waters and groundwater systems from the impacts of land-disturbing activities.

Erosion means the process of water or wind moving soil and depositing it elsewhere. Erosion is increased when vegetation is removed or an area is denuded.

Common area means land in a residential housing development that is not owned by an individual owner of the development but dedicated for shared use by all owners through a management organization, homeowners organization or cooperative board.

Credit means a reduction in the amount of SBUs associated with a property in recognition of a property's efforts to mitigate the runoff impact that its impervious area may have on the Towns stormwater management system.

Developed property means real property that has been altered from its "natural" state by the addition of any improvements such as buildings, structures, and other impervious surfaces. For new construction, property shall be considered developed pursuant to this section upon (a) issuance of a certificate of occupancy or (b) certification of the final building permit inspection for those facilities not requiring a certificate of occupancy.

Developed residential property means a developed lot or parcel containing at least one (1) but no more than four (4) residences or dwelling units, and accessory uses related to but subordinate to the purpose of providing permanent dwelling facilities. Such property may include houses, duplexes, triplexes, quadruplexes, townhouses and mobile homes.

Developed multifamily residential property means developed property containing more than four (4) residences or dwelling units, and accessory uses related to but subordinate to the purpose of providing permanent dwelling facilities. Such property may include apartments and condominiums.

Developed nonresidential property means developed property that does not serve a primary purpose of providing permanent dwelling units. Such property shall include, but

not be limited to, commercial properties, industrial properties, parking lots, recreational and cultural facilities, hotels, offices and churches.

Impervious surface area means a surface that is compacted or covered with material that is highly resistant to infiltration by water, including, but not limited to, most conventionally surfaced streets, roofs, sidewalks, parking lots, gravel parking lots and roads, and other similar structures.

Permanent Reduction means the reduction of inflow or pollutant load achieved by verifiable stormwater practices. These practices available for use are limited to those contained in the Virginia Stormwater BMP Clearinghouse website and designed with the standards and specifications contained therein.

Revenues means all rates, fees, assessments, rentals or other charges or other income received pursuant to this article, in connection with the management and operation of the system, including amounts received from the investment or deposit of moneys in any fund or account and any amounts contributed by the town, funds provided by developers or individual residents, and the proceeds from sale of general obligation for stormwater projects or stormwater revenue bonds.

SBU rate means the fee charged for a stormwater billing unit.

Stormwater billing unit or **SBU** means the equivalent impervious area of a single-family residential developed property per dwelling unit located within the town based on the statistical average horizontal impervious area of a single-family residence in the town. A billing unit (BU) equals three thousand three hundred (3,300) square feet of impervious surface area. For individually metered residential properties, any common areas shall be considered, on a prorata basis, as being included in the SBU, so that no bill will be generated for the common areas.

Stormwater management system or **system** means the stormwater management infrastructure and equipment of the town and all improvements thereto for stormwater control in the town. Infrastructure and equipment shall include structural and natural stormwater control systems of all types, including, without limitation, retention basins, sewers, conduits, pipelines, pumping and ventilation stations, and other plants, structures, and real and personal property used for support of the system. The system does not include privately owned farm ditches and other private drainage systems.

Stormwater service charge means the monthly service charges based upon the SBU rate applied to property owners or occupants, including condominium unit owners or tenants (when the tenant or occupant is the party to whom water and sewer service is

billed), of developed residential property, developed multifamily residential property and developed nonresidential property, all as more fully described in section 18-704.

Undeveloped property means any parcel which has not been altered from its natural state to disturb or alter the topography or soils on the property in a manner which substantially reduces the rate of infiltration of stormwater into the earth.

INTRODUCTION TO THE STORMWATER ENTERPRISE FUND

The Town of Blacksburg finds that an adequate, sustainable source of revenue for stormwater management activities is necessary to protect the general health, safety, and welfare of the residents of the town. Further, Town Council finds that properties with higher amounts of impervious area contributes greater amounts of stormwater and pollutants to the stormwater management system and waters of the commonwealth and should carry a proportionate burden of the cost. However, stormwater runoff is associated with all

improved properties in the town, whether residential or nonresidential, and the individual property impacts of runoff are correlated to the amount of impervious surface on the property and land-disturbing activities on property.

The elements of the stormwater network and infrastructure will provide benefits and services to properties within the town through direct protection of property, control of flooding of critical components of the infrastructure



and protection of the town's natural environment. Therefore, the Council determines that it is in the best interest of the public to enact a stormwater service charge that allocates program costs to all property owners based on impervious area.

The stormwater credit system is intended to recognize and/or promote on-site systems, facilities, measures, or other actions that mitigate the impact and improve the quality of stormwater runoff to our local water bodies.

What is the stormwater network?

The stormwater network includes the waterways, storm pipes and stormwater BMPs that control stormwater during rain events. The network is a public system, similar to water or sanitary sewer, which provides a public benefit and is maintained by the Town.



CREDIT PROGRAM PROCEDURES

- Application must be submitted by January 1st of each calendar year.
- The Town staff will review the application. This may include requests for additional information and inspections of the applicant site to ensure that the application is complete.
- The Town will notify applicant of approval status by April 1st and the credit will be effective no later than July 1st. Applications for credits received after January 1 will be accepted, but not reviewed until the following year.
- No credit will be issued retroactively.
- Renewal of the stormwater utility credit shall be in accordance with the above procedures.



SUMMARY OF STORMWATER ENTERPRISE FUND CREDITS

The following general policies apply when considering stormwater credits:

- The engineering calculations associated with verification of credit eligibility must be performed, signed and sealed in accordance with the professional certification provisions outlined in the Town's subdivision ordinance.
- Credits are only applied to eligible customers. The fee may be assessed on an individual parcel basis or for a community with a shared facility.
- An eligible individual property is defined as a property that contributes runoff to the qualifying stormwater BMP located on the same property via natural or manmade systems.
- An eligible group customer is defined as multiple properties that collectively contributes runoff to one or a group of stormwater BMPs that have been designed and constructed for the purpose of treating the collective properties, such as a subdivision draining to a regional stormwater facility.
- If a group of properties are served by a BMP(s) then the credit will be applied to all
 customers for which the stormwater BMP is designed to treat. This applicant will be
 referred to as the primary applicant. If the applicant provides a memorandum of
 agreement (MOA) between the primary applicant and another customer for which
 - the BMPs provides adequate treatment for the applicable credit, the Town will apply the credit to all customers names in the MOA. This credit will apply to all of the applicants until the term expires or until such time as the primary applicant notifies the Town that the MOA is no longer in effect, whichever is sooner.
- No credits will be applied for BMPs located within the Town owned rights of way or public drainage or stormwater



- easement unless an agreement has been made with the Town prior to credit application.
- For the purposes of awarding the credit, the credit being applied for must be met for the entire development and must meet all credit conditions. Partial application of credit within a property will not be allowed. Phased development will be considered on a site by site basis.
- The maximum total credit per property is 50%.

APPLYING FOR A STORMWATER ENTERPRISE FUND CREDIT

All of the credits in this manual require an application, and some of the credit applications require engineering calculations to verify eligibility to receive the credit. The credits associated with engineering calculations are identified in the manual and the credit application forms. The Town requires that these calculations be performed, signed, and sealed in accordance with the professional certification provisions outlined herein.

Stormwater Credit Schedule		
1 year storm	1 year < or = to pre development	10%
2 year storm	2 year < or = to pre development	10%
10 year storm	10 year < or = to pre development	10%
25 year sorm	25 year < or = to pre development	10%
100 year storm	100 year < or = to pre development	10%
New Regulations	Channel & Flood Protection Compliance	20%
Water Quality	To current water quality standard	20%
Incentive Credits	Additional <u>volume</u> reductions may qualify proportional credit will be provided for the preduced.	

The procedure for filing a credit application includes the following tasks:

- Obtain an application packet from the Town.
- Retain a professional engineer to perform the required analysis.
- Submit the completed application with all sections appropriately filled out, and all required information contained within or attached to the application.
- The Town will review and rule on the eligibility of the credit application prior to April 1 of the calendar year submitted.
- Incomplete packages will not be considered by the Town and will be returned to the customer for correction or revision. The



- decision of the Town regarding credit eligibility is final.
- If the credit application is approved, the Town will apply the stormwater credit to the billing cycle no later than July 1 of the calendar year submitted.
- During the credit term, the Town has the right to inspect the BMP facility to ensure it is functioning per the design documents and is being properly maintained.
- Stormwater Utility credits expire automatically on June 30th at the end of the 5 year credit term.
- A new credit application is required at the end of the credit term. It is the customer's responsibility to ensure that reapplication is made by January 1st of the expiration year to continue credit coverage.

MAINTENANCE COVENANT

In order to remain eligible for a stormwater fee credit, a property owner must agree to adhere to a stormwater maintenance covenant for the facility(s) which qualify for the credit. For new facilities, the maintenance covenant is provided as part of the plan review and approval process and should be submitted as part of the credit application. In the event the credit application is based on an existing BMP or stormwater control feature, a maintenance agreement will need to be submitted, approved and recorded as part of the stormwater fee credit application process.

FACILITY MAINTENANCE AND INSPECTION REQUIREMENTS

In order for an applicant to continue to receive a stormwater credit, each BMP installed

must be maintained to ensure continued function. The applicant is responsible for having all ongoing maintenance work completed to keep the functional. The Town may revoke the credit if an inspection determines it is no maintained longer properly functioning as designed. This revocation will be effective thirty (30) days after the owner is notified in writing of the deficiencies and if the problems are not resolved.



REQUIRED MAINTENANCE

The following stormwater facility maintenance activities are required for a customer to be eligible for a Stormwater Facility Credit. These activities are required to ensure that the facility performs as credited, complies with Town standards and State regulations, meets safety standards, and is not a public nuisance. Maintenance activities are required on all drainage structures related to the facility, including the embankment, in flow points, headwalls, velocity dissipaters, spillways, pipes, feeder channels, discharge channels, etc. The owner of a credited Stormwater Facility must comply with all applicable maintenance practices below that are relevant to the credited facility.

- **Debris and Litter Removal** This activity must be performed after storm events totaling approximately two inches over a 24-hour period or as needed in order to prevent the structure from clogging and failing and to prevent a public nuisance.
- **Erosion and Structural Repair** Side slopes, emergency spillways, and embankments all may periodically suffer from slumping and erosion. Regrading, re-vegetating, compacting and/or installing or replenishing rip-rap may be required to correct erosion problems that develop.
- Mowing Side slopes, embankments, emergency spillways, and other grassed areas of stormwater facilities should be periodically mowed to prohibit woody growth and to prevent grass from growing over heights set forth in the Town code. More frequent mowing may be required in residential areas by adjacent homeowners or to meet State Dam Safety standards. Native grasses, which are water-tolerant, pest-tolerant, and slow growing, are recommended.
- No Blockages Remove sediment or any blockage from pipes, channels, spillways, inlets, and outlets as needed to keep the facility in proper working condition.
- Nuisance Control Standing water or soggy conditions within a "dry" stormwater facility can create nuisance conditions for nearby residents. Common nuisance conditions may include odors, mosquitoes, litter, and weeds. Regular maintenance to remove debris and ensure control structure functionally is required to control these potential problems. In addition, well maintained and established wetland plants in wet detention ponds or bird nesting boxes around the pond can provide a habitat for birds and predacious insects and fish that can actively serve as a natural check on nuisance insects such as mosquitoes.
- Outlet Control Maintain outlet control devised to ensure proper functioning in the control of stormwater velocities at the outlet of the stormwater facility. Revegetating and/or replenishing or reinstalling rip-rap may be required to correct erosion problems at the outlet of stormwater facility pipes.

- Removal of Log Jams and Debris All streams and ditches within the stormwater system should be inspected periodically for blockages. If identified, the blockages and debris should be removed as quickly as practicable.
- **Sediment Removal** This activity is to be performed as needed or as required by the Town to ensure proper working order of the facility and its related stormwater facility features (channels, pipes, etc.) and to maintain the required storage volume.
- Structural Repairs and Replacement Eventually, stormwater control structures will deteriorate and must be replaced. Major structural damage to outlet structures (i.e. cracks, leaks, or failure) must be repaired as soon as possible.

REQUIRED ANNUAL INSPECTIONS

Annual documentation must be submitted to the Town to continue receiving a credit. The required documentation consists of the following:

- Annual inspection report.
- Recently dated photographs showing the condition (including any known damage or disrepair) of a stormwater facility.
- Records demonstrating that required maintenance activities and/or repairs have been completed.

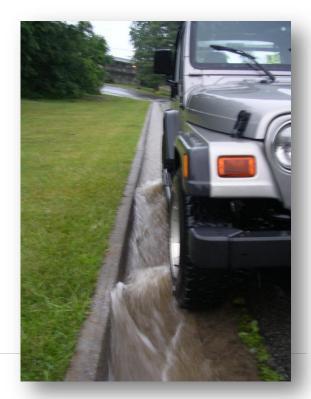
CREDIT RENEWALS

Stormwater fee credits are provided for a period of five years. In order to continue to

receive the credit in future years, the recipient is required to renew the credit application by January 1st of the year of expiration. It is the responsibility of the recipient to submit the credit renewal application to the Town ensuring that the credit remains continuous.

All renewals should be mailed to:

Town of Blacksburg Attn: Stormwater Program 400 South Main St. PO BOX 90003 Blacksburg, VA 24062-9003



RESTRICTIONS ON CREDITS

Transfer of Credit: The stormwater credit will apply to property upon transfer of ownership until the application period expires.

Off-Site BMP Credit

In circumstances where an applicant is attempting to claim credit for a BMP owned by a separate entity, proof that the Applicant shares in the maintenance obligations and costs of the BMP will need to be submitted in order for credit to be applied.

Local Community Requirements

The BMP must meet all applicable Town building, planning and other code requirements. If code requirements are violated, and no



efforts are made to come into compliance, the credit may be administratively terminated.

Right to Inspect

The Town may inspect the BMP at any time to perform compliance inspections.

CONTACT US

If you have questions or comment regarding the information discussed here, please contact the Town of Blacksburg by email at stormwater@blacksburg.gov.

By phone:

Stormwater Program Engineer – Kafi Howard (540) 443-1354 Stormwater Inspector – Mic Mullins (540) 443-1356 Director of Engineering and GIS – Randy Formica (540) 443-1351 Town Manager – Marc Verniel (540) 443-1005 For Emergencies, please call 911.

To report a misuse of the stormwater network or illegal discharge, please call Mic Mullins (540) 443-1356.