Report

Stormwater Utility Feasibility Study

DRAFT

City of

Stoughton, WI

June 2010

Report for

City of Stoughton, Wisconsin

Stormwater Utility Feasibility Study

DRAFT

Prepared by:

STRAND ASSOCIATES, INC.®
910 West Wingra Drive
Madison, WI 53715
www.strand.com

June 2010

TABLE OF CONTENTS

Page No.
or Following

EXECUTIVE SUMMARY

SECTION 1–INTRODUCTION

1.01 Introduction 1-1
1.02 Stormwater Utility Technical Advisory Committee 1-2
1.03 Mandated Stormwater Permit Requirements 1-3
1.04 Stormwater Management Activities 1-4
1.05 Current and Future Stormwater Management Expenditures 1-6

SECTION 2–BACKGROUND INFORMATION

2.01 Stormwater Utilities–Background Information 2-1
2.02 Other Funding Options 2-3

SECTION 3–ESTIMATION OF ERUS AND RATES

3.01 Impervious Area and Equivalent Runoff Unit Analyses 3-1
3.02 Potential Rate Structure 3-4
3.03 Estimated Stormwater User Fees 3-7
3.04 Service Area, Responsibilities, and Credits 3-11

SECTION 4–EVALUATION OF STORMWATER UTILITY IMPACTS

4.01 Possible Cost Reallocation Under A Stormwater Utility 4-1
4.02 Comparison of Stormwater Utility Impacts on Individual Properties 4-2

APPENDICES

APPENDIX A–APWA STORMWATER UTILITY SURVEY RESULTS
APPENDIX B–TECHNICAL ADVISORY COMMITTEE MEETING MINUTES

TABLE OF CONTENTS Continued

Page No.
or following

TABLES

ES-1	APWA Chart	ES-3
ES-2	Projected Annual Stormwater Utility Fees	ES-5
1.05-1	Estimated 2009 Stormwater Administration and O & M Costs	1-7
1.05-2	Past and Future Annual Stormwater Capital Project Costs	1-8
1.05-3	Stormwater Capital Project Budget – Annual Debt Service Payments	1-9
1.05-4	Stormwater Program Budget – Estimated Annual Costs	1-10
1.04-5	Stormwater Funding Contributions Under Current Tax-Based System	1-11
3.01-1	Nonresidential and Multifamily Residential Impervious Area Breakdown	3-3
3.02-1	Estimated ERUs	3-6
3.03-1	Potential Revenue per Monthly ERU Charge	3-7
3.03-2	Projected Annual Stormwater Utility Fees – Total Stormwater Budget	3-8
3.03-3	Projected Annual Stormwater Utility Fees with Only New Capital Improvements Financed	3-9
3.04-1	Potential Credit Policy	3-14
4.01-1	Reallocation of Funding–Fee Based Versus Tax-Based Funding	4-1
4.02-1	Comparison of Possible Property Costs–Tax-Based Versus Fee-Based	4-4

FIGURES

ES-1	Reallocation of Funding Contribution by Class Under a Stormwater Utility	ES-6
3.01-1	Residential Parcel Size Distribution	3-2
3.01-2	Percent Land and Impervious Area by Land Class (Excluding R/W)	3-3
3.03-1	Average Cost Per ERU for Wisconsin Communities	3-8
3.03-1	Comparison of Estimated Annual Cost Per ERU	3-10
4.01-1	Reallocation of Funding Contribution by Class Under a Stormwater Utility	4-2

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

This report summarizes results of a stormwater utility feasibility study completed between January 2010 and June 2010 for the City of Stoughton, Wisconsin. The study was completed under the guidance of the Stoughton Stormwater Utility Technical Advisory Committee (TAC). The primary goal of the TAC was to provide input into utility features such as the rate structure, budget, and credit policy.

The Technical Advisory Committee included the following members:

Member	Affiliation
Donna Olson	City of Stoughton Mayor
Tim Carter	City Council
Carl Chenoweth	City Council
Rodney Scheel	Director of Planning and Development
Laurie Sullivan	Finance Director/Treasurer
Karl Manthe	Street Superintendent
Robert Kardasz	Stoughton Utilities Director
Peter Sveum	President, Coldwell Banker Success Realty
Robert Barnett	Citizen
Dennis Barkenhagen	Stoughton School District
Ken Wahlin	Stoughton Trailers
Bob Wahlin	Stoughton Trailers

Other parties present at some or all meetings included Mark Shubak (Strand Associates, Inc.®), Steve Sletten (Resident), Jim Griffin (former Mayor), Pastor Bill Lehman, and Scott Sedlacek (Stoughton Trailers).

The TAC held six meetings between early March 2010 and early June 2010. Primary meeting topics included:

1. Overview of city stormwater management responsibilities and facilities.
2. Discussion of city stormwater management plan.
3. Possible stormwater utility organization and functions.
4. Discussion of existing and future city stormwater management costs.
5. Discussion on potential stormwater utility budget.
6. Discussion on other Wisconsin stormwater utilities.
7. Discussion of existing and future city stormwater management costs.
8. Discussion of alternative stormwater utility rate structures.
9. Discussion on policy for corrections, adjustments, credits, and exemptions.
10. Review of public education materials and programs.
11. Discussion of possible recommendations to city council.
12. Review of draft feasibility study report.

Results of TAC discussions and comments have been incorporated into this report. Copies of the TAC meeting minutes are provided in Appendix B.

This study provides the City with a general overview of current stormwater management practices and funding in Stoughton, background information on stormwater utilities and other funding alternatives, estimates of impervious areas by land class in the City, identification of a potential stormwater utility rate structure, and an evaluation of potential impacts of stormwater utility formation on select properties.

The City of Stoughton currently owns and maintains an extensive network of streets, storm sewer, and drainage structures. 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.

Currently, the costs of expansion, operation, and maintenance of the City's stormwater management system are paid for by property taxes through the General Fund. Increasing pressures on the General Fund caused by rising municipal costs and reduced revenues from the State of Wisconsin have made the General Fund a less reliable source for stormwater management funding. One possible means of addressing stormwater management funding needs without placing an additional burden on property taxes is the formation of a stormwater utility. A stormwater utility is a utility formed for the purpose of managing stormwater and imposing user charges for cost recovery. Unlike property tax funding, user charges under a stormwater utility are established in proportion to the relative amount of stormwater runoff "generated" by an individual property. A common method of estimating the relative amount of stormwater runoff from a property is by the amount of "impervious area." Impervious area includes surfaces such as rooftops, parking lots, driveways, and sidewalks that generally resist infiltration of stormwater. Typically, there is a greater amount of stormwater runoff from impervious areas than vegetated areas.

Stormwater utilities have become an increasingly popular means of funding stormwater management improvements throughout Wisconsin and the United States. A stormwater utility could provide a means of funding implementation of measures to protect and improve nearby water resources and comply with State mandated requirements. Table ES-1 provides a summary of information from some stormwater utilities in Wisconsin.

TABLE ES-1 APWA CHART

Fox Wolf Watershed Alliance

WI Stormwater User Charge System Information
Representative Wisconsin Communities
Wisconsin stormwater user charge information is subject to change! Contact individual communities to confirm accuracy - please forward corrections and updates!

January 6, 2010

Name of Community or Stormwater District	Recent Population	Created/ Started in:	ERU Size (sf)	Annual $/ERU or 1 fam home	Credit Policy? Y/ N	Credit Policy? Max Amount	Comments/ Web site addresses
Allouez (Village)	15,443	2006	3,663				www.villageofallouez.com
Appleton (City)	70,293	1995	2,368	$ 108.88	Y	77%	www.appleton.org
Baraboo (City)	10,771	2005	2,379	$ 46.87			www.cityofbaraboo.com
Barron (City)	3,250	2005	10,850	$ 24.00	Y	75%	www.barronwi.us
Bellevue (Village)	14,386	2002	3,221	$ 48.00	Y	100%	www.bellevue-wi.com
Beloit (City)	35,803	2006	3,347	$ 24.00			beloit.govoffice3.com/
Brown Deer (Village)	11,895	2004	3,257	$ 91.80	N		www.browndeerwi.org
Butler (Village)	1,885	1999	3,032	$ 66.00			www.butlerwi.gov/
Chetek (City)	2,180	2005		$ 27.00	Y		www.chetek.net
Chippewa Falls (City)	13,374	2005		$ 36.00			www.ci.chippewa-falls.wi.us
Cudahy (City)	18,430	2001	2,700	$ 48.00	Y	$2/ ERU	www.ci.cudahy.wi.us
De Forest (Village)	7,400	2005	2,900	$ 60.00			www.vi.deforest.wi.us/
Delafield (City)	7,820	2004		$ 29.00			www.cityofdelafield.com/
De Pere (City)	20,560	2003		$ 47.00			www.de-pere.org/
Eau Claire (City)	62,576	1997	3,000	$ 62.00	Y	100%	www.ci.eau-claire.wi.us
Elm Grove (Village)	6,250	2004	6,235	$ 65.50			www.elmgrovewi.org
Fitchburg (City) - Urban	19,000	2002	3,700	$ 52.20	Y		www.city.fitchburg.wi.us
Fitchburg (City) - Rural	4,000	2002	3,700				www.city.fitchburg.wi.us
Garner's Creek (watershed)		1998	3,623	$ 96.00	Y	85%	Combined Locks, Buchanan, Harrison
Glendale (City)	13,400	1996	2,609	$ 42.00	N	‡	www.glendale-wi.org
Grand Chute (Town)	20,200	1997	3,283	$ 48.00	Y	85%	www.grandchute.net
Grantsburg (Village)	1,397	2004		$ 18.00	Y	75%	www.grantsburgwi.com
Green Bay (City)	102,350	2004	3,000	$ 55.20	Y	67%	www.ci.green-bay.wi.us
Greendale (Village)	14,410	2004	3,941	$ 78.00	Y	50%	www.greendale.org
Greenville (Town)	8,008	1999	4,510	$ 60.00	Y	85%	www.townofgreenville.com
Harrison (Town of)	5,800	1998		$ 96.00			www.townofharrison.org
Hobart (Village of)	5,834	2007	4,000	$ 72.00	Y	50%	www.hobart-wi.org/
Holmen (Village of)	7,176	2007	3,550	$ 44.00	Y	50%	www.homenwi.com
Howard (Village)	15,774	2005	3,301	$ 44.00			www.villageofhoward.com
Janesville (City)	61,604	2003	3,200	$ 27.36	Y	65%	www.ci.janesville.wi.us
Kenosha (City)	96,845	2007	2,477	$ 60.00	Y		www.kenosha.org
Lake Delton (Village)	2,975	1993	1,685	$ 18.00	Y	100%	www.lakedelton.org
Lancaster (City)	4,033	2008	3,400	$ 24.00	Y		www.lancasterwisconsin.com
Lisbon (Town)		2007	6,642	$ 40.00	Y	50%	www.townoflisbonwi.com
Little Chute (Village)	10,830	1998	2,752	$ 96.00	N		www.littlechutewi.org
Madison (City)	220,332	2001	Ind'l Msmt	$ 55.00	Y	50%	www.cityofmadison.com
McFarland (Village)	6,416	2007	3,456	$ 46.85			www.mcfarland.wi.us
Menominee (City of)	15,318	2008	3,000	$ 32.00	Y	20%	www.menomonie-wi.gov/
Milton (City of)	5,667	2009		$ 55.13			http://www.ci.milton.wi.us/
Milwaukee (City)	597,000	2006	1,610	$ 82.20	Y	60%	www.mpw.net
Monona (City)	8,000	2004	NA *	$ 60.00	Y	65%	www.monona.wi.us
Monroe (City)	10,600	2006	2,728	$ 60.00			www.cityofmonroe.org
Neenah (City)	24,600	2003	3,138	$ 56.00			www.ci.neenah.wi.us
New Berlin (City)	38,719	2001	4,000	$ 60.00	N		www.newberlin.org
New Richmond (City)	7,726	2004	12,632	$ 28.68	Y	75%	www.ci.new-richmond.wi.us
N. Fond du Lac (Village)	4,557	2007	3,123	$ 56.00	Y		www.nfdl.org
Onalaska (City)	16,690	2009	3,888	$ 50.95	Y	40%	www.cityofonalaska.com
Onalaska (Town)	5,600	2005	3,709	$ 24.00			www.co.la-crosse.wi.us/townofonalaska
Oshkosh (City)	65,000	2003	2,817	$ 48.88	Y	40%	www.ci.oshkosh.wi.us
Pleasant Prairie (Village)	18,000	2006		$ 15.00			www.pleasantprairieonline.com/
Poynette (Village)	2,563	2006	3,550	$ 50.00			www.poynette-wi.gov/
Racine (City)	81,855	2004	2,844	$ 72.00	Y	40%	www.cityofracine.org
Raymond (Town)	3,516	2008	See note -		N		$0.0036/ sf impervious area
Reedsburg (City of)	8,594	2008	3,024	$ 46.00	Y	50%	www.reedsburgwi.gov
River Falls (City)	13,019	1998	NA *	$ 37.68	Y	100%	www.rfcity.org
Salem (Town)	9,871	2009	6,352	$ 60.00	Y	50%	www.townofsalem.net
Sheboygan (City)	50,800	2001	2,215	$ 36.00	Y		www.ci.sheboygan.wi.us
Shorewood Hills (Village)	1,732	2007	2,941				www.shorewood-hills.org
Slinger (Village)	3,901	2007	4,300	$ 40.00	Y		www.slinger-wi-usa.org/
St. Francis (City)	9,373	2001	2,500	$ 48.00			www.ci.stfrancis.wi.gov/
Sun Prairie (City)	24,464	2003	3,468	$ 60.00	Y	65%	www.cityofsunprairie.com/
Superior (City)	27,370	2007	1,907	$ 70.80	Y	TBD	www.ci.superior.wi.us/
Sussex (Village)	9,687	2005		$ 60.00			www.village.sussex.wi.us/
Vernon (Town)	7,455	2008	6,904	$ 32.00	Y	50%	www.rownofvernon.org/
Washburn (City)	2,300	2005		$ 48.00			www.cityofwashburn.org/
Watertown (City)	23,163	2005	2,900	$ 76.00			www.cityofwatertown.org/
Waupun (City)	10,720	2005	3,204	$ 36.00			www.cityofwaupun.org/
Wauwatosa (City)	45,602	1999	2,174	$ 55.44	Y	100%	www.wauwatosa.net/
West Allis (City)	61,250	1997	1,827	$ 63.12	Y	56%	www.ci.west-allis.wi.us/
West Milwaukee (Village)	4,142	2003	1,956	$ 24.00	Y	75%	www.westmilwaukee.org/
Weston (Village)	12,736	2004	3,338	$ 47.78	Y	68%	www.westonwisconsin.org/

Send updates to jeff.mazanec@rasmithnational.com; matrix developed with supporting information from stormwater professionals state-wide.

The following are the anticipated responsibilities of the stormwater utility:

1. 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.

2. 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.

3. Respond to customer billing and service inquiries.

The proposed stormwater utility rate structure is based on a parameter known as an equivalent runoff unit (ERU). One ERU is defined as the average square footage of impervious area for a typical residential parcel. The impervious area analysis estimated that in Stoughton, one ERU is equivalent to approximately 3,105 square feet (rounded) of impervious area, which is the basis for the stormwater utility rate structure. Therefore, single-family residential parcels are assigned one ERU. The fee for nonresidential (including multifamily parcels) is based on the measured number of ERUs on each nonresidential parcel. The number of ERUs is estimated by dividing the total estimated impervious area on that parcel by the typical single-family residential impervious area.

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. User fees have been estimated based on the current 2011 stormwater management budget for comparison to current property tax rates as well as for future estimated stormwater management costs. Based on 7,377 ERUs, the user fee necessary to support the 2011 stormwater management budget of $960,737 would be approximately $130.23. This means the annual stormwater management fee for a typical residential user (one ERU) would be $130.23/year or $10.85 per month. Based on comparisons to average costs per ERU for Wisconsin communities, the TAC recommended consideration of a more phased-in approach to help lessen the burden on those properties most impacted by a new user fee.

One budget model that was discussed would only include debt service for new capital improvement projects in the stormwater utility budget. The debt service for projects prior to 2011 would remain on the City's tax roll and be paid for with general funds. Under this fee structure, the estimated operating budget for 2011 would be $467,513 and would equate to a much lower initial annual fee per ERU of $63.37. The operating budget and associated annual fees per ERU would gradually increase over the following several years, until the entire stormwater program budget would be phased in by 2020. Under this scenario, a property assigned 10 ERUs (31,050 square feet of impervious area) would pay $633.70/year or $52.80 per month. The stormwater utility fee would range from approximately $63 to approximately $105 per ERU per year to address future stormwater management requirements from 2011 through 2020 (refer to Table ES-2).

Year	Estimated Budget	ERUs	Annual Fee/ERU	Monthly Fee/ERU
2011	$467,513	7,377	$63.37	$5.28
2012	$506,649	7,377	$68.68	$5.72
2013	$518,133	7,377	$70.24	$5.85
2014	$537,889	7,377	$72.91	$6.08
2015	$549,233	7,377	$74.45	$6.20
2016	$618,100	7,377	$83.79	$6.98
2017	$657,552	7,377	$89.14	$7.43
2018	$697,177	7,377	$94.51	$7.88
2019	$736,979	7,377	$99.90	$8.33
2020	$776,961	7,377	$105.32	$8.78
2021	$742,157	7,377	$100.60	$8.38
2022	$751,225	7,377	$101.83	$8.49
2023	$788,294	7,377	$106.86	$8.90
2024	$817,447	7,377	$110.81	$9.23
2025	$855,374	7,377	$115.95	$9.66

Note: Costs are in given year dollars.

Table ES-2 Projected Annual Stormwater Utility Fees

A stormwater utility would shift the burden of stormwater management funding largely from the residential sector to the nonresidential sector (refer to Figure ES-1). Greatest impacts would be felt by the business sector (such as Stoughton Trailers) and also tax-exempt properties, which do not currently contribute to stormwater management funding through property taxes. Residential parcels would generally contribute proportionately less to stormwater funding than currently based on the lower relative impervious area present on typical residential properties.

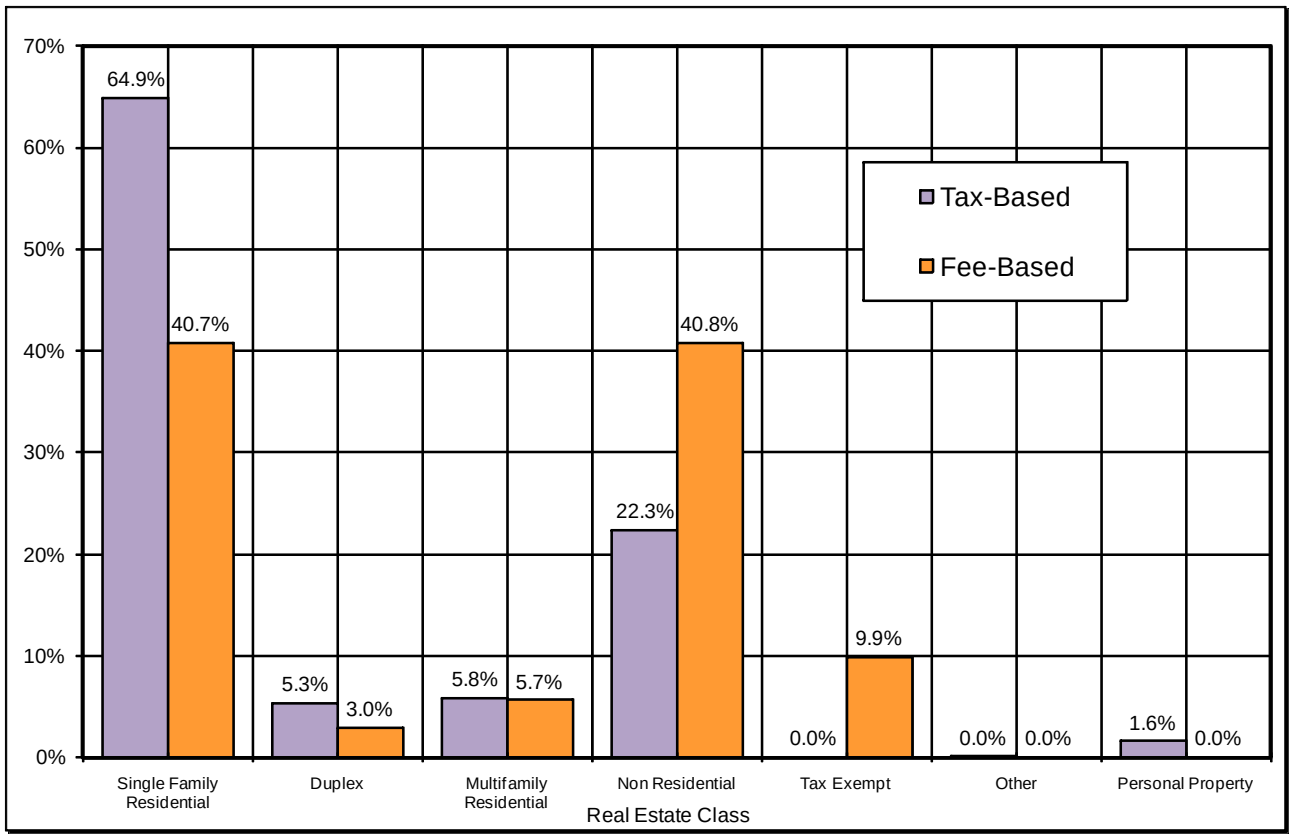


Figure ES-1 Reallocation of Funding Contribution by Class Under a Stormwater Utility

SECTION 1
INTRODUCTION

1.01 INTRODUCTION

This study provides an overview of current stormwater management practices and funding in the City of Stoughton and provides a plan to develop an alternate funding source for future stormwater management planning and improvements projects. This project has been prompted by the need for the City of Stoughton to develop an alternate funding source for stormwater management and to update and expound upon previous stormwater planning efforts, namely the 2005 *Feasibility of Developing a Storm Water Utility Management Utility In the City of Stoughton* prepared by Vierbicher Associates, Inc.

The City of Stoughton currently owns and maintains an extensive network of streets, storm sewer, and drainage structures. 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.

Currently, the costs of expansion, operation, and maintenance of the City's stormwater management system are paid for by property taxes through the General Fund. Increasing pressures on the General Fund caused by rising municipal costs and reduced revenues from the State of Wisconsin have made the General Fund a less reliable source for stormwater management funding. One possible means of addressing stormwater management funding needs without placing an additional burden on property taxes is the formation of a stormwater utility. A stormwater utility is a utility formed for the purpose of managing stormwater and imposing user charges for cost recovery. Unlike property tax funding, user charges under a stormwater utility are established in proportion to the relative amount of stormwater runoff "generated" by an individual property.

The purpose of this report is to provide the following information toward evaluation of stormwater utility formation in Stoughton:

1. A general overview of current stormwater management practices and funding in Stoughton.

2. Background information on stormwater utilities and other funding alternatives.

3. Results of an impervious area analysis of Stoughton and estimation of equivalent runoff units (ERUs).

4. Identification of possible stormwater utility responsibilities.

5. Identification of a possible user fee rate structure based on the current city budget.

6. Evaluation of potential impacts on select properties.

1.02 STORMWATER UTILITY TECHNICAL ADVISORY COMMITTEE

This report summarizes results of a Stormwater Utility Feasibility Study completed between January 2010 and June 2010 for the City of Stoughton, Wisconsin. The study has been completed under the guidance of the Stoughton Stormwater Utility Technical Advisory Committee (TAC). The primary goal of the TAC was to provide input into utility features such as the rate structure, budget, and credit policy.

The Technical Advisory Committee included the following members:

Member	Affiliation
Donna Olson	City of Stoughton Mayor
Tim Carter	City Council
Carl Chenoweth	City Council
Rodney Scheel	Director of Planning and Development
Laurie Sullivan	Finance Director/Treasurer
Karl Manthe	Street Superintendent
Robert Kardasz	Stoughton Utilities Director
Peter Sveum	President, Coldwell Banker Success Realty
Robert Barnett	Citizen
Dennis Barkenhagen	Stoughton School District
Ken Wahlin	Stoughton Trailers
Bob Wahlin	Stoughton Trailers

Other parties present at some or all meetings included Mark Shubak (Strand Associates, Inc.®), Steve Sletten (Resident), Jim Griffin (former Mayor), Pastor Bill Lehman, and Scott Sedlacek (Stoughton Trailers).

The TAC held six meetings between early February 2010 and early June 2010. Primary meeting topics included:

1. Overview of city stormwater management responsibilities and facilities.
2. Discussion of city stormwater management plan.
3. Possible stormwater utility organization and functions.
4. Discussion of existing and future city stormwater management costs.
5. Discussion on potential stormwater utility budget.
6. Discussion on other Wisconsin stormwater utilities.
7. Discussion of existing and future city stormwater management costs.
8. Discussion of alternative stormwater utility rate structures.
9. Discussion on policy for corrections, adjustments, credits, and exemptions.
10. Review of public education materials and programs.
11. Discussion of possible recommendations to city council.
12. Review of draft feasibility study report.

Results of TAC discussions and comments have been incorporated into this report. Copies of the TAC meeting minutes are provided in Appendix B.

1.03 MANDATED STORMWATER PERMIT REQUIREMENTS

Sediment, heavy metals, pesticides, nutrients, bacteria, and oxygen-demanding organic waste from pollutant "source areas" have been recognized as a cause of water quality degradation in our streams, lakes, ponds, and other water resources. In recognition of the potential harmful impacts of stormwater runoff, many Cities must apply for coverage under the Municipal General Permit [Wisconsin Pollutant Discharge Elimination System (WPDES)] coverage by the WDNR authorizing discharge of stormwater runoff to Waters of the State. Communities that require permit coverage include large municipalities with populations greater than 100,000 (Phase I communities such as Madison and Milwaukee) and Phase II communities that include municipalities with a minimum population of 10,000 and also municipalities that are identified as "urbanized areas" with specified minimum population densities. The City of Stoughton is considered a Phase II community and therefore is required to meet the requirements outlined in the Phase II permit.

The mandated Phase II permit, with coverage that started on November 15, 2006, requires the permitted municipalities to establish and maintain a number of stormwater management programs and practices over the initial 5-year permit cycle. Some of these programs and practices include the following:

1. Implementation of a public education and outreach program to inform the community about the impacts of stormwater discharges on water bodies.

2. Public involvement and participation in efforts to reduce nonpoint source pollutant discharges.

3. Development of an illicit discharge detection and elimination program with the primary goal of eliminating nonstormwater discharges to the storm sewer system. A primary component of this program is development of mapping to identify storm sewer outfalls to adjacent water bodies.

4. Development of a program to reduce pollutants in any stormwater runoff from construction activities that result in a land disturbance of greater than or equal to one acre.

5. Development of a program to address stormwater runoff from new development and redevelopment projects that disturb an area greater than or equal to one acre.

6. Development and implementation of an operation and maintenance program to prevent pollution and facilitate good housekeeping practices for municipal operations.

The WDNR administers this program through Wisconsin Administrative Code NR 216, which requires affected municipalities to implement the six minimum control measures listed above to the "maximum extent practical." To better define maximum extent practical, the WDNR has adopted specific stormwater management performance standards as defined in the NR 151 administrative rules.

NR 151 developed urban area performance standards are described below.

1. Stage 1 requirements to be implemented by March 10, 2008:

    a. Public information and education program using WDNR materials that promote on-site reuse of leaves and grass clippings, proper use of lawn and garden chemicals, proper management of pet waste, and proper disposal of oil and other chemicals.

    b. Municipal programs for leaf and grass clipping collection.

    c. Evaluation of lawn and garden fertilizer application policies for municipally controlled properties with over 5 acres of pervious surface.

    d. Detection and elimination of illicit discharges to storm sewers.

    e. To the maximum extent practicable, a 20 percent reduction in total suspended solids in runoff that enters Waters of the State as compared to no controls conditions.

2. Stage 2 requirements to be implemented by March 10, 2013:

    a. To the maximum extent practicable, a 40 percent reduction in total suspended solids in runoff that enters Waters of the State as compared to no controls conditions.

Many of the programs specified above are relatively new to the City of Stoughton and will continue to require an increase in the level of funding allocated to the stormwater management budget, whether through the general fund or through creation of an alternative funding mechanism such as a stormwater utility. The City created a Stormwater Management Plan and Total Suspended Solids Reduction Plan in May 2006 to identify specific activities to be implemented to comply with permit conditions. As part of the Stormwater Utility Feasibility Study, a specific stormwater utility budget was created for the period from 2011 to 2025 that expands on the information included in the Stormwater Management Plan.

1.04 STORMWATER MANAGEMENT ACTIVITIES

The City currently undertakes a number of stormwater management activities. Responsibilities for these activities are divided between various departments, including Planning and Development, Streets, Utilities, and Parks and Recreation. Stormwater management costs are generally paid by property taxes through the City's general fund. Future City stormwater management responsibilities and expenditures are expected to increase over the next several years as a result of mandated regulatory requirements.

This section presents current and probable future stormwater management activities and costs.

A. Construction and Postconstruction Erosion Control

Chapter 10, Article IV (Erosion Control and Stormwater Management) of the Stoughton Municipal Code regulate stormwater runoff from new development, redevelopment, and construction sites. Staff from the Dane County Land Conservation Division conduct erosion control and stormwater plan reviews and inspections and are under contract with the City of Stoughton to perform these services.

B. Operations and Maintenance Costs

The City owns and maintains a drainage system consisting of inlets, catch basins, manholes, storm sewers, ditches, greenways, detention basins, and associated appurtenances. Stormwater management-related activities routinely performed by the City include inlet and storm sewer cleaning, storm sewer televising, culvert and ditch cleaning, greenway mowing, and reactive operations such as storm sewer catch basin and manhole repair. Each year additional culverts, ditches, storm sewers, catch basins, inlets, and manholes are constructed with a number of these requiring additional and continued inspections to ensure effective operation.

Street sweeping and other routine street maintenance activities are also performed by the City. While historically performed for aesthetic reasons, street sweeping also serves an important function in collecting sediment and other pollutants before reaching local waterways. The City's current street sweeping program is from May through November each year, and includes sweeping all downtown City streets each Friday and once per month for all other City streets.

The City also conducts yard waste management activities that include streetside leaves, grass, and yard waste for three weeks in the Spring and each Fall between mid-October and December 1st. There is also City site at which residents can drop off their own yard waste.

C. Capital Improvements

Since 2005, the City has spent more than $2,900,000 on stormwater management capital improvements. These past projects have primarily focused on stormwater system capacity improvements and flood control. However, it is anticipated that future projects will shift the focus to meeting the City's water quality improvement mandates, including construction of water quality best management practices (BMPs) such as wet detention basins and infiltration basins. Shown below is a list of eligible stormwater capital costs:

Conveyance Facilities

1. Storm Sewers (including manholes, inlets, catch basins, end walls, rip-rap aprons)
2. Culverts/Bridges
3. Ditches/Greenways
4. Curb and Gutter
5. Stormwater Pumping Stations
6. Streambank Restoration/Stabilization

Storage/Treatment/BMPs

1. Wet Detention Basins (typically for water quality purposes)
2. Dry Detention Basins (typically for water quantity or flood control purposes)
3. Infiltration Basins/Swales
4. Bioretention Basins/Swales
5. Rain Gardens/Barrels
6. Porous Pavement
7. Mechanical Stormwater Treatment Devices (Stormceptors, Vortechnics, Baysaver, etc.)
8. Construction Erosion Control Measures (Silt Fence, Erosion Mat, Sediment Basins, Inlet Protection, Stone Tracking Pad)

Other

1. Stormwater Management Master Planning
2. Engineering Costs (Design/Inspection)
3. Equipment Purchase Fund (i.e. Street Sweeper, Mower, Vactor, etc.)

1.05 CURRENT AND FUTURE STORMWATER MANAGEMENT EXPENDITURES

In an effort to determine the revenue that a stormwater utility would need to generate, the TAC worked to develop a projected stormwater program budget. The goal in developing the budget was to break up stormwater costs into three distinct program components, as follows:

1. Administration
2. Operation and Maintenance
3. Capital Improvements/Debt Service

To best develop anticipated future Administration and Operation and Maintenance costs, City staff reviewed expenditures from 2009 as a baseline. These costs are summarized in the following table (Table 1.05-1).

Budget Item	Cost	Notes
Administration		
WPDES Permit Elements		
a) Public Education & Outreach	$ 3,900	MAMSWap
b) Public Involvement & Participation	$ 2,900	WPDES Permit
c) Illicit Discharge & Detection	$ 1,000	Inspections/Investigations
d) Construction Site Pollutant Control	$ 9,000	Review & Inspection, Offset by Permit Fees
e) Post-Construction Pollutant Control	$ -	Included in Construction Site Item
f) Pollution Prevention	$ -	Included in O & M Budget
g) Water Quality Management	$ 20,000	Modeling & Master Plan Updates
h) Stormwater System Map	$ 1,500	--
Administration	$ 70,000	--
Total Administration Costs	**$108,300**	
Operation and Maintenance		
Pollution Prevention		
a) Street Sweeping	$ 103,000	--
b) Leaf Collection	$ 91,000	--
Greenway Mowing	$ 25,000	--
Storm Sewer & Misc. Repair	$ 50,000	--
Total Operation & Maintenance Costs	**$ 269,000**	

Table 1.05-1 Estimated 2009 Stormwater Administration and O & M Costs

In order to develop approximate future administration and operation and maintenance costs, a two-percent rate of inflation was applied to the 2009 costs presented in Table 1.05-1.

In order to develop future stormwater capital improvement and debt service costs, the TAC reviewed both historical cost data of past projects and anticipated costs for future projects. A listing of both past and anticipated future annual stormwater capital improvement project costs is listed in Table 1.05-2.

Year	Cost
2001	$830,500
2002	$700,000
2003	$400,000
2004	$0
2005	$1,125,400
2006	$0
2007	$170,000
2008	$243,000
2009	$555,000
2010	$819,000
2011	$647,000
2012	$270,000
2013	$30,000
2014	$100,000
2015	$26,000
2016	$521,000

Table 1.05-2 Past and Future Annual Stormwater Capital Project Costs

In the past, the City has financed capital improvement projects over a 10-year period, and it is assumed that future capital projects will also be similarly financed. Consequently, the capital improvement and debt service component of the utility budget would initially be made up of debt service payments from both past projects and future projects. For instance, the 2011 budget would include debt service payments for past projects for the previous nine years (2002 through 2010) and the first debt service payment for any 2011 projects. This concept is illustrated in Table 1.05-3, with debt service payments from past projects shown in orange and debt service payments for future projects shown in green. The total annual debt service costs are shown in blue in the bottom row of Table 1.05-3.

Table 1.05-4 shows the estimated annual costs for the City of Stoughton's stormwater program from 2011 through 2025.

TABLE 1.05-3

STORMWATER CAPITAL PROJECT BUDGET - ANNUAL DEBT SERVICE PAYMENTS

		Annual Payments Based on 10-year Loans														
Year	Total	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
2001	$ 830,500															
2002	$ 700,000	$86,048														
2003	$ 400,000	$49,170	$49,170													
2004	$ -	$0	$0	$0												
2005	$ 1,125,400	$138,340	$138,340	$138,340	$138,340											
2006	$ -	$0	$0	$0	$0	$0										
2007	$ 170,000	$20,897	$20,897	$20,897	$20,897	$20,897	$20,897									
2008	$ 243,000	$29,871	$29,871	$29,871	$29,871	$29,871	$29,871	$29,871								
2009	$ 555,000	$68,223	$68,223	$68,223	$68,223	$68,223	$68,223	$68,223	$68,223							
2010	$ 819,000	$100,676	$100,676	$100,676	$100,676	$100,676	$100,676	$100,676	$100,676	$100,676						
2011	$ 647,000	$74,970	$74,970	$74,970	$74,970	$74,970	$74,970	$74,970	$74,970	$74,970	$74,970					
2012	$ 270,000		$31,286	$31,286	$31,286	$31,286	$31,286	$31,286	$31,286	$31,286	$31,286	$31,286				
2013	$ 30,000			$3,476	$3,476	$3,476	$3,476	$3,476	$3,476	$3,476	$3,476	$3,476	$3,476			
2014	$ 100,000				$11,587	$11,587	$11,587	$11,587	$11,587	$11,587	$11,587	$11,587	$11,587	$11,587		
2015	$ 26,000					$3,013	$3,013	$3,013	$3,013	$3,013	$3,013	$3,013	$3,013	$3,013	$3,013	
2016	$ 521,000						$60,370	$60,370	$60,370	$60,370	$60,370	$60,370	$60,370	$60,370	$60,370	$60,370
2017*	$ 265,667							$30,784	$30,784	$30,784	$30,784	$30,784	$30,784	$30,784	$30,784	$30,784
2018*	$ 265,667								$30,784	$30,784	$30,784	$30,784	$30,784	$30,784	$30,784	$30,784
2019*	$ 265,667									$30,784	$30,784	$30,784	$30,784	$30,784	$30,784	$30,784
2020*	$ 265,667										$30,784	$30,784	$30,784	$30,784	$30,784	$30,784
2021*	$ 265,667											$30,784	$30,784	$30,784	$30,784	$30,784
2022*	$ 265,667												$30,784	$30,784	$30,784	$30,784
2023*	$ 265,667													$30,784	$30,784	$30,784
2024*	$ 265,667														$30,784	$30,784
2025*	$ 265,667															$30,784
CIP Debt Service (Projects Before 2011)		**$493,224**	**$407,177**	**$358,007**	**$358,007**	**$219,667**	**$219,667**	**$198,770**	**$168,899**	**$100,676**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
SW CIP Debt Service (Projects 2011 & beyond)		**$74,970**	**$106,255**	**$109,732**	**$121,319**	**$124,332**	**$184,701**	**$215,485**	**$246,269**	**$277,052**	**$307,836**	**$263,649**	**$263,147**	**$290,455**	**$309,651**	**$337,422**
Total CIP Debt Service		**$568,194**	**$513,432**	**$467,739**	**$479,326**	**$343,999**	**$404,368**	**$414,255**	**$415,168**	**$377,728**	**$307,836**	**$263,649**	**$263,147**	**$290,455**	**$309,651**	**$337,422**

* - Avergage Annual CIP (2011 - 2025) Costs Were Applied

TABLE 1.05-4

STORMWATER PROGRAM BUDGET - ESTIMATED ANNUAL COSTS

Stormwater Program Component	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Administration	$ 112,675	$ 114,929	$ 117,227	$ 119,572	$ 121,963	$ 124,403	$ 126,891	$ 129,429	$ 132,017	$ 134,657	$ 137,351	$ 140,098	$ 142,900	$ 145,758	$ 148,673
Operation and Maintenance	$ 279,868	$ 285,465	$ 291,174	$ 296,998	$ 302,938	$ 308,996	$ 315,176	$ 321,480	$ 327,909	$ 334,468	$ 341,157	$ 347,980	$ 354,940	$ 362,039	$ 369,279
Capital Improvements Debt Service	$ 568,194	$ 513,432	$ 467,739	$ 479,326	$ 343,999	$ 404,368	$ 414,255	$ 415,168	$ 377,728	$ 307,836	$263,649	$263,147	$290,455	$309,651	$337,422
Total	**$ 960,737**	**$ 913,826**	**$ 876,140**	**$ 895,895**	**$ 768,900**	**$ 837,768**	**$ 856,322**	**$ 866,076**	**$ 837,654**	**$ 776,961**	**$ 742,157**	**$ 751,225**	**$ 788,294**	**$ 817,447**	**$ 855,374**

Presently, the City funds stormwater management administration, system operation and maintenance and capital improvements through property taxes. Under the current system, taxable property value is the sole factor determining a property owner's contribution to the City's stormwater management program costs. In the 2011 budget, approximately $960,737 of the total $7,015,800 property tax levy, or 13.7 percent, is planned to be used for funding the City's stormwater management program. Based on this percentage, approximately $1.00 of the $7.28 per $1,000 property tax assessment is planned for stormwater management system funding. Therefore, a property having an assessed value of $100,000 currently contributes approximately $100.00 annually to funding of the stormwater management system.

The current contribution of the commercial, manufacturing, single-family residential, and multifamily residential sectors to stormwater management system funding, based on assessed values, is summarized in Table 1.04-5. Under the current property tax-based funding system, tax-exempt properties do not contribute to stormwater management system funding.

Real Estate Class	Total Assessed Value	Percent of Total	Stormwater Contribution
Single-Family Residential	$ 624,952,289	64.9%	$ 623,236
Duplex	$ 51,173,683	5.3%	$ 51,033
Multifamily Residential	$ 56,180,878	5.8%	$ 56,027
Commercial	$ 179,611,700	18.6%	$ 179,119
Manufacturing	$ 35,696,000	3.7%	$ 35,598
Tax-Exempt (Church-Owned)	$0	0.00	$0
Tax-Exempt (City-Owned)	$0	0.00	$0
Tax-Exempt (County-Owned)	$0	0.00	$0
Tax-Exempt (Federal-Owned)	$0	0.00	$0
Tax-Exempt (Other)	$0	0.00	$0
Tax-Exempt (School-Owned)	$0	0.00	$0
Tax-Exempt (State-Owned)	$0	0.00	$0
Agricultural	$ 114,700	0.0%	$ 114
Undeveloped	$ 100	0.0%	$ 0
Personal Property	$ 15,652,700	1.6%	$ 15,610
Subtotal	**$963,382,050**	**100.00**	**$ 960,737**

Note: Tax Levy Data is from 2009. Report will be updated when 2010 data is available

Table 1.04-5 Stormwater Funding Contributions Under Current Tax-Based System

SECTION 2
BACKGROUND INFORMATION

2.01 STORMWATER UTILITIES–BACKGROUND INFORMATION

A stormwater utility is a method of collecting revenue for stormwater management system improvements under which property owners are charged a user fee based on the amount of stormwater runoff "produced" on their property. Stormwater utilities have become increasingly popular throughout the country in recent years. Major cities such as Seattle, San Diego, Cincinnati, Dallas, Sacramento, Miami, St. Paul, and many others currently fund their stormwater management programs through stormwater utilities.

A recent survey by the Wisconsin Chapter of the American Public Works Association (APWA) January 6, 2010 update documented 71 stormwater utilities in Wisconsin including municipalities such as Milwaukee, Madison, Oshkosh, Sun Prairie, and West Allis. We estimated actual number in Wisconsin to be somewhat higher, most likely as high as 100 municipalities. Annual residential rates in Wisconsin range from a low of $15 per year in Village of Pleasant Prairie to a high of $109 in the City of Appleton. The average cost per ERU per year for the 71 utilities is approximately $51. It is expected that most utilities rates will increase in the coming years to address additional expenditures necessary to meet stormwater permit requirements. Results of the APWA Survey are provided in Appendix A.

The fee structure for a stormwater utility is typically based on the amount of impervious area on a parcel of land. A large commercial parcel, which may be 80 to 90 percent impervious, produces a larger amount of stormwater runoff than a residential parcel of equal area, which may be only 30 to 40 percent impervious. With a stormwater utility, the commercial property owner pays a proportionally higher fee than a residential property owner because the impact of his land use on the stormwater system is greater than that of the residential property owner. Therefore, 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.

Benefits of a stormwater utility include the following:

1. A stormwater utility more equitably allocates stormwater system costs to property owners than does the present property tax-based system. Under a property tax-based system, an individual property owner's contribution is based on property value alone. A stormwater utility will allocate costs based on estimated amounts of runoff and, therefore, impacts to the City drainage system. Another benefit of creating a stormwater utility is that it would reduce the need for increasing property taxes or annual general fund borrowing to finance future stormwater management system improvements.

2. A stormwater utility increases the number of properties contributing to funding of the stormwater management system. Under a property tax-based system, a large tax-exempt stormwater runoff "producer" such as a hospital may not contribute to the cost of constructing or maintaining a stormwater management system. Under a stormwater utility system, costs from such sites could be recovered through the user fee.

3. A stormwater utility provides a dedicated source for funding stormwater management improvements.

Development and implementation of a stormwater utility typically involves the following steps:

1. Educate administration, elected officials, and the public. This may involve formation of a steering committee consisting of various sectors of the public, mailings to homeowners and businesses, and public meetings.

2. Develop a stormwater management plan to estimate costs and revenue needs to be recovered through the stormwater utility. The stormwater plan should identify short-term and long-term priorities and establish a preliminary short-term budget (one to two years). The City completed this plan in May 2006.

3. Develop a conceptual stormwater utility rate structure. This will require the following information:

    a. Land use identification, estimation of acreage under each land use, and determination of the number of parcels under each land use. This information has been provided by the City as described Section 3.01.

    b. Determination of appropriate factors to apply to different land use categories. This is based on hydrologic characteristics of each land use category.

    c. Revenue needs as determined in the stormwater management plan.

    d. The relationship between estimated amounts of runoff per parcel to parcel charges. There are a number of alternative methods to assess these charges. The most common method is based on ERU. ERUs represent runoff from a parcel. These units calculate and levy stormwater charges by multiplying a rate factor by a parcel area. A common application is to establish a typical single-family residential lot as having one ERU. The ERUs assigned to a land use of a different type are based on the amount of stormwater runoff produced in comparison with a typical single-family residential site.

4. Preparation of a stormwater utility and user charge ordinance. This ordinance establishes the legal authority for the utility and establishes criteria in determining the user charge.

5. Determination of filing procedures. Most municipalities include the stormwater user charge on monthly utility bills. Other options include developing a separate billing statement or inclusion on property tax bills.

2.02 OTHER FUNDING OPTIONS

A. Property Tax

Stormwater management system costs in Stoughton have historically been funded by property taxes. Property taxes are paid into the City's general fund that is also used for other public works improvements, public safety, and other related programs. There is often a great deal of competition with other programs for funding. As a result, stormwater management improvements are typically given a low priority, unless the City is reacting to a recent storm event or regulatory requirements.

Property taxes are based exclusively on assessed property value. The City's cost of stormwater service to individual properties is typically more related to physical characteristics of the property served than to the assessed value of the property. Therefore, in many cases, property taxes may not be an equitable means of recovering stormwater management system costs.

B. Fees

Fees are another common means of funding stormwater management improvements. Fees are charges for services rendered. Many municipalities recover costs of constructing, designing, reviewing, and/or inspecting new developments through fees assessed to developers. Impact fees and special assessments transfer the cost of infrastructure improvements needed for private development directly to developers or property owners. User fees recover costs over the life of a project. An increasingly common type of user fee related to stormwater management is a stormwater utility.

C. Tax Incremental Financing

Tax Incremental Financing (TIF) captures the projected increase in property tax revenue created by developing an area and uses that increase to assist in paying for development and redevelopment projects. This funding makes it possible to go forward with projects that otherwise would not be built. Upon creation of a development or redevelopment project area or district, the assessor will establish the base-assessed value of that area or district. Each subsequent year, the assessor will certify the current assessed value of the property in the development or redevelopment project area or district. The difference between the amount of regular levy property taxes on the current assessed value and the amount of regular levy property taxes on the base-assessed value is the tax increment. Regular levy property taxes on the base-assessed value of the property will continue to be allocated to the appropriate local taxing bodies. The tax increment will be deposited in a TIF fund for use on projects approved for the project area or district. Typically, stormwater management projects inside or outside of the TIF that will improve the value of the property are eligible for funding under a TIF. Section 66.1105 of the Wisconsin State Statutes identifies costs potentially eligible for TIF funding.

D. Bonds

Large capital improvement projects such as major storm sewers or detention facilities may be funded through bonds or grants. Bonds are a mechanism to borrow capital for a project and distribute repayment over the life span of the project. A popular local bonding program is the Clean Water Fund Program (CWFP). This is one of the subsidized loan programs included in the WDNR Environmental

Improvement Fund (EIF). The CWFP provides loans to municipalities for wastewater treatment and urban stormwater projects. This program has historically been used extensively for wastewater treatment plant construction. Recent program modifications allow funds to be used for stormwater management improvements.

Most CWFP projects receive a subsidized interest rate of 55 percent, 65 percent, or 70 percent of the EIF market interest rate. CWFP wastewater projects that meet certain criteria may be eligible to receive Hardship Financial Assistance, which may be in the form of a lower interest rate loan or include a grant.

E. Grants

1. TRM/Urban Nonpoint

(Note: Information in this section is taken from the WDNR Web Site).

"Financial assistance for local pollution-control efforts is available through various WDNR loan and grant programs, including the Targeted Runoff Management (TRM) and Urban Nonpoint Source & Storm Water Management (UNPS&SW) programs.

TRM grants are provided to control polluted runoff from both urban and rural sites. The grants are targeted at high-priority resource problems. Projects funded by TRM grants are site-specific and serve areas generally smaller in size than a subwatershed. The grant period is 2 years, with a possible 1-year extension. The maximum cost-share rate available to TRM grant recipients is 70 percent of eligible costs, with the total of state funding not to exceed $150,000. UNPS&SW grant funds are used to control polluted runoff in urban project areas. Funds are awarded for either planning or construction projects. The grant period is 2 years with a possible 1-year extension. Projects funded by these grants are site-specific, serve areas generally smaller in size than a subwatershed, and targeted to address high-priority problems. Governmental units are not eligible for a TRM grant if the governmental unit is covered by a stormwater permit under ch. NR 216, Wis. Adm. Code.

UNPS&SW planning grants can be used to pay for a variety of technical assistance activities. Eligible activities such as stormwater management planning, related information and education activities, ordinance and utility development, and enforcement are cost shared at 70 percent. This year, the cap on the total state share for UNPS&SW planning projects is $85,000. For a technical assistance activity to be eligible for funding under this program the project must currently be in an urban area or an area projected to be urban within 20 years.

Eligible UNPS&SW construction grant costs may include such projects as stormwater detention ponds, filtration and infiltration practices, streambank stabilization, and shoreline stabilization. Eligible costs are cost-shared at 50 percent up to a maximum of $150,000. Design costs are also eligible as part of the total project costs and can be reimbursed at 50 percent. Design costs can be retroactively reimbursed provided the design is approved by the WDNR regional staff and the construction project is selected for funding.

2. Transportation Equity Act

The Transportation Equity Act for the 21st Century (TEA-21) funds numerous transportation programs, such as the Surface Transportation Program (STP) and the National Highway System, to improve the nation's transportation infrastructure, enhance economic growth, and protect the environment. States may spend up to 20 percent of their STP dollars for environmental restoration and pollution abatement projects including the construction of stormwater treatment systems. Additionally, each state sets aside 10 percent of STP funds for transportation enhancement projects, which can include acquisition of conservation and scenic easements, wetland mitigation, and pollution abatement as well as scenic beautification, pedestrian and bicycle trails, archaeological planning, and historic preservation. These varied project types can be used to protect source water areas during construction of transportation corridors."

SECTION 3
ESTIMATION OF ERUS AND RATES

3.01 IMPERVIOUS AREA AND EQUIVALENT RUNOFF UNIT ANALYSES

As discussed in Section 2, one of the primary steps in evaluating formation of a stormwater utility is a land use analysis to calculate factors impacting stormwater runoff such as impervious area. This Section summarizes results of an impervious area analysis in the City to provide a basis for establishing potential user fee rates.

A. Method of Measurement and Source of Data

For the purpose of this study, the following data from the 2005 *Feasibility of Developing a Storm Water Utility Management Utility In the City of Stoughton* prepared by Vierbicher Associates, Inc. was provided by the City of Stoughton to be used in the land use and impervious area analysis:

1. Preliminary ERU calculations database including single family residential impervious area calculations dated April 20, 2005. This database contains the parcel numbers, owner, improvement values, parcel areas, address, and land use class.

2. ERU breakdown by landuse from the previous study.

3. Impervious area shapefiles.

The preliminary ERU database was the primary source of baseline property information. The database was sorted by Land Class and Land Use Description into five categories (residential, commercial, manufacturing, tax-exempt, and other). Work within each category referenced the parcel number as the primary key. Subcategories were also included under tax-exempt and other classes. Tax-exempt subcategories included church-owned, city-owned, federal-owned, school-owned and other. Other subcategories included agricultural and undeveloped property.

Individual parcels were located by superimposing the parcel map and impervious area shapefiles onto orthophotos using ArcGIS software. The impervious area (including parking lots, driveways, rooftops, other paved areas, and compacted gravel areas) on individual parcels was digitized based on visual inspection of the orthophotos. The calculated impervious area was entered into ERU calculations spreadsheet using the parcel number as the primary key.

It should be noted that as part of the previous study, several of the nonresidential land use classes were sampled to determine the average percent impervious area for that land use class. The average percent impervious area was then applied to all of the parcels within its respective land use class to develop an approximate impervious area per parcel. Should the City move forward with implementation of the stormwater utility, the parcels that were estimated for impervious area would need to be delineated to properly distribute the cost of the City's stormwater management costs. Based on the data provided, it appears that approximately 300 parcels that were estimated for impervious area as part of the previous study would need to be delineated. Also, any additional development constructed after the completion of the 2005 study would also need to be delineated prior to implementation.

B. Residential Parcel Analysis

Based on review of information provided by the City, approximately 3,005 developed residential parcels were identified out of 3,358 total residential parcels. The remaining 353 parcels were assumed to be undeveloped since the database showed no improvement value. Of the 3,005 developed residential parcels, approximately 95 percent ranged in size from one-eighth acre to one-half acre. Approximately 2 percent of these were greater than one-half acre and 3 percent were less than one-eighth acre (refer to Figure 3.01-1). The impervious area was measured on 206 of these 3,005 developed residential parcels. The average measured impervious area was approximately 3,105 square feet.

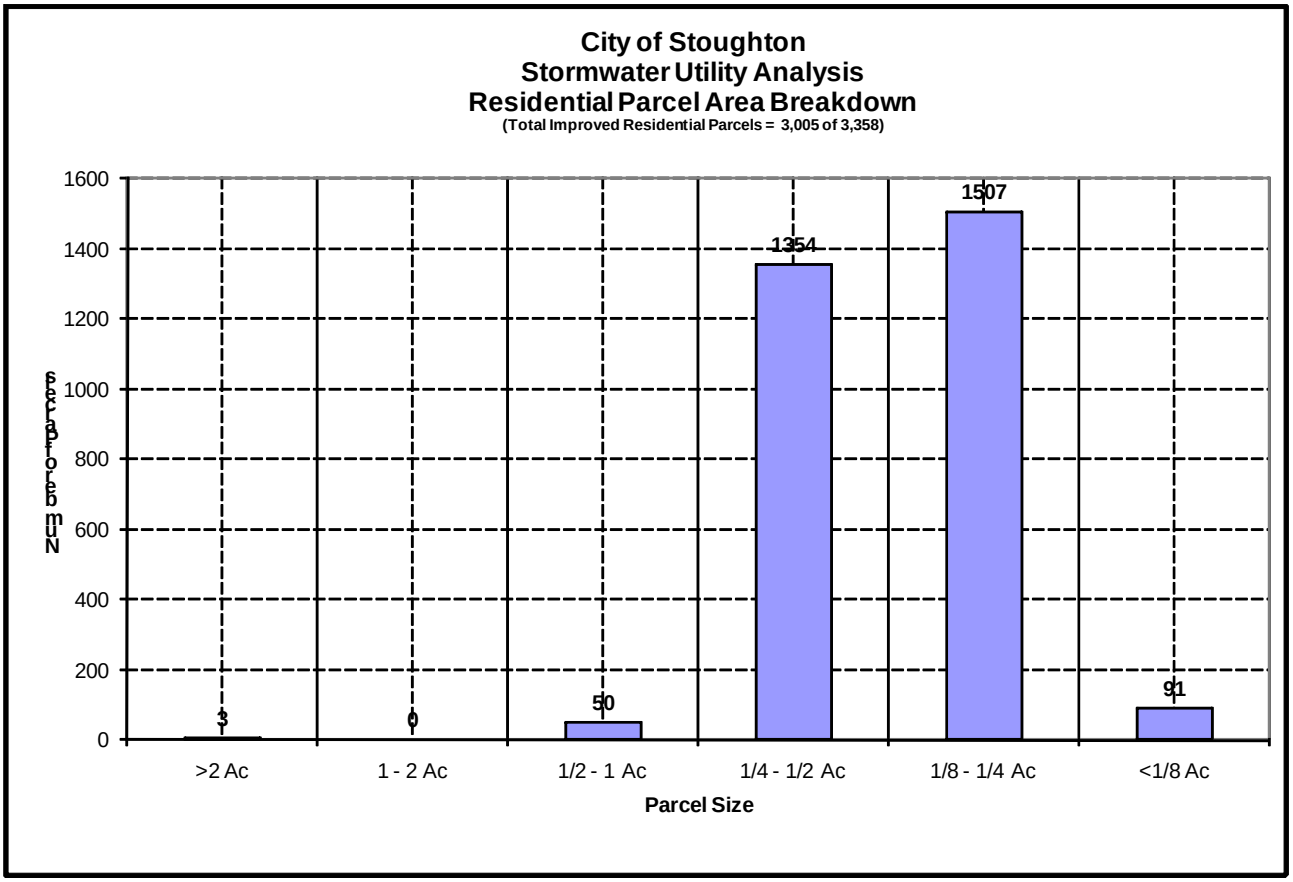


Figure 3.01-1 Residential Parcel Size Distribution

C. Nonresidential and Multifamily Residential Parcel Analysis

Nonresidential parcels in the database were analyzed to determine the impervious area for each parcel. For this analysis, a total of 689 nonresidential and 146 multifamily residential parcels were analyzed. The nonresidential analysis included all land use categories except those listed as single-family residential shown in Figure 3.01-1, duplex and agricultural.

Results of this analysis are summarized in Table 3.01-1; which indicates there are approximately 14,319,373 square feet (328.7 acres) of nonresidential and multifamily residential impervious area in the City. Of this, approximately 82 percent is on taxable property such as multifamily residential, commercial, and manufacturing. The remaining 18 percent of the impervious area in the City is located on tax-exempt or other nonresidential properties.

A breakdown of estimated ERUs for various land classes in Stoughton is also included in Table 3.01-1.

Real Estate Class	Impervious Area		Percent of Total
	Sq. Ft.	Acres	
Multifamily Residential	1,440,256	33.1	10.1
Commercial	3,667,997	84.2	25.6
Manufacturing	6,700,915	153.8	46.8
Tax-Exempt	2,510,205	57.6	17.5
Total	**14,319,373**	**328.7**	**100.0**

Table 3.01-1 Nonresidential and Multifamily Residential Impervious Area Breakdown

Overall results of the impervious analysis for the City are summarized in Figure 3.01-2. This chart indicates that approximately 47 percent of the impervious area in the City (excluding City right-of-way) is located on residential property and approximately 53 percent is on nonresidential property.

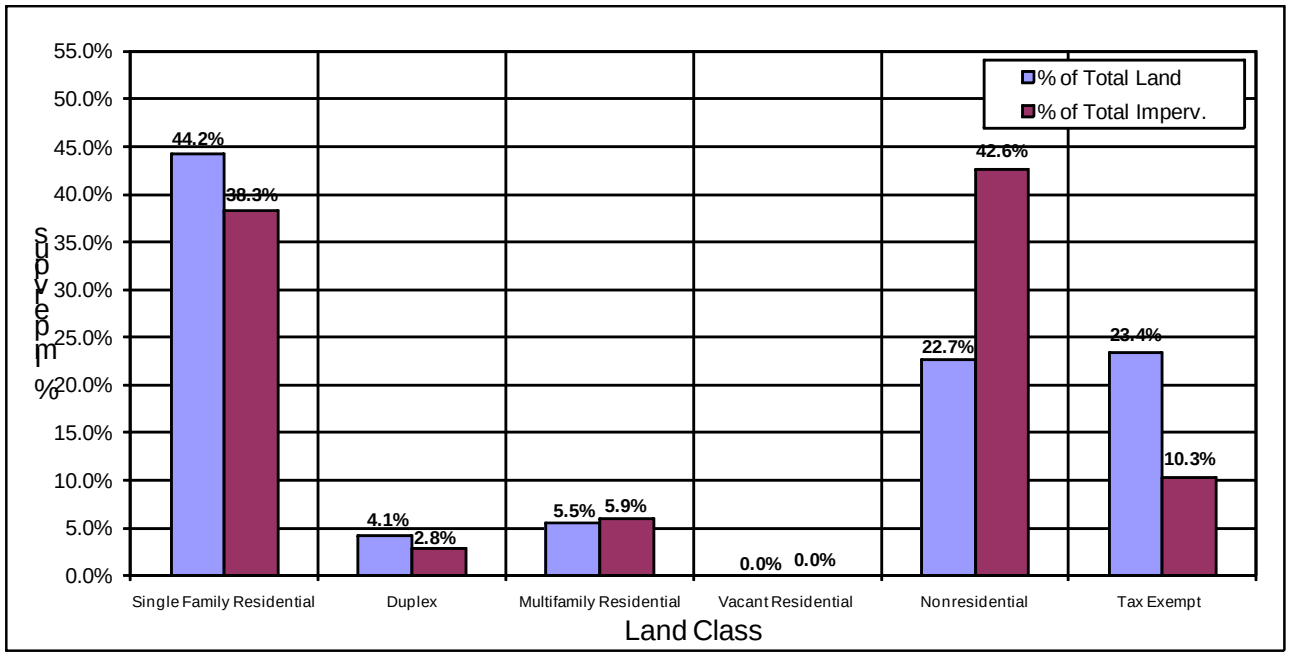


Figure 3.01-2 Percent Land and Impervious Area by Land Class (Excluding R/W)

3.02 POTENTIAL RATE STRUCTURE

A. General

One of the primary considerations in creation of a stormwater utility is identification of parameters used to establish stormwater utility rates. To be legally viable, parameters included in the rate structure must have a direct relationship to the amount of stormwater runoff draining from a parcel. Parameters most impacting stormwater runoff from a parcel includes the following:

1. Parcel size.
2. Impervious area (rooftops, parking lots).
3. Percent developed.
4. Land use.
5. Impervious area "connectedness."
6. Slope.
7. Soil type.
8. Type of drainage system.

Most stormwater utilities in Wisconsin and throughout the country use parcel size and/or impervious area to determine utility fees. This is because the relationship between these parameters and stormwater runoff volumes is typically the most apparent and understandable to the general public. Some utilities, such as the City of Madison, also charge a small fee based on pervious area.

B. Impervious Area-Based Rate Structures

Rate structures based exclusively on the amount of impervious area on a parcel are the most common types in Wisconsin and throughout the country. These generally fall into either a flat residential rate approach or a tiered residential rate approach. A "flat rate" approach typically consists of assignment of one ERU to each single-family residential parcel. An ERU is considered to be the average impervious area present on a single-family residential parcel based on measurement of a random sampling of residential parcels within the service area. ERUs are assigned to nonresidential parcels based on dividing the actual measured impervious area by the average impervious area for a typical single-family residential parcel. For example, if one ERU is based on an average residential impervious area of 4,500 square feet, then a nonresidential parcel with 45,000 square feet of measured impervious area would be assigned 10 ERUs (45,000 square feet divided by 4,500 square feet = 10 ERUs). In this way, a nonresidential parcel having ten times the amount of impervious area of a typical single-family residential parcel will pay ten times the average residential charge for stormwater management.

The primary benefit of this approach is that it is easy to calculate and generally understandable to the public. The primary disadvantage is that all residential properties are treated equally. In other words, a single-family residential parcel having a 3,000-square-foot house would pay the same as a parcel having a 1,500-square-foot house. This may not be perceived as equitable by the public.

A "tiered" approach is a variation on the flat rate approach. In a tiered approach, additional classifications are added to address differences in single-family residential parcel impacts. For example, Janesville added a secondary single-family residential tier for parcels less than 7,700 square

feet in size. Parcels in this tier are assigned 0.7 ERUs, based on the estimated ratio of impervious area in this class to the overall single-family residential average impervious area. This approach has the benefit of improving the perceived equity among single-family residential customers, based on relative single-family residential impervious area.

Another variation in the tiered approach would be charging all parcels, whether residential or nonresidential, based on the actual measured impervious area. While this approach maximizes equity from parcel to parcel, it can be more difficult and expensive to administer. Note that any change in impervious area on a property (for instance, addition of a concrete patio) would change that customer's stormwater utility fee. This, in turn, would increase the utilities record keeping and database maintenance costs.

C. Rate Structure Analysis for City of Stoughton Stormwater Utility

Several factors have been considered in developing the City of Stoughton stormwater utility rate structure. The rate structure must:

1. Generate adequate revenue to fund the City's stormwater management program.

2. Equitably charge a customer based on the impact the property owned by the customer has on the actual cost of the City's stormwater management program costs.

3. Be understandable to the public.

4. Be relatively easy and inexpensive to administer.

5. Be legally defensible.

Based on discussions with the TAC members, it was generally agreed that the rate structure should be based on impervious area with a flat rate assigned to the single-family residential class. Based on the data illustrated in Figure 3.01-1, the majority of single-family residential parcels (95 percent) are between 1/8-acre and 1/2-acre. This data seems to support that there is not a need to establish a tiered rate structure. Therefore, this analysis is based on the flat rate approach as discussed in Section 3.02B.

Under a flat single-family residential approach, stormwater service charges are based on ERUs. One ERU equals the average impervious area on a typical single-family residential property (3,105 square feet). Single-family residential parcels are assigned one ERU. The fee for nonresidential (including multifamily parcels) is based on the measured or estimated number of ERUs on each nonresidential parcel. The number of ERUs is calculated by dividing the total estimated impervious area on that parcel by the typical single-family residential impervious area.

Table 3.02-1 summarizes the ERU estimate for the City, based on this approach. As indicated in Table 3.02-1, this approach estimates approximately 7,838 ERUs for the City, prior to distribution of credits. With consideration of a 10 percent reduction in the ERU count to nonresidential properties for future credits, the total ERU count is approximately 7,377. Approximately 49 percent of the total ERUs are

residential (including multifamily) and 51 percent nonresidential. The annual stormwater user fee for each ERU is based on the total annual stormwater utility costs divided by the total number of ERUs assigned to all properties in the Stormwater Utility Service Area.

Land Use Class	Number of Parcels	Parcel Area (acres)	Nonsingle-Family Residential Impervious Area (sq ft)	Estimated ERUs Before Credits*	Estimated ERUs After Credits	Percent of Total ERUs
Single-Family Residential	3,005	776	--	3,005	3,005	40.7
Duplex	267	83	--	220	220	3.0
Multifamily Residential	146	111	1,440,256	464	418	5.7
Commercial	426	157	3,667,997	1,181	1,063	14.4
Manufacturing	121	296	6,700,915	2,159	1,943	26.3
Tax Exempt	142	467	2,510,205	809	728	9.9
Other	353	107	0	0	0	0
Total	**4,460**	**1,997**	**14,319,373**	**7,838**	**7,377**	**100**

*1 ERU = 3,105 square feet of average residential impervious area.

Table 3.02-1 Estimated ERUs

The following Stormwater Utility rate structure was generally endorsed by the TAC members and would include 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 down to the nearest one-tenth (0.1). The minimum charges for any nonresidential parcel shall be equal to the rate for one (1) ERU, unless it contains no impervious surface.

5. Undeveloped–no stormwater charge shall be assigned to undeveloped land.

3.03 ESTIMATED STORMWATER USER FEES

A. User Fee Estimate Per 2011 Budget

The estimated stormwater user fee was calculated based on the assumption that a flat user fee approach would be implemented, as described in Section 3.02. User fees have been estimated based on the current 2011 stormwater management budget that was presented in Table 1.04-5.

The rate per ERU is calculated by dividing the total revenue that must be generated for the stormwater system by the total number of ERUs within the utility district. The total number of ERUs based on the land use analysis is 7,377 ERUs (assuming a 10 percent reduction in calculated ERUs to account for future credits and exemptions. Based on 7,377 ERUs, the user fee necessary to support the 2011 stormwater management budget of $960,737 would be $130.23. This means the annual stormwater management fee for a typical single-family residential user (1 ERU) would be $130.23/year or $10.85 per month.

Table 3.03-1 summarizes the estimated revenue based on a range of ERU costs from $4 to $10.85 per month ($48.00 to $130.23 per year).

Monthly ERU Charge	Annual ERU Charge	ERUs	Potential Revenue Generated
$4.00	$48.00	7,377	$354,090
$5.00	$60.00	7,377	$442,613
$5.28	$63.36	7,377	$467,513
$6.00	$72.00	7,377	$531,135
$7.00	$84.00	7,377	$619,658
$8.00	$96.00	7,377	$708,180
$9.00	$108.00	7,377	$796,716
$10.00	$120,00	7,377	$885,240
$10.85	$130.23	7,377	$960,737

Table 3.03-1 Potential Revenue per Monthly and Annual ERU Charge

B. User Fee Estimate per Future Stormwater Management Budget

Section 1 presented the preliminary stormwater management budget estimate for 2011 through 2025 (Table 1.04-5), including compliance with new regulatory requirements. Table 3.03-1 estimates potential stormwater utility fees to generate revenue to cover these anticipated costs. Table 3.03-2 indicates potential stormwater utility fees ranging from approximately $8.38 per ERU per month to approximately $10.85 per ERU per month over the planning period. Estimated rates vary based on the anticipated program budget for each year. Note that the budget values reported include debt service from projects completed prior to 2011.

Year	Estimated Budget	ERUs	Annual Fee/ERU	Monthly Fee/ERU
2011	$960,737	7,377	$130.23	$10.85
2012	$913,826	7,377	$123.88	$10.32
2013	$876,140	7,377	$118.77	$9.90
2014	$895,895	7,377	$121.44	$10.12
2015	$768,900	7,377	$104.23	$8.69
2016	$837,768	7,377	$113.56	$9.46
2017	$856,322	7,377	$116.08	$9.67
2018	$866,076	7,377	$117.40	$9.78
2019	$837,654	7,377	$113.55	$9.46
2020	$776,961	7,377	$105.32	$8.78
2021	$742,157	7,377	$100.60	$8.38
2022	$751,225	7,377	$101.83	$8.49
2023	$788,294	7,377	$106.86	$8.90
2024	$817,447	7,377	$110.81	$9.23
2025	$855,374	7,377	$115.95	$9.66

Note: Costs are in given year dollars.

Table 3.03-2 Projected Annual Stormwater Utility Fees - Total Stormwater Budget

To gauge how these projected stormwater utility fees compared with other active stormwater utilities in Wisconsin, available data from APWA's Stormwater User Charge System Information Database was reviewed. Based on this data, the average annual cost per ERU for the 71 active utilities in Wisconsin is approximately $49 per ERU, which is significantly less than the projected annual rates for the City of Stoughton. Based on discussions with the TAC members, they were in favor of evaluating methods to better phase in stormwater utility fees. This budget approach has the advantage of easing the transition to user fees for those property owners that would pay more under a user fee funding method, especially large businesses such as Stoughton Trailers and tax-exempt organizations.

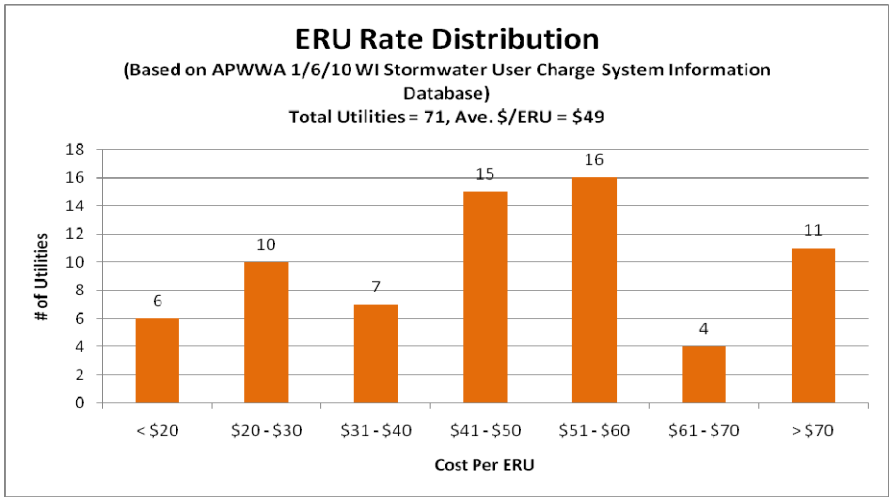


Figure 3.03-1 Average Cost Per ERU for Wisconsin Communities

One budget model that was discussed would only include debt service for new capital improvement projects in the stormwater utility budget. The debt service for projects prior to 2011 would remain on the City's tax roll and be paid for with general funds. Table 3.03-3 presents the average annual and monthly fee per ERU required to meet the estimated annual stormwater program budget if debt service payments are included for only new capital improvement expenditures. Under this fee structure, the estimated operating budget for 2011 would be $467,513 and would equate to a much lower initial annual fee per ERU of $63.37. The operating budget and associated annual fees per ERU would gradually increase over the following several years, until the entire stormwater program budget would be phased in by 2020. This budget model is illustrated in Figure 3.03-2. The TAC members were generally more in favor of this phased-in stormwater fee approach.

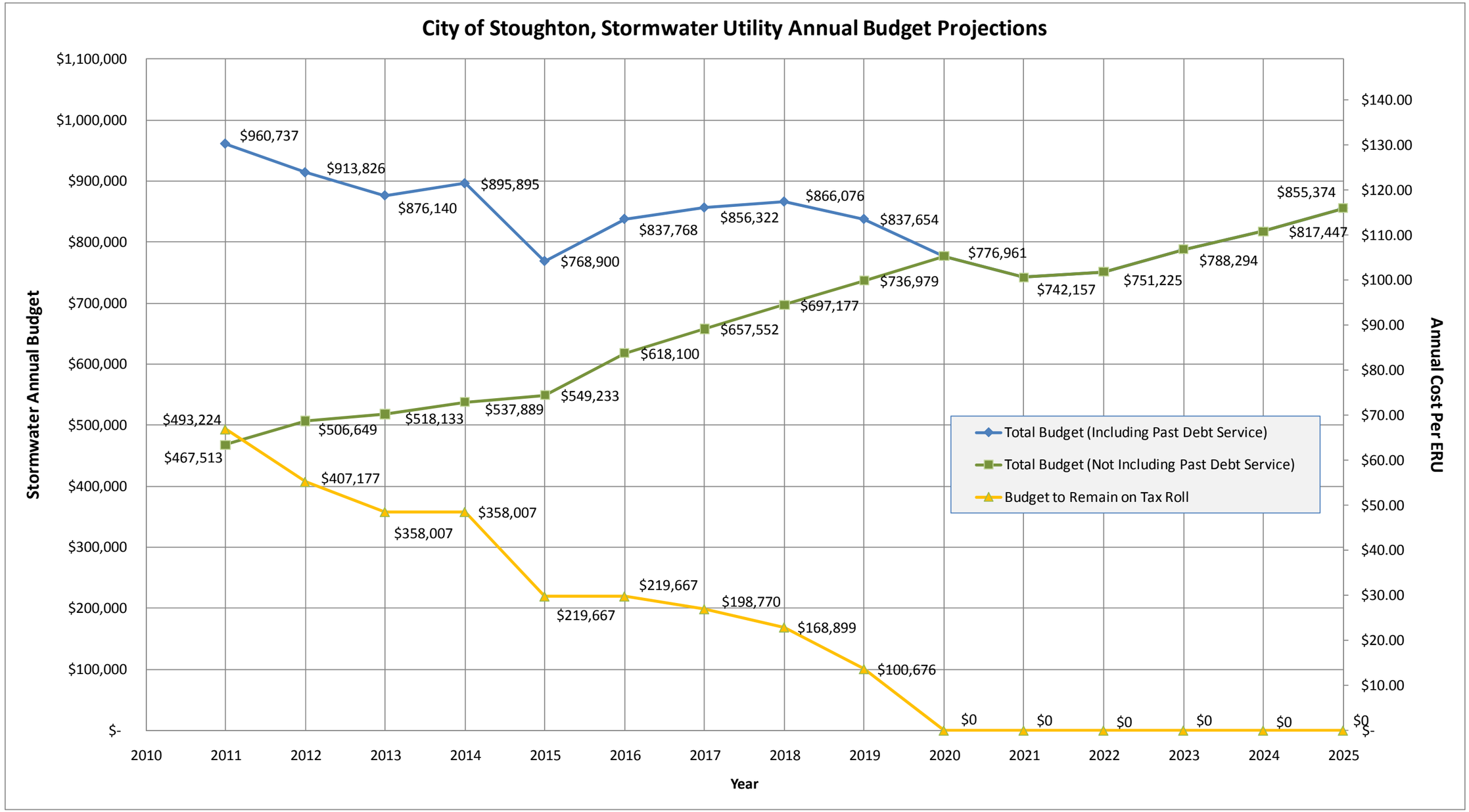
Year	Estimated Budget	ERUs	Annual Fee/ERU	Monthly Fee/ERU
2011	$467,513	7,377	$63.37	$5.28
2012	$506,649	7,377	$68.68	$5.72
2013	$518,133	7,377	$70.24	$5.85
2014	$537,889	7,377	$72.91	$6.08
2015	$549,233	7,377	$74.45	$6.20
2016	$618,100	7,377	$83.79	$6.98
2017	$657,552	7,377	$89.14	$7.43
2018	$697,177	7,377	$94.51	$7.88
2019	$736,979	7,377	$99.90	$8.33
2020	$776,961	7,377	$105.32	$8.78
2021	$742,157	7,377	$100.60	$8.38
2022	$751,225	7,377	$101.83	$8.49
2023	$788,294	7,377	$106.86	$8.90
2024	$817,447	7,377	$110.81	$9.23
2025	$855,374	7,377	$115.95	$9.66

Note: Costs are in given year dollars.

Table 3.03-3 Projected Annual Stormwater Utility Fees with Only New Capital Improvements Financed

FIGURE 3.03-2

COMPARISON OF ESTIMATED ANNUAL COST PER ERU-FINANCING VERSUS NO FINANCING OF CAPITAL IMPROVEMENTS



3.04 SERVICE AREA, RESPONSIBILITIES, AND CREDITS

A. Stormwater Utility Service Area and Responsibilities

The projected stormwater utility service area is primarily the area within the Stoughton city limits. In addition, subdivisions abutting the city limits that drain into the city involving city maintenance activities could be added with development of an intermunicipal agreement.

The utility has the following primary goals:

1. Provide a more equitable means of funding the City's stormwater management program.

2. Provide nonproperty tax-based revenues for the operation and maintenance of the City's stormwater management program.

3. Provide a mechanism to fund the City's future stormwater needs, including new WDNR requirements and remedial storm sewer improvements.

The following are the anticipated responsibilities of the stormwater utility:

1. 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.

2. 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.

3. Respond to customer billing and service inquiries.

Prior to implementation of the stormwater utility, it is recommended the City develop an organizational structure identifying how the utility will be staffed and governed. It is anticipated the Stoughton Common Council would be the governing authority over the stormwater utility. In addition, it is currently anticipated the stormwater utility would be primarily an organizational entity utilizing existing City staff, equipment, and facilities.

B. Credits and Exemptions

If the City moves forward with stormwater utility implementation, we recommend developing a credit policy to address nonstandard properties or properties that have implemented measures to reduce impacts of stormwater runoff on City costs. As a component of this policy, we recommend structuring

the fee structure after the rate structure agreement reached between the City of Eau Claire and the Public Service Commission (PSC) in resolving a complaint by the Plainwell Tissue Corporation. The fact that the rate structure agreement has been approved by the PSC lends credibility to its fairness.

Proposed features of the agreement are described below.

1. The stormwater user fee should include 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 mandated WDNR permit requirements are included in the base component.

   b. Operation and Maintenance Component

   The operation and maintenance 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.

   c. Capital and Debt Service Component

   This includes capital costs and debt service payments for the City's stormwater management system.

Such a structure would enable the City to recover "citywide" costs such as USEPA compliance and utility administrative costs from all customers. Fees directly attributable to maintenance of the existing stormwater management system could be reduced if all or a portion of a customer's property does not utilize the City's stormwater management system.

The PSC ruling on the City of Eau Claire versus Plainwell Tissue Corporation complaint concludes that consideration must be given to "private investment that aids in controlling storm and surface water quality and quantity" when establishing user fee rates. The ruling states that "...where a nonresidential resident has significant surface area that is not being directly served by City-owned infrastructure, the City must have in place a user charge system that makes reasonable provision to address this circumstance."

With consideration of this ruling, we recommend considering a rate structure that allows for reduction of a portion of the stormwater utility fee to nonresidential customers having property does not use a City-owned facility.

Based on this ruling, the rate structure should allow waiver, upon customer request, of a portion of the operation and maintenance and/or the Debt Service component costs provided:

1. The discharge is direct and not through any form of conveyance system owned or operated by the stormwater utility.

2. The drainage is not in violation of any environmental code or federal, state, or local surface water drainage requirements.

It is assumed that direct discharge to a facility or drainageway that does not ultimately discharge to a facility owned or maintained by the City is the only activity that would enable consideration of this reduction. Determination of the portion that could be allowed for this fee adjustment was discussed by the TAC members. It was stated that although stormwater runoff from a non-residential property may not enter a city owned or operated conveyance system, the total suspended solids (TSS) loading still contributes to the citywide TSS loading that must be reduced and managed. Furthermore, although a non-residential parcel may directly discharge into township lands, in certain cases, this runoff will still ultimately be directed to the Yarara River, portions of which are maintained by the City. Should implementation of the utility proceed, further evaluation and refinement of a system of adjustments is suggested.

The City may wish to consider implementing a system of credits for other activities. Some criteria for credits used in other stormwater utilities around the country include property location with respect to outfall, extraordinary practices or activities that benefit the system, practices that reduce the impact of a new development on the drainage system, credits for certain classes of rate payers, and credits for certain classes of property.

We recommend that any credit system established by the City relate directly to development impacts on City stormwater management costs. A practice such as providing stormwater detention to address a downstream flooding issue would be valid criteria for granting a credit because it could reduce future City infrastructure costs associated with downstream drainage improvements.

We do not recommend allowing credits for land characteristics or practices not associated with stormwater runoff. Examples of this would be credits based on classes of property or classes of rate payers (for example churches or low-income residents). Exempting classes of rate payers or properties on any basis other than impacts on the system may violate the fundamental basis of the user fee system.

Prior to implementation of the stormwater utility, the City should develop a written policy documenting the following:

1. Activities, if any, that qualify a customer for a user fee credit.
2. Amount of credit to be given for selected activities.
3. Process of how credits should be calculated and implemented.

The TAC members discussed various potential credit policies for consideration and generally came to the following conclusions:

1. Single-family residential rate payers should be eligible for a one-time rebate for implementing measures such as a rain garden or a rain barrel. Continuous annual credits to residential rate payers was not recommended due to difficulties with administration and enforcement.

2. The TAC members were generally in favor of implementing an education credit that could be available to public and private schools that educate and inform their students about the importance of our surface and groundwater resources.

3. Partial credits should be available to non-residential rate payers for implementing water quantity (peak flow reduction) and water quality measures, thereby lessening the burden on the City's stormwater system. The TAC members were in agreement that no hard cap should be set on how much of a credit a non-residential rate payer should be eligible for. In cases where a property owner is capable of providing measures that would exceed a hard cap, a proper incentive would instead be in place to benefit both the property owner and the City.

4. The TAC members generally endorsed the credit policy outlined in Table 3.04-1 below.

Potential Credit Policy	
Peak Flow Reduction Credit	
Device	Allowable Credit
Detention, Infiltration or Other Peak Flow Reduction Method Based on 2- and 10-Year Peak Flow (Percent Reduction)	Up to 50%
Stormwater Quality Credit	
Device	Allowable Credit
Wet Pond	Up to 25%
Infiltration Basin, Infiltration Strips, Rain Gardens, Bioretention	Up to 20%
In-Line Proprietary Stormwater Treatment Device	Up to 15%
Oil/Water separators, replaceable inlet inserts	Up to 10%
Stormwater Education Credit	Allowable Credit
Available to private & public schools where water resources & land stewardship curriculum is being taught.	Up to 25%
TOTAL	**No maximum on O&M and Capital & Debt Service**

Table 3.04-1 Potential Credit Policy

SECTION 4
EVALUATION OF STORMWATER UTILITY IMPACTS

4.01 POSSIBLE COST REALLOCATION UNDER A STORMWATER UTILITY

Table 4.01-1 compares the relative contribution of each land use sector to stormwater system funding under a property tax-based system versus a user fee-based system. This comparison is based on the "phased-in" 2011 stormwater program budget of $467,513 (i.e. debt service from past capital projects stays on the tax roll. Table 4.01-1 indicates that conversion from a tax-based to a user fee-based system would shift the primary burden for funding the stormwater management system from the residential to the nonresidential sector. This is also shown in Figure 4.01-1. For the 2011 budget, a user fee-based system would reduce the total residential contribution to stormwater management system funding from approximately $355,000 to $231,000. This would reduce the overall percentage of the budget funded by the residential sector from approximately 76 percent to approximately 49 percent. This is consistent with the relative proportion of impervious surface area in the residential sector compared to the nonresidential sector. Also, data in Table 4.01-1 shows that conversion to a user fee-based system would provide approximately $46,000 from tax-exempt parcels.

Real Estate Class	Estimated 2011 Contribution to Stormwater System Funding					
	Dollars			Percentage		
	Tax Based	Fee Based	Reallocation	Tax Based	Fee Based	Reallocation
Residential						
Single-Family	$303,279	$190,443	($112,836)	64.9%	40.7%	(24.2%)
Duplex	$24,834	$13,943	($10,891)	5.3%	3.0%	(2.3%)
Multifamily	$27,263	$26,465	($798)	5.8%	5.7%	(0.1%)
Subtotal	$355,376	$230,851		76.0%	49.4%	
Commercial	$87,162	$67,402	($19,760)	18.6%	14.4%	(4.3%)
Manufacturing	$17,323	$123,133	105,810	3.7%	26.3%	22.6%
Subtotal	$104,485	$190,535		22.3%	40.8%	
Tax-Exempt (Church)	$0	$6,377	$6,377	0.0%	1.4%	1.4%
Tax-Exempt (City)	$0	$8,943	$8,943	0.0%	1.9%	1.9%
Tax-Exempt (Federal)	$0	$297	$297	0.0%	0.1%	0.1%
Tax-Exempt (School)	$0	$30,510	$30,510	0.0%	6.5%	6.5%
Subtotal	$0	$46,127		0.0%	9.9%	
Agricultural	$56	$0	($56)	0.0%	0.0%	0.0%
Undeveloped	$0	$0	$0	0.0%	0.0%	0.0%
Subtotal	$56	$0		0.0%	0.0%	
Personal Property	$7,596	$0	($7,956)	1.6%	0.0%	(1.6%)
Total	**$467,513**	**$467,513**		**100.0%**	**100.0%**	

Table 4.01-1 Reallocation of Funding-Fee Based Versus Tax-Based Funding

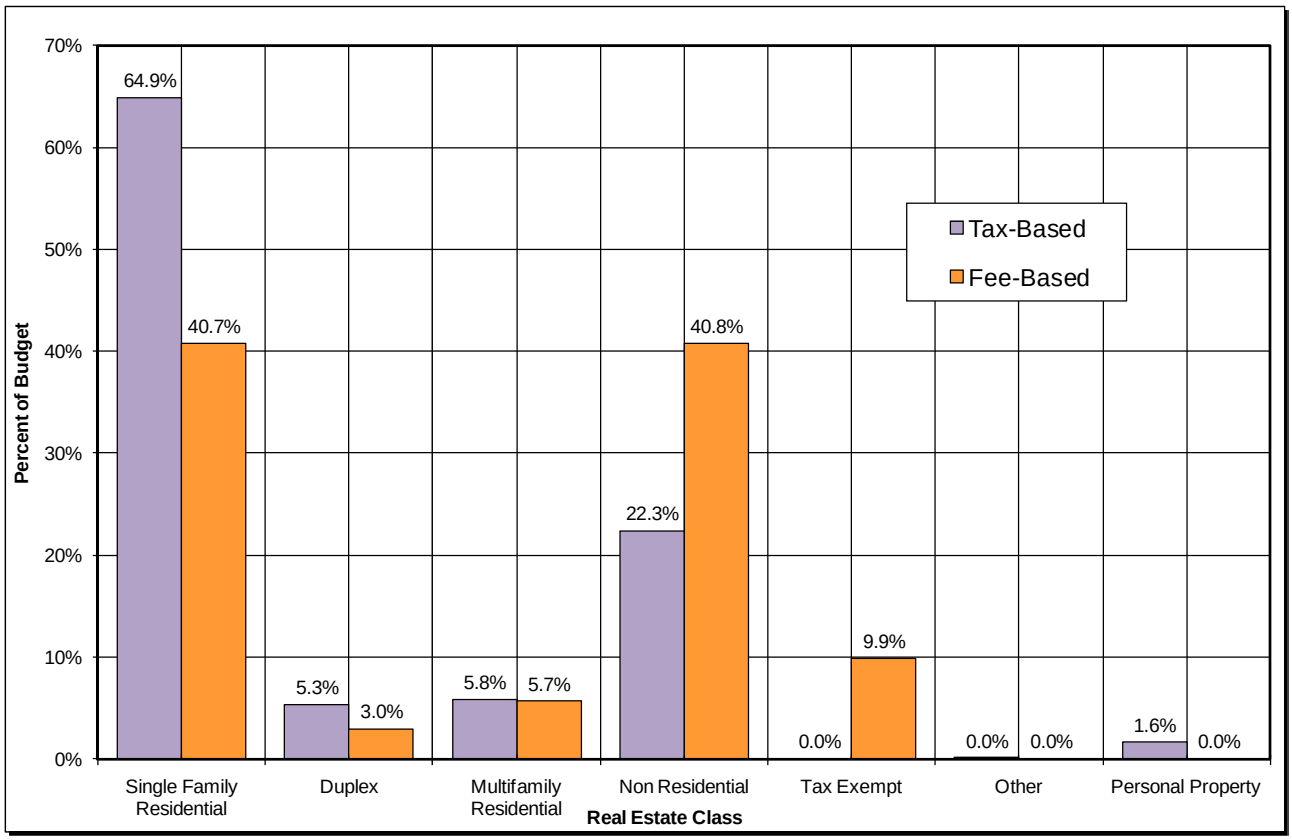


Figure 4.01-1 Reallocation of Funding Contribution by Class Under a Stormwater Utility

4.02 COMPARISON OF STORMWATER UTILITY IMPACTS ON INDIVIDUAL PROPERTIES

Impacts of conversion to a user fee-based method of stormwater system funding were evaluated for various residential, commercial, industrial, and tax-exempt properties. To provide a comparison, the following analysis is based on the 2011 stormwater budget of $467,513, the 2009 mill rate of $7.28 per $1,000 of assessed value, and an estimated 7,377 ERUs. Results of this evaluation based on the 2011 stormwater management budget are summarized in Table 4.02-1.

Individual properties analyzed included small, average, and large single-family residential parcels. For each single-family residential category, the approximate average assessed value, based on the 2009 assessor's database, was used. Results indicate the stormwater contribution from each typical residential parcel would be lower under a stormwater utility than under the present property-tax based system. The annual reduction under a fee-based system would be about $30 per residential parcel.

Relative impacts of tax-funding versus stormwater utility funding were compared at the Castleberg Apartment complex and WPA LLC Apartments (multifamily residential) at 729 Lincoln Avenue and 915 S Page Street, respectively. Results indicate a reduction of approximately $51 and an increase of $7, respectively under a stormwater utility in comparison with the current property tax-based system at this property.

A variety of commercial and manufacturing properties were also evaluated including Walmart Department Store, Associated Bank, Fosdal Bakery, Ortega, Diversitech, Inc., and Stoughton Trailer. With the exception of Fosdal Bakery, the comparative analysis indicates that the stormwater contribution would increase for each of the nonresidential properties analyzed. Fosdal Bakery is representative of a relatively small downtown business and would realize a decrease of approximately $11 per year.

The most significant impact of conversion to a stormwater fee-based system will be to Stoughton Trailers, which has approximately 1,081 ERUs over 10 different parcels. This number of ERUs equates to approximately 15 percent of the total impervious area within the City of Stoughton. The resultant annual increase that Stoughton Trailers would encounter in 2011 is approximately $63,000.

Tax-exempt parcels such as the City of Stoughton, Stoughton School District, and area churches would also experience significant increases under a fee-based system. Analysis of these parcels indicates potential increases ranging from approximately $786 per year for First Lutheran Church to $33,900 for Stoughton School District.

It should be noted this analysis does not consider potential reductions in fees that specific properties listed above may be eligible for from credits for measures such as detention basins.

TABLE 4.02-1

COMPARISON OF POSSIBLE PROPERTY COSTS–TAX-BASED VERSUS FEE BASED

Owner	Class	Tax-Based[1]			Fee-Based[2]			Change[3]
		Assessed Value	Rate	Annual Contribution	ERUs	Rate/ ERU	Annual Contribution	
Typical Residential Property	Single-Family Residential	$191,500	$0.000485	$93	1	$63.38	$63	($30)
Castleberg Apartments	Multifamily Residential	$862,400	$0.000485	$419	5.8	$63.38	$368	($51)
WPA LLC – Page Street Apartments	Multifamily Residential	$900,000	$0.000485	$444	7.0	$63.38	$444	$7
Walmart	Commercial	$2,137,000	$0.000485	$1,037	63.2	$63.38	$4,005	$2,968
Associated Bank	Commercial	$1,190,600	$0.000485	$578	11.2	$63.38	$710	$132
Fosdal Bakery	Commercial	$152,700	$0.000485	$74	1.0	$63.38	$63	($11)
Stoughton Trailers (10 Parcels)	Manufacturing	$11,906,000	$0.000485	$5,778	1,081.4	$63.38	$68,534	$62,756
Ortega (3 Parcels)	Industrial	$1,540,500	$0.000485	$748	62.0	$63.38	$3,929	$3,182
Diversitech, Inc. (3 Parcels)	Industrial	$1,484,000	$0.000485	$720	13.9	$63.38	$881	$161
Venevoll (15 Parcels)	Tax-Exempt/Commercial	$5,331,500	$0.000485	$2,587	112.3	$63.38	$7,117	$4,530
First Lutheran Church	Tax-Exempt	$0	$0.000485	$0	12.4	$63.38	$786	$786
Stoughton Hospital (15 Parcels)	Tax-Exempt	$0	$0.000485	$0	32.5	$63.38	$2,060	$2,060
Stoughton School District (9 Parcels)	Tax-Exempt	$0	$0.000485	$0	534.9	$63.38	$33,900	$33,900
City of Stoughton (120 Parcels)	Tax-Exempt	$0	$0.000485	$0	156.8	$63.38	$9,937	$9,937

[1] Based on the 2009 City Budget of $7,015,800 (mill rate = $7.28 per $1,000 value) and a 2011 Stormwater Management Budget of $467,513.
[2] Based on an estimated 2011 Stormwater Management Budget of $467,513 and 1 ERU = 3,105 square feet of impervious area.
[3] Does not consider possible reductions from credits or other adjustments.

APPENDIX A
APWA SURVEY RESULTS

Fox Wolf Watershed Alliance

WI Stormwater User Charge System Information

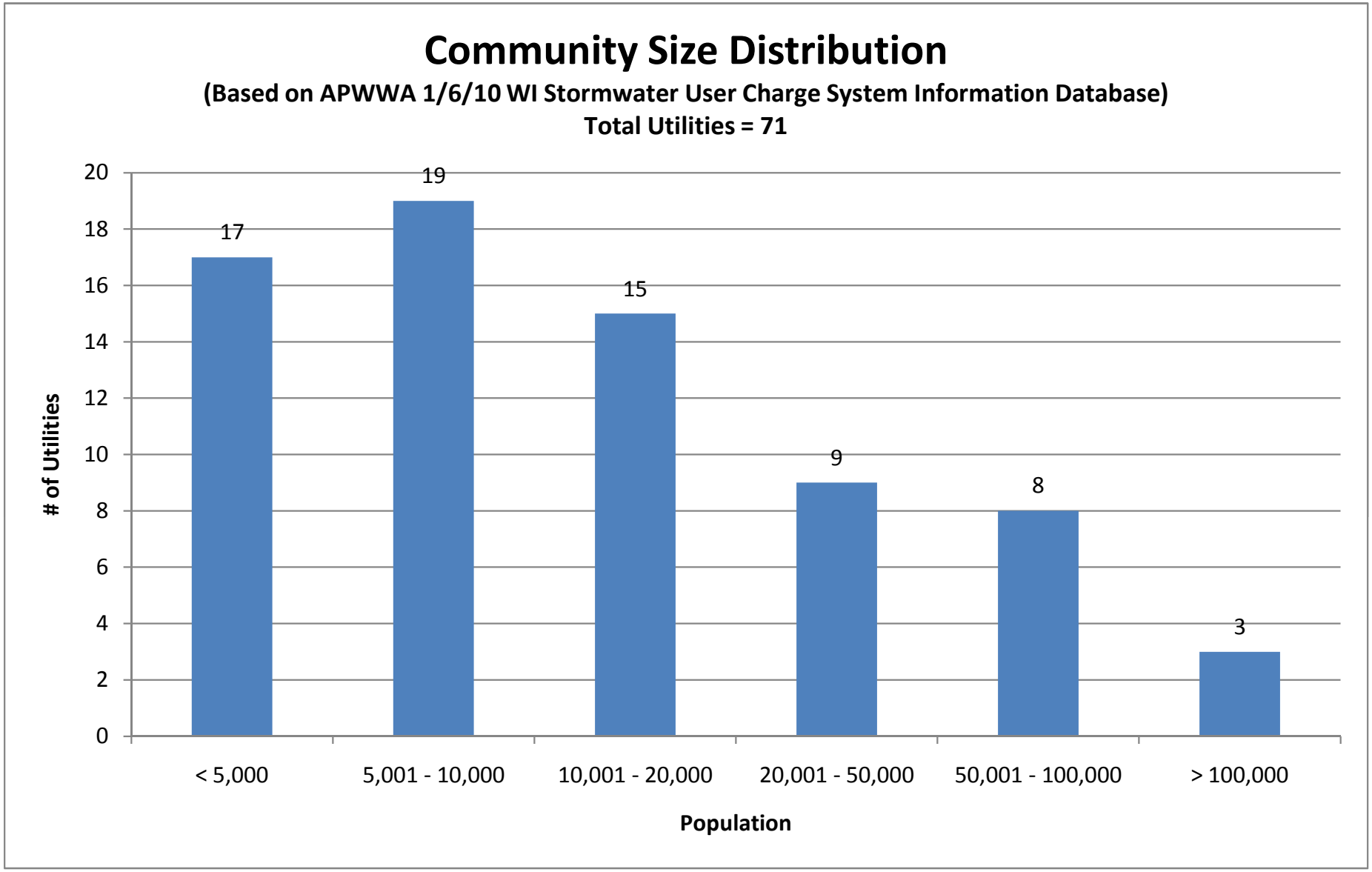
Representative Wisconsin Communities

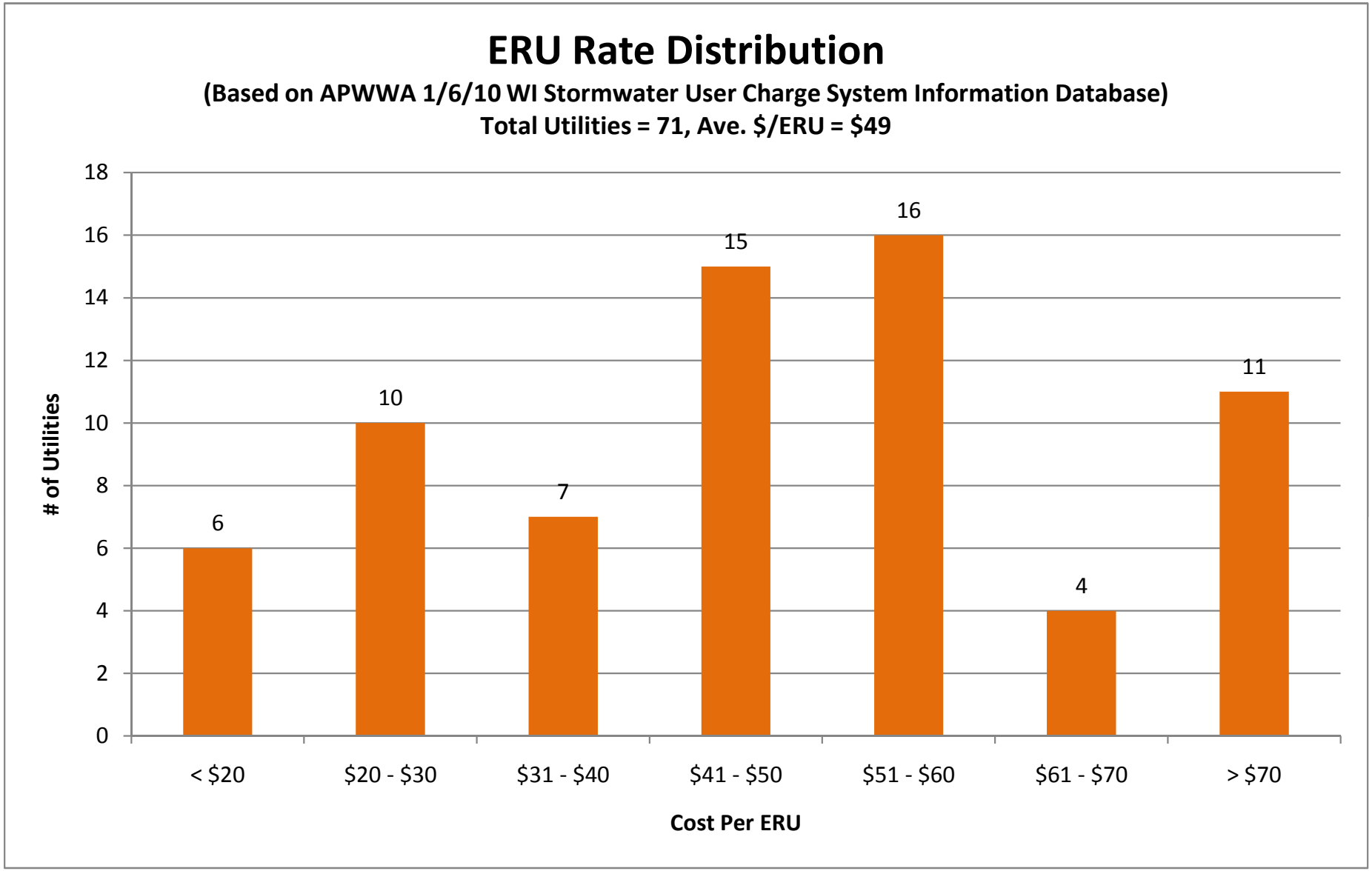
Wisconsin stormwater user charge information is subject to change! Contact individual communitie.
to confirm accuracy - please forward corrections and updates!

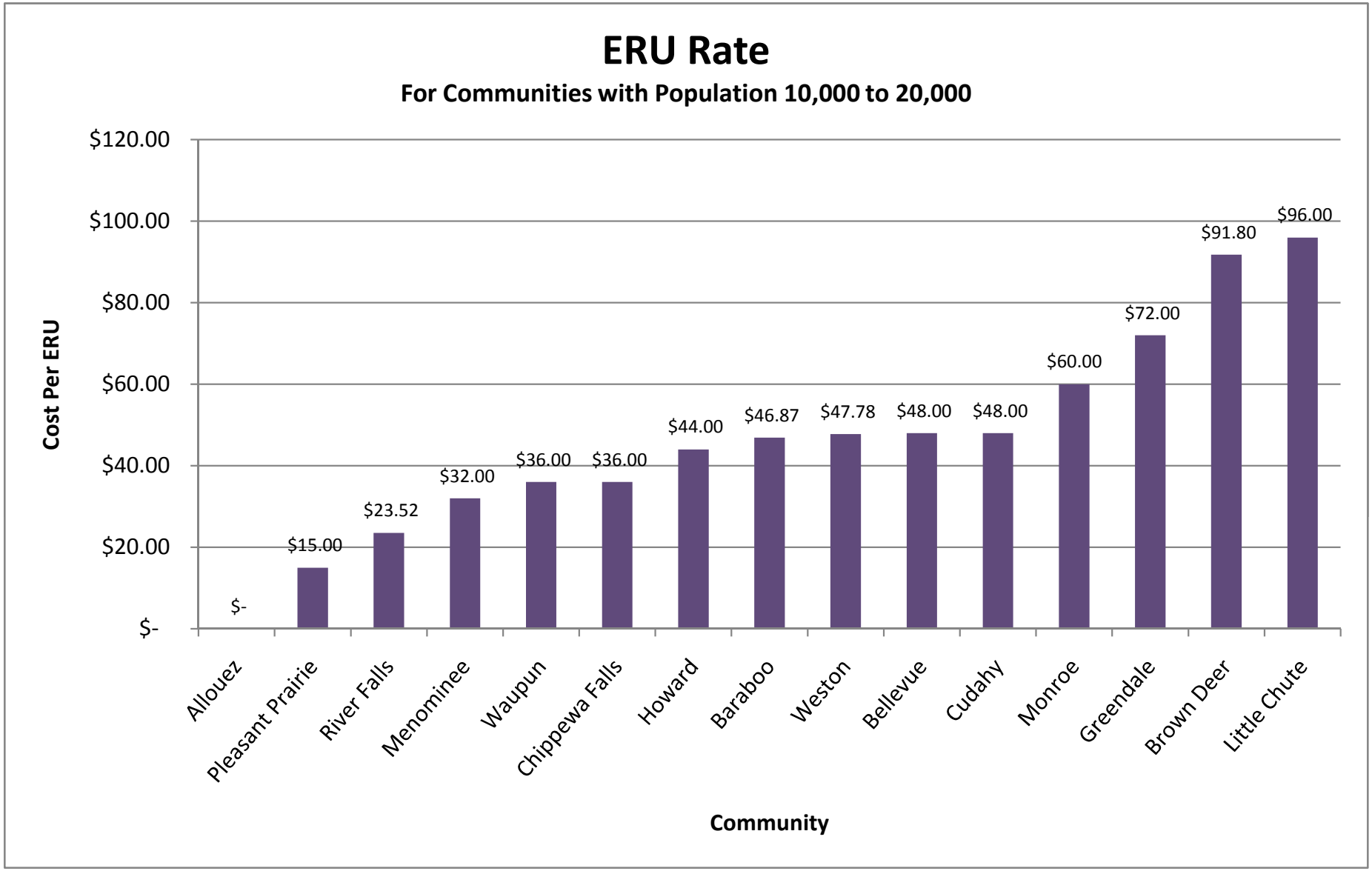
January 6, 2010

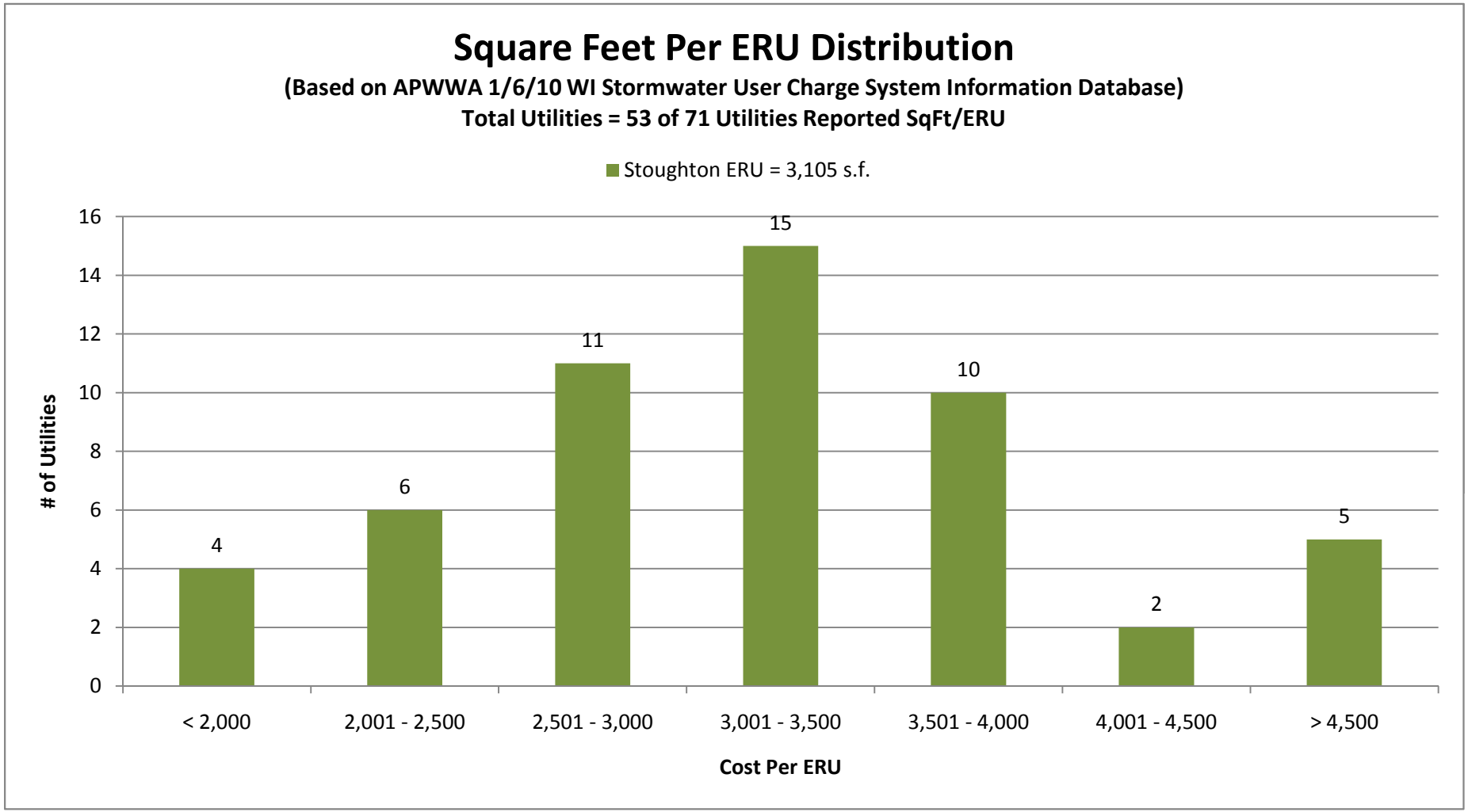
Name of Community or Stormwater District	Recent Population	Created/ Started in:	ERU Size (sf)	Annual $/ERU or 1 fam home	Credit Policy? Y/ N	Credit Policy? Max Amount	Comments/ Web site addresses
Allouez (Village)	15,443	2006	3,663				www.villageofallouez.com
Appleton (City)	70,293	1995	2,368	$ 108.88	Y	77%	www.appleton.org
Baraboo (City)	10,771	2005	2,379	$ 46.87			www.cityofbaraboo.com
Barron (City)	3,250	2005	10,850	$ 24.00	Y	75%	www.barronwi.us
Bellevue (Village)	14,386	2002	3,221	$ 48.00	Y	100%	www.bellevue-wi.com
Beloit (City)	35,803	2006	3,347	$ 24.00			beloit.govoffice3.com/
Brown Deer (Village)	11,895	2004	3,257	$ 91.80	N		www.browndeerwi.org
Butler (Village)	1,885	1999	3,032	$ 66.00			www.butlerwi.gov/
Chetek (City)	2,180	2005		$ 27.00	Y		www.chetek.net
Chippewa Falls (City)	13,374	2005		$ 36.00			www.ci.chippewa-falls.wi.us
Cudahy (City)	18,430	2001	2,700	$ 48.00	Y	$2/ ERU	www.ci.cudahy.wi.us
De Forest (Village)	7,400	2005	2,900	$ 60.00			www.vi.deforest.wi.us/
Delafield (City)	7,820	2004		$ 29.00			www.cityofdelafield.com/
De Pere (City)	20,560	2003		$ 47.00			www.de-pere.org/
Eau Claire (City)	62,576	1997	3,000	$ 62.00	Y	100%	www.ci.eau-claire.wi.us
Elm Grove (Village)	6,250	2004	6,235	$ 65.50			www.elmgrovewi.org
Fitchburg (City) - Urban	19,000	2002	3,700	$ 52.20	Y		www.city.fitchburg.wi.us
Fitchburg (City) - Rural	4,000	2002	3,700				www.city.fitchburg.wi.us
Garner's Creek (watershed)		1998	3,623	$ 96.00	Y	85%	Combined Locks, Buchanan, Harrison
Glendale (City)	13,400	1996	2,609	$ 42.00	N	‡	www.glendale-wi.org
Grand Chute (Town)	20,200	1997	3,283	$ 48.00	Y	85%	www.grandchute.net
Grantsburg (Village)	1,397	2004		$ 18.00	Y	75%	www.grantsburgwi.com
Green Bay (City)	102,350	2004	3,000	$ 55.20	Y	67%	www.ci.green-bay.wi.us
Greendale (Village)	14,410	2004	3,941	$ 78.00	Y	50%	www.greendale.org
Greenville (Town)	8,008	1999	4,510	$ 60.00	Y	85%	www.townofgreenville.com
Harrison (Town of)	5,800	1998		$ 96.00			www.townofharrison.org
Hobart (Village of)	5,834	2007	4,000	$ 72.00	Y	50%	www.hobart-wi.org/
Holmen (Village of)	7,176	2007	3,550	$ 44.00	Y	50%	www.homenwi.com
Howard (Village)	15,774	2005	3,301	$ 44.00			www.villageofhoward.com
Janesville (City)	61,604	2003	3,200	$ 27.36	Y	65%	www.ci.janesville.wi.us
Kenosha (City)	96,845	2007	2,477	$ 60.00	Y		www.kenosha.org
Lake Delton (Village)	2,975	1993	1,685	$ 18.00	Y	100%	www.lakedelton.org
Lancaster (City)	4,033	2008	3,400	$ 24.00	Y		www.lancasterwisconsin.com
Lisbon (Town)		2007	6,642	$ 40.00	Y	50%	www.townoflisbonwi.com
Little Chute (Village)	10,830	1998	2,752	$ 96.00	N		www.littlechutewi.org
Madison (City)	220,332	2001	Ind'l Msmt	$ 55.00	Y	50%	www.cityofmadison.com
McFarland (Village)	6,416	2007	3,456	$ 46.85			www.mcfarland.wi.us
Menominee (City of)	15,318	2008	3,000	$ 32.00	Y	20%	www.menomonie-wi.gov/
Milton (City of)	5,667	2009		$ 55.13			http://www.ci.milton.wi.us/
Milwaukee (City)	597,000	2006	1,610	$ 82.20	Y	60%	www.mpw.net
Monona (City)	8,000	2004	NA *	$ 60.00	Y	65%	www.monona.wi.us
Monroe (City)	10,600	2006	2,728	$ 60.00			www.cityofmonroe.org
Neenah (City)	24,600	2003	3,138	$ 56.00			www.ci.neenah.wi.us
New Berlin (City)	38,719	2001	4,000	$ 60.00	N		www.newberlin.org
New Richmond (City)	7,726	2004	12,632	$ 28.68	Y	75%	www.ci.new-richmond.wi.us
N. Fond du Lac (Village)	4,557	2007	3,123	$ 56.00	Y		www.nfdl.org
Onalaska (City)	16,690	2009	3,888	$ 50.95	Y	40%	www.cityofonalaska.com
Onalaska (Town)	5,600	2005	3,709	$ 24.00			www.co.la-crosse.wi.us/townofonalaska
Oshkosh (City)	65,000	2003	2,817	$ 48.88	Y	40%	www.ci.oshkosh.wi.us
Pleasant Prairie (Village)	18,000	2006		$ 15.00			www.pleasantprairieonline.com/
Poynette (Village)	2,563	2006	3,550	$ 50.00			www.poynette-wi.gov/
Racine (City)	81,855	2004	2,844	$ 72.00	Y	40%	www.cityofracine.org
Raymond (Town)	3,516	2008	See note -		N		$0.0036/ sf impervious area
Reedsburg (City of)	8,594	2008	3,024	$ 46.00	Y	50%	www.reedsburgwi.gov
River Falls (City)	13,019	1998	NA *	$ 37.68	Y	100%	www.rfcity.org
Salem (Town)	9,871	2009	6,352	$ 60.00	Y	50%	www.townofsalem.net
Sheboygan (City)	50,800	2001	2,215	$ 36.00	Y		www.ci.sheboygan.wi.us
Shorewood Hills (Village)	1,732	2007	2,941				www.shorewood-hills.org
Slinger (Village)	3,901	2007	4,300	$ 40.00	Y		www.slinger-wi-usa.org/
St. Francis (City)	9,373	2001	2,500	$ 48.00			www.ci.stfrancis.wi.gov/
Sun Prairie (City)	24,464	2003	3,468	$ 60.00	Y	65%	www.cityofsunprairie.com/
Superior (City)	27,370	2007	1,907	$ 70.80	Y	TBD	www.ci.superior.wi.us/
Sussex (Village)	9,687	2005		$ 60.00			www.village.sussex.wi.us/
Vernon (Town)	7,455	2008	6,904	$ 32.00	Y	50%	www.rownofvernon.org/
Washburn (City)	2,300	2005		$ 48.00			www.cityofwashburn.org/
Watertown (City)	23,163	2005	2,900	$ 76.00			www.cityofwatertown.org/
Waupun (City)	10,720	2005	3,204	$ 36.00			www.cityofwaupun.org/
Wauwatosa (City)	45,602	1999	2,174	$ 55.44	Y	100%	www.wauwatosa.net/
West Allis (City)	61,250	1997	1,827	$ 63.12	Y	56%	www.ci.west-allis.wi.us/
West Milwaukee (Village)	4,142	2003	1,956	$ 24.00	Y	75%	www.westmilwaukee.org/
Weston (Village)	12,736	2004	3,338	$ 47.78	Y	68%	www.westonwisconsin.org/

Send updates to jeff.mazanec@rasmithnational.com; matrix developed with supporting information from stormwater professionals state-wide.


Community Size Distribution
(Based on APWWA 1/6/10 WI Stormwater User Charge System Information Database)
Total Utilities = 71
# of Utilities
0
2
4
6
8
10
12
14
16
18
20
17
19
15
9
8
3
< 5,000
5,001 - 10,000
10,001 - 20,000
20,001 - 50,000
50,001 - 100,000
> 100,000
Population


ERU Rate Distribution
(Based on APWWA 1/6/10 WI Stormwater User Charge System Information Database)
Total Utilities = 71, Ave. $/ERU = $49
# of Utilities
18
16
14
12
10
8
6
4
2
0
6
10
7
15
16
4
11
< $20
$20 - $30
$31 - $40
$41 - $50
$51 - $60
$61 - $70
> $70
Cost Per ERU


ERU Rate
For Communities with Population 10,000 to 20,000
Cost Per ERU
$120.00
$100.00
$80.00
$60.00
$40.00
$20.00
$-
$-
$15.00
$23.52
$32.00
$36.00
$36.00
$44.00
$46.87
$47.78
$48.00
$48.00
$60.00
$72.00
$91.80
$96.00
Allouez
Pleasant Prairie
River Falls
Menominee
Waupun
Chippewa Falls
Howard
Baraboo
Weston
Bellevue
Cudahy
Monroe
Greendale
Brown Deer
Little Chute
Community


Square Feet Per ERU Distribution
(Based on APWWA 1/6/10 WI Stormwater User Charge System Information Database)
Total Utilities = 53 of 71 Utilities Reported SqFt/ERU
Stoughton ERU = 3,105 s.f.
# of Utilities
0
2
4
6
8
10
12
14
16
4
6
11
15
10
2
5
< 2,000
2,001 - 2,500
2,501 - 3,000
3,001 - 3,500
3,501 - 4,000
4,001 - 4,500
> 4,500
Cost Per ERU

APPENDIX B
TECHNICAL ADVISORY COMMITTEE MEETING MINUTES

Ad Hoc Stormwater Utility Technical Advisory Committee Meeting Minutes
Wednesday, March 10, 2010 - 3:00 p.m.
Hall of Fame Room, City Hall, 381 E. Main St., Stoughton, WI.

Members Present: Mayor Jim Griffin, Carl Chenoweth, Director of Planning & Development Rodney Scheel, Utilities Director Robert Kardasz, Street Superintendent Karl Manthe, Finance Director Laurie Sullivan, Peter Sveum, Dennis Barkenhagen, Robert Barnett
Absent and Excused: Scott Sedlacek
Absent: None
Staff:
Press:
None
Guests:
Mark Shubak, Strand Associates, Inc., Steve Sletten, Donna Olson, Pastor Bill Lehman

1. **Call to Order** The meeting was called to order at 3:00 p.m.

2. **Welcome and Introductions** Scheel thanked and welcomed everyone for their participation. Introductions were made.

3. **Charge to Technical Advisory Committee (TAC) Members/Expectations** Mark Shubak, Strand Associates, Inc. referred to handout that summarizes the roles and expectations for each of the TAC members. Six TAC meetings will be held over the next three months in an effort to evaluate the Feasibility of a Stormwater Feasibility Study. The TAC will assist in developing a Feasibility Study report that will be presented to the City Council. The Feasibility Study will include evaluating the following issues:
   a. Potential Stormwater Utility Rate Structures
   b. Potential Stormwater User Fees
   c. Potential Stormwater Utility Service Area and Responsibilities
   d. Potential Credit Policies and exemptions to Reduce Stormwater Utility Fee
   e. Potential Stormwater Utility Budget (What will the utility pay for?)
   f. Potential Billing System Options

4. **Review Past Stormwater Utility Study Efforts and Results (2005)** Rodney Scheel discussed work that had been performed in 2005 to evaluate the feasibility of implementing a stormwater utility. This work included formation of a TAC, development of a Feasibility Study Report under the guidance of the TAC, and development of a Stormwater Utility Ordinance. However, late in 2005, it was decided by the City Council to not proceed with adoption of the Stormwater Utility due to potential issues related to stormwater maintenance fees that were being applied as part of the plat review process. The ordinance governing these fees has since been amended in the fall of 2009 to remove the stormwater maintenance fee, thereby allowing the City to re-evaluate implementation of a stormwater utility.

5. **Discuss Anticipated Stormwater Utility Implementation Process/Schedule** Mark Shubak, Strand Associates, Inc. referred to a handout that indicated the anticipated tasks and schedule for implementation of the Stormwater Utility. This

process will include conducting six TAC meetings over the next three months, finalizing the feasibility study report and presenting it to the City Council by the end of May 2010, and concluding implementation tasks by the end of August 2010. This would allow initial stormwater utility fees to commence in January 2011.

6. **Overview of Current Stoughton Stormwater Facilities/Responsibilities** Mark Shubak, Strand Associates, Inc. referred to a handout summarizing the City's existing stormwater facilities and stormwater program responsibilities. The discussion included focusing on the City's mandated stormwater permit activities, including Public Education and Outreach, Public Involvement and Participation, Illicit Discharge Detection Program, Construction Site Erosion Control, Post Construction Stormwater Management, the City's Pollution Prevention Program, and Stormwater Quality Management. Rodney Scheel indicated as part of the City's stormwater management planning efforts, the City currently has reduced their City-wide Total Suspended Solids (TSS) by 31 percent. A Citywide TSS reduction of 40 percent must be achieved by March 2013. In order to do this, several costly stormwater best management practices projects will need to be implemented in the next few years to meet this requirement, placing a significant burden on the City's budget. Mayor Griffin stated that the City has reached their tax levy limits and that in order to fund the required stormwater projects likely would require cutting other City services.

7. **Overview/Discussion on Stormwater Utility Organization and Functions** Mark Shubak, Strand Associates, Inc. presented a *PowerPoint* presentation to the TAC that included an overview of the City's current Stormwater Management Program and how it is funded. The presentation highlighted how a stormwater utility user charge for a single family residential rate payers would be based on an Equivalent Runoff Unit (ERU) that represents the average fee for services necessary to manage stormwater for the average single family residential customer. It was noted that in the City of Stoughton, it has been estimated that 1 ERU is equal to 3,104 square feet based on measurement of 206 selected parcels. An example (Associated Bank property) was given on how non-residential user fees would be computed, based on measured impervious areas. Comparisons were presented on how much the Associated Bank property currently pays on an annual basis under the current tax based system versus how much they would pay under a user fee based system. Similar comparisons were made for various real estate classes.

8. **Next Meeting/Tentative Meeting Dates and Schedule/Agenda Items** The group agreed that Wednesdays at 3:00 p.m. is good time for future meetings. The next TAC meeting will be on Wednesday, March 24th at 3:00 p.m.

9. **Adjournment** The meeting adjourned at 5:00 p.m.

Ad Hoc Stormwater Utility Technical Advisory Committee Meeting Minutes
Wednesday, March 24, 2010 - 3:00 p.m.
Hall of Fame Room, City Hall, 381 E. Main St., Stoughton, WI.

Members Present:
Mayor Jim Griffin, Director of Planning & Development Rodney Scheel, Street Superintendent Karl Manthe, Utilities Director Robert Kardasz, Peter Sveum, Dennis Barkenhagen, Scott Sedlacek
Absent and Excused:
Finance Director/Treasurer Laurie Sullivan
Robert Barnett
Absent: Carl Chenoweth
Staff: None
Press:
None
Guests:
Mark Shubak, Strand Associates, Inc., Steve Sletten, Donna Olson

1. **Call to Order** The meeting was called to order at 3:00 p.m.

2. **Meeting Minutes of March 10, 2010** Motion by Kardasz, seconded by Manthe to approve the minutes. Motion carried unanimously.

3. **Overview of Wisconsin Stormwater Utilities** Mark Shubak, Strand Associates, Inc. referred to a handout developed by APWA that summarizes stormwater utility information for 71 communities in Wisconsin. Shubak noted that this list is not all inclusive, but provides some useful data including population, date created, ERU size (square feet), cost per ERU, and credit policy information. Shubak distributed several bar charts that provided a graphical breakdown of the data from the APWA handout, including community size distribution and ERU rate distribution for permitted and non-permitted communities.

4. **Review of Eligible Stormwater Utility Administration and O & M Costs**

   Mark Shubak referred to a handout that summarizes specific administration and operation and maintenance line items that are typically eligible for inclusion in a stormwater utility budget. Shubak discussed how stormwater utility budgets are typically broken down into three primary categories: administration, O&M, and Capital and Debt Service.

5. **Review of 2009 Stormwater Administration and O & M Costs** Rodney Scheel referred to a handout that summarizes estimated City stormwater administration and operation and maintenance for 2009. Scheel noted that the $70,000 administration line item is an estimate at this time and that more detailed tracking should be done. Kardasz stated that tracking of stormwater costs will be very important, such as having work order numbers for stormwater related tasks.

6. **Review of Eligible Stormwater Capital Costs and City's Stormwater CIP Budget** Shubak referred to a handout that listed specific stormwater capital improvement costs that are typically eligible for inclusion in a stormwater utility budget. Peter Sveum noted that many of the items that are listed are items that the City has been

doing for a long time and that going to a utility would simply be a shift from the tax roll to a user fee. He felt that only the increase in these costs due to the City's mandated permit requirements should be included. Shubak referred to a handout that listed the City's projected stormwater CIP through 2016. Scheel noted that the majority of the projects in the first few years are being driven by the City's stormwater permit requirements. It was noted that the average annual stormwater CIP cost is approximately $345,000. Shubak noted the estimated annual stormwater utility budget, including administration, O&M, and capital/debt service is approximately $734,000. This equates to approximately $100 per ERU, which is significantly higher than average. Shubak then referred to a handout that showed projected annual debt service payments for future stormwater capital projects. It was noted that by including only debt service payments of new projects in the budget would allow for the initial annual cost per ERU to be reduced to about $65 per ERU for the first year.

7. **Discussion of Items to Include in the Stormwater Utility Budget**

   A round table discussion was held to consider which items should and shouldn't be included in the stormwater utility budget. Dennis Barkenhagen noted that yard waste should be homeowner's responsibility and that leaf collection should be taken out. He also noted that the administration cost seems to be too high and should be reduced. Barkenhagen also noted that when presenting the utility concept, it shouldn't just be called a "stormwater" utility, but must include water quality in order to help sell it to the public. Jim Griffin agreed that yard waste should be taken out of the budget, but that an attempt to keep all other eligible items in the budget to remain as transparent as possible. Manthe and Kardasz felt that leaf collection should definitely be left in the budget. Scheel noted that the estimated administration cost is appropriate and should not be adjusted down and that leaf collection should be left in the budget because leaf collection and management is currently part of their stormwater permit requirements. Scheel agreed that yard waste should be removed from the budget because there is already an existing user fee that covers this. Barkenhagen noted that it didn't appear there is enough budgeted for public education. Scheel noted the City's participation in MAMSWap which utilizes a cooperative approach with other Madison area communities to fulfill their public education requirements.

8. **Next Meeting/Tentative Meeting Dates and Schedule/Agenda Items** The next TAC meeting will be on Wednesday, April 7th at 3:00 p.m. It was requested that a breakdown of topics be provided for future meetings.

9. **Adjournment** The meeting was adjourned at 4:55 p.m.

Ad Hoc Stormwater Utility Technical Advisory Committee Meeting Minutes
Wednesday, April 7, 2010 - 3:00 p.m.
Hall of Fame Room, City Hall, 381 E. Main St., Stoughton, WI.

Members Present: Director of Planning & Development Rodney Scheel, Carl Chenoweth, Finance Director/Treasurer Laurie Sullivan, Robert Barnett, Utilities Director Robert Kardasz, Peter Sveum, Dennis Barkenhagen
Absent and Excused: Mayor Jim Griffin, Street Superintendent Karl Manthe
Absent: Scott Sedlacek
Staff:
Press:
None
Guests:
Mark Shubak, Strand Associates, Inc.
Mayor-Elect Donna Olson

1. **Call to Order** The meeting was called to order at 3:00 p.m.

2. **Meeting Minutes of March 24, 2010** The meeting minutes were not included in the committee packets, so the March 24, 2010 minutes will be approved at the next meeting.

3. **Rescheduling of Future Meetings** Rodney Scheel noted that Item No. 6 indicates the revised schedule for the remaining three TAC meetings. The meetings will each be pushed back two weeks, with the next meeting now being scheduled for May 5, 2010.

4. **Review of Updated Projected Stormwater Utility Budget** Mark Shubak referred to the updated estimated 2009 Stormwater Administration and Operation and Maintenance Budget. This updated budget reflects removal of the yard waste site line item, which is already covered by an existing fee. Rodney Scheel stressed that these budget numbers are based on rough estimates and will need to be refined upon further development of a final budget. Bob Kardasz noted that he has estimated that if Stoughton Utilities were to handle the SWU billing on a monthly basis, it would need to charge the SWU back approximately $30,000 annually. Robert Barnett inquired what the Administration line item consists of. Rodney Scheel noted that this line item consists primarily of staff time. Mark Shubak reviewed the updated Stormwater CIP budget between 2011 and 2016. Rodney Scheel noted that the CIP has only been approved by the Council for 2010 (not shown) and 2011. Subsequent years may include additional projects and what it shown is likely subject to change. Mark Shubak reviewed the project annual payments for future stormwater CIP projects between 2011 and 2020 and also reviewed the total projected stormwater utility budget (2011 through 2020). Shubak noted that for the first year of the utility (2011) there would be an annual cost per ERU of $63.38 and that cost would gradually increase over subsequent years to include additional debt service for future stormwater CIP projects. Shubak noted that debt service for past stormwater CIP projects (2001 through 2010) is not included in this worksheet, but would likely continue to be paid for under the General Fund. The committee agreed that it would be good to show these costs under a separate General Fund category. In order to do this, we will need to estimate the total stormwater debt service

payments for projects from 2001 through 2010. Lori Sullivan indicated that she will be able to pull this information together prior to the next meeting.

5. **Review of ERU Size (square feet) Graph for Wisconsin Communities** Shubak reviewed a bar graph showing a distribution of the average square feet per ERU for the 53 Wisconsin communities that reported this information. It was noted that Stoughton's 3,105 square feet per ERU is in the "bell curve" or median of other Wisconsin communities.

6. **Discussion of Stormwater Utility Rate Structure** Shubak referred to a potential rate structure handout for the committee to consider. Shubak noted that this rate structure is based on using the Equivalent Runoff Unit (ERU) methodology, which bases the fee purely on the amount of impervious surface on a particular parcel. Shubak noted that other rate structure methodologies exist which also charge for pervious areas (City of Madison uses this), but this is fairly uncommon and more difficult and costly to administrate. The potential rate structure presented is based on a flat rate of 1.0 ERU for single family residential parcels. An alternative to this would be a tiered rate for single family residential parcels, which would reduce or increase the annual fee for smaller and larger lot sizes, respectively. This is typically done when there is wide distribution of lot sizes within a community, which is generally not the case in Stoughton. Shubak presented a chart that indicates that 85% of the parcels in the City fall between 1/8-acre and ½-acre. This data supports that implementing a tiered rate structure likely is not warranted.

7. **Review Possible Stormwater Utility Impacts on Selected Properties** Shubak referred to a series of tables and charts that indicated potential stormwater utility impacts (2011 budget projections) on land use classes and also specific properties. Peter Sveum voiced his concern what impact the additional stormwater utility fees would have on the business district, that it may create an "anti business sentiment". Carl Chenoweth agreed that impacts to the business district in this economy will be a big challenge to overcome. Shubak noted that one possibility to lessen the initial burden on stormwater utility rate payers, including the business district would be start the fees out at a lower, more palatable amount, thereby giving businesses and tax exempt properties more time deal with this additional costs, basically a phased approach. Carl indicated that he will be speaking with his fellow Council-members about this issue, but feels that this phased approach will need to be considered to get acceptance. This issue will be discussed further at our next meeting.

8. **Next Meeting/Tentative Meeting Dates and Schedule/Agenda Items** The next TAC meeting will be on Wednesday, May 5th at 3:00 p.m.

9. **Adjournment** The meeting was adjourned at 5:10 p.m.

Ad Hoc Stormwater Utility Technical Advisory Committee Meeting Minutes
Wednesday, May 5, 2010 - 3:00 p.m.
Hall of Fame Room, City Hall, 381 E. Main St., Stoughton, WI.

Members Present: Director of Planning & Development Rodney Scheel, Finance Director/Treasurer Laurie Sullivan, Street Superintendent Karl Manthe, Mayor Donna Olson, Alderman Tim Carter, Ken Wahlin, Utilities Director Robert Kardasz, Peter Sveum, Dennis Barkenhagen
Absent and Excused: Alderman Carl Chenoweth, Robert Barnett
Absent:
None
Staff:
Press:
None
Guests: Mark Shubak, Strand Associates, Inc., Steve Sletten

1. **Call to Order** The meeting was called to order at 3:00 p.m.

2. **Meeting Minutes of March 24, 2010 and April 7, 2010** Motion by Kardasz, seconded by Manthe to approve the minutes as presented. Motion carried unanimously.

3. **Review of Updated Projected Stormwater Utility Budget** Mark Shubak, Strand Associates, Inc. referred to updated exhibits which provided the projected stormwater utility budget, including debt service payments for past capital improvement projects. The proposed stormwater utility budget being proposed would not include debt service payments for past capital improvement projects, however does show the additional cost to the taxpayers to carry the existing debt on the tax roll. This portion of the budget would be paid for under the general fund. Peter Sveum noted that if this is done, it will not necessarily solve the City's budget shortfall issues.

4. **Review Updated Possible Stormwater Utility Impacts on Selected Properties** Several additional properties were analyzed based on requests made at the last TAC meeting. The additional parcels included Vennevoll Condominiums (consists of a combination of tax exempt and non-tax exempt parcels), Fosdal's Bakery (representative downtown business parcel), Ortega (Industrial Park), and Diversitech, Inc. (Business Park). It was noted that for Fosdal's Bakery, if the currently presented annual $63 per ERU fee were used, they would realize an $11 reduction from the current tax based system. Rodney Scheel noted that the four additional property owners analyzed are in additional to previously analyzed properties that include Stoughton Trailers and the Stoughton School District. Both of which will be significantly impacted by a stormwater utility fee. Ken Wahlin wanted clarification on how a stormwater utility fee can be directly tied to services provided. Shubak noted that the fundamental basis of a stormwater utility fee is typically based on impervious area. The assumption being that the amount of impervious area is directly proportionate to the amount of stormwater runoff that is generated and must be managed by the City.

5. **Potential Stormwater Utility Credit Policy** Shubak presented handouts outlining the three main components of a credit policy (Corrections, Adjustments, and

Credits). Shubak noted that credit policies typically are applied to the Operation and Maintenance and Capital and Debt Service components of the stormwater utility fee. The base administration component remains unchanged. Peter Sveum noted that he would be concerned with offering long term credits to single family residential property owners due to administration challenges and would rather see a one time rebate offered for things like rain barrels and rain gardens. Rodney Scheel noted that rain barrels and rain gardens would serve as conservation incentives. Shubak reviewed a potential credit policy for the group to consider. It consisted of a peak flow reduction (flood control) credit, stormwater quality credit, and a stormwater education credit. The cumulative maximum credit is 50% on O&M and Capital & Debt Service. No adjustment would be available for properties that directly discharge to townships lands and to the Yahara River. Dennis Barkenhagen is very much in favor of the education credit for schools. He mentioned that there is existing curriculum that focuses on conservation that could be expanded to include water resources. Rodney mentioned that he feels any property that has or will put in stormwater measures to meet minimum regulatory or ordinance requirements should not be eligible for credits. It should be clarified that these properties only be eligible for measures that go above and beyond what is required. Mark Shubak will bring a draft credit policy document for the group to review at the next TAC meeting.

6. **Frequently Asked Questions (FAQs)** Shubak referred to a handout containing several frequently asked questions that could be placed on the City's web-site or distributed via flyers or brochures. The group should review these FAQs and provide recommendations for changes and additions.

7. **Next Meeting/Tentative Meeting Dates and Schedule/Agenda Items** The next TAC meeting will be on Wednesday, May 26th at 3:00 p.m. Rodney Scheel noted that a progress report of the TAC's findings will be presented at the next Committee of the Whole meeting on Wednesday, May 19th at 6:00 p.m. Each of the TAC members were encouraged to attend to provide their input.

8. **Adjournment** The meeting was adjourned at 5:00 p.m.

Ad Hoc Stormwater Utility Technical Advisory Committee Meeting Minutes
Wednesday, May 26, 2010 - 2:30 p.m.
Hall of Fame Room, City Hall, 381 E. Main St., Stoughton, WI.

Members Present: Mayor Donna Olson, Director of Planning & Development Rodney Scheel, Street Superintendent Karl Manthe, Alderman Tim Carter, Robert Barnett, Bob Wahlin, Utilities Director Robert Kardasz, Peter Sveum, Dennis Barkenhagen
Absent and Excused:
Finance Director/Treasurer Laurie Sullivan, Alderman Carl Chenoweth
Absent: None
Staff:
Press: None
Guests: Mark Shubak, Strand Associates, Inc., Steve Sletten

1. **Call to Order** The meeting was called to order at 2:30 p.m.

2. **Meeting Minutes of May 5, 2010** Motion by Manthe, seconded by Kardasz to approve the minutes. Motion carried unanimously.

3. **Discuss Comments Raised at May 19, 2010 Committee of the Whole Meeting** The was a round-table discussion regarding the comments raised and the general outcome of the presentation made to the Committee of the Whole on May 19, 2010. Peter Sveum noted that it appeared the majority of the concerns centered around potential impacts to the business community. Bob Barnett stated that after the meeting, several alders indicated to him that a phased in approach would make implementation of the utility more palatable. Tim Carter felt the presentation was a success, stating that the Council needed to be apprised of what the TAC has been doing. Both Tim and Donna Olson also stated they are much in favor of the phased in approach. Karl Manthe felt that it is important to keep moving forward with the process.

4. **Review Draft Stormwater Utility Credit Policy Manual** Bob Wahlin stated that he feels the credit policy should be revised to not include the hard cap currently being proposed (50%). Bob felt that if a property owner is capable of providing measures that exceed the 50% cap, proper incentives should be in place to that would benefit both the property owner and the City. Generally speaking, the remainder of the members agreed with this change. The draft credit policy will be revised, accordingly. Shubak reviewed an example of how the credit policy would be applied assuming implementation of both a dry and wet detention basin. The group collectively agreed that because the education credit will be most difficult to quantify, a 25% credit cap for this portion of the credit policy is appropriate. The group generally agreed that credits for residential rate payers should be limited to a one time rebate rather than credits over time, primarily because the administration of annual credits would be cumbersome.

5. **Review Frequently Asked Questions to Add to City Website** Shubak reviewed the FAQs handouts with the group and stated that these FAQs could be posted on the City's website. It was also stated that if the City chooses to develop an informational brochure, many of these same FAQs could be incorporated. Bob Wahlin stated that the public education program for the utility should include specific

meetings with those business owners who will be most affected by the stormwater utility fees. Donna Olson was also very much in favor of this approach.

6. **Review Examples of Public Education Materials to Distribute** The group reviewed several examples of other tri-fold brochures that other communities have developed. Bob Kardasz mentioned that he felt it would be important to include some graphics and condense the amount of text in the brochure. Bob Barnett stated that will be important to stress the City's mandated permit requirements in the brochure. Peter Sveum especially likely the graphic included in St. Cloud's brochure and how it focuses on why there is a greater emphasis on stormwater. Tim Carter liked the Waukee, Iowa brochure that indicated the phased stormwater utility rates over time and that we should consider doing something similar.

7. **Next Meeting/Tentative Meeting Dates and Schedule/Agenda Items** The next and final TAC meeting will be on Wednesday, June 9th at 3:00 p.m. This meeting will center around reviewing the draft Feasibility Study Report, which will be distributed to each of the TAC members by June 2nd. It was noted that the Feasibility Study will ultimately be presented to the City Council at the June 22nd meeting.

8. **Adjournment** The meeting was adjourned at 4:45 p.m.