STORM WATER SERVICE
FEE CREDIT MANUAL

Type 1 Storm Water Credit Application

SUMTER COUNTY STORM WATER UTILITY

1289 NORTH MAIN STREET

SUMTER , SOUTH CAROLINA 29153

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Section 1 - Scope and Purpose

Parcels within the unincorporated areas of the Sumter County that are charged a storm water service fee based on total impervious surface may apply and qualify for a storm water credit. A storm water credit is a percentage reduction of the storm water fee for a single parcel that is categorized by use as either Commercial, Industrial, or fee assessed Agricultural. Parcels of the aforementioned types are charged an annual fee based on total impervious area as defined in Sumter County Ordinance Section 14-111 et al. This Storm Water Service Fee Credit Manual is intended to encourage and provide guidance to property owners and design professional seeking to reduce their storm water service charge by installing specific storm water management structures that will reduce the amount storm water runoff. Property owners are encouraged to apply for storm water service fee credits on new developments as part of Sumter County Storm Water Utility plan review process.

Section 2 - Introduction

Storm water runoff is water that flows over yards, streets, buildings, parking lots, and other surfaces when it rains. Storm water runoff flows into the nearest natural or manmade drainage features such as streams, catch basins, pipes, and ditches. In general, storm water runoff eventually empties, untreated, into our local streams, rivers, ponds, and lakes.

Developed properties have an increase of storm water runoff from their pre-development condition. The increase in runoff creates a variety of negative impacts on both the storm drainage system and the ecosystem in natural drainage ways. This increase in runoff and the resulting negative impacts are directly related to the amount of impervious area found on developed property.

Sumter County defines impervious areas as those areas that prevent or impede the infiltration of storm water into the soil. Common impervious areas include, but are not limited to, roof tops, sidewalks, walkways, patio areas, driveways, parking lots, storage areas, brick or concrete pavers, compacted dirt and gravel surfaces (roads, driveways, parking, and storage areas), and other surfaces which prevent or impede the natural infiltration of storm water into the soil.

A storm water fee is applied to the increase in storm water runoff volume from a developed property over its pre-development condition. A parcel of land had a given hydrology, or runoff characteristic, prior to development that was primarily based on soil type and ground cover. As a general rule, pre-development ground cover consisted of trees, pasture and some ground debris, such as bushes, leaves, fallen branches and the like. With the addition of roads, buildings and other modifications to ground cover and the removal of pre-development ground cover, the volume of runoff from a rainfall event increases. The storm water service fee is used to pay for the management of this increase of storm water runoff from pre-development to post-development. Therefore, the storm water service fee is directly proportional to the increase in the storm water runoff volume from pre-development conditions.

In order to relate impervious area to a storm water service fee, Sumter County has established an **Equivalent**

Drainage Unit (EDU). One **EDU** is currently defined as 8,000 square feet of **impervious surface**. For example, an industrial site containing 265,715 square feet of impervious area would be charged for 33.214 **EDU**'s . Per year, the industrial site would pay $996.42 (33.214 EDU's times $30/year per EDU = $996.42).

Sumter County has developed a system of credits for any **commercial**, **industrial** or **agricultural use** customers who have facilities or controls in place to retain and store storm water runoff, thereby reducing the total volume of storm water runoff from their property. This manual details the policies and procedures applicable to the **storm water service fee credit** program.

Section 3 - Definitions

Agricultural Use Property - shall include poultry houses, swine farrowing and confinement operations and gin operations. All other agriculture use properties as defined by this division shall be exempt from storm water service charges. Processing, production and distribution facilities associated with agriculture activities are considered industrial facilities and shall be subject to storm water service charges.

Best Management Practices (BMP's) - are schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to Surface Waters of the State. BMPs also include treatment requirements, operating procedures, and practice to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Commercial Properties - shall include all properties developed initially for the retail of goods and services, or other business activities, office buildings or property otherwise assessed as commercial use, and any multifamily residential structure with three or more dwelling units which structure is taxed as only one structure.

Developed Land - shall mean property altered from its natural state by construction or installation of more than 200 contiguous square feet of impervious surfaces as defined in this division.

Drainage System - is a collection of storm water conveyance structures, natural or manmade, that convey storm water runoff.

Equivalent Drainage Unit (EDU) - is the basis for assessing a storm water utility fee, currently defined as 8,000 square feet of impervious surface.

Industrial Properties - shall include all properties developed for uses other than residential and commercial

properties, as defined in this article.

Impervious Surfaces - are those areas which prevent or impede the infiltration of storm water into the soil as it entered in natural conditions prior to development.

Nonprofit Properties - shall include churches, government buildings or property otherwise assessed as nontaxable due to its use for a nonprofit activity.

Residential Properties - shall include, but shall not be limited to, the following structures for purposes of this division: Single-family residences; Duplexes; individually taxed units of townhouses; Individually taxed units of condominiums; Mobile homes.

Storm Water Service Charges - shall mean the periodic service charge imposed pursuant to this division by the county for the purpose of funding costs related to storm water management services and storm water management systems and facilities. The use of impervious surface on each property as a storm water service charge rate parameter shall not preclude the use of other parameters, or of grouping of properties having similar characteristics into classes or categories, grouping of properties having similar characteristics through the use of ranges or rounding up or down to a consistent numerical interval, or the use of flat-rate charges for one or more classes of similarly-situated properties whose impact on county's cost of providing storm water management services and storm water management systems and facilities is relatively consistent. Storm water service charges may also include special charges to individual properties or persons for services, systems, or facilities related to storm water management, including but not limited to charges for development plan review, inspection of development projects and on-site storm water control systems, and enhanced levels of storm water service above and beyond the levels normally provided by the county.

Section 4 - Abbreviations

EDU - Equivalent Drainage Unit

BMP - Best Management Practice

CN - NRCS Curve Number

Q - Storm Water Runoff Volume (inches)

Section 5 - General Information

Sumter County Council created a Storm Water Utility to provide for storm water management activities; such as, street maintenance, storm drainage repair and maintenance, public education and participation, the elimination of illicit discharges, control of construction site runoff, and pollution prevention.

Storm water service charge rates may be determined and modified periodically by Sumter County Council, so that, the total revenue generated by said charges and any other sources of revenues or other resources allocated by the county council to the storm water utility shall be sufficient to meet the cost of storm water management services, systems, and facilities, including but not limited to the payment of principal and interest on debt obligations, operating expense, capital outlays, non-operating expense, provisions for prudent reserves, and other costs related to storm water as deemed appropriate by the county council. The basis of the service charge rate is one **EDU**. The **storm water service charge** for one EDU is $30.00 per year. The following storm water service charge rates shall apply:

1. Commercial properties. **Commercial properties** shall be billed for the storm water service fees based on actual **impervious surface** area on the given property.
2. Industrial properties. **Industrial properties** shall be billed for the storm water service fees based on actual **impervious surface** area on the given property.
3. **Agricultural use properties**. Poultry houses, swine farrowing and confinement operations and gin operations shall be billed for the storm water service fees based on actual **impervious surface** area on the given property. Processing, production and distribution facilities associated with agriculture activities are considered industrial facilities and shall be subject to the storm water service charge.
4. **Developed land**. The minimum storm water service charge for developed land shall be billed for .50 EDU, equivalent to $15.00 per year, except where exempt from a storm water service fee.

Section 6 - Credit Policies:

It is the County's intent to encourage sound technical design practices that reduce the negative impact of development on the drainage system through a simple but effective credit system. Properties whose impact on the storm water drainage system is significantly limited or has been effectively reduced through specific controls shall be entitled to a credit adjustment that will be applied to their storm water service fees.

Section 6.1 - Types of Credit Application:

Credit applications are divided into two application types: Type 1 and Type 2.

A type 1 credit application may be submitted by an applicant requesting a reduction in their storm water service fee based on installed, operating and maintained storm water management facilities and/or the hydrology of the property. Storm water runoff that drains through a storm water retention structure or through any other best management practice that retains and reduces the total volume of runoff may qualify for a storm water fee reduction. A type 1 application shall be prepared in accordance with the requirements of section 6.2.

A type 2 credit application may be submitted by an applicant requesting a reduction in their storm water service fee based on one of the following:

The impervious surface area on the property has been reduced or eliminated.

The impervious surface area ground cover on the property is something other than asphalt, concrete or roof tops; such as dirt, gravel or lawn surfaces.

A type 2 application shall be prepared in accordance with requirements of the Type 2 Storm Water Credit Application.

Section 6.2 - Standards and Requirements for the preparation of a Type 1 Storm Water Credit Application:

General submission requirements for all applicants requesting storm water service fee credits will include the following information:

1. A completed Storm Water Credit Information Application form.
2. Narrative describing the property and drainage conditions.
3. Summary table for pre– and post development runoff volumes.
4. A site plan at a scale appropriate to display the following information clearly:

   A) Locations and dimensions of all storm water management facilities

   B) Locations of all impervious surfaces including; but not limited to, structures, parking, bare soil and drives.

   C) Soil types and boundaries

   D) Site topography

   E) Details of retention facility, i.e., average permanent pool surface elevation, outlet structure(s), storage volume, and infiltration rates.

   F) Diagram of subcatchment areas, accurately routed storm water to storm water facility(s) and from the property, and clearly corresponding to calculations for both pre-developed and post-developed.

   G) As-built drawings verifying the storm water management structure information.

5. The hydrologic analysis for a 5-year, type II, 24-hour rain event, by subcatchment, must address: (See *Note)

   A) Pre-development runoff volume, based on wood-grass combination with fair hydrologic conditions

   B) Post-development runoff volume **without** composite curve numbers (See **Note) and bypassing all operating storm water management facilities.

   C) Post-development runoff volume **with** storm water management facilities.

6. Provide the Inputs used to determine runoff volume calculations, including, but not limited to:
    A) Time of concentration(s)
    B) Curve number(s)
    C) Watershed areas and routing
    D) Engineering calculations
    E) Stage-storage-discharge relationship for the outlet structure of each storm water facilities
    F) Infiltration rates used
7. A completed Form A-Storm Water Service Fee Credit Application.
8. The following is a list of some storm water facilities that are capable of reducing the volume of storm water runoff from an applicant's property, and may be provide a storm water service fee reduction if indicated by a hydrologic analysis for the property: (See ***Note)
    A) Retention ponds (See ****Note)
    B) Infiltration ponds
    C) Infiltration trenches
    D) Bioretention or infiltration areas
    E) Porous paving surfaces
    F) Disconnected impervious surfaces
9. All type 1 credit applications must be prepared, certified, and stamped by a qualified individual who is licensed as follows:
    A) Registered professional engineers as described in S.C. Code 1976, title 40, chapter 22.
    B) Registered landscape architects as described in S.C. Code 1976 title 40, chapter 28, section 10, item B.
    C) Tier B land surveyors as described in S.C. Code 1976, title 40, chapter 22.
    D) Federal government employees as described by Title 40, Chapter 22, Section 280(A)(3).

*Note: The total drainage area analyzed does not change from pre– to post-development, although the individual subcatchments contributing to each outfall point might shift.

**Note: The analysis assumes that all impervious area is directly connected to an outfall point.

***Note: All existing storm water management facilities must be operating as designed and have no deficiencies. Other storm water management facilities may qualify for storm water service fee credits if demonstrated by a licensed professional.

****Note: A retention pond is design to have a permanent pool of water. Retention ponds will be eligible to receive one-half inch (0.5") of runoff volume reduction if calculations indicate that the pond has adequate storage volume from the bottom orifice to the spillway to store one-half inch of runoff from the entire drainage area to the pond. Retention ponds may receive additional credits if an analysis or data show that there is additional storage volume below the bottom orifice, but not above.

Section 7 - Application Submittal and Review Process

A credit application will not be considered complete, and will not be processed unless it is accompanied with the appropriate forms and information specified in this manual. The application is to be completed and certified by one of the following licensed design professionals: a Registered Professional Engineer, a Registered Landscape Architect, or a Tier B Land Surveyor. It is the intent of the Storm Water Department to process applications within thirty (30) days of submittal of a completed application package. If approved, the applicant will be notified by mail. Any storm water service fee credit shall be applied to the fee appearing on the current county tax notice if the application is received by January 15th. An applicant will also be informed by mail if the application is incomplete, or requires correction or clarification by applicant. A pending application for credit shall not constitute a valid reason for nonpayment of the current Storm Water Service Fee.

The rate adjustment shall remain in effect provided that:

A) The on-site storm water facility has been constructed and properly maintained in accordance with all approved plans and design criteria.

B) The person responsible for the developed property remains accountable for all cost of operation and maintenance of the on-site storm water facility.

C) The County shall have full access to the on-site storm water facility for the purpose of inspection and its compliance with the design, maintenance and operating standards.

D) No new impervious surfaces have been constructed since the date of the credit application.

All storm water credit application should be sent to:

Sumter County Storm Water Utility
1289 North Main Street
Sumter, SC 29153
Attn: Storm Water Utility Credits

For question regarding the completion of a storm water credit application, contact:

Sumter County Storm Water Utility
1289 North Main Street
Sumter, SC 29153
Phone: 803-774-3854
Fax: 803-774-3862
E-mail: stormwatermgmt@sumtercountysc.org