

City of Maryville, Tennessee STORMWATER UTILITY

Credit Manual for Stormwater Fees



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TABLE OF CONTENTS

1	INTRODUCTION.....	1
1.1	OVERVIEW.....	1
1.2	DEFINITIONS	2
2	SECTION II: CREDIT POLICIES & INSTRUCTIONS.....	4
2.1	GENERAL POLICIES	4
2.2	THE DETENTION/RETENTION CREDIT	6
2.3	THE WATER EDUCATION CREDIT	9
2.4	THE TMSP CREDIT	11
2.5	THE WATER QUALITY BMP CREDIT	12
2.6	THE SMALL HOMES CREDIT.....	14
	APPLICATION FORMS AND INSTRUCTIONS	16

1 INTRODUCTION

1.1 Overview

In 2003, the City Council of the City of Maryville Tennessee passed Ordinance No. 2003-31, which created a citywide stormwater utility within the Department of Engineering, Planning & Codes. The Utility provides a stable and adequate source of revenue for the City's stormwater management program that allocates the costs of stormwater services across every stormwater "user" in the City through a stormwater utility fee (or user fee). Each property that discharges stormwater to the City's stormwater system is charged a fee based on the amount of impervious surface area on the property. The stormwater fee that a property owner pays is directly proportional to the impervious area found on the property.

The Department of Engineering, Planning & Codes has developed a system of credits for stormwater service customers who undertake specific, approved actions that reduce the impact of stormwater runoff on the public stormwater system, or provide an ongoing public benefit related to stormwater management. A credit is an ongoing reduction in the fee. This manual details the policies and procedures for Stormwater Utility credits.

The five (5) different stormwater fee credits that will be offered in the City of Maryville are summarized in the following pages. The only credit available for single-family residential properties is the Small Homes Credit. The credits that are available for non-single-family residential properties are:

- The Detention/Retention Credit;
- The Water Education Credit;
- The Water Quality Best Management Practice (BMP) Credit; and,
- The Tennessee Multi-Sector General Permit (TMSP) Credit.

To qualify for any of the credits, the stormwater utility customer must fill out a credit application form and submit it to the Department of Engineering, Planning & Codes. The application will be evaluated to determine the amount of credit that the parcel is entitled.

1.2 Definitions

Best Management Practices (BMP): Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to the municipal separate storm sewer system. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage, or leaks, sludge or waste disposal, or drainage from raw material storage.

Credit: A credit is an ongoing reduction in a property's stormwater normally calculated fee given for certain qualifying activities that reduce the impact of increased stormwater runoff resulting from development, or provide an ongoing public benefit related to stormwater management.

Detention facility: A detention facility is a stormwater structure, by means of a single control point, which provides temporary storage of stormwater runoff in ponds, parking lots, depressed areas, rooftops, buried underground vaults or tanks, etc., for future release, and is used to delay and attenuate peak flow. Refer to the *City of Maryville Land Development and Public Works Standards (Section 112)* for the specified criteria on detention/retention basin design.

Equivalent Residential Unit (ERU): In order to standardize billing and allocate costs (based on impervious area) to different property types, the City of Maryville has established an Equivalent Residential Unit (ERU). One ERU is equal to the average amount of impervious area found on a typical single-family residence. A statistical sampling of residential properties within the City determined that, on average, a developed single-family residential property has 2,400 square feet of impervious area. As a result, 2,400 square feet is used as the base billing unit or ERU (equivalent residential unit). Each single-family residential property is assigned a flat rate bill of one ERU (or one base unit). For non-residential properties, the impervious area on the property is measured and translated into a whole number of ERUs. The number of ERUs is then multiplied by the ERU rate (see next definition) to yield the monthly stormwater fee for that particular property. All calculated stormwater fees remain the same from month to month unless changes are made to the property that affect the total number of ERUs (i.e., impervious area is added or eliminated from the property) or the ERU rate changes. The City of Maryville's *Stormwater Utility Customer Service Manual* provides more information on stormwater fee calculation, including example calculations for non-single family residential properties.

ERU Rate: The ERU rate is the stormwater fee applied to each base billing unit, or 2,400 square feet. In the City of Maryville, the ERU Rate is \$3.97 per month.

Impervious areas: Impervious surfaces are areas on a property that prevent or impede the infiltration of stormwater into the soil at the same rate as natural or pre-developed

conditions. Common impervious areas may include, but are not limited to, rooftops, sidewalks, walkways, patio areas, driveways, parking lots, storage areas, compacted gravel or soil surfaces, awnings (and other fabric or plastic coverings) and any other surface that prevents or impedes the natural infiltration of stormwater runoff.

Non-single-family residential property: These properties are also called “other developed land” in the rate ordinance. Non-single family residential properties are individual properties that have 200 square feet or more of impervious surface and are not used as a single-family residential property. This can include, but is not limited to, multiple dwelling unit residential properties (e.g., apartments), manufactured home and mobile home parks, commercial and office buildings, public buildings and structures, industrial and manufacturing buildings, storage buildings and storage areas covered with impervious surfaces, parking lots, parks, recreation properties, public and private schools and universities, research stations, hospitals and convalescent centers, airports, agricultural uses covered by impervious surfaces, water reservoirs, and water and wastewater treatment plants.

Retention facility: A retention facility is a stormwater facility that provides storage of stormwater runoff and is designed to eliminate subsequent surface discharges. These facilities are effective in reducing downstream flooding because they do not allow discharge of stormwater runoff to downstream locations except in extreme flood events where the storage volume of the facility is exceeded. Retention facilities can also be effective in reducing stormwater pollution since the pollutants contained in stormwater are not released downstream. Refer to the *City of Maryville Land Development and Public Works Standards (Section 112)* for the specified criteria on detention/retention basin design.

Single-family residential property: These properties are also called “detached dwelling units” in the rate ordinance. Single-family residential properties are developed land containing one structure which is not attached to another dwelling and which is designed for occupancy by one family. These may include houses, manufactured homes, and mobile homes located on one or more individual lots or parcels of land. For purposes of the stormwater utility, properties that are designed as a single-family residence but are used for commercial purposes are considered single-family residential so long as the property does not have additional impervious areas, such as parking spaces, impervious surfaced playgrounds, or structures or additions to the building.

Stormwater: Stormwater is rainfall runoff, snowmelt runoff, and surface runoff and general drainage related to a precipitation event.

2 SECTION II: CREDIT POLICIES & INSTRUCTIONS

2.1 General Policies

There are certain conditions that must be met and applications that must be completed that will determine what properties qualify for a credit and for what amount of credit. General policies for stormwater utility credits are listed below. See the following pages for policies, details, and special circumstances that may be specific to individual credits.

- Credit is given to eligible properties only, as described in the credit policies presented in this manual and/or in the credit application(s).
- It is the responsibility of the property owner (or his/her designee) to apply for stormwater credits, and to provide the necessary substantiating information with the Credit Application, as described herein.
- Credit applications are available from the Department of Engineering, Planning & Codes, and questions regarding credits should be referred to the City Stormwater Engineer. Although the Department staff is happy to answer questions, they are not responsible for initiating, performing engineering calculations, or otherwise assisting with the preparation of credit applications.
- The Department of Engineering, Planning & Codes will only review complete credit applications. The review will be performed within four (4) weeks after a complete application is submitted. If approved, the credit will be applied in the next month after approval. Note: Please review the specific policies for the Small Homes Credit for exceptions to this policy for single-family residences.
- Any approved credit application received within one (1) year of the date of the initiation of user fee billing by the Stormwater Utility (anticipated in July 2005) will apply retroactively to:
 1. the date of the initiation of user fee billing by the Stormwater Utility (anticipated in July 2005) for existing developed property; or,
 2. the date of initiation of billing for new construction.
- One year after the date of the initiation of user fee billing by the Stormwater Utility (anticipated in July 2005), the Utility will not refund any portion of the stormwater fees paid prior to the approval of an applicant's credit application.
- Multiple credits can be given to eligible properties. However, the total credit available to any one property is 50% of the stormwater fee.



- Credits are maintained on a property as long as the activity is being performed in accordance with City requirements, or the stormwater facility is properly functioning in accordance with applicable City codes and ordinances, or the policies stated herein.

2.2 The Detention/Retention Credit

The detention/retention credit is available only to businesses, industries and other non-residential properties that discharge stormwater to a detention or retention facility. When constructed and maintained properly and in appropriate locations, stormwater detention and retention facilities reduce the peak flow and/or volume of runoff from a property, thereby alleviating downstream flooding. However, when constructed in an inappropriate location, or when left un-maintained, these facilities can aggravate drainage problems.

The policies specific to the Detention/Retention credit listed below.

CREDIT CRITERIA:

1. A **Detention/Retention credit** will be available to *non-single family residential properties (NSFR)* properties that have onsite stormwater detention and retention ponds designed to control the peak stormwater runoff rate or runoff volume in accordance with the *Maryville Land Development and Public Works Standards* and the policies stated in this manual.
2. A homeowner's association may apply for a credit for a detention/retention pond that serves their neighborhood. The credit will be applied to any common area within the neighborhood that receives a stormwater utility bill. Credits will not be applied to single-family residential fees.
3. Sufficient information must be supplied to the City Stormwater Engineer to verify that the controls meet the following criteria: the peak runoff rate under developed conditions must be less than, or equal to, the peak runoff rate for the same property under undeveloped conditions.
4. Credit applications for new construction may be submitted to the City Stormwater Engineer at any time during the construction process. However, the credit will not be approved based on site plans alone. The credit application requires that the detention/retention facility must be constructed and working in proper operating condition.
5. The total credit percentage is dependant on the magnitude of stormwater control provided by the facility. A 10% credit to the assessed stormwater fee will be given for each level of storm event controlled, for the 2, 5, 10, and 25-year events. The credit percentages are cumulative if the stormwater facility controls multiple storm events, but the maximum credit shall not exceed 50%. For example, if the detention facility controlled the 2, 5, and 10-year events, a 30% credit to the assessed stormwater fee will be given.

6. Credit will also be considered, on a case-by-case basis, for other types of facilities, activities, or control devices that restrict and control the volume and/or peak flow related impacts of a property's stormwater runoff on the municipal stormwater system, providing sufficient technical justification is submitted in the application package to make such determinations.
7. A credit shall only be applied to that portion of the property served by the stormwater facility.
8. All detention/retention facilities for which credit is applied must be working in proper operating condition at the time that the application is submitted.

OWNERSHIP AND MAINTENANCE REQUIREMENTS:

9. The facilities must be owned, operated and maintained, either on-site or by record of agreement, by the applicant. The applicant must provide documentation of the activities that will occur in order to inspect and maintain the facility to the standards presented herein.
10. In the event that the stormwater facility not located on the property owned or operated by the applicant, the applicant must provide a copy of a record agreement between the applicant and the owner of the off-site facility stating that the applicant is responsible for maintaining all or a portion of the facility and that the owner understands that the applicant will receive the stormwater fee credit for the facility. In addition, the owner of the off-site parcel should provide a letter to the City Stormwater Engineer indicating that he/she is in agreement with the information contained in the application for credit.
11. The stormwater detention/retention facilities must be operated and maintained in proper condition to control the peak runoff rate as presented above, in accordance with the maintenance standards presented in this manual. If the applicant does not operate and maintain the facility as required, the credit will be discontinued.
12. In order for stormwater retention and detention facilities to operate as they were intended, maintenance must be routinely performed. Improperly maintained stormwater facilities do not reduce stormwater impacts effectively and are therefore ineligible for credit. The following items are the basic minimum maintenance requirements for all applicable stormwater facilities:
 - a. Sediment shall be removed when about 20% of storage volume of the facility is filled.
 - b. Sediment traps, if existing, shall be cleaned out when filled.

- c. No woody vegetation shall be allowed to grow on the embankment without special design provisions.
- d. Debris shall be removed from blocking inlet and outlet structures and from other areas of potential clogging (i.e., weirs, pipes, grates, etc.). This is especially important after major storms. Extended detention control devices should be checked often for debris accumulation and clogging.
- e. The control structures shall remain unaltered and be kept structurally intact, free from erosion, and functioning as originally designed.
- f. No standing water is allowed within detention basins or above the retention pool in combined retention/detention facilities. Detention ponds must drain completely.
- g. The facility must be properly vegetated (no bare soil or eroding areas) but not overgrown.

CREDIT APPLICATION AND APPROVAL PROCESS:

13. Credit applications must include hydrologic calculations demonstrating the stormwater facility effectiveness based on a routed hydrologic study through the site using the techniques presented in Section 107 of the *Maryville Land Development and Public Works Standards*, as appropriate for the size of the site. The applicant can utilize hydrologic modeling software pre-approved by the Department of Engineering, Planning & Codes.
14. All engineering calculations and drawings shall be prepared, sealed and stamped by a professional engineer registered to design stormwater management facilities in the State of Tennessee.
15. If all requirements and conditions of this section are met, the credit will be available upon successful completion of the credit application process and approval of an on-site City inspection.
16. Credit applications for new developments can occur as part of the normal development plan review procedures. The completed credit application should accompany the final plat for the site.
17. For the detention/retention and water quality BMP credits, a Right-of-Entry or easement, as applicable, must be granted to the City in order for the City to review and approve the credit, and to perform occasional inspections to see that the stormwater management facility is maintained and operating as designed. Right-of-entry is granted via the applicant's or property owner's signature on the credit application.

2.3 The Water Education Credit

The education credit is available to schools that educate and inform their students about the importance of our surface and groundwater resources using the Project Wet (or similar) educational program. The goal is to reach all students within a school with this information at least once during their time at any one school. The rationale behind this credit is that the information provided by the school will translate into appreciation and stewardship of water resources and thereby reduce negative impacts (usually pollutant impacts) on local streams, ponds and lakes that can result from uninformed citizens.

Policies specific to the Water Education Credit are as follows:

1. The **Water Education Credit** is available to colleges, elementary, middle and high schools (both public and private) located in the City of Maryville.
2. The school must teach a water resources-based curriculum that is approved by the Department of Engineering, Planning & Codes. The Department will base their approval on the sufficiency of the curriculum to meet State standards for City compliance with the NPDES Phase II MS4 permit.
3. The Water Education Credit will be approved on an annual basis for education activities that were performed in the previous school year. Credit received for the prior year's educational activities will be shown on the monthly utility bill over a twelve-month period, starting on the September bill following the school year during which the activities were performed.
4. The Water Education Credit requires submittal of both an application and an annual report to the Department of Engineering, Planning and Codes. The application need only be completed once, and requires a description of the educational program, list of educational tools used, estimated number of students that will/have receive the education, and the length of the educational program. Submittal of the application is necessary to indicate to the applicant that the proposed curriculum meets the criteria stated in item 2 above, and that a credit will be received pending approval of an annual report to follow.
5. Credit approval must be renewed each year via approval of an annual report. The annual report must be submitted after the end of the school year, but prior to August 1. It must provide an accurate accounting of the education activity performed as described in the application, including the number of students that received the education.
6. Approvals of both the credit application and annual report will result in a maximum 20% credit to the assessed fee. The credit will be applied only to the school property(s) where the curriculum is taught (e.g., if the curriculum is taught

only at Sam Houston Elementary School, the credit will be applied only to that property, not the entire City school system).

7. To receive the full credit, the curriculum must be scheduled with the intention that all students should receive the curriculum at least once during a typical tenure at the school. For example, a typical tenure for high school would be four (4) years, so it would be expected that approximately 25% of students in the school would be taught the curriculum. A curriculum that is scheduled for teaching to all the students in tenth grade meets this criterion.
8. Schools that do not teach the curriculum in a manner that allows all students to receive it within a typical tenure at the school can receive partial credit. The credit will be calculated based on the percentage of students that the curriculum is intended to reach, relative to a 25% base goal. For example, if the curriculum is scheduled so that it will be taught to only 10% of the student body at any one time, the credit received will be 8%. $(10/25) \times 20\% = 8\%$

2.4 The TMSP Credit

Policies specific to the TMSP Credit are listed below:

1. The **TMSP Credit** is available to *non-single-family residential properties* that have and maintain a current Tennessee Multi-Sector General Permit (TMSP) for all appropriate facilities.
2. Properties approved for the TMSP credit will receive a 10% credit to the assessed stormwater utility fee for that property.
3. The property will receive the TMSP credit only for the duration of the active TMSP permit. The property owner must re-apply for the TMSP credit each time that the TMSP is renewed with the State of Tennessee.
4. To obtain this credit, the property owner must provide:
 - a. A completed TMSP credit application form;
 - b. A copy of the latest Notice of Intent (NOI) for the permit;
 - c. A copy of the current Notice of Coverage (NOC) for the TMSP, as delivered to the facility owner by the State of Tennessee Department of Environment and Conservation. The NOC must indicate the date of permit coverage;
 - d. A copy of the facility's Stormwater Pollution Prevention Plan (SWPPP).

2.5 The Water Quality BMP Credit

The water quality Best Management Practice (BMP) credit is available to non-single family residential properties that implement water quality BMPs that can assist the City in meeting requirements of the City's Federally-mandated National Pollutant Discharge Elimination System (NPDES) Phase II permit.

Maryville's compliance with the NPDES Phase II permit requires that the City implement strategies to reduce pollutants in local streams and waterbodies. According to the Tennessee Department of Environment and Conservation (TDEC), the major pollutant found in Maryville's streams is silt, caused by discharges from developed and/or developing areas. In stormwater, silt is a pollutant that is often captured under the umbrella term of Total Suspended Solids (TSS). Therefore, in support of the City's NPDES Phase II compliance initiatives, the Water Quality BMP credit is available for those privately-owned and maintained BMPs that can reduce silt levels in post-construction stormwater discharges.

Specific policies for the Water Quality BMP Credit are listed below.

1. A 10% credit against the stormwater fee is available for *non-single family residential properties (NSFR)* properties that incorporate structural post-construction stormwater quality practices presented in the *Tennessee Guide to the Selection & Design of Stormwater Best Management Practices* (TDEC, 2003). These practices must be approved by the City of Maryville prior to implementation.
2. A homeowner's association may apply for a credit for one or more structural BMPs that serve their neighborhood. The credit will be applied to any common area within the neighborhood that receives a stormwater utility bill. Credits will not be applied to single-family residential fees.
3. The credit shall only be applied to that portion of the property served by the water quality BMP(s).
4. The maximum Water Quality BMP credit that can be obtained for any one property shall be 10%.
5. Credit will also be considered, on a case-by-case basis, for other types of facilities, activities, or control devices that are not presented in the *Tennessee Guide to the Selection & Design of Stormwater Best Management Practices*. The applicant must provide sufficient technical justification to prove that the proposed BMP is appropriate for removal of TSS (e.g., silt) from post-construction stormwater runoff. Such proof must include independent field data collected by non-biased party(s) other than the BMP manufacturer.

6. The water quality BMP(s) must be owned, operated and maintained, either on-site or by record of agreement, by the applicant.
7. The water quality BMP(s) must be maintained in proper operating condition as designed and constructed. If the applicant does not maintain the BMP(s) as required, the credit will be discontinued. The City is not responsible for maintenance of BMPs on private properties, including open space, common areas, natural areas, greenways, stream buffers, and other, similar, non-structural BMPs. The City is not responsible for the aesthetic maintenance of any BMP, such as mowing or landscaping.
8. If all requirements and conditions of this section are met, the credit will be available upon successful completion of the credit application process and on-site City inspection. The credit shall remain in force as long as the BMP(s) is maintained in satisfactory condition.
9. All engineering calculations and drawings used to apply for the Water Quality BMP Credit shall be prepared, sealed and stamped by a professional engineer registered to design stormwater management facilities in the State of Tennessee, and shall be sufficient for full review of the control.
10. The criteria, requirements and policies for the Water Quality BMP Credit will be re-evaluated by the Department of Engineering, Planning & Codes at the time that the City's NPDES Phase II permit is fully implemented (July 2008).

2.6 The Small Homes Credit

The small homes credit is available only to single-family residential properties that have a total impervious surface of less than eighteen hundred (1800) square feet within the bounds of the property lines. The rationale behind this credit is that properties that have little impervious area (e.g., less than 1800 square feet) discharge less runoff to the public drainage system than properties with large amounts of impervious areas.

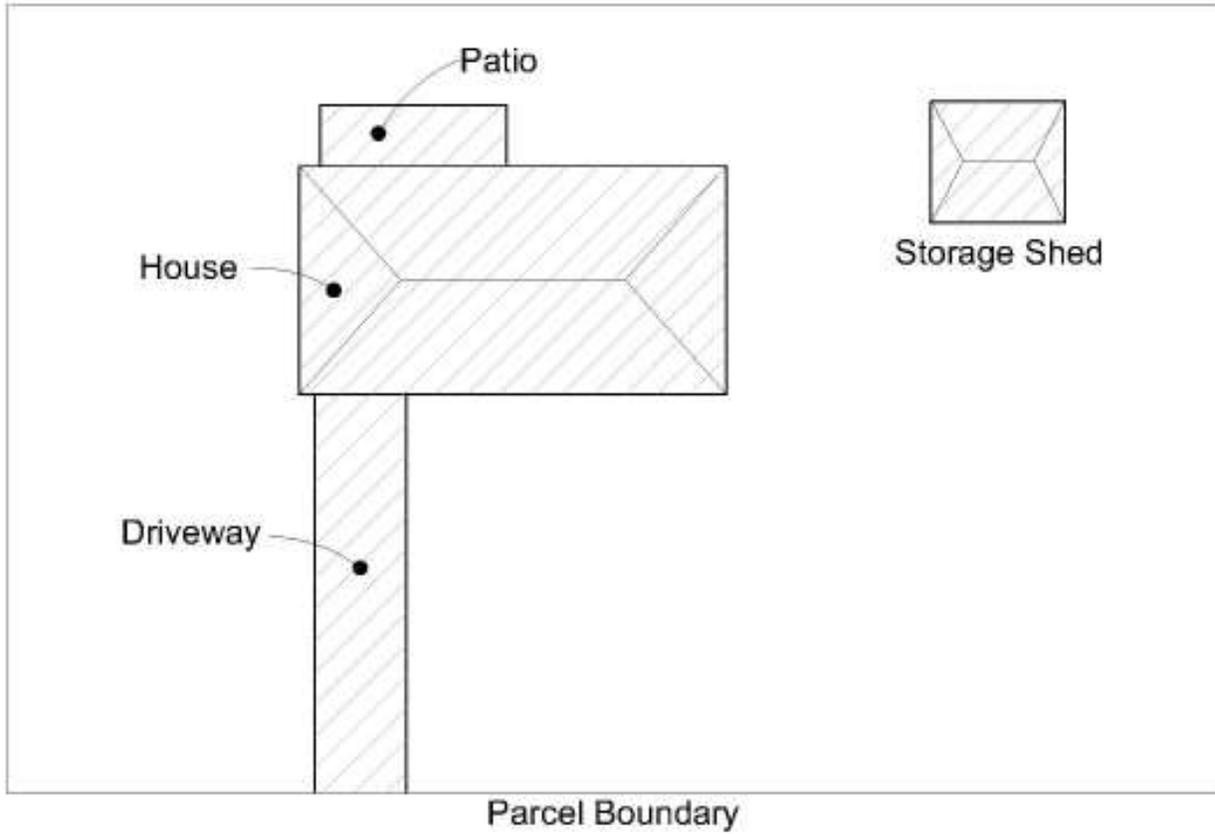
In the application of the small homes credit, total impervious area of a property does not mean the total square footage of a house. The square footage of home often includes only the livable space, or the total “heated” area of the home. The total square footage is not equal to the total impervious area, and in most cases, cannot be used to measure the total impervious area of the house.

Figure 1 presents a simplified graphic of a residential home, with hatched areas representing impervious areas that are commonly found on residential properties. The total impervious area can include the area of the rooftop of the house, as well as any driveway, patio areas, walkways, storage areas and any other surface that prevents or impedes the natural infiltration of stormwater runoff.

The following policies apply to the small homes credit:

- Single family residential properties that have a total impervious area equal to or less than 1,800 square feet, and who apply for and are accepted for a credit, shall receive a 40% reduction of the total assessed stormwater utility fee.
- In order to qualify for such a credit the homeowner must fill out a Small Homes Credit Application Form. The form must include sketched dimensions of total impervious area measured from edge of road pavement to the edges of the property line. The City will not make such measurements on behalf of property owners.
- Any approved credit application received within one (1) year of the date of the initiation of user fee billing by the Stormwater Utility (anticipated in July 2005) will apply retroactively to:
 1. the date of the initiation of user fee billing by the Stormwater Utility (anticipated in July 2005) for existing developed property; or,
 2. the date of initiation of billing for new construction.
- One year after the date of the initiation of user fee billing by the Stormwater Utility (anticipated in July 2005), the Utility will not refund any portion of the stormwater fees paid prior to the approval of an applicant’s credit application.

Figure 1. Common Impervious Areas for Residential Properties





APPLICATION FORMS AND INSTRUCTIONS

SMALL HOMES CREDIT APPLICATION



For review of this application, you must:

- fill out this application completely;
- provide a sketch of your property showing the appropriate measured lengths.

Instructions:

You must measure the impervious surfaces that exist on your property and to provide those measurements, with this application, to the City Stormwater Engineer. You must provide sufficient information to allow the City Stormwater Engineer to determine the amount of impervious area on your property. Use the example sketch as a guide for making and recording the measurements. You must provide a similar sketch of your property, with the appropriate measurements clearly indicated. A blank sketch page is provided for this purpose. The impervious surfaces are those surfaces that prevent the infiltration of rainfall into the soil. Common impervious surfaces may include rooftops, sidewalks, walkways, patio areas, driveways, parking lots, storage buildings/pads, compacted gravel or soil surfaces, awnings (and other fabric or plastic coverings) and any other surface that prevents or impedes the natural infiltration of stormwater runoff.

Property Owner Information

Name: _____ Phone: _____
Address: _____

Applicant Information (if different from owner)

Name: _____ Phone: _____
Address: _____

Property Information (if different from above)

Address: _____
Parcel Identification Number (if known): _____
Utility Account Number: _____

Check here if the following statement applies:

I am physically incapable of making the required measurements. I hereby request that the City of Maryville staff measure the impervious area on my property.

I hereby request the City of Maryville to review this application for a Small Homes Credit to my stormwater utility fee. I certify that I have the authority to make such a request and grant such authority for this property. The attached information is true and correct to the best of my knowledge and belief. I agree to provide corrected information to the City of Maryville Department of Engineering, Planning & Codes should there be any change in the information provided herein. I further authorize the City of Maryville to assess the property identified in this application for the purpose of assessment for a stormwater fee credit.

Signature: _____ Name: _____

Date: _____

Do not write in shaded area – for City use only

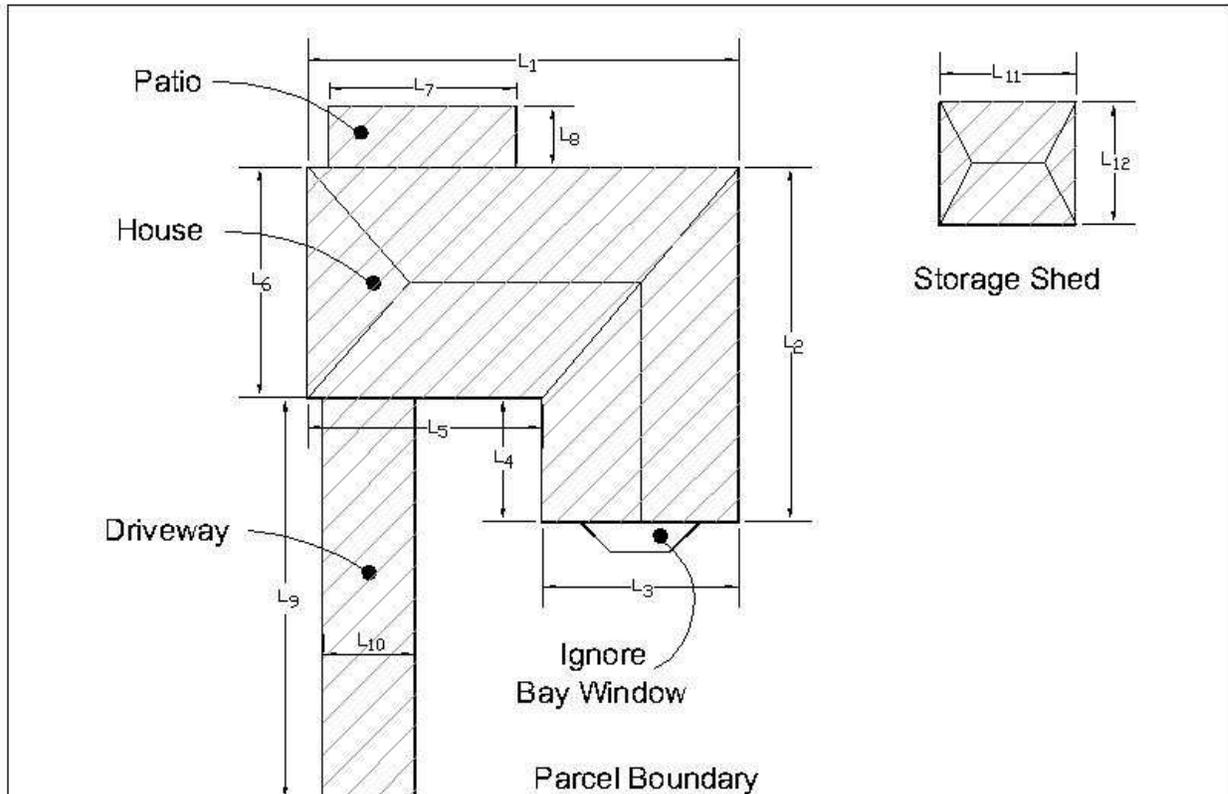
Calculated Impervious Area: _____ sf Credit Approved? Yes No

Signature: _____ Name: _____

Title: _____ Date: _____

Example Measurements for Residential Impervious Areas

Instructions: The drawing below shows example measurements that should be taken for the impervious areas shown on the property. Each length (e.g., L₁, L₂, up to L₁₂) can be measured using a standard measuring tape, and the measurements written in the spaces provided below the drawing. Make a similar drawing of your property, measuring the basic dimensions of each impervious area. The layout of your house could require you to record more, or less, measurements than that shown in the example below, depending upon the design of your house and the other impervious areas on your property. Be sure to label the drawing to show all the lengths that you measure, and identify which measurements are for the house, the driveway, and for other impervious areas. It is not necessary to measure more complicated structures, such as bay windows, landscape pavers, short sidewalks, awnings, and other small, irregular surfaces.



House Measurements	Patio Measurements	Driveway Measurements	Storage Shed Measurements
L ₁ = _____	L ₇ = _____	L ₉ = _____	L ₁₁ = _____
L ₂ = _____	L ₈ = _____	L ₁₀ = _____	L ₁₂ = _____
L ₃ = _____			
L ₄ = _____			
L ₅ = _____			
L ₆ = _____			



Impervious Measurements for:
Address _____



City of Maryville, Tennessee Detention/Retention Credit Application (Form 1)

How many Detention/Retention facilities are being submitted for credit? _____

Property Information

Name of Business/Entity/Home Owners Association: _____

Name of Property Owner: _____

Address of Property Owner: _____

Property Owner Contact Numbers Day: _____ Cell: _____ Fax: _____

Property Address: _____

E-mail Address: _____

Property Tax Map Number: _____

Parcel Identification Number (if known): _____

Utility Account Number: _____

Applicant Information (if different from property owner)

Name: _____

Address: _____

E-mail Address: _____

Applicant Contact Numbers Day: _____ Cell: _____ Fax: _____

I hereby request the City of Maryville review this application for a stormwater fee credit. I further authorize the City of Maryville to inspect the stormwater facility(ies) identified in this application for the purpose of assessment for a stormwater fee credit. I certify that I have authority to make such a request and grant such authority for this property. The attached information is true and correct to the best of my knowledge and belief. I agree to provide corrected information to the City of Maryville Department of Engineering, Planning & Codes should be there be any change in the information provided herein.

Signature: _____

Name: _____

Title: _____

Date: _____



City of Marville, Tennessee

Stormwater Facility Information

(Form 2)

(Attach a separate sheet for each facility with a site plan or sketch if available)

Facility Number (e.g., 1, 2, 3...): _____
Which attachment is the facility shown in: _____
Closest Cross Street: _____
Facility Distance and Direction from Cross Street: _____
Facility is located in which side of the street (North, etc.): _____
Landmarks(s) if any: _____
Generally, where on the site is the facility located:

Description of Facility:

ENGINEER'S CERTIFICATION:

I hereby certify that the detention/retention facility described in Form 2 has been constructed in substantial conformance with pertinent design requirements and that the detention/retention facility is in an acceptable state of maintenance and repair, and is operating as designed. I further certify that these calculations, technical details and information provided reflect accurately the condition of the detention/retention facility at the time of my inspection.

Signature and Seal
State of Tennessee Licensed Professional Engineer

Name: _____
Company: _____
Address: _____
Telephone: _____ Fax: _____
Tennessee Registration Number: _____

Do not write in the shaded area (City Use Only)

Facility Approved to Receive Credit (check one): Yes No

If No, provide a brief explanation for denial:

If No, provide information on follow-up with applicant:

Date approved or denied: _____

Signature: _____ Name: _____
Title: _____ Date: _____

A completed Detention/Retention Facility Inspection Checklist must be attached.



City of Maryville, Tennessee Stormwater Facility Information (Form 3)

HYDROLOGIC CHARACTERISTICS

Facility # _____

All values below must pertain only to the areas of the site that discharge to the detention/retention facility.

PRE-DEVELOPMENT CONDITIONS:

Hydrologic Method used (check one): Rational SCS Curve Number Other (*Attach explanation as appropriate*)

Drainage Area: _____ acres

Runoff Coefficient: _____ (C Factor or SCS Curve Number)

Time of Concentration: _____ min (5 minutes minimum)

Rainfall Intensity (Rational Method only): _____ in/hr

Storm Duration (SCS method only): _____ hours

$Q_{pre} =$ _____ cfs

POST-DEVELOPMENT CONDITIONS:

Hydrologic Method used (check one): Rational SCS Curve Number Other (*Attach explanation as appropriate*)

Drainage Area: _____ acres

1. Paved draining to facility: _____ acres

2. Rooftops draining to facility: _____ acres

3. Other impervious area draining to facility: _____ acres

Explanation of other impervious area(s):

Total Impervious area draining to facility (sum of 1, 2 and 3 above): _____ acres

Runoff Coefficient: _____ (C Factor or SCS Curve Number)

Time of Concentration: _____ min (5 minutes minimum)

Rainfall Intensity (Rational Method only): _____ in/hr

Storm Duration (SCS Method only): _____ minutes

Inflow Hydrograph Peak Flow: _____ cfs

$Q_{post} =$ _____ cfs

Flow (Q) through outlet: _____ cfs

Flow (Q) over emergency spillway: _____ cfs

Facility storage volume at overflow: _____ ft³

Attach stage-discharge-storage information in tabular form, storage volume calculations, outlet description, overflow description, runoff calculations, and all other pertinent information necessary to perform a detailed review.



City of Maryville, Tennessee Checklist for Detention/Retention Credit Application

- _____ Completed "City of Maryville Stormwater Utility Application for Credit for Stormwater Detention/Retention Facilities" Form
- _____ Seal and signature of registered professional engineer
- _____ Topographic map or site plan showing existing and proposed topographic contours, scale, and north arrow
- _____ Vicinity Map
- _____ North arrow
- _____ Existing and proposed topographic contours
- _____ Dimensions describing the existing or proposed improvements
- _____ Impervious delineations and labels (buildings, driveways, etc.)
- _____ Drainage area map, including off-site areas draining through existing or proposed controls
- _____ Size and location of all existing stormwater structures, if applicable
- _____ Construction drawing and details of existing or proposed stormwater controls, where applicable
- _____ Final recorded document (deed description or plat) dedicating storm drainage and access easements, where applicable
- _____ For retention ponds: Hydraulic calculations showing stage-discharge and stage-storage relationships of stormwater runoff storage facilities/structural controls, and the volume of the permanent pool. At a minimum, calculations must demonstrate that design criteria presented in the *Maryville Land Development and Public Works Standards* are met
- _____ For dry extended detention basins: AT a minimum, runoff volume computations and structural control routings or calculations must demonstrate that design criteria presented in the *Maryville Land Development and Public Works Standards* are met



City of Maryville, Tennessee Credit Application Review Form for Stormwater Detention/Retention Facilities

FOR STORMWATER UTILITY USE ONLY / DO NOT MARK IN THIS SPACE

Reviewer: _____ Phone: _____

Review Number: _____ Date Received: _____ Returned: _____

Review Number: _____ Date Received: _____ Returned: _____

Review Number: _____ Date Received: _____ Returned: _____

Date Approved: _____

As-built Verification Inspector: _____

Drainage Easement Document Recorded in Book: _____ Page: _____

Project Information:

Current Stormwater Utility Fee: _____

Credit Components check all that apply):

- 2-year control (10% credit)
- 5-year control (10% credit)
- 10-year control (10% credit)
- 25-year control (10% credit)
- other control (10% credit)

Total Credit: _____

Revised Stormwater Utility Fee: _____ Effective Date: _____

Master Account File Revised by: _____ Date: _____

Required Special Construction/Other:



City of Maryville, Tennessee
Water Quality BMP
Credit Application (Form 1)

How many water quality BMPs are being submitted for credit? _____

Property Information

Name of Business/Entity/Home Owners Association: _____

Name of Property Owner: _____

Address of Property Owner: _____

Property Owner Contact Numbers Day: _____ Cell: _____ Fax: _____

Property Address: _____

E-mail Address: _____

Property Tax Map Number: _____

Parcel Identification Number (if known): _____

Utility Account Number: _____

Applicant Information (if different from property owner)

Name: _____

Address: _____

E-mail Address: _____

Applicant Contact Numbers Day: _____ Cell: _____ Fax: _____

I hereby request the City of Maryville review this application for a stormwater fee credit. I further authorize the City of Maryville to inspect the BMPs identified in this application for the purpose of assessment for a stormwater fee credit. I certify that I have authority to make such a request and grant such authority for this property. The attached information is true and correct to the best of my knowledge and belief. I agree to provide corrected information to the City of Maryville Department of Engineering, Planning & Codes should there be any change in the information provided herein.

Signature: _____

Name: _____

Title: _____

Date: _____



City of Marville, Tennessee

Water Quality BMP

(Form 2)

(Attach a separate sheet for each facility with a site plan or sketch if available)

BMP Number (e.g., 1, 2, 3...): _____
In which attachment is the BMP shown: _____
Closest Cross Street: _____
BMP Distance and Direction from Cross Street: _____
BMP is located in which side of the street (North, etc.): _____
Landmarks(s) if any: _____
Generally, where on the site is the BMP located:

Description of BMP:

ENGINEER'S CERTIFICATION:

I hereby certify that the best management practice described in Form 2 has been constructed in substantial conformance with pertinent design requirements and that the BMP is in an acceptable state of maintenance and repair, and is operating as designed. I further certify that these calculations, technical details and information provided reflect accurately the condition of the BMP at the time of my inspection.

Signature and Seal
State of Tennessee Licensed Professional Engineer

Name: _____
Company: _____
Address: _____
Telephone: _____ Fax: _____
Tennessee Registration Number: _____

Do not write in the shaded area (City Use Only)

Facility Approved to Receive Credit (check one): Yes No

If No, provide a brief explanation for denial:

If No, provide information on follow-up with applicant:

Date approved or denied: _____

Signature: _____ Name: _____
Title: _____ Date: _____



City of Marville, Tennessee

Stormwater Facility Information

(Form 3)

BMP DESIGN SPECIFICATIONS

BMP # _____

Provide on this page, or attach on separate pages, sufficient design calculations and specifications to prove that the design and current (as-built) condition of the BMP conforms with the design and performance standards presented in the Tennessee Guide to the Selection & Design of Stormwater Best Management Practices, as amended. The Department of Engineering, Planning, and Codes may request more information on the BMP in order to prove compliance with the required conditions for credit approval.



City of Maryville, Tennessee

Water Education

Credit Application

Instructions:

1. Fill-out this form completely.
2. A separate application must be made for each property for which a credit is being requested.
3. Forms must be signed by the financially responsible person if an individual, or if not an individual, by an officer, director, partner, or registered agent with authority to execute instruments for the financially responsible person.
4. Mail the completed form to:

City of Maryville
 Department of Engineering, Planning & Codes
 416 West Broadway
 Maryville, TN 37801

Property Owner Name: _____

Property Owner Address: _____

Property Owner Contact Numbers Day: _____ Cell: _____ Fax: _____

Authorized Contact (if different from property owner): _____

Authorized Contact mailing Address: _____

Authorized Contact Numbers Day: _____ Cell: _____ Fax: _____

Utility Account Number: _____

Parcel Identification Number (if known): _____

Property Street Address: _____

Attach a description of the Water Education Curriculum being taught at this property. Include grade(s) and number of students taught, number of instructors teaching the curriculum, teacher training requirements, educational tools used, etc.

I hereby request the City of Maryville review this application for a stormwater fee credit. I certify that I have authority to make such a request and grant such authority for this property. The attached information is true and correct to the best of my knowledge and belief. I agree to provide corrected information to the City of Maryville Department of Engineering, Planning & Codes should there be any change in the information provided herein.

Signature: _____ Name: _____

Title: _____ Date: _____

Do not write in the shaded area (City Use Only)

Credit Approved (check one): Yes No Credit Amount (attach backup calculations): _____

If No, provide a brief explanation for denial:

If No, provide information on follow-up with applicant:

Date approved or denied: _____

Signature: _____

Name: _____

Title: _____

Date: _____



City of Maryville, Tennessee TMSP Credit Application

Instructions:

1. Fill-out this form completely.
2. A separate application must be made for each property for which a credit is being requested.
3. Forms must be signed by the financially responsible person if an individual, or if not an individual, by an officer, director, partner, or registered agent with authority to execute instruments for the financially responsible person.
4. Mail the completed form to:

City of Maryville
 Department of Engineering, Planning & Codes
 416 West Broadway
 Maryville, TN 37801

Property Owner Name: _____

Property Owner Address: _____

Property Owner Contact Numbers Day: _____ Cell: _____ Fax: _____

Authorized Contact (if different from property owner): _____

Authorized Contact mailing Address: _____

Authorized Contact Numbers Day: _____ Cell: _____ Fax: _____

Utility Account Number: _____

Parcel Identification Number (if known): _____

Property Street Address: _____

Name of Permitted Facility: _____

Date of Notice of Intent (attach a copy): _____

Date of Notice of Coverage (attach a copy): _____

Is a copy of the Facility SWPPP attached: Yes No

I hereby request the City of Maryville review this application for a stormwater fee credit. I certify that I have authority to make such a request and grant such authority for this property. The attached information is true and correct to the best of my knowledge and belief. I agree to provide corrected information to the City of Maryville Department of Engineering, Planning & Codes should be there be any change in the information provided herein.

Signature: _____ Name: _____

Title: _____ Date: _____

Do not write in the shaded area (City Use Only)

Credit Approved (check one): Yes No

If No, provide a brief explanation for denial:

If No, provide information on follow-up with applicant:

Date approved or denied: _____

Signature: _____

Name: _____

Title: _____

Date: _____