

STORMWATER CREDIT MANUAL

City of Evansville, Wisconsin
Adopted 8-9-16

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PREFACE

Send Application Forms to:

City of Evansville
Municipal Services Department
Attn: Stormwater Utility Credit
31 S. Madison Street, PO Box 76
Evansville, WI 53536

Make Checks Payable to: City of Evansville Stormwater Utility
For Questions Regarding the Credit Application, Contact:
Municipal Services
(608) 882-2266

Application Procedure:

Initial review of Stormwater Utility Credit Applications will be completed within 30 days of receipt at the City of the complete application form and supporting information, and fee payment as called out in the City fee schedule. Application fees are one-time and non-refundable. Reviewers will check application forms for completeness and accuracy. Application for any credit is an acknowledgement of the indemnification statement in Chapter 2 of this document (Section E), and the City of Evansville's (City) right-of-entry to inspect and verify the information submitted on said application. If deficiencies in the application or supporting information are found during the review, a deficiency letter will be sent to the applicant's contact person. Upon receipt of additional information from applicant, the review will resume and be completed within 30 days of receipt of the additional information. If an application is denied, a letter explaining the reasons for the denial will be provided to the applicant. The applicant has the right to appeal this decision, in accordance with the procedures outlined in the City of Evansville Code of Ordinances.

Effective Date:

No credit shall take effect unless the stormwater management facilities for which the application was filed are installed and approved by the City Engineer. Any stormwater facility approved by the City Engineer shall receive a credit as of the next full billing cycle after approval.

Limitations:

In no case may the credit reduce the stormwater fee below the charge of one (1) ERU per year.

CHAPTER 1: INTRODUCTION

The City Council of the City of Evansville, Wisconsin passed Ordinance 2008-12 which created a City-wide Stormwater Utility to fund stormwater management activities.

The primary revenue source for the Stormwater Utility is Stormwater Utility Charges to all developed property in the City. Stormwater Utility Charges to a property are related to the impervious surface area on the property. In general terms, the impervious areas are the portions of the property that shed water from most of the rainfall that occurs during even the early stages of a storm. Typical impervious areas include sidewalks, driveways, roofs, awnings, patios, parking lots and compacted aggregate (gravel) surfaces.

A sampling of residential properties within the City determined that the typical developed single-family residential or duplex property has approximately 3,000 square feet of impervious area. As a result, 3,000 square feet is used as the base billing unit, or ERU (equivalent runoff unit).

Each single-family residential or duplex residential property is billed according to a one (1) ERU flat rate schedule established by resolution by the City Council. For properties other than single-family and duplex residential properties, the amount of impervious area is measured in square feet and divided by 3,000, the calculated amount of impervious surface area on a typical single-family or duplex parcel. The result of that division is rounded to the nearest tenth of an ERU and becomes the number of ERUs assigned to the property. That number multiplied by the unit-billing rate contained in the current stormwater utility charge resolution yields the stormwater utility charge for that particular property.

The number of ERUs assigned to a property other than single-family and duplex properties will remain constant unless physical changes are made that alter the amount of its impervious surface area. In these cases, billing changes will be made automatically at the completion of construction. Typically, these changes will be triggered through the building permit process.

The City of Evansville has developed a system of credits for stormwater service customers with ten (10) ERUs or greater who have one or more of the following that are not specifically required by ordinance, permit, statute or regulation:

- (a) Have facilities or controls in place to temporarily store stormwater runoff, thereby reducing the discharge rate to the public drainage system.
- (b) Have facilities or controls in place to infiltrate stormwater runoff, thereby reducing the discharge quantity to the public drainage system.

- (c) Have facilities or controls in place to remove suspended solids from stormwater runoff, thereby reducing the stormwater pollutant impacts on the public drainage system.
- (d) Are elementary, middle or high schools where an approved and established stormwater curriculum is taught.

Credits are available only for the variable portion of the stormwater fee. The fixed portion is not subject to credit. The exact percentages of the fee which are fixed and which are variable are reviewed and established every two years by the City.

In no case may the credit reduce the stormwater fee below the charge for one (1) ERU per year. Percentage reductions set forth in this manual are percentages of the stormwater charge in excess of the stormwater charge for one (1) ERU, not percentages of the total stormwater charge.

Two examples are provided below for clarification:

Assumptions: 25% of Stormwater fee is Fixed (75% is Variable)*
 50% credit is approved**

Example 1:

Total ERU before: 40
 Is this ERU > 1.0? $40 > 1.0 \rightarrow$ Eligible for credit
 Eligible for credit: $40 \times 0.75 = 30$
 Credit amount: $30 \times 0.50 = 15$
 Total ERU after: $40 - 15 = 25$

Example 2:

Total ERU before: 1.5
 Is this ERU > 1.0? $1.5 > 1.0 \rightarrow$ Eligible for credit
 Eligible for credit: $1.5 \times 0.75 = 1.125$
 Credit amount: $1.125 \times 0.50 = 0.5625$
 Total ERU after: $1.5 - 0.5625 = 0.9375 \rightarrow$ This is < 1 ERU minimum, use 1.0

This manual details the policies and procedures applicable to the stormwater service charge credit program.

* As calculated by the City annually – May change annually

** For example use only – As approved by City staff based upon information submitted by applicant

CHAPTER 2: CREDIT POLICIES

It is the City'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. The policy has been crafted to maintain a balance between simplicity and effectiveness.

A. APPLICATION FEE AND DETERMINATION - A credit application will not be considered complete and will not be processed unless accompanied by the application fee and all appropriate forms and information as required in this manual. The credit application fee has been established by City resolution and is shown on the credit application form. It is the intent of the City to process applications within thirty (30) days of submittal of the complete and correct application package. No credit shall take effect unless the stormwater management facilities for which the application was filed are installed and approved by the City Engineer. Any stormwater facility approved by the City Engineer shall receive a credit as of the next full billing cycle after approval. A pending application for credit shall not constitute a valid reason for non-payment of current Stormwater Service Charges. For new developments, credits detailed herein do not apply until the stormwater utility charge would initially be levied.

B. PUD AND MOBILE HOME SITE CREDITS – Credits approved for these locations will be applied to the entire utility bill for the site, or equally distributed among the utility bills (as applicable) for the site.

C. DISCHARGE RATE REDUCTION CREDITS – A discharge rate reduction credit is offered to customers that maintain runoff facilities or controls, by means of detention facilities that restrict stormwater runoff rates released from their property to less than the levels required by current regulations. Discharge Reduction Credits shall be conditioned on continuing operation and maintenance of these facilities, as follows:

- Available credits
 1. 5%-Detain 2-year storm and/or release at a flow rate of the pre-developed 2-year storm where such control is not otherwise required;
 2. 5%-Detain 10-year storm and/or release at a flow rate of the pre-developed 10-year storm where such control is not otherwise required;
 3. 5%-Detain 25-year storm and/or release at a flow rate of the pre-developed 25-year storm where such control is not otherwise required;
 4. 5%-Detain 100-year storm and/or release at a flow rate of the pre-developed 100-year storm where such control is not otherwise required;

Qualification requirements and application procedures for these credits are outlined in Chapter 3.

C. RUNOFF VOLUME REDUCTION CREDIT - A runoff volume reduction credit is offered to customers that maintain infiltration or bio-retention facilities that prevent stormwater runoff from being released from their properties. Credits shall be conditioned on continuing operation and maintenance of these facilities. Available credits are as follows:

1. 20% - Infiltrate runoff equivalent to that which would occur in an “undeveloped” condition using the SLAMM computer model or an estimated annual average recharge rate of 7.6 inches using the RECARGA computer model.

Qualification requirements and application procedures for this credit is outlined in Chapter 4.

D. QUALITY IMPROVEMENT CREDIT – A quality credit is offered to properties that reduce suspended solids in stormwater runoff to levels as follows:

- 10% for 20%-40% reduction in total suspended solids
- An additional 10% for each additional 20% reduction above 40% in total suspended solids.

Qualification requirements and application procedures for this credit are outlined in Chapter 5.

E. EDUCATION CREDIT - An education credit of 20% is offered to properties on which an elementary, middle or high school is located and where an approved stormwater education curriculum is taught.

Qualification requirements for this credit are outlined in Chapter 6.

G. INDEMNIFICATION - In consideration for permission to construct or install a stormwater improvement Best Management Practice (BMP), and by nature of applying for a stormwater user fee credit, the applicant is hereby legally acknowledging and agreeing to the following:

1. After completion of the construction or installation by Owner and approval by the City, the stormwater improvement/BMP shall remain a privately owned and maintained stormwater improvement BMP, shall not be accepted by the City, and shall not become a part of the maintenance program of the Evansville Stormwater Utility or the Evansville Municipal Services Department (MSD). All maintenance responsibility and liability

shall be and shall remain with the property owner, his/her personal representatives, heirs, grantees, successors, and assigns.

2. Owner, his/her personal representatives, heirs, grantees, successors, and assigns shall indemnify and hold harmless the City of Evansville, its officers, agents, and employees from any and all claims, actions, causes of action, judgments, damages, losses, costs, and expenses (including attorney's fees) arising out of or resulting from the construction, installation, maintenance, or operation of the stormwater improvement BMP.

This Agreement shall run with the real estate upon which the stormwater improvement BMP has been constructed and shall be binding upon Owners, their personal representatives, heirs, grantees, successors, and assigns. This Agreement shall be disclosed upon transfer of real estate.

CHAPTER 3: DISCHARGE RATE REDUCTION CREDIT

A Discharge Rate Reduction Credit is available to properties whose peak stormwater runoff rate is restricted and controlled through onsite facilities or controls, such as detention ponds, which are privately designed, constructed, and maintained according to City standards and requirements.

CALCULATION METHODOLOGIES AND CRITERIA

- Mathematical Model to Be Used – TR-55, TR-20, or other approved model that generates a hydrograph and allows routing through detention facilities.
- Criteria – The model shall be run using a Type II distribution. Hydrologic curve numbers for determination of pre-development conditions shall be as set forth in the City's Erosion Control and Stormwater Management Ordinance. Detention facilities must return to normal water level within twenty-four (24) hours.

APPLICATION REQUIREMENTS

1. *The owner shall supply maintenance information along with his/her application.* Any association agreements or contracts for inspection and/or maintenance are required to be disclosed as part of the application. Indicate the schedule for major maintenance that will be performed and how many times per year basic maintenance (such as mowing) activities are performed. Inspection reports shall be filed with the City every subsequent year, as calculated from the original application date, in order to maintain either Quantity credit. If a property owner fails to file required inspection reports or if a random City inspection results in a judgment by the City that the facility is ineffective, the City will send a letter informing the property owner of the required action to avoid revocation of the Quantity credit. If the property owner fails to take the required action, the Quantity credit will be revoked until the situation is corrected. No retroactive credit will be given during said lapse period. Credit will be restored on the effective date of the submittal of the property owner's acceptable response.
2. *The owner shall supply the following technical information along with their application.*
 - Conceptual site plan and stormwater feature location diagram
 - Locations, dimensions and characteristics of all proposed and existing drainage patterns and facilities
 - Existing and proposed grading and location of all structures, parking, driveways, and other impervious areas

- Detailed engineering calculations using approved mathematical models. A Wisconsin Professional Engineer must certify these calculations.
- The sum-total of the runoff rate from the entire property must be calculated and compared. Calculation of runoff control only part of the property, ignoring other parts, will not receive credit. Overcontrol of runoff in only one watershed, *which takes into account the runoff from all other parts*, could receive credit.
- Upon completion of construction, as-built data certified by a Wisconsin Professional Engineer shall be submitted in order to complete the application. The as-built data must verify the capacities of the facilities for which the credit has been applied.

The owner shall submit a statement certifying that information is correct and acknowledging that the credit determination will be based on information provided. A later determination that the information was inaccurate may result in loss of credit.

Credits will not be considered approved until as-built data has been submitted.

CHAPTER 4: RUNOFF VOLUME REDUCTION CREDIT

A Runoff Volume Reduction Credit is available to properties whose total runoff is restricted and controlled through onsite facilities or controls, such as by biofiltration facilities or similar infiltration facilities, which are privately designed, constructed, and maintained according to City standards and requirements.

CALCULATION METHODOLOGIES AND CRITERIA

- Mathematical Models to Be Used – RECARGA
- Criteria – For RECARGA hydrologic curve numbers for determination of pre-development conditions shall be as set forth in the City's Erosion Control and Stormwater Management Ordinance. Soil Classifications according to the USDA classification system. Ponding duration must satisfy the restriction of the current Dane County and Department of Natural Resources limitations.

APPLICATION REQUIREMENTS

1. *The owner shall supply maintenance information along with his/her application.* Any association agreements or contracts for inspection and/or maintenance are required to be disclosed as part of the application. Indicate the schedule for major maintenance that will be performed and how many times per year basic maintenance (such as mowing) activities are performed. Inspection reports shall be filed with the City every subsequent year, as calculated from the original application date, in order to maintain either Quantity credit. If a property owner fails to file required inspection reports or if a random City inspection results in a judgment by the City that the facility is ineffective, the City will send a letter informing the property owner of the required action to avoid revocation of the Quantity credit. If the property owner fails to take the required action, the Quantity credit will be revoked until the situation is corrected. No retroactive credit will be given during said lapse period. Credit will be restored on the effective date of the submittal of the property owner's acceptable response.
2. *The owner shall supply the following technical information along with their application.*
 - Conceptual site plan and stormwater feature location diagram
 - Locations, dimensions and characteristics of all proposed and existing drainage patterns and facilities
 - Existing and proposed grading and location of all structures, parking, driveways, and other impervious areas
 - Soil test results

- Detailed engineering calculations using approved mathematical models. A Wisconsin Professional Engineer must certify these calculations.
- The sum-total of the runoff volume from the entire property must be calculated and compared. Control of runoff in only one part of the property, ignoring all other parts, will not receive credit. Control of runoff in only one part of the property, *which takes into account the runoff from all other parts*, could receive credit.
- Upon completion of construction, as-built data certified by a Wisconsin Professional Engineer shall be submitted in order to complete the application. The as-built data must verify the capacities of the facilities for which the credit has been applied.

The owner shall submit a statement certifying that information is correct and acknowledging that the credit determination will be based on information provided. A later determination that the information was inaccurate may result in loss of credit.

Credits will not be considered approved until as-built data has been submitted.

CHAPTER 5: QUALITY IMPROVEMENT CREDIT

A Quality credit will be available to properties where structural or non-structural stormwater best management practices (BMPs) are located and which are used to treat stormwater runoff, specifically total suspended solid (TSS), to levels greater than otherwise required by state or local regulations.

NOTE: A bio-retention facility that is being used for a Volume Reduction Credit may also be approved as a BMP for a quality credit if properly designed. Separate calculations or professional certifications showing the required removal of TSS in the facility need not accompany the application for each credit. This type of quality credit will be tied to the associated quantity credit, which means that termination of the quantity credit for any reason will also terminate the quality credit for that BMP.

- a. Mathematical Model to Be Used – SLAMM, P-8, or RECARGA run in accordance with the latest requirements established by the Wisconsin Department of Natural Resources and Dane County, whichever is more restrictive.

APPLICATION REQUIREMENTS

1. *The owner shall supply maintenance information along with his/her application.* Any association agreements or contracts for inspection and/or maintenance are required to be disclosed as part of the application. Indicate the schedule for major maintenance that will be performed and how many times per year basic maintenance activities are performed. Inspection reports shall be filed with the City every subsequent year, as calculated from the original application date, in order to maintain the Quality credit. If a property owner fails to file required inspection reports or if a random City inspection results in a judgment by the City that the facility is ineffective, the City will send a letter informing the property owner of the required action to avoid revocation of the Quality credit. If the property owner fails to take the required action, the Quality credit will be revoked until the situation is corrected. No retroactive credit will be given during said lapse period. Credit will be restored on the effective date of the submittal of the property owner's acceptable response.
2. *The owner shall supply the following technical information along with their application.*
 - Conceptual site plan and stormwater feature location diagram
 - Locations, dimensions and characteristics of all proposed and existing drainage patterns and facilities
 - Existing and proposed grading and location of all structures, parking, driveways, and other impervious areas

- Detailed engineering calculations using approved mathematical models. A Wisconsin Professional Engineer must certify these calculations.
- The sum-total of suspended solids discharges from all watersheds within the property must be calculated and compared, regardless of the number of natural or constructed watersheds in the property. Control of runoff in only one of the property's watersheds, ignoring all others, will not receive credit. Control of runoff in only one watershed, *which takes into account the runoff from all others*, could receive credit.
- Upon completion of construction, as-built data certified by a Wisconsin Professional Engineer shall be submitted in order to complete the application. The as-built data must verify the capacity of the facilities for which the credit has been applied.

Credits will not be finally approved until as-built data has been submitted.

CHAPTER 6: EDUCATION CREDIT

An education credit will be available to properties on which a primary or secondary educational institution is located. Such credit shall apply only to the property of the school where the stormwater education curriculum is taught. The method of calculation of the credit shall be established by Municipal Services Committee. A qualified stormwater education curriculum shall present stormwater and water resources management education to every student at least one time during each student's time at the particular school and shall be reasonably prepared to encourage appreciation and stewardship of water resources and thereby reduce negative impacts on local streams and lakes.

Application for this credit shall be made by submitting a proposed curriculum to the City Administrator with a written request for consideration of a credit. The Municipal Services Committee shall review the proposed curriculum and shall render a decision within seventy-five (75) days of receipt of the request unless an extension of time is agreed to in writing by the school or district.

CHAPTER 7: AMENDMENTS

Changes to this credit manual can be made by formal action by the Municipal Services Committee.