

Village of Palmyra, Wisconsin

Stormwater Credit Manual

1.0 INTRODUCTION

The Village of Palmyra has developed a system of credits for stormwater utility customers who are able to demonstrate one of the following conditions: (1) Discharge Rate Reduction; and (2) Direct Discharge.

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

2.0 CREDIT POLICY

2.1 Background

The purpose of the storm water utility credit policy is to encourage actions by property owners within the utility district to: 1) reduce storm water flows and 2) reduce the utility district's costs in providing proper management of storm water runoff. The term 'Property' or 'Properties' will refer to any developed property in the Village excluding single family residential and duplex parcels. The term 'Residential Parcel' will refer to parcels with a principal use of single family or duplex. Credits for user fees will only be allowed when it can be demonstrated by the customer that a condition or activity on the property results in a direct reduction in costs for Storm Water Utility services.

2.2 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 is as established in The Village of Palmyra Fee Schedule. Billing adjustments required to implement credits will be applied retroactively to the date the customer submitted a complete application. Adjustments shall be made by crediting the customer's storm water service charge until any overpayment has been fully repaid. A pending application for credit shall not constitute a valid reason for non-payment of the current Storm Water Service Charges. In the case of new development, Storm Water Service Charges and the associated credits detailed herein do not apply until construction is complete and verified by the Department, or upon granting of conditional occupancy, whichever is earlier.

2.3 Direct Discharge Credit

Direct discharge credit is available to a nonresidential parcel that discharges all or a portion of its stormwater directly into a waterbody not maintained in any way by the Village and without first passing through an element of the publicly owned stormwater collection and conveyance system and without crossing any Village rights-of way; or does not discharge stormwater because the parcel is internally drained. Internally drained is defined as follows: no runoff leaves the parcel, or that portion of the parcel for which a credit is being sought, either overland or through a subsurface stormwater conveyance, as a result of the 100-yr, 24-hr storm event. Procedures for this credit are outlined in Section 3.

2.4 Discharge Rate Reduction Credit

Discharge Rate Reduction Credits are offered to nonresidential parcel owners that maintain private runoff facilities or controls, such as detention or retention facilities, which maintain the pre-development peak discharge rate released from their property for the 1-, 10-, and 100- year 24- hour storm event. Discharge Rate Reduction Credits shall be conditioned upon compliance with the design, operation, and maintenance requirements of all the applicable ordinances and codes of the Village of Palmyra, State or Federal Permitting, and this Storm Water Credit Manual. Qualification requirements and application procedures for these credits are outlined in Section 4.

2.5 Maximum Credit

The maximum aggregate credit to the Storm Water Service Charge of any individual property is 50% of its gross billing amount, regardless of how many individual credits for which the property qualifies. Developments must conform to all applicable ordinances and standards of the Village of Palmyra to be credit eligible.

2.6 Combining Credits

The two different credit types may not be applied to the same watershed or sub-watershed within a parcel, but may be individually applied to different watersheds within a parcel, so long as the maximum aggregate credit does not exceed 50% as outlined in Section 2.5.

3.0 DIRECT DISCHARGE CREDIT

3.1 Eligibility

The credit amount will be pro-rated based on the percent of the parcel's impervious area that is directly discharged or internally drained as described in Section 2.

3.2 Application Requirements

The completed Direct Discharge Credit application must include an application fee along with the following information:

- a) The location of the receiving waterbody
- b) Site topography with a minimum 2' contour interval
- c) Watershed breaks across the property
- d) Layout of impervious surface areas on the property
- e) Layout of the drainage system on the property, including location and elevations of natural and man-made features
- f) Sufficient topographic data or elevations to verify general drainage patterns across the property.
- g) A calculation of impervious area (in square feet) for each delineated drainage area on the property.

All information must be approved as acceptable by the Department of Public Works before an application will be deemed complete.

4.0 POST DEVELOPMENT DISCHARGE RATE REDUCTION CREDIT

4.1 Eligibility

This credit applies to all nonresidential properties that provide privately constructed and maintained runoff flow control measures, or will provide privately constructed and maintained runoff flow control measures as a component of a land development process. Properties that maintain the pre-development peak discharge rate for the 1-, 10-, and 100- year 24- hour storm event are eligible. All calculations shall be made using the rational method, TR-55 or other commonly accepted engineering method.

The credit amount is pro-rated based on the percent of a parcel's impervious area where the pre-existing flow rate is maintained. If there is more than one discharge point, users may only receive credit for areas draining to discharge points where the flow rate is been maintained to the pre-development flow rate at that point. Applicants will not receive credit for areas that drain to a discharge point where the pre-development flow rate is not maintained, even if the overall post-development flow rate from the entire site matches the overall post-development peak flow rate for the entire site.

4.2 Application Requirements

The completed Discharge Rate Reduction Credit application must include an application fee and the following information:

1. *Maintenance information:* Any 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 erosion control and/or mowing) activities are performed. In order to maintain the Discharge Rate Reduction Credit, the property owners shall provide the village with inspection reports by January 1st of every subsequent year. If a property owner fails to file required inspection reports or if a Village inspection finds the system not meeting the conditions set forth in this manual or the approved maintenance agreement, the Village will send a letter informing the property owner of the required action to avoid revocation of the Discharge Rate Reduction Credit. If the property owner fails to take the required action, the credit will be revoked until the situation is corrected. No retroactive credits will be given during said lapse period. Credits will be restored on the effective date of the submittal of the property owner's acceptable response.

2. Technical information (certified by a Wisconsin Professional Engineer or Professional Hydrologist):

- a) Narrative describing the site and post-development flow control practices
- b) Site plan(s) at a scale of 1"=100' or larger (i.e. 1"=50' or 1"=20' etc.) appropriate to display the following following information clearly:
 - 1) Locations, dimensions, and characteristics of all drainage patterns and storm water management facilities
 - 2) Location of all impervious surfaces including, but not limited to: structures, parking, driveways, etc.
 - 3) Soils
 - 4) Site topography
 - 5) Details of detention facility outlet structure(s)
 - 6) Diagram of watershed routing to the detention facility(s)
 - 7) As built construction drawings verifying the storm water management structural information.
- c) Summary of runoff peak flow calculations for the 1-, 10-, and 100- year, 24-hour rain event, by watershed, including:
 - 1) Existing flow rates
 - 2) Post-development flow rates without management
 - 3) Post-development flow rates with management
- d) Calculations (and factors used for calculations) performed to determine existing, postdeveloped "managed", and post-developed "un-managed" peak flow control including, but not limited to:
 - 1) Time of concentration(s)
 - 2) Curve number(s)
 - 3) Watershed areas
 - 4) Watershed routing
 - 5) Engineered designs for all structural flow control management practices

- 6) Stage-storage-discharge tables or curves for the detention facilities
- 7) Tailwater impacts, if any

3. *Storm Water Ordinance and Construction Standards:* Appropriate documents showing that the village of Palmyra Storm Water Ordinance and Construction Standards in effect at the time of construction were met at the time of development. Retrofitting of existing structures is allowed to provide, or increase the amount of credit for a property. As-built data shall be submitted for the existing or retrofitted structure before the credit will be applied. A Wisconsin Professional Engineer or Professional Hydrologist must certify the calculations.

4. *Statement of Certification:* The owner shall sign a statement certifying that information is correct and acknowledging that the credit determination will be based on information provided. A later determination that the application information was inaccurate may result in loss of credit.

NOTE: Developers are encouraged to apply for discharge rate reduction credits on new developments as part of the city's normal development plan review procedures. The credits, as well as the Storm Water Service Charges, do not go into effect until the construction is complete or upon granting of conditional occupation. Credits will not be in effect until as-built data have been submitted for new or retrofitted storm water management facilities.

PARCEL ID NO. _____
STORMWATER UTILITY ACCOUNT NO. _____

Plan Review Information:

Has this project and its stormwater calculations been previously approved by the Village of Palmyra?

____ Yes ____ No

If Yes, date of final approval of plan and calculations:

(If no copy is on file, the Village will notify Applicant to request a copy.)

If No, provide copies of as-built plans and calculations showing the project: meets or exceeds the requirements of the Village of Palmyra stormwater management and erosion control ordinance; maintains the pre-development peak discharge rate of flow released from the site for the 1-, 10-, and 100- year 24- hour storm events; and meets or exceeds all applicable State and Federal stormwater management requirements.

The above information is true and correct to the best of my knowledge and belief. (This form 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). I agree to provide corrected information should there be any change in the information provided herein.

Type or print name

Title or Authority

Signature

Date

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

The above information and the information on Form 2 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

Professional License Type and Number

Signature

Date

()
Phone

PARCEL ID NO. _____
STORMWATER UTILITY ACCOUNT NO. _____

FORM 2 - STORMWATER UTILITY CREDIT APPLICATION

TOTAL BILLABLE AREA

(1) Total Impervious Area _____ sf

DIRECT DISCHARGE CREDIT

(2) Impervious Area Draining Directly to Waterbody not Maintained by Village _____ sf

(3) Percent Billable Area Eligible for Direct Discharge Control **(2) ÷ (1) x 100 =** _____ %

(4) Direct Discharge Credit **(3) x (0.5) =** _____ %

DISCHARGE RATE REDUCTION CREDIT

(5) Total Billable Area Eligible for Discharge Rate Reduction Credit* **(9) + (10) + (11) =** _____ sf

(6) Percent Billable Area Eligible for Discharge Rate Reduction Credit **(5) ÷ (1) x 100 =** _____ %

(7) Discharge Rate Reduction Credit **(6) x (0.5) =** _____ %

TOTAL CREDIT

(8) Utility Fee Credit **(4) + (7) or 50%, whichever is less** _____ %

PARCEL ID NO. _____
 STORMWATER UTILITY ACCOUNT NO. _____

***Peak discharge rates for each drainage area where credit is claimed must be entered in the tables below.**

****Calculation Worksheets are provided for up to three (3) discharge locations; attach more or less as needed.**

Discharge Location 1** _____

(9) Impervious Area draining to Discharge Point where the Pre-development Peak Discharge Rate is Maintained for 1-, 10-, and 100- year 24- Hour Storm Events _____ sf

Storm Event	Pre-Development	Post-Development, No Controls	Post-Development, with Controls	Pre ≥ Post?
1- year	_____ cfs	_____ cfs	_____ cfs	Yes or No
10- year	_____ cfs	_____ cfs	_____ cfs	Yes or No
100- year	_____ cfs	_____ cfs	_____ cfs	Yes or No

Discharge Location 2** _____

(10) Impervious Area draining to Discharge Point where the Pre-development Peak Discharge Rate is Maintained for 1-, 10-, and 100- year 24- Hour Storm Events sf

Storm Event	Pre-Development	Post-Development, No Controls	Post-Development, with Controls	Pre = Post?
1- year	_____ cfs	_____ cfs	_____ cfs	Yes or No
10- year	_____ cfs	_____ cfs	_____ cfs	Yes or No
100- year	_____ cfs	_____ cfs	_____ cfs	Yes or No

Discharge Location 3** _____

(11) Impervious Area Draining to Discharge Point where the Pre-development Peak Discharge Rate is Maintained for 1-, 10-, and 100- year 24- Hour Storm Events sf

Storm Event	Pre-Development	Post-Development, No Controls	Post-Development, with Controls	Pre ≥ Post?
1- year	_____ cfs	_____ cfs	_____ cfs	Yes or No
10- year	_____ cfs	_____ cfs	_____ cfs	Yes or No
100- year	_____ cfs	_____ cfs	_____ cfs	Yes or No

PARCEL ID NO. _____
STORMWATER UTILITY ACCOUNT NO. _____

DIRECT DISCHARGE APPLICATION CHECKLIST

_____ Location of the receiving waterbody

_____ Watershed breaks across the property

_____ Layout of impervious surface areas on the property

_____ Layout of the drainage system on the property, including location and elevations of natural and man-made features

_____ Sufficient topographic data or elevations to verify general drainage patterns across the property.

_____ A calculation of impervious area (in square feet) for each delineated drainage area on the property.

_____ Signed Application

_____ Application Fee

PARCEL ID NO. _____
STORMWATER UTILITY ACCOUNT NO. _____

DISCHARGE RATE REDUCTION APPLICATION CHECKLIST

_____ Maintenance Information

_____ Narrative describing the site and post-development discharge rate control practices

_____ Site plan(s) at a scale of 1"=100' or larger displaying the following following information: location, dimension, and characteristic of drainage patterns and storm water management facilities; location of impervious surfaces; soils; topography; detention facility outlet structure(s) details; watershed routing to the detention facility(s).

_____ Summary of runoff peak flow calculations for the 1-, 10-, and 100- year, 24-hour rain event, by watershed

_____ Calculations (and factors used for calculations) performed to determine existing, post-developed "managed", and post-developed "un-managed" peak discharge rate control

_____ Documents showing that the Village Storm Water Ordinance and Construction Standards in effect at the time of construction were met at the time of development

_____ Complete Signed Application

_____ Application Fee

PARCEL ID NO. _____
STORMWATER UTILITY ACCOUNT NO. _____

_____ **Credit Application Approved**
_____ **Credit Application Not**
_____ **Approved**

Superintendent of Public Works (or designee) (Print Name)

Superintendent of Public Works (or designee) (Sign Name)

Date