Issue Date: 10/09/2012 Revision(s):

I. INTRODUCTION

On September 11, 2012 the Stoughton City Council adopted an ordinance creating a Stormwater Utility. In establishing the stormwater utility, the City recognized that certain properties may have less impact on stormwater utility costs than others in a similar rate class, either because of structural or non-structural stormwater management practices property owners have implemented on-site. As a result, the City has developed a Stormwater Credit System to provide owners of such properties with the opportunity to apply for stormwater utility credits. This document summarizes policies and procedures for determining eligibility for stormwater utility credits.

II. OVERVIEW OF STORMWATER UTILITY

The City of Stoughton currently owns and maintains an extensive network of streets, storm sewers, drainage structures such as inlets and manholes, greenways, and detention basins. Much of the existing drainage system is aging and in need of repair. In addition, increasing emphasis by the United States Environmental Protection Agency (USEPA) and Wisconsin Department of Natural Resources (WDNR) on impacts of stormwater runoff-borne pollutants on waters of the state has increased, and will likely continue to increase, local administrative and construction costs.

To provide a means of funding needed maintenance and improvements to the City's stormwater management system, the City has created a stormwater utility. The fee structure for the stormwater utility is based on the amount of "impervious area" on a land parcel. Impervious areas are areas where the amount of seepage into the ground is restricted because of the presence of hard surfaces such as rooftops, parking lots, or driveways. Because seepage is limited, a higher proportion of rainfall or snowmelt drains from the land parcel to the City's drainage system than would on from a parcel having a vegetative cover. As a result, the cost of constructing and maintaining the City's drainage system is typically higher downstream from areas with a greater amount of impervious areas.

Under the City's stormwater utility, a property owner having a greater amount of impervious area will typically pay a proportionally higher fee than a property owner with a lower amount of impervious area because the impact of their land use on the stormwater system is greater. For example, a commercial establishment having eight times the amount of impervious area of a typical residential property would pay a user fee eight times higher than that of a residential property owner.

Responsibilities of the stormwater utility include the following:

A. Develop and administer programs and practices to reduce sediment, heavy metals, pesticides, nutrients, bacteria, and oxygen-demanding organic waste from pollutant "source areas" that have been recognized as a cause of water quality degradation in the City's rivers, lakes, ponds, and other water resources. These programs and practices are necessary for compliance with mandated EPA and DNR nonpoint source pollution control rules and local stormwater management and erosion control ordinances.

Issue Date: 10/09/2012 Revision(s):

B. Fund and administer stormwater management operation and maintenance activities. Activities include cleaning and routine repair of ditches, detention basins, greenways, storm sewers, catch basins, manholes, streambanks and associated facilities, street sweeping, leaf collection, and construction of stormwater treatment, detention, and conveyance facilities serving a public purpose.

C. Respond to customer billing and service inquiries.

III. STORMWATER UTILITY RATE STRUCTURE

Stormwater service charges are based on Equivalent Runoff Units (ERU). One ERU equals the average impervious area on a typical residential property. Single-family residential parcels are assigned one ERU. In Stoughton, one ERU is equivalent to approximately 3,105 square feet of impervious area. The fee for nonresidential parcels is based on the number of ERUs. The number of ERUs is estimated by dividing the total estimated impervious area on the parcel by the typical residential impervious area. Appropriate credits will be provided to nonresidential parcels that do not fully utilize City stormwater management facilities.

Stoughton's Stormwater Utility rate structure includes the following customer rate classes:

- 1. Residential—single family unit 1.0 ERU
- 2. Residential–duplex: 0.5 ERU multiplied by each dwelling unit.
- 3. Residential—multifamily: (including apartments greater than or equal to 3 Units, Condominiums, and Mobile Homes). The charge per unit shall be calculated by dividing the number of ERUs calculated for the entire property by the number of units existing on the property
- 4. Nonresidential—one ERU times a factor obtained by dividing the total impervious area of the property by the square footage equivalent for one ERU. Such impervious area shall be determined based upon the best information reasonably available. The result shall be rounded to the nearest one-tenth (0.1). The minimum charges for any nonresidential parcel shall be equal to the rate for one (1.0) ERU, unless it contains no impervious surface.
- 5. Undeveloped—no stormwater charge shall be assigned to undeveloped land.

The stormwater user fee for each rate class includes three distinct components:

- a. Base Component: The base component includes the Stormwater Utility's estimated annual administrative and management costs, water quality costs, and other miscellaneous costs. Costs associated with the new WDNR requirements are included in the base component.
- b. Operation and Maintenance Component: The O&M component includes the utility's estimated annual operation and maintenance costs for the city's stormwater management system, including storm sewer and detention basin maintenance, street sweeping, and so on.

Issue Date: 10/09/2012 Revision(s):

c. Capital and Debt Service Component: This includes capital costs and debt service payments for the City's stormwater management system.

The rate for each ERU is determined by dividing the total revenue that must be generated for the stormwater system by the total number of ERUs within the utility district.

IV. CORRECTIONS, ADJUSTMENTS, CREDITS, AND EXEMPTIONS

The City recognizes that certain properties may have less impact on stormwater utility costs than others in a similar rate class, primarily because of structural and non-structural stormwater management practices property owners have implemented on-site. Modifications to stormwater utility fees will be considered through corrections or credits, as described in this section.

A. Corrections

A customer may apply for a correction if the customer believes the impervious area calculation used for the ERU designation on the subject property is incorrect. To be eligible for a Correction, the customer must provide the Stormwater Utility with site-specific information specified in Section 5.0.

B. Adjustments

An adjustment is defined as a modification to a customer's stormwater utility fee to reflect site specific runoff characteristics that are substantially different from those attributed to the base billing unit. An adjustment may be applicable if a customer in the nonresidential or multifamily residential classes believes a portion of the subject property has significant surface area that is not being served by City owned infrastructure. This means that all or a portion of the customer's property does not directly or indirectly discharge to any natural or manmade stormwater conveyance, storage, or treatment facility owned or maintained in any way by the Stormwater Utility. To be eligible for an adjustment, discharge from the property must not be in violation of any environmental code or federal, state, or local surface water drainage requirements.

Adjustments shall be applied only to the capital and debt service and operation and maintenance components of the stormwater utility fee and a maximum adjustment of 50 percent shall be applied. Properties qualifying for an adjustment are still responsible for the base component. An adjustment can be applied if the applicant demonstrates the property is regulated by a separate municipal Stormwater Discharge Permit (WPDES). An adjustment need only be applied for once, but can be reviewed if the property is redeveloped or re-graded.

An adjustment shall also be reviewed if lands become annexed to the City whereby portions of the property that are receiving a stormwater utility fee adjustment becomes served by City infrastructure. This may result in a change to the adjustment for the affected property.

C. Credits

1. Definition

Issue Date: 10/09/2012 Revision(s):

A credit is defined as a percentage reduction applied to the operation and maintenance and capital and debt service components of a customer's stormwater utility fee based on existence of an on-site stormwater management practice or facility that reduces the rate or volume of stormwater or sediment discharge to facilities owned or maintained by the Stormwater Utility. A credit may be applicable if a customer in the nonresidential or multifamily residential classes has constructed a detention basin, infiltration basin, or similar facility that reduces impacts of stormwater runoff from the customer's property to the City's stormwater management system. To be eligible for credit, all practices must comply with the design, operation, and maintenance requirements of all the applicable ordinances and codes of the City of Stoughton, State or Federal Permitting, and this Manual. Application procedures and requirements for these credits are outlined in Section 5.

2. Fee Credit Criteria

a. Peak Flow Reduction Credit: This credit is based on the reduction of post-development peak flow for the specified rain event (see below). An applicant must demonstrate that runoff from the land parcel is released at a lower rate than without storm water management. To determine the amount of credit, the "post-site development" peak flow with no management will be compared to the "post-site development" peak flow with management. The percentage change will then be multiplied by the number of ERUs "served" by the stormwater management facility and divided by two (2). All calculations shall use the 10-year, 24-hour, SCS Type II distribution rainstorm of 3.9 inches and SCS curve number hydrology.

For example, the owner of a 30-acre nonresidential property having an impervious area of 7.128 acres (100 ERUs) applies for a credit based on the presence of a detention basin that reduces the 10-year peak flow rate from the site from 20 cfs to 16 cfs (20.0 percent peak flow reduction). This peak flow reduction is then divided by two, yielding a peak flow reduction percentage of 10.0 percent.

$$(20 \text{ cfs} - 16 \text{ cfs}) = 4.0 \text{ cfs} \rightarrow (4.0 \text{ cfs} \div 20.0 \text{ cfs}) \times 100\% = 20.0\%$$

$$20.0\% \div 2 = 10.0\%$$

The detention basin serves an on-site impervious area of 3.564 acres (50 ERUs) of the total 7.128 acres of impervious area (100 ERUs) present on the site. The owner would then be eligible for a credit of 5.0 ERUs to the operation and maintenance and capital and debt service components of the stormwater utility fee, based on multiplying 10.0 percent times the number of ERUs "served" by the facility (50 ERUs times 10.0 percent). The property owner would still be responsible for the full number of ERUs for the base component.

 $(3.564 \ acres \ x \ 43,560 \ square \ feet) \div (3,105 \ square \ feet/ERU) = 50.0 \ ERUs$

Issue Date: 10/09/2012 Revision(s):

 $50.0 \ ERUs \times 10.0\% = 5.0 \ ERUs$

- b. <u>Stormwater Quality Credit:</u> This credit may be granted for parcels that provide a quantifiable stormwater quality benefit through implementation of Best Management Practices for treatment of stormwater runoff to capture nonpoint source pollutants. The percent reduction in pollutant loading realized by a stormwater BMP correlates to the percent stormwater quality credit to be applied. For instance, a wet detention pond constructed to the DNR technical standard achieves by design an 80 percent reduction in TSS. This pollutant reduction is then divided by two, yielding a stormwater quality credit reduction percentage of 40.0 percent. The following credits will be considered:
 - (1) Provision of a permanent pool designed in conformance with Wisconsin Department of Natural Resources Conservation Practice Standard 1001 to capture sediment and other pollutants. This practice will be eligible for up to a 40 percent credit applied to the number of ERUs "served" by the facility.
 - (2) Infiltration Basins, Infiltration Strips, rain gardens or bioretention systems will be eligible for up to a 30 percent credit applied to the number of ERUs "served" by the facility. To be eligible for the maximum credit, the applicant must demonstrate that the facility is sized and designed in accordance with Wisconsin Department of Natural Resources Conservation Practice Standards.
 - (3) Manufactured devices designed to remove sediment from stormwater runoff (e.g. "Stormceptor," "Vortechs," "Downstream Defender," etc.) will be eligible for up to a 25 percent credit applied to the number of ERUs "served" by the facility. The maximum number of ERUs subject to credit will be capped with consideration of the maximum capacity of each unit, per manufacturer's specifications. For example, if the device specified is designed to serve a maximum area of 1 acre (43,560 square feet) of impervious area, the maximum ERU credit allowable is 3.5 ERUs (43,560 square feet divided by 3,105 square feet per ERU times 25 percent).

 $(1.0\ acre\ x\ 43,560\ square\ feet) \div (3,105\ square\ feet/ERU) = 14.0\ ERUs$

 $14.0 \ ERUs \times 25.0\% = 3.5 \ ERUs$

(4) Provision of measures to trap oil and grease using oil/water separators, replaceable inlet inserts, or other approved practices will be eligible for up to a 15 percent credit applied to the number of ERUs "served" by the practice.

Issue Date: 10/09/2012 Revision(s):

3. Maximum Credit

The maximum aggregate credit to the operation/maintenance and capital/debt service components of the Storm Water Service Charge of any individual property is 50 percent of its gross calculated ERUs after adjustments, regardless of how many individual credits for which the property qualifies. Developments must conform to all applicable ordinances and standards of the City of Stoughton to be credit eligible. In the event the City needs additional improvements to meet TSS or TMDL permit requirements, credits may be considered for areas already receiving an adjustment.

4. Application of Credits

The total credit applied to a site will be the sum of individual credits applied for. For example, an applicant may be eligible for both a peak flow reduction credit and a water quality credit for a wet detention basin that provides both peak flow reduction and water quality benefits to the City. Likewise, if different portions of a site are served by different stormwater facilities, the total amount of credit is additive up to the maximum credit specified below. The following example summarizes the possible use of additive credits.

A 30-acre nonresidential property having a total impervious area of 7.128 acres (100 ERUs) is located near the crest of a hill within the City Limits. The westerly 1.782 acres of impervious area (25 ERUs) drains to a detention basin without a wet pool located on the west side of the property that reduces peak flow for the 10-year storm by 37.5 percent, and the easterly 3.564 acres of impervious area (50 ERUs) drains to a detention basin on the east side of the property having a permanent wet pool designed in accordance with Wisconsin Department of Natural Resources technical standards that reduces peak flow for the 10-year storm by 20 percent. Dividing the peak flow reduction ratios for the west and east detention basin yields final peak reduction ratios of 18.8 and 10.0 percent, respectively. The ERU credits for the west and east basin is 4.7 and 5.0 ERUs, respectively.

West Basin

 $(1.782\ acres\ x\ 43,560\ square\ feet) \div (3,105\ square\ feet/ERU) = 25.0\ ERUs$ $25.0\ ERUs \times 18.8\% = 4.7\ ERUs$

East Basin

 $(3.564 \ acres \ x \ 43,560 \ square \ feet) \div (3,105 \ square \ feet/ERU) = 50.0 \ ERUs$

 $50.0 \ ERUs \times 10.0\% = 5.0 \ ERUs$

0.782 acres of impervious area (12.5 ERUs) drains from the site directly to a storm sewer owned and maintained by the stormwater utility without being treated by a stormwater measure and the remaining 1.0

Issue Date: 10/09/2012 Revision(s):

acres of the site directly drains to a Town owned drainage ditch outside the jurisdiction of the stormwater utility. The following adjustments and credits would apply:

a. The site would be eligible for a 50 percent adjustment of (-7.0 ERU's) because 1.0 acres of impervious area does not drain to a stormwater facility owned or maintained by the stormwater utility.

 $(1.0 \ acre \ x\ 43,560 \ square \ feet) \div (3,105 \ square \ feet/ERU) = 14.0 \ ERUs$

$$14.0 \ ERUs \times 50.0\% = 7.0 \ ERUs$$

- b. The site would be eligible for a peak flow reduction credit of 9.7 ERUs (4.7 ERUs to the west pond plus 5.0 ERUs to the east pond).
- c. The site would be eligible for a water quality credit of 20.0 ERUs based on the presence of a wet pool serving 50 ERUs (40 percent Credit).

 $(3.564 \ acres \ x \ 43,560 \ square \ feet) \div (3,105 \ square \ feet/ERU) = 50.0 \ ERUs$

$$50.0 \ ERUs \times 40.0\% = 20.0 \ ERUs$$

Based on these individual adjustments and credits, the operation/maintenance and capital/debt service components of the stormwater utility fee would be reduced by a total of 36.7 ERUs. Of this reduction, 7.0 ERUs is considered an adjustment, and 29.7 ERUs is considered a credit. Since the number of credited ERUs (29.7) after adjustments is less than 50 percent of the gross number of ERUs on the site after adjustments (46.5), the entire credit applies.

A sample worksheet depicting this calculation is included as Attachment 1.

D. <u>Exemptions</u>

Properties that are exempt from property taxes are not exempt from the stormwater utility fee. Public right-of-way and railroad right-of-way is considered part of the City's stormwater conveyance system and is therefore exempt. No other exemptions from stormwater utility fees will be considered.

E. Right of Access

Prior to receiving a credit or exemption, the Director or designee shall be allowed access to the property to determine the amount of credit or exemption to be granted. No credit shall be considered for any "natural" features, including but not limited to, wetlands, streams and creeks, floodplains, or water impoundment of any kind in existence prior to the passage of the stormwater utility ordinance.

F. Appeals

Issue Date: 10/09/2012 Revision(s):

If the applicant believes special circumstances exist for their property that warrants greater credits or adjustments than outlined in this policy they may submit an application to be considered on a case by case basis as outlined in Stoughton Ordinance Sec. 10-173.

V. APPLICATION PROCEDURES AND REQUIREMENTS

The Stormwater Utility will accept applications from property owners requesting consideration for corrections, adjustments and credits. Applications may be obtained from the Administrator. A correction, adjustment or 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. It is the intent of the Stormwater Utility to process applications within thirty (30) calendar days of submittal of the complete and correct application package. Billing adjustments required to implement credits shall 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 Utility Fees. In the case of new development, Storm Water Utility Fees and the associated credits detailed herein do not apply until construction is complete and verified by the Stormwater Utility, or upon granting of conditional occupancy, whichever is earlier.

Upon receipt of the application, reviewers will check application forms for completeness and accuracy. If the application is found to be complete and accurate, a letter will be sent to the applicant notifying approval of the credit. If deficiencies 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 thirty (30) calendar 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 Stoughton Stormwater Utility Ordinance.

Submittal requirements for Correction, Adjustment and Credit Applications are described below.

A. <u>Correction Applications</u>

The completed Stormwater Utility Correction application must include a \$100.00 application fee and plat of survey certified by a Wisconsin-Registered Land Surveyor, or as-built construction site plan certified by a Wisconsin Professional Engineer or Professional Hydrologist, indicating the following:

- a) Property location.
- b) Layout of impervious surface areas on the property.
- c) A calculation of impervious area (in square feet) for each delineated drainage area on the property.

The \$100 application will be refunded to the property owner if the correction is found to be warranted.

B. Adjustment Applications

Issue Date: 10/09/2012 Revision(s):

The completed Stormwater Utility Fee Adjustment application must include a \$200.00 application fee and plat of survey certified by a Wisconsin-Registered Land Surveyor, or as-built construction site plan certified by a Wisconsin Professional Engineer or Professional Hydrologist, indicating the following:

- 1. Property location.
- 2. Drainage basin divides on the property.
- 3. Layout of impervious surface areas on the property.
- 4. Layout of the drainage system on the property, including location and elevations of natural and man-made features.
- 5. Sufficient topographic data or elevations to verify general drainage patterns across the property.
- 6. A calculation of impervious area (in square feet) for each delineated drainage area on the property.

The \$200 application will be refunded to the property owner if the adjustment is found to be warranted.

C. <u>Credit Applications</u>

The completed Peak Flow Control and Water Quality Credit application must include a \$200.00 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 credit, the property owners shall provide the city with inspection reports by January 1st of every subsequent year. If a property owner fails to file required inspection reports or if a city inspection finds the system not meeting the conditions set forth, the City will send a letter informing the property owner of the required action to avoid revocation of the credits. If the property owner fails to take the required action, the credits will be revoked until the situation is corrected. No retroactive credits will be given during the 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):
 - a. Site plan(s) at a scale of 1"=100' or larger (i.e. 1"=50' or 1"=20' etc.) appropriate to display the 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, and driveways.
 - (3) Soils.
 - (4) Site topography.

Issue Date: 10/09/2012 Revision(s):

- (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.
- b. Summary of runoff peak flow calculations for the 10-year, 24-hour rain event, by watershed, including the following:
 - (1) Existing flow rates.
 - (2) Postdevelopment flow rates without management.
 - (3) Postdevelopment flow rates with management.
- c. Calculations (and factors used for calculations) performed to determine existing, postdeveloped "managed", and postdeveloped "unmanaged" peak flow control including, but not limited to the following:
 - (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 facility(ies).
 - (7) Tailwater impacts, if any.
- 3. 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: Property owners are encouraged to apply for flow control 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 occupancy. Credits will not be in effect until as-built data have been submitted for new storm water management facilities.

Issue Date: 10/09/2012 Revision(s):

Attachment 1-Sample Calculation Worksheet

			City of St	toughton	
			Stormwater Utility ER	RU Credit Calculation	
)n	er Name:			
			Example Site Stoughton, WI		
	JWH	er Address:	Stoughton, vvi		
F	Parce	el Number:			
F	Parce	Parcel Area 30			
ı	mpe	rvious Area	7.128 Ac		
	ERU'		100.0		
_		1011			
		ent Calculat			
<u> </u>		tment Calcu			
-	8	n. Description			
+		Area arai	ning to Town owned ditch		
+	h	. Imperviou	s Area Draining From MS4	1.0	Ac
+			r area outside MS4		ERU's
			RUs for area outside MS4		ERU's
ΚU			adjustment	400.0	
-	Gross ERU's			100.0	
+		-	U's (drain outside the basin)	7.0	
	<u> </u>	Remaining E	RUS	93.0	
rec	dit C	alculation			
. <u>F</u>		Flow Reduc	ction Credit		
		Pond 1			
	а	. Description			
_		Dry Pond	I on West Side		
+	h	Imponio	s Area Draining to Pond	1.782	۸۵
+		ERU's to			ERU's
+			-Hr Peak Flow (No Management)		cfs
+			-Hr Peak Flow (With Management)		cfs
+	f.		eak Flow Reduction Ratio	0.188	013
		0070011		0.100	
	2 F	Pond 2			
	а	. Description			
		Wet Pon	d on East Side		
+	h	Importion	us Area Draining to Pond	3.564	Δο
+		ERU's to	-		ERU's
					cfs
+			-Hr Peak Flow (No Management)		
+	e. 10-Yr, 24-Hr Peak Flow (With Management)f. 50% of Peak Flow Reduction Ratio				cfs
-	T.	. 50% of P	eak Flow Reduction Ratio	0.100	

Issue Date: 10/09/2012 Revision(s):

B. W	ater	Quality Credit					
				Impervious Area	ERU's	Allowable	Credited
		Device		Served (Ac)	Served	Credit Ratio	ERU's
		Wet Basin		3.564	50.0	0.40	20.0
		Infiltration Basin			0.0	0.30	0.0
		Infiltration Strip			0.0	0.30	0.0
		Rain Garden			0.0	0.30	0.0
		Other Bioretenti	on		0.0	0.30	0.0
		Manufactured D	evice		0.0	0.25	0.0
		Oil/Grease Trap	pping		0.0	0.15	0.0
			Total				20.0
Overa	all Cr	edit and Adjust	ment Calculation				
0 1011	a O.		morn Gardalation				Gross
				Impervious Area	ERU's	Calculated	Credited
				Served (Ac)	Served	Credit Ratio	ERU's
A.	Pe	Peak Flow Credit		, ,			
	1	Pond 1		1.782	25.0	18.8%	4.7
	2	Pond 2		3.564	50.0	10.0%	5.0
	3	Total Peak Flow	/ Credit				9.7
В.	. Wa	ater Quality Cred	it				20.0
С	. Gr	oss Credited ER	U's				29.7
D	. Ma	x. Allowable ERU	J Credits (After Adjustments)		93.0	50%	46.5
E.	To	tal Credits					29.7
F.	To	tal Adjustments					7.0
G	. To	tal ERU Reduction	on				36.7
H.	To	tal ERUs After R	eduction				63.3