

Origination Date: 9/07

Revision Dates: 10/07, 12/07, 4/08, 5/08, 2/09,  
5/09, 3/16, 8/16

# CITY OF SUPERIOR



THE CITY OF  
**SUPERIOR**

W I S C O N S I N

Living up to our name.

## **Stormwater Conveyance System Treatment and Peak Flow Credit Application and Instructions**

Prepared by:

Environmental Services Division of Public Works



# CITY OF SUPERIOR STORMWATER CONVEYANCE SYSTEM (SCS) CREDIT APPLICATION INSTRUCTIONS

## Application Form

### Application Fee

A credit application will not be processed unless accompanied by the application fee. The credit application fee is \$150.00 and covers one credit application form for one site. Customers seeking credit on multiple sites are required to submit an application and accompanying fee for each site. The application fee is nonrefundable. Make checks payable to: City of Superior – Stormwater Utility Credit Application Fee.

### Property Owner Information

Enter the name and mailing address of the property owner (must be the owner as recorded with the County Registrar of Deeds). If you have questions or want to make a change regarding either the owner name or owner mailing address, contact the Douglas County Treasurer at (715) 395-1348.

Enter the owner's email address, if available.

### Property Information

- Enter in the address of the property for which credit is being requested.
- Record the size of the whole property in square feet. (1 acre = 43,560 square feet)
- Record the total amount of impervious area in square feet. [Existing Impervious Area will be shown on the ESD provided map.]
- Enter the owner's account number from the City of Superior Utility Bill.
- Enter the parcel number(s) that contain the area for which credit is being applied.
- Briefly describe the basis or reasoning for the credit request in the space provided.

### Contact Information

- Enter the name and title for the person responsible for the property.
- Enter the address where correspondence regarding the credit application should be sent.
- Enter an email address and phone number for the contact person.

### Owner/Representative Certification

This section must be signed and dated by the property owner or an individual with delegated authority to execute instructions for the owner. By signing this form, the owner or representative is certifying that the information within the application is true and correct to the best of his/her knowledge and belief and that he/she agrees to provide updated information should there be any change in the information provided.

Any changes in information should be sent to: City of Superior Environmental Services Division, Attn: Water Resources Program Coordinator, 51 E. 1<sup>st</sup> St., Superior, WI 54880.

### ERUs Eligible for Credit

Credits are offered as a percent reduction of the stormwater utility fee. Credits pertain to specific impervious surfaces within a site. It is NOT a site average measurement.

SCS credits are available for eligible NSFU customers with structural BMPs that provide treatment and/or peak flow attenuation for designated and measured impervious surfaces. All structural BMPs must comply with City Stormwater Standards. Compliant BMPs that provide both treatment and peak flow attenuation are eligible for a credit of 59.02%. Complaint BMPs that provide treatment or flow attenuation are only eligible for a credit of 29.51% (or half of the full SCS credit).

For more specific information about requirements, see the “City of Superior Stormwater Utility Credit Program.”

Verify the amount of impervious surfaces quantified on the ESD provided map. If applicable, identify and quantify any new impervious surfaces on the map. The definition of impervious surface can be found in the “City of Superior Stormwater Management Permitting Program”. Calculate the total amount of impervious surfaces in square feet.

After the drainage areas have been defined, determine the total amount of impervious surfaces that drain to the MS4. In addition, determine the amount of impervious surfaces requesting each credit type (full vs. partial SCS credit). Divide all impervious surface amounts by 2,933 ft<sup>2</sup> to convert to ERUs:

Enter these numbers, rounded to the nearest tenth of an ERU, on the application in the section titled “ERUs eligible for Stormwater Conveyance System Credit.” The ERUs eligible must total at least 20 ERUs or constitute at least 50% of the ERUs draining to the MS4 to qualify for credit.

### **Professional Engineer Certification**

- Enter the name of the engineering company that the engineer is affiliated with along with the company address, city, state, zip code, phone and fax number.
- Enter the name of the engineer and the title or authority.
- The engineer must sign, date, enter the license type and number, and a cell phone number and email address if available. The professional must also review and initial the ESD provided map appropriately.

### **License Agreement**

This section must be signed and dated by the owner or an individual with delegated authority to execute instructions for the owner. **By signing this form, the owner or representative is agreeing to allow the City access to the property to conduct inspections to verify compliance with the stormwater credit requirements.**

## **Narrative**

### **Site Description**

Provide a detailed site description. Describe the property location relative to major geographical features, waterbodies, roads, etc.

Identify the portion of impervious surfaces being treated and the location of all stormwater BMPs installed.

The location of commercial or industrial activities and materials that have the potential to contaminate storm water must be described.

### **Credit Justification**

Describe in detail the BMPs that will be used to qualify for credit. Specify which credit type(s) are being applied for: only SCS peak flow, only SCS treatment, or both SCS peak flow and SCS treatment.

## **Survey Map**

On the map provided by ESD, the property will be identified with the current parcel layer. If the representation of the parcel(s) is not adequate, a CSM or Map of Survey should be submitted. The Douglas County’s Register of Deeds houses existing maps and are available for purchase.

# **Stormwater Mapping**

## **Existing and/or As-built Conditions**

All applicants are required to submit plans and information showing the BMP(s) was(were) designed and installed to meet the credit program requirements.

For locations on which a BMP was installed prior to the credit program (2009), applicants shall provide a current topographical survey and a thorough inspection of all components of the BMP(s) along with either

1. The original site plan and narrative or DNR permit application detailing the installed BMPs and the expected level of treatment and attenuation

OR

2. An “existing plan” (developed from the current topographical survey) with the appropriate modeling showing the level of treatment and attenuation the site is achieving

For sites which have just been or are soon to be installed, as-built plans for any permanent stormwater management facilities must be included in the application. The plan must show the final implemented site design as well as details and specifications for all BMPs and be sealed by a registered professional engineer.

Provide map(s) containing all of the following information about your property. If you need mapping information please contact ESDPW:

- Site Conditions.
    - The applicant is responsible for providing a map or plan that show contours and topographic features which accurately reflect the as-built or current conditions of the site as discussed above.
    - Land features not represented by contours.
      - Any land feature (i.e. sink or hill) that is not represented by contours shall be drawn on the map.
  - All drainage areas, divides, and flow patterns.
    - This includes all flows affected by ditches and pipe systems. Flow arrows must be shown. Each area on the site must be labeled as “tributary to receiving water” or “tributary to City MS4”.
    - These areas shall be delineated and labeled with the same identifier as in the TR-20/55 routing schematics for newly constructed sites.
  - Location of stormwater controls/conveyance systems.
    - The location of stormwater controls and conveyances, public and private, including all known surface and subsurface conveyances, structural storm water controls and BMPs, including any secondary or other containment structures, shall be mapped and labeled. All public conveyances utilized, including pipes, ditches, culverts and streets, shall be clearly labeled as “public”.
      - Roads/streets/alleys – paved and unpaved
      - Inlets/Catch Basins
      - Culverts
      - Channels
      - Curbs
      - BMPs
      - Gutters
      - Other
      - Ditches
      - Outfalls – Including WPDES permitted outfalls that discharge channelized flow to surface water, groundwater, or wetlands (number each for reference)
  - Additional impervious surfaces.
    - Any impervious area that is not shown on the ESD provided GIS map’s aerial photograph shall be added to the map and labeled as “Impervious” (i.e. newly constructed buildings, roads, etc.)
- Contact the Water Resources Program Coordinator at 715-394-0392 or [deverak@ci.superior.wi.us](mailto:deverak@ci.superior.wi.us) with any questions or to obtain mapping information.

## Stormwater Design

Provide the following for your property:

- Stormwater models
  - **SCS Peak Flow Modeling** (*Wet or Dry Detention, Artificial Wetlands, Biofiltration, Swales, and Underground Storage*)  
For all credit applications requesting peak flow attenuation credit, an evaluation which compares preexisting\* peak flows to proposed peak flows for the 1-year, 2-year, 10-year, and 100-year Soil Conservation Service Type II design storms must be modeled. The results of this analysis must show that peak flows do not increase for any of these storms in the proposed conditions. A summary table must be included showing preexisting peak flows and proposed peak flows with attenuation. New facilities must also include proposed peak flows without peak flow attenuation.

\*NOTE: Preexisting shall mean open space in good condition. Values in Table 2 of NR 151.123 shall be used

Runoff Curve Number	Hydrologic Soil Group			
	A	B	C	D
Woodland	30	55	70	77
Grassland	39	61	71	78
Cropland	55	69	78	83

Note: Where the pre-development condition is a combination of woodland, grassland, or cropland, the runoff curve number should be pro-rated by area.

- Specific guidance and modeling requirements can be found in the City of Superior's Stormwater Management Permitting Program, Appendix C.
- **SCS Treatment Modeling** (*Wet Detention, Artificial Wetlands, Biofiltration, Underground Storage, and Vegetated Swales*)
  - For all credit applications requesting treatment credit, an evaluation which shows that by design, structural BMP's will reduce total suspended solids (TSS) by 80% compared to no controls in place, must be made utilizing the most recent version of WinSLAMM (preferred) or P8, version 3.4.
  - Information on either of these modeling programs can be found at <http://dnr.wi.gov/topic/stormwater/standards/slammm.html>.
  - Specific guidance and modeling requirements can be found in the City of Superior's Stormwater Management Permitting Program, Appendix C.

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## Operation and Maintenance Plan

The effectiveness of long-term stormwater BMPs depends upon routine inspections and appropriate maintenance of the practices. Inlet and outlet pipes should be inspected for obstructions, erosion and condition. Trash and debris should be collected and properly disposed of. Vegetation should be checked as mowing might be required and/or dead vegetation may need to be removed.

For each of the BMPs qualifying for credit, develop an operation and maintenance plan that is consistent with the BMP being used, the intended lifespan of the BMPs, safety requirements, and the design criteria. Please refer to the DNR technical standards for inspection and maintenance guidance

The operation and maintenance plan shall include:

- Description and locations of storm water controls and BMPs to be inspected and maintained by the applicant.
  - Schedule of inspection and maintenance including the techniques used to inspect and maintain the systems to ensure that they are functioning as designed.
  - Site specific inspection form(s) including names of all BMPs requiring inspection as identified by the inspection and maintenance schedule.
  - Property map identifying the location and names of each BMP as identified on the inspection form.
  - Method(s) of disposal for extracted material from maintenance activities.
  - Person(s) and phone number(s) of who will be responsible for inspection and maintenance.
-

## Submittal Checklist

<b>Submittal Checklist</b>		
<b>Completed Stormwater Utility Credit Application</b>	Check to indicate inclusion	
- Application Fee (\$150.00)		
- Property Owner Information		
- Property Information		
- Contact Information		
- Owner/Representative Certification		
- ERUs Eligible for Credit		
- Professional Engineer Certification		
- License Agreement		
<b>Narrative</b>	Check to indicate inclusion	
- Site Description		
- Impervious area description		
- Location of activities and materials that have the potential to contaminate storm water		
- Credit Justification		
<b>Plat Map (if needed)</b>	Included	N/A
- Available through the Douglas County Register of Deeds if existing.		
<b>Stormwater Mapping</b>	Included	N/A
- Map(s) containing:		
• Contours		
○ Land features not visible with contours		
• Drainage divides, flow patterns, and flow types-all labeled		
• Location of any stormwater controls/conveyance systems		
○ Roads/Streets		
○ Inlets/Catch Basins		
○ Outfalls		
○ Curbs		
○ Gutters		
○ Ditches		
○ Culverts		
○ BMPs		
○ Channels		
○ Other		
• Additional Impervious area not shown on the aerial photograph		

## Submittal Checklist Continued

<b>Submittal Checklist Continued</b>	
<b>Stormwater Design</b> <ul style="list-style-type: none"> <li>- Stormwater Design Plans and Details</li> <li>- Peak Flow modeling (TR-20/55)                             <ul style="list-style-type: none"> <li>♦ Software and version used</li> <li>♦ All input values</li> <li>♦ Assumptions</li> </ul> </li> <li>- TSS Modeling (P8 or WinSLAMM)                             <ul style="list-style-type: none"> <li>♦ Software and version used (most current version strongly recommended)</li> <li>♦ All input values</li> <li>♦ Assumptions</li> </ul> </li> </ul>	Check to indicate inclusion
<b>Rainfall Data</b> <ul style="list-style-type: none"> <li>- Data source documentation</li> <li>- Justification of specific values used, if needed</li> </ul>	Check to indicate inclusion
<b>Operation and Maintenance Plan</b> <ul style="list-style-type: none"> <li>- Plan</li> </ul>	Check to indicate inclusion



**STORMWATER UTILITY  
STORMWATER CONVEYANCE SYSTEM  
CREDIT APPLICATION**



**Application Fee \$150**

Make checks payable to: City of Superior – Stormwater Credit Application Fee

<b>Property Owner Information (Please print or type)</b>
Owner's Name: _____ (Same as "Owner's Name" on Municipal Stormwater Utility Bill)
Owner's Address: _____ (Same as "Owner's Address" on Municipal Stormwater Utility Bill)
Email Address: _____

<b>Property Information</b>
Property Address/Location: _____
Property size (square feet): _____ Impervious area (square feet) _____
Account Number (from your City of Superior Utility Bill): _____
Parcel Number(s) (from ESD provided map): _____
Briefly describe the basis or reasoning for the credit request: _____ _____

<b>Contact Information</b>
Name: _____
Title: _____
Address: _____
City: _____ State: _____ Zip Code: _____
Phone: _____ Cell: _____
Email Address: _____

<b>Owner/Representative Certification</b>
The information within this application is true and correct to the best of my knowledge and belief. I agree to provide updated information should there be any change in the information provided herein. (This form must be signed by the owner or individual with delegated authority to execute instructions for owner.)
_____ Signature
_____ Date

**ERUs eligible for Stormwater Conveyance System Credit**

1.Total number of ERUs draining to the MS4 \_\_\_\_\_

2.Requested number of ERUs for only SCS Treatment Credits \_\_\_\_\_

3.Requested number of ERUs for only SCS Peak Flow Credits \_\_\_\_\_

4.Requested number of ERUs for both SCS  
Peak Flow and SCS Treatment Credits \_\_\_\_\_

(NOTE: lines 2, 3 and 4 can NOT add to more than line 1)

5.BMP(s) utilized (check all that apply):

- Wet Detention Basin     Artificial Wetland     Biofiltration     Vegetated Swales\*  
 Dry Detention Basin     Underground Storage

(\*Swales alone do not provide sufficient treatment; they are acceptable when used in series with other approved BMPs)

**Professional Engineer Certification**

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax \_\_\_\_\_

**Certification:** The following certification is required for approval of all credits for which a certified technical submission is required:

Any facilities constructed and/or installed as a condition of Credit qualification have been inspected and conform to technical and performance standards required within the City of Superior Stormwater Management Permitting Program. The information above and within this application was prepared either by or under the supervision of myself as the qualified professional and is true and correct to the best of my knowledge and belief.

\_\_\_\_\_  
Type or print name Title or Authority

\_\_\_\_\_  
Signature Date

\_\_\_\_\_  
Professional License Type and Number

\_\_\_\_\_  
Phone Number Email:

## LICENSE AGREEMENT

**THIS LICENSE AGREEMENT** (this "*Agreement*") is made by the applicant named below (together with its successors and assigns, "*Applicant*"), for the benefit of the City of Superior, Wisconsin, a municipal corporation (the "*City*"). Applicant has applied to the City for credits under the City's Stormwater Utility Credit Program (as in effect from time to time, the "*Stormwater Program*"). For good and valuable consideration, Applicant agrees as follows:

1. License. Applicant grants to the City a license to enter upon all or any portion of the real property set forth as "*APPLICANT'S STREET ADDRESS, CITY, STATE & ZIP*" below (the "*Property*"), for the limited purpose of inspecting the Property for compliance with the terms and conditions of the Stormwater Program and the paragraphs that follow. Any such right of entry by the City pursuant to the foregoing license shall be made upon at least 24 hours notice to Applicant, which may be given by telephone or email. The license may be revoked by Applicant only in the manner described below.
2. Creditable Activity. For purposes of this Agreement, the term "*Creditable Activity*" refers to any and all activities undertaken by Applicant on the Property to receive any credit under the Stormwater Program, including, without limitation, site grading, stormwater improvements, best managements practices for stormwater management, or related stormwater runoff managed by Applicant, as well as the construction, installation, condition, repair, maintenance or operation of the same.
3. Compliance. Applicant represents and warrants to the City that all Creditable Activity is, and will remain, in compliance with all Federal, State or local laws, ordinances, codes, rules and regulations, with all local technical or performance standards, and with all related stormwater management plans or programs, as each of them are in effect from time to time and applicable to the Property (collectively, "*Applicable Laws*"). Applicant is charged with knowledge of all Applicable Laws, as well as any changes to Applicable Laws during the period of time during which this instrument is effective.
4. Maintenance. All Creditable Activity shall be and remain privately owned and maintained, and shall not be accepted by the City, and shall not become a part of the maintenance program of the Stormwater Utility or the Public Works Department of the City. All responsibility and liability for maintenance of any Creditable Activity shall be and remain with Applicant.
5. Waiver of Claims. Applicant assumes all risks that may arise in connection with its Creditable Activity. Applicant agrees that the City assumes and bears no liability or responsibility for Applicant's Creditable Activity. Applicant waives any and all claims it may have against the City for its Creditable Activity, for the exercise by the City of its right of entry pursuant to the license granted by Applicant above or otherwise in connection with the Stormwater Program.

6. Revocation of Credits. This Agreement is being delivered as a prerequisite to Applicant's participation in the Stormwater Utility Credit Program, but confers no rights or interests in such program. Any credits that had been granted to Applicant under the Stormwater Credit Program shall be automatically revoked upon the occurrence of any of the following events: (a) Applicant is in default under any of the terms of this Agreement or the Stormwater Credit Program; or (b) Applicant discontinues any Creditable Activity; or (c) Applicant transfers the Property, as evidenced by an instrument of conveyance recorded in the real property records of Douglas County, Wisconsin, and the new owner fails within 30 days to execute and deliver an agreement containing all of the same terms and conditions of this Agreement. Applicant will not be entitled to restoration of such credits unless Applicant re-applies for the same pursuant to the terms of the Stormwater Utility Credit Program.

7. Revocation of License. Applicant may revoke the license granted above only by written notice to the City by certified mail, return receipt requested, to the attention of the Water Resources Program Coordinator, City of Superior – Environmental Services Division of Public Works, 51 East 1<sup>st</sup> Street, Superior, WI 54880.

8. General. Any notices required or permitted hereunder shall be sent by certified mail, addressed to Applicant at its address first listed above, and to the City c/o Water Resources Program Coordinator, City of Superior – Environmental Services Division of Public Works, 51 East 1<sup>st</sup> Street, Superior, WI 54880. If any provision hereof is invalid or unenforceable to any extent, that provision and the remainder of this instrument shall continue in effect and be enforceable to the fullest extent permitted by law.

<i>SIGNATURE OF AUTHORIZED AGENT OR EMPLOYEE OF APPLICANT</i>	<i>PRINTED NAME &amp; TITLE OF AUTHORIZED SIGNATORY (e.g. "John Doe, President")</i>
<i>LEGAL NAME &amp; ENTITY OF APPLICANT (e.g. Doe, Inc., a Wisconsin corporation)</i>	<i>APPLICANT'S STREET ADDRESS, CITY, STATE &amp; ZIP</i>
<i>APPLICANT'S TELEPHONE NUMBER:</i>	<i>DATE OF SIGNATURE</i>