

REPORT TO CITY COUNCIL

FROM: Steven C. Carter, City Manager

DATE: August 19, 2011

SUBJECT: STORMWATER UTILITY FEE – SS 2011-054

A. Introduction: The purpose of this report is to obtain the following:

1. Obtain Council's input on the following plans for the stormwater utility fee:
 - Revenue Plan
 - Credit and Incentive Plan
 - Billing Plan
 - Public Outreach Plan
2. Obtain Council input on which expenditure plan to incorporate into the Stormwater Utility Fee Expenditure, Revenue, and Billing Plan, i.e., \$2.2M or \$3.2M Expenditure Plan.
3. Obtain Council direction to prepare a "draft" stormwater utility fee ordinance and to proceed with the Public Outreach Plan.

B. Recommended Action: Direct staff to do the following:

1. Incorporate Council's input on the Revenue, Credit and Incentive, Billing, and Public Outreach Plans, and finalize those plans;
2. Finalize the Stormwater Utility Fee Expenditure, Revenue, and Billing Plan based on a \$3.2M Expenditure Plan;
3. Prepare a "draft" Stormwater Utility Fee Ordinance;
4. Proceed with the Public Outreach Plan.

C. Prior Council Action:

- Exhibit A, attached to this report, provides a summary of prior City efforts from 1996 through 2002 concerning a stormwater utility fee.
- On October 27, 2009, Council discussed a report on financial options to address flooding in three neighborhoods, which the Finance Department had prepared at Council's request.
- March 23, 2010, Council Study Session, SS 2010-022, Council directed staff to proceed with the next implementation step for a stormwater utility fee.

- June 15, 2010, CB 2010-127, Council established a Stormwater Utility Fee Advisory Committee.
- June 15, 2010, CB 2010-128, Council appointed individuals to the Stormwater Utility Fee Advisory Committee.
- August 3, 2010, CB 2010-168, Council authorized the City Manager to execute a professional services agreement with AMEC Earth and Environmental, Inc., Indianapolis, Indiana, in an amount not to exceed \$153,184.
- March 29, 2011, Council Study Session, SS 2011-019, Council directed staff to proceed with the completion of the Stormwater Utility Fee Expenditure, Revenue, and Billing Plan.

D. Summary:

- Currently, there is no funding available in the Stormwater Fund for additional capital projects. Last year the City committed all previously uncommitted resources in the fund to the Boneyard Creek Second Street Reach, Washington Street East, and John Street Drainage Improvement Projects.
- Council established development of a plan to fund stormwater drainage improvements as a 2009-2011 City Council goal.
- March 2010, Council directed staff to prepare an Expenditure, Revenue, and Billing Plan for a stormwater utility fee.
- June 2010, Council established the Stormwater Utility Fee Advisory Committee and appointed individuals to the committee. The purpose of the committee was to provide citizen input and review for the stormwater utility fee Expenditure, Revenue, and Billing Plan.
- Expenditure Plans were developed for the stormwater utility fee. The plans would fund stormwater expenditures that are currently funded primarily with sales and property taxes. If those activities are funded in the future by the stormwater utility fee, then sales and property taxes currently funding these activities would be available to fund other needs. Staff has indicated these available funds over a 10-year period could fund on a “pay as you go” basis the Washington Street West Drainage Improvements, Phinney Branch Channel Improvements (Windsor to Crescent), Boneyard Creek Improvements (north of University Avenue).
- According to the Revenue Plan, single family and duplex properties (18,367 parcels) would pay a flat monthly fee. All other properties (4,379 parcels) would pay based on the amount of impervious area on the property.
- A Credit and Incentive Plan was developed for property owners that install stormwater management activities that provide either a reduction in peak discharge or a reduction in runoff volume or a water quality benefit. Single family and duplex properties could be eligible for a total of \$1,025 of incentives. Non-single family/duplex properties could be eligible for 40% credit on monthly stormwater utility fees.
- The Billing Plan would utilize the billing services of the Urbana and Champaign Sanitary District.
- A Public Outreach Plan has been developed for the stormwater utility fee. The purpose of the plan is to provide information to property owners and to obtain input on the fee.
- The next steps for the stormwater utility fee are:

- Incorporate Council input and finalize the plans for Expenditure, Revenue, Billing, Credits/Incentives, and Public Outreach.
- Prepare a “draft” Stormwater Utility Fee Ordinance.
- Proceed with the Public Outreach Plan.

E. Background:

1. Stormwater Funds Totally Committed. Due to the 2008 and 2009 record rainfalls and the neighborhood flooding those rainfalls caused, Council expressed an interest in completing more capital drainage improvement projects. The improvement projects would address neighborhood flooding problems. Currently, there is no funding available in the Stormwater Fund for additional capital projects. Last year the City committed all previously-uncommitted resources in the fund to the Boneyard Creek Second Street Reach Project, Washington Street East and John Street Drainage Improvement Projects. The following information summarizes the Stormwater Management Fund’s revenues and programs for a typical year:

| <u>Revenues</u> | | <u>Expenditures</u> | |
|-----------------------------|----------------------|---------------------|----------------------|
| ¼ Cent Sales Tax | \$2.9 million | Operating Budget | \$1.0 million |
| Property Tax | \$1.3 million | Recurring Projects | \$1.8 million |
| General Fund Transfer | \$0.7 million | Debt Service | \$2.7 million |
| Build America Bond Payments | <u>\$0.4 million</u> | | |
| Other | <u>\$0.2 million</u> | | |
| Total Revenues | <u>\$5.5 million</u> | Total Expenditures | <u>\$5.5 million</u> |

Current recurring revenue in this fund is about \$5.5 million per year from several sources but primarily a one-quarter percent sales tax that the City levies under its Home-rule authority. The “Build America Bonds Payments” in the chart above refers to payments from the Federal Government, authorized in the 2009 economic stimulus program, which pays 35% of the interest expense on certain state and local government bonds issued in 2009 and 2010. The City’s 2010 bonds were issued as Build America Bonds and the payments reduce the effective rate of interest paid by the City. The payments contributed to the City’s ability to expand the debt issuance to include projects beyond the Boneyard Second Street Basin.

Stormwater Management Fund expenditures fund the following activities, which use all available funds:

- Operations, which includes activities such as water quality management (pursuant to Federal requirements) and response to flooding - \$1.1 million annually.
- Recurring projects include maintenance of storm sewers and channels and rehabilitation of storm sewers and related facilities such as catch basins - \$1.8 million annually.
- Debt Service: The City typically finances large projects through bond issues with debt service payments for up to about 20 years. Currently the City pays debt service on two bond series issued in the late 1990’s Boneyard Creek improvements (the Healy Street Detention Basin and Campustown Channel Improvements) and a bond series issued in 2010 to finance the Second Street Basin, East Washington, and John Street drainage

improvement projects. That bond issue exhausted all uncommitted resources in the Stormwater Management Fund for the next 20 years – about \$2.7 million annually, of which about \$400,000 is reimbursed by Federal Build America Bond payments.

2. Stormwater Utility Fee. City Council established development of a plan to fund stormwater drainage improvements as a 2009-2011 City Council goal. A stormwater utility fee is one method of providing this funding.

Stormwater runoff can be managed as a utility and billed as a fee. The fee is based on the concept that every property contributes runoff and should support the operation, maintenance, and rehabilitation of the stormwater transport system. The amount of support is based on the amount of runoff the property contributes to the stormwater drainage system.

The runoff from a property is directly proportional to the amount of impervious area that has been constructed on a property. Impervious areas include roofs, sidewalks, driveways, parking lots, and any other surfaces that will not allow rainfall to soak into the ground.

A stormwater utility fee would incorporate a credit and/or incentive program. The program is designed to encourage property owners to construct and maintain improvements to their properties to reduce and treat the stormwater from their property. In return, the property owners receive either a one-time (incentive) or recurring (credit) reduction in their stormwater utility fee.

Over 1,000 communities across the nation have adopted a stormwater fee.

3. Benefits. A stormwater utility fee could provide several benefits.

a. Improve Stormwater Management. The stormwater utility fee could be structured to provide additional resources for stormwater management.

Additional resources could mean more dollars to complete unfunded maintenance, rehabilitation and capital projects. Staff estimates there are over \$80 million of unfunded stormwater capital projects.

b. Equitable Means to Pay for Stormwater Management. A stormwater utility fee can be an equitable means to pay for stormwater management. The fee is based on the burden a property places on the stormwater transport system. The more burden (runoff), the higher the property owner's utility fee.

A stormwater utility fee is also equitable because it provides a means for a property owner to reduce his or her fee. If a property owner is willing to install facilities on the property to reduce runoff or improve stormwater quality, thereby reducing their burden on the stormwater system, a credit is given, lowering the property owner's stormwater utility fee.

c. Stable Revenue Source. Approximately 60% of the Stormwater Management Fund's current resources come from the 0.25% sales tax. Sales tax revenue fluctuates with the economy. However, some expenditures in the fund such as debt retirement for capital

projects or stormwater quality expenditures required by the City's NPDES permit are fixed. When sales tax revenue in the fund is flat or down, the fund is balanced by reducing maintenance and rehabilitation expenditures.

A stormwater utility fee would be a more stable revenue source. Once the fee is established there would be very little fluctuations in the annual revenue.

4. Stormwater Utility Fee Efforts. City Council has considered a stormwater utility fee before. Exhibit A summarizes City efforts concerning a stormwater utility fee from 1996 through 2002.

At the March 23, 2010, Council Study Session, Council directed staff to prepare an Expenditure, Revenue, and Billing Plan for a City stormwater utility fee. Generally, the plan would identify stormwater expenditures that could be supported by the fee, develop the structure (rates) for the fee, and determine how the fee would be billed. Staff indicated this plan would help Council in reaching a decision on whether or not to implement a stormwater utility fee.

At the June 15, 2010, City Council meeting, Council established the Stormwater Utility Fee Advisory Committee and appointed individuals to the committee. A Stormwater Utility Fee Advisory Committee provided an opportunity for both technical and citizen input and review for the stormwater utility fee. The committee consisted of 14 members from the community representing a variety of interests. Exhibit B contains the ordinances; 1) establishing and defining the duties and responsibilities of the Stormwater Utility Fee Advisory Committee, and 2) appointing the individuals to the committee.

A Stormwater Utility Fee Technical Committee was also formed. It consisted of City staff from Finance, Planning, and Information Technology Departments, plus a representative from the development community and the Champaign County Chamber of Commerce.

At the August 3, 2010, City Council meeting, Council authorized the City Manager to execute an engineering agreement with AMEC Earth and Environmental, Inc., Indianapolis, Indiana, in an amount not to exceed \$153,184. The purpose of the agreement was to have AMEC assist staff with the preparation of the Expenditure, Revenue, and Billing Plan. Staff has limited experience in the preparation of a stormwater utility fee plan. AMEC had extensive experience with this type of plan. AMEC help assured the utility fee plan was completed in a timely fashion.

The Stormwater Utility Fee Advisory and Technical Committee had their first meeting on September 13, 2010. The committee met eleven times, concluding their work at the July 7, 2011 meeting. A letter from the advisory committee chair is included in Exhibit C.

5. Expenditure Plan. At the March 29, 2011, Council Study Session, Council reviewed the \$2.2M and \$3.2M Expenditure Plans for the stormwater utility fee. The plans are summarized in Table 1.

| Table 1 EXPENDITURE PLANS | | |
|--|-------------------------------|-------------------------------|
| | \$2.2M Expenditure Plan | \$3.2M Expenditure Plan |
| STORMWATER EXPENDITURES | | |
| 1. Operation, Maintenance, and Rehabilitation (City Crews) | \$ 694,000 | \$ 694,000 |
| 2. Storm Sewer Cleaning and Televising (Contractual) | \$ 456,000 | \$ 466,000 |
| 3. Storm Sewer Pipe and Manhole Repair (Contractual) | \$ 506,000 | \$ 506,000 |
| 4. Channel Maintenance | | \$ 339,000 |
| 5. JULIE | | \$ 47,000 |
| 6. Stormwater Quality (NPDES Permit Compliance) | | \$ 188,000 |
| 7. Service Requests (Private Property Drainage Problems) | | \$ 131,000 |
| 8. Master Plan Subdivision Detention Basins | | \$ 150,000 |
| ADMINISTRATIVE EXPENDITURES | | |
| 1. Utility Fee Implementation Cost Recovery | \$ 100,000 | \$ 100,000 |
| 2. Billing Costs | \$ 140,200 | \$ 170,200 |
| 3. Administrative Fees | \$ 150,000 | \$ 200,000 |
| 4. Utility Fee Credits and Incentives | \$ 90,000 | \$ 116,000 |
| 5. Collection Fees, Uncollectible, Delinquencies | \$ 63,800 | \$ 92,800 |
| TOTAL | \$ 2,200,000 | \$ 3,200,000 |
| | \$ 1,656,000 | \$ 2,521,000 |

Exhibit D summarizes the information from the March 29 Study Session Report to Council explaining how these expenditure plans were developed by the Stormwater Utility Fee Advisory Committee. The exhibit also provides a short description explaining each expenditure line item in Table 1.

All Stormwater Expenditures listed in Table 1 for the \$2.2M Expenditure Plan and all but one of the expenditures (Master Plan Subdivision Basins) in the \$3.2M plan are currently funded by sales and property taxes. If those activities are funded in the future by a stormwater utility fee, then sales and property taxes currently funding these activities would be available to fund other needs. The funds available for other uses are highlighted at the bottom of Table 1.

Per Council input at the March 29, 2001, Study Session, Council wants these available dollars to be used for stormwater capital projects. Listed below are capital projects that could be funded over the next 10 years on a “pay as you go” basis by the \$2.2M Expenditure Plan.

- Washington Street West Drainage Improvements - \$8,700,000
- Phinney Brach Channel Improvements (Windsor to Crescent) - \$4,300,000
- Boneyard Creek Improvements (Phase 3) - \$7,300,000
- Kaskaskia Watershed Master Plan - \$200,000

The \$3.2M Expenditure Plan could also fund these capital projects listed above, but fund them quicker and have over \$6M available in the 10-year period to fund additional capital projects.

The projects listed above are not listed in any prioritized order and are illustrative only. Council would select the projects to be funded.

6. Revenue Plan. Options for the stormwater utility fee Revenue Plan for the \$2.2M and \$3.2M Expenditure Plans are summarized in Table 2.

| Table 2 REVENUE PLAN | | |
|--|---------------------------------------|--|
| Option A – Single Family/Duplex – Flat Fee | | |
| <u>Expenditure Plan</u> | <u>Monthly</u> | <u>Yearly</u> |
| \$2.2M | \$ 3.82 | \$ 45.84 |
| \$3.2M | \$ 5.24 | \$ 62.88 |
| Option B – Single Family/Duplex – Tiered/Flat Fee | | |
| \$2.2M | | |
| Tier 1 – 0 to 6,000 ft ² | \$ 3.58 | \$ 42.96 |
| Tier 2 – 6,001 to 8,000 ft ² | \$ 7.68 | \$ 92.16 |
| Tier 3 – Over 8,000 ft ² | \$ 9.88 | \$118.56 |
| \$3.2M | | |
| Tier 1 – 0 to 6,000 ft ² | \$ 4.94 | \$ 59.29 |
| Tier 2 – 6,001 to 8,000 ft ² | \$10.55 | \$126.60 |
| Tier 3 – Over 8,000 ft ² | \$13.64 | \$163.68 |
| All Other (Demand) | | |
| \$2.2M | \$3.82/3,478 sf of impervious area | \$45.84/3,478 sf of impervious area |
| \$3.2M | \$5.24/3,478 sf of impervious area | \$62.88/3,478 sf of impervious area |

For Option A, single family and duplex properties would pay a flat monthly fee. There are approximately 22,746 parcels in the City. There are approximately 18,367 (81%) single family or duplex parcels. The residential and duplex flat monthly fee for the \$2.2M and \$3.2M Expenditure Plans would be \$3.82 and \$5.24 per month, respectively, or \$45.84 and \$62.88 per year.

For Option B, single family and duplex properties would pay a flat monthly fee based on tiers. Properties would be placed in a tier based on the amount of impervious area on the property. When compared to Option A, Option B (tiered) adds an additional level of complexity to the billing system that would need to be managed and updated by staff.

The stormwater utility fee for non-residential properties would be based on impervious area. The impervious area would be estimated from aerial photographs and the rate for the \$2.2M and \$3.2M Expenditure Plans would be \$3.82 per month per 3,478 ft² of impervious area and \$5.24 per month per 3,478 ft² of impervious area, respectively.

The 3,478 ft² of impervious area is the average impervious area on a single family property. The impervious area was measured on 116 single family properties. The single family properties were chosen randomly throughout all neighborhoods in the City. The sampling included single family properties with 9,700 ft² of impervious area and single family homes with less than 2,000 ft² of impervious area. The median was 3,102 ft², and the mean was 3,478 ft².

It's estimated the City has approximately 185M ft² of impervious area. This does not include City streets or sidewalks in the right-of-way. To be conservative, the monthly and annual rates

for the \$2.2M and \$3.2M Expenditure Plans were based on 167M ft² to 176M ft² range of impervious area. These rates and impervious areas will be adjusted when the billing database for the stormwater utility fee is developed. In all likelihood, as that database is developed more fully, the rates for both Expenditure Plans will go down.

Sample calculations for non-residential stormwater utility fee bill are illustrated in Exhibit E. Staff has the capability of calculating the stormwater utility fee for any non-residential property based on aerial photography and the recommended Revenue Plan.

Exhibit F summarizes rate structures for other communities in Illinois that have a stormwater utility fee. Even though Champaign and Urbana have not adopted a fee, their proposed rates were added to the table for comparison purposes.

One member of the Stormwater Utility Fee Advisory Committee suggested the City create a subsidy program in the Stormwater Fund to help qualifying fixed-income property owners to pay for their stormwater utility fee monthly bill. Staff will evaluate this suggestion further and discuss the results of this evaluation with Council in the next implementation step for the stormwater utility fee.

7. Credit and Incentive Plan. The Credit and Incentive Plan for the stormwater utility fee is summarized in Table 3 and described in detail in Exhibit G.

| Table 3 CREDIT & INCENTIVE PLAN | | | |
|------------------------------------|-----------------------------------|--------------------|--|
| Credit/Incentive | Single Family & Duplex Properties | "Other" Properties | Examples |
| 1. Rain Barrel | \$25 – Incentive | \$25 – Incentive | - |
| 2. Rain Garden | \$250 – Incentive | \$250 – Incentive | - |
| 3. Rate Reduction | \$250 – Incentive | 15% – Credit | Detention Basin |
| 4. Volume Reduction | \$250 – Incentive | 15% – Credit | Cistern, permeable pavement, green roofs |
| 5. Water Quality | \$250 – Incentive | 10% – Credit | Rain Garden, Bioswales |
| 6. NPDES | N/A | 5% – Credit | - |
| 7. Private Detention Maintenance | 15% – Credit | 15% – Credit | - |
| 8. Direct Discharge | N/A | 50% – Credit | - |
| 9. Education | N/A | \$5 per Student | - |

The goals for the plan were:

- Per Council comments at the March 29, 2011, Study Session, use the Credit and Incentive Plan to encourage property owners to incorporate sustainable stormwater management practices on their property.
- Develop the Credit and Incentive Plan in a way that makes it easy for the property owner to use and does not overly complicate the stormwater utility fee billing system.

Generally, the plan provides incentives for single family and duplex properties and credits for the non-residential properties. Credits are recurring discounts against stormwater utility user fees that are granted because the ratepayer installed and/or implemented on their property a qualifying stormwater management activity. Incentives are one-time disbursements that are granted to the ratepayer for doing the same. Qualifying stormwater management activities that

are eligible for either credits or incentives must provide either a reduction in peak discharge, a reduction in stormwater runoff volume, a water quality benefit, or some combination of the three.

- a. **Single Family and Duplex Properties.** The City would provide an incentive per property of \$25 for the purchase of a 55-gallon or larger rain barrel and \$250 for the installation of a minimum 100 ft² rain garden. Additionally, properties would be eligible for incentives installing and/or implementing activities that provide either a reduction in peak discharge, a reduction in stormwater runoff volume, a water quality benefit, or some combination of the three. The property owner would be required to submit their plan to the City for review and approval. The amount of the incentive would be 25% of the construction cost for the activity up to a maximum incentive of \$250. The City would pay the incentive to the property owner after construction has been completed and the installation inspected and approved by the City.

These incentives could be earned individually, i.e., one \$250 incentive for installing a water quality management activity or combined, i.e. installing one management activity that accomplishes either a rate reduction, volume reduction, or water quality improvement.

In total, single family and duplex properties could earn \$1,025 of credits, which based on the proposed rates for the \$3.2M Expenditure Plan would be equivalent to over 16 years of stormwater utility fees. An example of this would be a single family home that had 3,500 ft² of impervious that built 700 ft² of rain garden, which also included a rain barrel. Assuming the improvements captures 100% of the runoff from the 3,500 ft² of impervious surfaces, the property could be eligible for \$1,025 of credits. Staff estimates the material and labor for 700 ft² of rain garden would be \$4,000.

- b. **Non-Residential Properties.** For properties other than single family and duplex, there would be both a credit and an incentive program. For installing a stormwater management activity, a property owner could choose to participate in either the City's credit or incentive program, but not both. There would be four categories of credit available to the non-residential property owner.
 - *Rate Reduction (Maximum 15%)* – Properties that installed a stormwater rate reduction device which is not required to be installed by City stormwater management regulations would be eligible for a 15% rate reduction credit. An example of this could be a commercial property that was developed prior to the City's stormwater management regulations. A stormwater detention basin could be constructed on the property resulting in a 15% stormwater utility fee credit.
 - *Volume Reduction (Maximum 15%)* – Properties that installed a stormwater management control that captured the first inch of rainfall from their impervious surfaces would be eligible for a 15% volume reduction credit. The stormwater control would need to be drained in 72 hours in order to be ready for the next storm. Examples of stormwater controls that could qualify for volume reductions are cisterns, permeable pavement, green roofs, and rain gardens.

- *Water Quality (Maximum 10%)* – Properties that installed stormwater management controls that are designed to remove 75% of the total suspended solids from the runoff from impervious surfaces would be eligible for a 10% water quality credit. Examples of stormwater controls that could qualify for water quality credits are rain gardens, vegetated swales, and bioretention.
- *Direct Discharge (Maximum 50%)* – Properties that discharge directly to stormwater facilities that are not maintained by the City would be eligible for a 50% direct discharge credit. Examples of this include Parkland College and the University of Illinois. Stormwater runoff from portions of those campuses located within the City limits do not drain to storm sewers or stormwater channels that are maintained by the City.

c. **Other Credits.** Properties whose stormwater drains to private detention basins that are maintained to City standards would be eligible for a 15% credit. Properties required to have NPDES stormwater permits would be eligible for a 5% credit. State accredited K-12 schools that provide a water quality-based education curriculum would be eligible for a credit. The credit would be \$5 per student enrolled in the curriculum. The City would need to approve the curriculum.

To qualify for a rate reduction, volume reduction, or water quality credit, the property owner would need to submit a plan to the City for review and approval. A plan would not be required for a direct discharge credit. The property owner’s plan must be prepared and certified by a professional qualified to submit stormwater management plans. A professional engineer registered in the State of Illinois would satisfy this requirement. The City would apply the credit after the approved plan has been constructed and inspected by the City. Every five years, the City would consider renewal of the credit upon receipt of a report from the property owner prepared by a certified professional indicating the stormwater management practice is functioning as designed and is being maintained properly. Credit renewal would take place after the City has reviewed and approved the report.

Exhibit H summarizes the stormwater utility fee credit and incentive programs from other Illinois communities. Champaign and Urbana were added to the table for comparison purposes.

Staff has been approached by property owners and businesses about installing stormwater management controls now that could be eligible for stormwater utility fee credits and incentives later. Staff has and will continue to encourage property owners to implement stormwater management practices that reduce stormwater rates and volumes and improve water quality and intends to “grandfather” these into the stormwater utility fee credit and incentive program when it is established. Staff will share the details of “grandfathering” with Council at the time the credit and incentive program is finalized.

8. Billing Plan. The stormwater utility fee Billing Plan for the \$2.2M and \$3.2M Expenditure Plans are summarized in Table 4.

| Table 4 BILLING PLAN | | | | |
|---------------------------------------|------------------------------------|-------------------|------------------------------------|-------------------|
| UCSD Billing (Recommended) | \$2.2M Expenditure Plan | | \$3.2M Expenditure Plan | |
| | One-Time | Recurring | One-Time | Recurring |
| 1. UCSD Billing Fee | | \$ 66,000 | | \$ 96,000 |
| 2. Labor | | | | |
| * Clerical – Temporary (Finance) | \$ 22,000 | | \$ 22,000 | |
| * Clerical – Temporary (Public Works) | \$ 22,000 | | \$ 22,000 | |
| * Engineering Technician 2 (PWD) | | \$ 73,800 | | \$ 73,800 |
| * Office Equipment and Computers | \$ 7,000 | \$ 400 | \$ 7,000 | \$ 400 |
| TOTAL – ALTERNATIVE A – UCSD | \$ 51,000 | \$ 140,000 | \$ 51,000 | \$ 170,200 |

The recommended Billing Plan for the City’s stormwater utility fee would utilize the billing services of the Urbana and Champaign Sanitary District (UCSD). UCSD currently bills the City’s sanitary sewer fee. UCSD also provides sewer billing services for the City of Urbana and the Village of Savoy.

UCSD would add a line to its bill, labeled “City of Champaign Stormwater Utility Fee” and indicate the billing units, rate, and total amount due. UCSD would be responsible for preparing the bills, sending them, and collecting the revenue. UCSD billing staff and the bill would have contact information directing customers with questions concerning the stormwater utility fee to the City for answers.

Table 4 illustrates the costs for the recommended Billing Plan utilizing UCSD services. It was assumed that UCSD billing fee for the stormwater utility fee would be 3% of revenue billed. It was also assumed the collection rate would be 97.1% of revenue billed. Both assumptions are consistent with current billing fees and collection rates for the sanitary sewer fee.

One-time costs for the Billing Plan would be \$51,000. Staff estimates that recurring costs would range from \$140,200 to \$170,200 depending on whether the City bills \$2.2M or \$3.2M of revenue annually. Additional city staff would be needed for the stormwater utility fee billing. Cost for the additional staff is summarized in Table 4.

It was assumed that one temporary staff member would be added for six month to both the Finance and Public Works Departments. The temporary worker would be responsible for answering customer service questions. It was assumed there would be a large volume of calls for the first six months. After six months, the temporary staff member could be eliminated and existing staff in Public Works and Finance could keep up with the volume of customer service calls.

It was also assumed that one permanent engineering technician would be added to the Public Works staff. This individual would be responsible for evaluating, investigating, and responding to customer service questions concerning impervious area. The stormwater utility fee for non-residential properties would be based on the amount of impervious area. For the billing system,

the impervious area on a property would be estimated from aerial photographs. These estimates could be wrong. The engineering technician would also be responsible for reviewing applications, plans, and inspecting installations for stormwater utility fee credits and incentives.

In addition to UCSD, other billing alternatives were investigated for the stormwater utility fee. Staff evaluated “in-house” billing where the City would prepare the bill, send it, and collect the revenue. Table 5 summarizes the cost for “in-house” billing. One-time and recurring costs for this alternative are significantly higher than the UCSD alternative.

| City “In-House” Billing | \$2.2M Expenditure Plan | | \$3.2M Expenditure Plan | |
|--|------------------------------------|-------------------|------------------------------------|-------------------|
| | One-Time | Recurring | One-Time | Recurring |
| 1. Billing Expenses | | | | |
| * Software and Hardware(Includes startup & training) | \$ 100,000 | \$ 20,000 | \$ 100,000 | \$ 20,000 |
| * Assistance w/ RFP for Software | \$ 10,000 | | \$ 10,000 | |
| * Billing Supplies | | \$ 70,000 | | \$ 70,000 |
| * Software Support | | \$ 20,000 | | \$ 20,000 |
| * Miscellaneous Equipment | \$ 5,000 | | \$ 5,000 | |
| 2. Labor | | | | |
| * Clerical – Temporary (Finance) | \$ 22,000 | | \$ 22,000 | |
| * Clerical – Temporary (Public Works) | \$ 22,000 | | \$ 22,000 | |
| * Engineering Technician 2 | | \$ 73,800 | | \$ 73,800 |
| * Account Clerk 2 Full-time (Finance) | | \$ 51,100 | | \$ 51,100 |
| * Account Clerk 2 Part-time (Finance) | | \$ 23,700 | | \$ 23,700 |
| * Office Equipment and Computers | \$ 15,000 | \$ 1,200 | \$ 15,000 | \$ 1,200 |
| TOTAL – ALTERNATIVE B - CITY | \$ 174,000 | \$ 259,800 | \$ 174,000 | \$ 259,800 |

Staff also contacted Ameren, Illinois American Water Company (IAWC), and the County as possible billing alternatives. Ameren was not interested. The County was possibly interested if the City was interested in sending only an annual bill for the stormwater utility fee (staff judged annually billing to be impractical since the amount for an annual stormwater utility fee bill would be very high for some properties). IAWC was interested but not at this time. IAWC is undergoing a billing software change that will not be completed for two to three years. IAWC would not consider billing for a stormwater utility fee until the software conversion has been completed.

Finally, staff made inquiries to private companies that are in the business of billing electricity, gas, and water for municipalities. All indicated there are an insufficient number of accounts in Champaign and Urbana for them to be competitive with other alternatives for the City of Champaign.

9. Public Outreach Plan. As outlined below, there would be two parts to this plan. Staff would complete Part A in one month and Part B over the next five months.

- a. Website – The City’s website would be updated. Currently, the Public Works page on the City’s website includes frequently asked question on the stormwater utility fee, surveys, and information on the Stormwater Utility Fee Advisory Committee.

Information on the stormwater utility fee Revenue, Credit/Incentive, and Billing Plans need to be added.

- b. Outreach – Staff would meet with the groups listed below. The goal of these meetings would be to provide information to property owners on the stormwater utility fee (what it is, its impact, and its benefits) and to obtain input on the fee. Staff will share with Council Members the schedule for the meetings. Council Members are welcome to attend the meetings.
- University of Illinois – The University would probably be the largest impacted property owner. The University was represented on the Stormwater Utility Fee Advisory Committee. Champaign and Urbana have met twice jointly with the University to discuss the fee. More meetings are planned.
 - Unit 4, Park District, Parkland College, John Street, Washington Street East and West Steering Committees – All of these groups were represented on the advisory committee. There may also be neighborhood meetings with John Street, Washington Street East and West.
 - Illinois American Water Corporation (IAWC) and UCSD
 - Chamber of Commerce, Center City Partnership, and Apartment Owners Association
 - Developers’ Forum
 - Environmental Groups (Prairie Rivers)
 - Homeowners’ Associations
 - Neighborhood Groups (Garden Hills, Beardsley Park, etc.)
 - Churches and church organizations
 - Large Property Owners – The plan is to meet with owners/managers of large developed tracts of properties with significant impervious areas (Market Place Mall, properties on North Prospect, Country Fair, etc.)

10. Next Steps.

- Incorporate Council input on the Revenue, Credit and Incentive, Billing, and Public Outreach Plans, and finalize those plans.
- Finalize the Stormwater Utility Fee Expenditure, Revenue, and Billing Plan based on a \$3.2M Expenditure Plan for the stormwater utility fee. Staff recommends the \$3.2M plan. The \$3.2M Expenditure Plan maximizes the amount of funds available for additional stormwater capital improvement projects. The \$3.2M Expenditure Plan also falls within the desired monthly rate for the stormwater utility fee for a single family property owner. The goal was a monthly rate of approximately \$5 per month. The rate for most single family properties for the \$3.2M Expenditure Plan is estimated in the range of \$4.94 to \$5.24 per month.
- Prepare a “draft” of the Stormwater Utility Fee Ordinance. AMEC Earth and Environmental, Inc., Indianapolis, Indiana would assist staff in the preparation of the “draft” ordinance. AMEC is the City’s consultant on the stormwater utility fee. AMEC assisted City staff in the preparation of the Stormwater Utility Fee Expenditure, Revenue, and Billing Plan. AMEC would prepare the first draft of the ordinance. City staff would then take AMEC’s draft and finalize the document. AMEC has expertise in preparing stormwater

utility fee ordinances and their assistance would allow City staff to complete the “draft” ordinance in a timely fashion. Staff estimates the cost of AMEC’s scope of work for preparation of the “draft” ordinance will be less than \$ 5,000.

- Proceed with the Public Outreach Plan for the stormwater utility fee.

F. Alternatives:

1. Direct staff to do the following:

- Incorporate Council’s input on the Revenue, Credit and Incentive, Billing, and Public Outreach Plans, and finalize those plans;
- Finalize the Stormwater Utility Fee Expenditure, Revenue, and Billing Plan based on a \$3.2M Expenditure Plan;
- Prepare a “draft” Stormwater Utility Fee Ordinance;
- Proceed with the Public Outreach Plan.

2. Do not direct staff to proceed with the items listed in Alternative 1 and provide further direction to staff.

G. Discussion of Alternatives:

Alternative 1 would incorporate Council’s input and finalize the Stormwater Utility Fee Expenditure, Revenue, and Billing Plan based on a \$3.2M Expenditure Plan. Alternative 1 would also direct staff to proceed with preparing a “draft” stormwater utility fee ordinance and to proceed with the Public Outreach Plan.

a. Advantages

- Continues progress toward the implementation of a stormwater utility fee.
- Could provide additional resources so more unfunded stormwater capital projects could be completed.
- Could provide a more equitable means to pay for stormwater management expenses.
- Could provide a stable revenue source for stormwater management activities.

b. Disadvantages

- Could shift more of the cost for stormwater management to property owners who are currently paying less.
- An additional fee that property owners will have to pay could be unpopular with some property owners.
- Implementation of a stormwater utility fee has a significant implementation cost. The cost to implement a complete stormwater utility fee is estimated at approximately \$500,000.

Alternative 2 would not direct staff to finalize the Expenditure, Revenue, and Billing Plan nor to proceed with the Public Outreach Plan or preparation of a “draft” Stormwater Utility Fee Ordinance.

a. Advantages

- Does not require the expenditure of \$500,000 and those resources could be used for other stormwater management activities.
- Provides an opportunity for Council input.
- Depending on Council action, there could be other advantages.

b. Disadvantages

- Difficult to identify disadvantages without knowing what Council direction could be.

H. Community Input: There have been several study sessions addressing drainage issues. Citizens at several of these meetings have voiced support for enacting a stormwater utility fee to help pay for needed drainage projects.

Additionally, there have been numerous neighborhood and steering committee meetings to discuss local flooding and drainage problems. Questions about a stormwater utility fee have been asked at several of the meetings. Public Works staff has discussed and provided steering committee members with stormwater utility fee information.

The John Street, Washington Street East and West Steering Committees were provided with a copy of this report. The public will have an opportunity to provide input on this issue when the report is presented to Council at the Study Session.

Council established a Stormwater Utility Fee Advisory and Technical Committee. The committees met monthly from September 2010 through July 2011. The packets for each committee meeting and minutes from each meeting are available at the City’s website at: www.ci.champaign.il.us/swufac. Committee meetings were televised on CGTV. Committee meetings were recorded and are available for viewing at: www.ci.champaign.il.us/cgtv (search keyword is “storm”).

Staff has developed a Public Outreach Program for the stormwater utility fee. The outreach program would be completed over the next five months. Also, there will be additional Council Study Sessions on the stormwater utility fee. The public would have an opportunity to provide input at these study sessions.

I. Budget Impact: Preparation of this Report to Council had no budget impact. The recommended alternative to proceed with the completion of the Stormwater Utility Fee Expenditure, Revenue, and Billing Plan also would have no additional budget impact since all funds needed to complete this plan are already budgeted.

To implement a stormwater utility fee, staff estimated the total cost at \$500,000. Staff feels this estimated cost is still a valid representation of what it could cost the City to implement a stormwater utility fee.

The City contracted for \$150,000 with AMEC to assist with preparation of the Expenditure, Revenue, and Billing Plan. This \$150,000 is part of the \$500,000 estimate.

AMEC would also assist staff with the preparation of the “draft” Stormwater Utility Fee Ordinance. Staff estimates the cost for AMEC’s help with this task at less than \$5,000. All funds needed for the stormwater utility fee implementation were budgeted in either the FY11 or FY12 budgets.

Sufficient resources have been budgeted in the Stormwater Fund to implement the stormwater utility fee at the estimated cost of \$500,000. The stormwater utility fee rates would be established at a level to pay back the Stormwater Fund for all costs associated with developing and implementing the stormwater utility fee.

J. Staffing Impact: It took approximately 150 staff hours to prepare this Report to Council. Sufficient staff resources are currently available in the Public Works Department FY12 budget to complete the Stormwater Utility Fee Expenditure, Revenue, and Billing Plan, the Public Outreach Program, and the “draft” Stormwater Utility Fee Ordinance. If Council decides to implement a stormwater utility fee, staff estimates a temporary Project Specialist would be needed at 10 hours per week in FY13 to assist the Public Works Director and other existing staff to implement the fee. Additional temporary staffing (six months) and one full-time engineering technician would be needed in FY14.

Prepared by:

Dennis Schmidt, P.E.
Public Works Director

Attachments: Exhibit A: Stormwater Utility Fee Prior Efforts (1996 through 2002)
Exhibit B: Resolutions Establishing a Stormwater Utility Fee Advisory Committee and Appointing Members to the Committee
Exhibit C: Stormwater Utility Fee Advisory Committee - Letter
Exhibit D: Stormwater Utility Fee Expenditure Plans
Exhibit E: Stormwater Utility Fee Sample Calculations (Non-Residential)
Exhibit F: Stormwater Utility Fee Rate Structures – Other Illinois Communities
Exhibit G: Stormwater Utility Fee Credit and Incentive Program
Exhibit H: Stormwater Utility Fee Credit and Incentive Programs – Other Illinois Communities

EXHIBIT A

Stormwater Utility Fee
Prior City Effort (1996 through 2002)

EXHIBIT A

Stormwater Utility Fee Prior City Efforts

July 1996 – The task force finished its work and summarized its findings in a report titled Stormwater Management Plan. A copy of the plan is on the City’s website. The plan contains 6 objectives and 32 strategies for stormwater management. Strategy E1 of the Stormwater Management Plan states, “Establish a utility fee to be applied to all properties within the City for the purpose of funding all ongoing or annually recurring drainage system maintenance and management expenses.” Since 1996, strategies listed in the Stormwater Management Plan have been accomplished. The strategies have been the basis for future City stormwater efforts.

November 1996 – Staff presented to Council a Stormwater Facility Maintenance and Rehabilitation Plan. At that time, the City did not have a complete inventory of its storm sewer system, i.e. the City did not know exactly how many miles of storm sewer pipe or number of inlets or manholes were in the system. At the time, the City’s stormwater maintenance was reactive in nature, i.e. storm sewers were not cleaned until they were plugged and a citizen called about the surface flooding, and storm sewers were not repaired until sink holes appeared on the ground surface.

The Stormwater Facility Maintenance and Rehabilitation Plan outlined several alternatives for inventorying the storm sewer system and providing a comprehensive storm sewer preventive maintenance program. Staff also provided information on a stormwater utility fee (Exhibit A). The revenues from the fee could be used to fund the additional cost for storm sewer maintenance.

No decision was made on the stormwater utility fee at that time. Staff was directed to inventory the storm sewer system and complete pilot storm sewer maintenance projects in order to develop better cost estimates for maintenance activities.

March 1998 – Staff presented to Council an updated Stormwater Facility Maintenance and Rehabilitation Plan. The Plan incorporated the completed inventory of the City’s storm sewer system and updated cost estimates for alternatives to provide a storm sewer preventive maintenance program. Generally, Council supported a plan to clean and televise storm sewers on a 10-year cycle and fund rehabilitation needs discovered during the televising process. Council did express concerns regarding how to fund expanded storm sewer maintenance activities.

November 1998 – Staff presented two methods for funding an expanded storm sewer preventive maintenance program. One method would involve funding additional maintenance activities with a stormwater utility fee. The other method scaled back the storm sewer maintenance program and funded the additional maintenance expenses by eliminating the property tax subsidy in the sanitary sewer fund, increasing sanitary sewer fees to fund all sanitary sewer costs and using the property tax revenues for storm sewer maintenance. Council generally supported the parameters of method two.

April 2001 – As part of the FY02 budget preparation process, staff prepared a budget memorandum for stormwater management. The memorandum recommended a storm sewer preventive maintenance program that would clean and televise storm sewers on a 5-year cycle and provide additional funds to repair the storm sewers, inlets, and manholes that were identified with deficiencies. The memorandum also recommended funding this enhanced storm sewer maintenance program with a stormwater utility fee. Council voted against the fee and directed staff to scale back the storm sewer maintenance program.

April 2002 – In a FY03 Budget Memorandum pertaining to the FY02/03 proposed budget, staff recommended providing \$988,000 annually for stormwater management. Specifically, \$125,000 of that total was dedicated for expenses associated with stormwater quality as part of the City's National Pollutant Discharge Elimination System (NPDES) permit. The balance, \$863,000, would be used for storm sewer cleaning, televising, and repairs. The funding would be provided by eliminating the property tax subsidy in the sanitary sewer fund, increasing sanitary sewer fees and using the property tax revenue for storm sewer maintenance. Council adopted this recommendation. Increased sanitary sewer fees were phased in over a five-year period and the new stormwater funding was fully implemented in FY2006/2007.

Exhibit B

Resolutions Establishing a Stormwater Utility Fee Advisory Committee and Appointing Members To the Committee

COUNCIL BILL NO. 2010 - 127

A RESOLUTION

ESTABLISHING A STORMWATER UTILITY FEE
ADVISORY COMMITTEE

WHEREAS, the City Council has established development of a plan to fund stormwater drainage improvement as a 2009-2011 City Council goal; and

WHEREAS, City Council directed staff at the March 23, 2010, Study Session to proceed with the next implementation step for the stormwater utility fee. This would involve establishing a Stormwater Utility Fee Advisory Committee and proceeding with the development of an expenditure, revenue, and billing plan for a City of Champaign stormwater utility fee; and

WHEREAS, the development and implementation of a stormwater utility fee requires extensive technical and community input; and

WHEREAS, an Advisory Committee provides an opportunity for both technical and citizen input and review.

NOW, THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CHAMPAIGN, ILLINOIS, as follows:

Section 1. There is hereby established a Stormwater Utility Fee Advisory Committee.

Section 2. The Stormwater Utility Fee Advisory Committee shall consist of fifteen (15) members appointed by the Mayor with the approval of the City Council. Members shall include representatives from each of the following: one member of the Champaign City Council, one member from the John Street Steering Committee, one member from the Washington Street East Steering Committee, one member from the Washington Street West Steering Committee, two property owners from Champaign neighborhoods, one member from the Central Illinois Apartment Association, one member from non-profit organizations, two members from commercial businesses, one member from industrial business, one member from the Unit 4

School District, one member from the Champaign Park District, one member from Parkland College, and one member from the University of Illinois.

Section 3. The duties of the Stormwater Utility Fee Advisory Committee shall be to:

- a. Develop goals and objectives for the expenditure, revenue, and billing plan for the stormwater utility fee;
- b. Provide input and direction on the expenditure, revenue, and billing plan prepared by City staff and/or the consultant for the stormwater utility fee.
- c. Assist with obtaining public input on the expenditure, revenue, and billing plan for the stormwater utility fee.
- d. Carry out such other responsibilities as may be determined by City Council.

Section 4. The Advisory Committee shall adopt such rules and procedures as it find desirable.

Section 5. The Public Works Department shall provide necessary staff support to the Advisory Committee.

Section 6. The Advisory Committee shall cease to exist after the stormwater utility fee expenditure, revenue, and billing plan has been presented to City Council.

COUNCIL BILL NO. 2010 - 127

PASSED:

APPROVED: _____
Mayor

ATTEST: _____
City Clerk

APPROVED AS TO FORM:

City Attorney

A RESOLUTION

APPOINTING MEMBERS TO THE
STORMWATER UTILITY FEE ADVISORY COMMITTEE

WHEREAS, Mayor Schweighart hereby appoints the following individuals to the Stormwater Utility Fee Advisory Committee.

| | |
|---|-------------------|
| Champaign City Council | Karen Foster |
| John Street Steering Committee | Steve Cochran |
| Washington Street East Steering Committee | Charles Allen |
| Washington Street West Steering Committee | James Creighton |
| Property Owner (City Resident) | Vic McIntosh |
| Property Owner (City Resident) | Anna Maria Watkin |
| Central Illinois Apartment Association | Chris Hamelburg |
| Commercial Business | Clif Carey |
| Commercial Business | James Jesso |
| Industrial Business | Donald Agin |
| Unit 4 School District | David Tomlinson |
| Champaign Park District | Jim Spencer |
| Parkland College | Jim Bustard |
| University of Illinois | Jack Dempsey |

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CHAMPAIGN, ILLINOIS, as follows:

Section 1. That this Resolution is passed and approved pursuant to legislation establishing the Stormwater Utility Fee Advisory Committee.

Section 2. The appointments presented by the Mayor to the Council hereinabove in the preamble are incorporated by reference as though set out herein.

Section 3. Vic McIntosh shall be appointed to serve as chair of the Stormwater Utility Fee Advisory Committee.

Section 4. That the Council hereby advises, consents, and confirms the appointment of the individuals hereinabove stated to the Stormwater Utility Fee Advisory Committee.

COUNCIL BILL NO. 2010 - 128

PASSED:

APPROVED: _____
Mayor

ATTEST: _____
City Clerk

APPROVED AS TO FORM:

City Attorney

Exhibit C

Stormwater Utility Fee
Advisory Committee – Letter

Champaign City Council
City of Champaign
102 N. Neil Street
Champaign, IL 61820

Re: Stormwater Utility Fee

City Council Members:

On behalf of the Stormwater Utility Fee Advisory Committee, I would like to thank City Council for this opportunity to serve the City of Champaign.

The City's stormwater management system is a vital City infrastructure that has significant needs. Providing adequate funding for those needs is important to the success of the community.

The committee started its work on September 13, 2010. It met monthly, concluding work eleven months later on July 7, 2011.

The Report to Council prepared by staff for the August 23, 2011 Study Session reflects the work the committee completed. Specifically, the committee helped staff study, develop, and prepare the expenditure, revenue, and billing plans for the stormwater utility fee. The committee also assisted staff with the preparation of the credit and incentive plans for the fee. For each of these plans, City staff made an initial presentation on the "draft" plan, the committee discussed the "draft" plan, committee questions were addressed and committee input was incorporated into the final plans.

The committee understood from the start that implementation of a Champaign stormwater utility fee would be a Council decision. However, if a fee is implemented, it is the committee's hope that Council will structure the fee similar to the plans that were developed by the advisory committee.

If you have questions, feel free to contact me at phone number 217/352-0194.

Sincerely,

Vic McIntosh
Chair, Stormwater Utility Fee Advisory Committee

Exhibit D

Stormwater Utility Fee Expenditure Plans

Exhibit D

**Stormwater Utility Fee
Expenditure Plans**

1. Development. The \$2.2M and \$3.2M Expenditure Plans were developed by completing the following three steps:

a. Funded Stormwater Needs. At the October and November Stormwater Utility Fee Advisory and Technical Committee monthly meetings, staff reviewed with committee members funded stormwater activities. The existing stormwater activities are listed below (Table A) with the average annual expenditure amount. Attachment A provides a short description explaining the stormwater tasks that are currently completed for each activity.

| | |
|---|--------------------|
| 1. Debt Retirement..... | \$2,300,000 |
| 2. Capital Improvement..... | \$0 |
| 3. Operation, Maintenance, and Rehabilitation Activities (City Crews) | \$694,000 |
| 4. Storm Sewer Cleaning and Televising (Contractual) | \$556,000 |
| 5. Storm Sewer Pipe and Manhole Repair (Contractual) | \$506,000 |
| 6. Channel Maintenance | \$339,000 |
| 7. Intergovernmental Maintenance Agreements (JULIE, USGS, Encephalitis, Urbana, Saline)..... | \$149,000 |
| 8. Erosion Control, Grading and Drainage Permit..... | \$97,000 |
| 9. Stormwater Quality (NPDES Permit Compliance) | \$188,000 |
| 10. Service Requests (Private Property Drainage Problems)..... | \$131,000 |
| 11. Hazardous Sump Pumps..... | \$45,000 |
| 12. Overhead Sewer Program | \$70,000 |
| 13. Rain Garden / Rain Barrels | \$25,000 |
| Total | \$5,100,000 |

The Stormwater Utility Fee Advisory and Technical Committee members were asked to rate each of these existing stormwater activities from “not important” to “top priority.” The results of the survey are illustrated in Table B. The stormwater activities shaded in grey were rated by the majority of committee members who completed the survey as a “top priority.” The remaining activities listed in Table B were rated by the majority of committee members as either “top priority” or “moderate priority.” All other activities that were listed in Table A but not in Table B did not get majority support.

Table B
Stormwater Fund
Funded Stormwater Needs
Existing Stormwater Activities and Expenditures

| | |
|--|--------------------|
| 1. Debt Retirement | \$2,300,000 |
| 2. Capital Improvement..... | \$0 |
| 3. Operation, Maintenance, and Rehabilitation Activities (City Crews) | \$694,000 |
| 4. Storm Sewer Cleaning and Televising (Contractual) | \$556,000 |
| 5. Storm Sewer Pipe and Manhole Repair (Contractual) | \$506,000 |
| 6. Channel Maintenance..... | \$339,000 |
| 7. JULIE..... | \$47,000 |
| 8. Stormwater Quality (NPDES Permit Compliance) | \$188,000 |
| 9. Service Requests (Private Property Drainage Problems) | \$131,000 |

b. Unfunded Stormwater Needs. At the January Stormwater Utility Fee Advisory and Technical Committee meeting, staff reviewed unfunded stormwater activities. These stormwater activities are all unfunded and are either capital projects that staff would like to complete or are stormwater activities currently being completed but need to be expanded. The unfunded activities are listed in Table C along with their estimated costs. Attachment B provides a short description of each unfunded stormwater activity.

Table C
Unfunded Stormwater Needs

| | |
|---|--------------------|
| 1. Additional Capital Projects | |
| • Washington Street West | \$8,700,000 |
| • Phinney Branch Channel Improvements (Crescent to Windsor) | \$4,300,000 |
| • Boneyard Creek – (University to CNRR) | <u>\$7,300,000</u> |
| | Total..... |
| | \$20,300,000 |
| 2. Additional Master Planning | |
| • Storm Sewer | \$200,000 |
| • Private Detention Basins | \$150,000 |
| 3. Additional Channel Maintenance | \$200,000 |
| • Phinney Branch | |
| • Boneyard Creek Second Street Reach | |
| 4. Additional Storm Sewer Rehabilitation | \$0 |
| 5. Additional Stormwater Quality | \$0 |

The Advisory and Technical Committee members were asked to rate each unfunded stormwater activity from “not important” to “top priority.” The survey results are summarized in Table D. Activities shaded grey in the table were rated by the majority of responding committee members as “top priority.” The activity for private detention basin master planning was rated by the majority as either “top priority” or “moderate priority.” All other activities that were listed in Table C but not Table D did not get majority support.

Table D
Unfunded Stormwater Needs

| | |
|--|-------------------------|
| 1. Additional Capital Projects | |
| • Washington Street West | \$8,700,000 |
| • Phinney Branch Channel Improvements (Crescent to Windsor)..... | \$4,300,000 |
| • Boneyard Creek (University to CNRR) | \$7,300,000 |
| | Total\$20,300,000 |
| 2. Additional Master Planning | |
| • Storm Sewer | \$200,000 |
| • Private Detention Basins | \$150,000 |

c. **Selection Criteria.** Staff and the Stormwater Utility Fee Advisory and Technical Committees established the selection criteria listed below. The criteria was used to select which stormwater activity (funded or unfunded) should be included in the Expenditure Plan for the stormwater utility fee.

- The stormwater activity had to be identified as a priority by the Advisory and Technical Committees, i.e. the majority of committee members that completed the survey had to indicate this activity was either a “top priority” or a “moderate priority.”
- The activity benefits the majority of property owners in the City.
- The cost for activities in the Expenditure Plan had to fall within the cost range (\$2,000,000 to \$3,000,000) that staff discussed with Council at the March 23, 2010, Council Study Session.

2. Stormwater Utility Fee Expenditure Plans. The Stormwater Utility Fee Advisory and Technical Committees developed two expenditure plans to forward to City Council. The plans are summarized in Table E.

Table E
Stormwater Utility Fee
Expenditure Plans

| Stormwater Activity | \$2M Expenditure Plan | \$3M Expenditure Plan |
|---|--------------------------|--------------------------|
| 1. Operation, Maintenance, and Rehabilitation Activities (City Crews) | \$ 694,000 | \$ 694,000 |
| 2. Storm Sewer Cleaning & Televising (Contractual) | \$ 556,000 | \$ 556,000 |
| 3. Storm Sewer Pipe & Manhole Repair (Contractual) | \$ 506,000 | \$ 506,000 |
| 4. Channel Maintenance | - | \$ 339,000 |
| 5. JULIE | - | \$ 47,000 |
| 6. Stormwater Quality – NPDES Permit Compliance | - | \$ 188,000 |
| 7. Service Requests (Private Property Drainage Problems) | - | \$ 131,000 |
| 8. Private Stormwater Detention Basin Master Plan | - | \$ 150,000 |
| TOTAL | \$1,756,000 | \$2,611,000 |

Per the selection criteria described in the previous section, the Expenditure Plan illustrated on the left side of Table E is the one that best fits the lower end of the cost range (\$2M). The Expenditure Plan on the right side of the table is the best fit for the high end of the range (\$3M).

All activities in either plan were rated by committee members as either moderate or top priority (per the selection criteria). The three stormwater activities selected for the \$2M Expenditure Plan were the activities rated highest by committee members.

Per the selection criteria, the committee did not include in either expenditure plans stormwater activities related to capital improvements or debt retirement. The committee felt that since most (if not all) property owners would be billed for the stormwater utility fee then the property owners should benefit from the stormwater activities funded by the fee. The committee did not feel the capital projects funded by the debt retirement or the unfunded capital projects identified in Tables C and D would be seen as benefiting the majority of property owners.

The three stormwater activities listed in the \$2M Expenditure Plan and the first seven activities in the \$3M Expenditure Plan are all currently funded by sales and property taxes. If those activities are funded sometime in the future by a stormwater utility fee then the sales and property taxes currently funding those activities would be available to fund other needs.

3. Stormwater Utility Fee Administrative Expenses. The expenditure plans listed in Table E need to have administrative expenses added to them. Administrative expenses are difficult to estimate at this time. Once the revenue and billing plans have been completed, staff will be able to estimate administrative expenses more accurately.

Table F adds to the expenditure plans in Table E, staff's best estimate at this time for administrative expenses. An explanation of each administrative expense is provided below. Table F provides a total for the dollars that would be available for other uses if a stormwater utility fee is implemented.

| | \$2M Expenditure Plan | \$3M Expenditure Plan |
|---|--------------------------------------|--------------------------------------|
| STORMWATER EXPENDITURES | | |
| 1. Operation, Maintenance and Rehabilitation (City Crews) | \$ 694,000 | \$ 694,000 |
| 2. Storm Sewer Cleaning and Television (Contractual) | \$ 556,000 | \$ 556,000 |
| 3. Storm Sewer Pipe and Manhole Repair (Contractual) | \$ 506,000 | \$ 506,000 |
| 4. Channel Maintenance | | \$ 339,000 |
| 5. JULIE | | \$ 47,000 |
| 6. Stormwater Quality (NPDES Permit Compliance) | | \$ 188,000 |
| 7. Service Requests (Private Property Drainage Problems) | | \$ 131,000 |
| 8. Master Plan Subdivision Detention Basins | | \$ 150,000 |
| ADMINISTRATIVE EXPENDITURES | | |
| 1. Utility Fee Implementation Cost Recovery | \$ 100,000 | \$ 100,000 |
| 2. Billing Costs | \$ 150,000 | \$ 200,000 |
| 3. Administrative Fees | \$ 150,000 | \$ 200,000 |
| 4. Utility Fee Credits and Incentives | \$ 100,000 | \$ 100,000 |
| TOTAL | \$ 2,256,000 | \$ 3,211,000 |
| \$'s Available for Other Uses | \$ 1,756,000 | \$ 2,611,000 |

- Utility Fee Implementation Cost Recovery – One of the disadvantages of a stormwater utility fee is the front-end cost to set up the fee. The City is currently under contract with AMEC Earth and Environmental, Inc. for approximately \$150,000 to assist staff with the preparation of the Expenditure, Revenue, and Billing Plan. After the Expenditure, Revenue, and Billing Plan has been completed and if Council decides to proceed with the fee, staff estimates an additional \$350,000 would be spent developing the stormwater utility fee ordinance, credit/incentive manual, purchasing billing software, and developing the billing database. Staff indicated to Council this “front-end cost” would be paid back to the Stormwater Fund once the stormwater utility fee started generating revenue. Staff has established a five-year payback period for the estimated front-end cost of \$500,000 or approximately \$100,000 per year.
- Billing Cost – This is the cost to prepare and mail the bills for the stormwater utility fee. It includes postage, envelopes, and paper. Also included are the annual maintenance and upgrade fees for the billing software.
- Administrative Fees – The stormwater utility fee will be an enterprise fund in the Public Works Department. City enterprise funds are charged an administrative fee. The administrative fee represents the cost for management and administrative services provided by the Public Works Department (Director, clerical services, etc.) as well as services that City Administrative Departments (Legal, Finance, etc.) provide to the enterprise fund.
- Utility Fee Credits and Incentives – Stormwater utility fees have credit/incentive programs to encourage property owners to reduce the amount and/or improve the quality of stormwater that runs off their property. The credit program is a way for property owners to reduce their stormwater utility bill. Staff estimated the cost for the program at \$100,000 annually.

**Attachment A
Stormwater Fund
Funded Stormwater Needs
Existing Stormwater Activities and Expenditures**

| | |
|--|--------------------|
| 1. Debt Retirement | \$2,300,000 |
| 2. Capital Improvement | \$0 |
| 3. Operation, Maintenance, and Rehabilitation Activities (City Crews)..... | \$694,000 |
| 4. Storm Sewer Cleaning and Televising (Contractual)..... | \$556,000 |
| 5. Storm Sewer Pipe and Manhole Repair (Contractual) | \$506,000 |
| 6. Channel Maintenance | \$339,000 |
| 7. Intergovernmental Maintenance Agreements (JULIE, USGS, Encephalitis, Urbana, Saline) | \$149,000 |
| 8. Erosion Control, Grading and Drainage Permit | \$97,000 |
| 9. Stormwater Quality (NPDES Permit Compliance)..... | \$188,000 |
| 10. Service Requests (Private Property Drainage Problems)..... | \$131,000 |
| 11. Hazardous Sump Pumps | \$45,000 |
| 12. Overhead Sewer Program..... | \$70,000 |
| 13. Rain Garden / Rain Barrels..... | \$25,000 |
| Total | \$5,100,000 |

1. **Debt Retirement.** This is the annual amount paid on the bonds that were sold to finance the stormwater improvement projects listed below. The average annual debt service retirement in the Stormwater Fund is \$2,300,000.

- Phase 1 Boneyard Creek Improvements Healey Street Detention Basin and channel improvements from Sixth Street to First Street.
- Phase 2 Boneyard Creek Improvements Scott Park and Second Street Reach channel improvements and detention, plus the storm sewer improvements for Logan, Chester, and Springfield viaducts.
- John Street Drainage Improvements.
- Washington Street East Drainage Improvements.

2. **Capital Improvement.** Approximately \$2,000,000 is budgeted in FY11 in the Stormwater Fund for engineering and property acquisition for the Washington Street West drainage project. The total cost for this project is approximately \$9,000,000. No significant work on property acquisition and engineering has been started on the Washington Street West Drainage Improvement Project. Staff is waiting until bids for Phase 2 of the John Street Drainage Improvement Project are opened. If the John Street bids come in higher than expected (budgeted), the funds budgeted for property acquisition and engineering for the Washington Street West Project will be needed to complete the John Street project.

The \$7,000,000 needed for construction to build the Washington Street West drainage improvements have not been budgeted in the Stormwater Fund. There is no revenue available in the Stormwater Fund to pay for additional drainage improvement projects.

3. **Operation, Maintenance, and Rehabilitation** (City Crews). Approximately \$694,000 is currently budgeted in the Stormwater Fund for this activity. The budgeted amount is for the cost of labor, material and equipment for City crews to perform OM&R for the storm sewer system. Storm sewer related tasks completed by City crews generally include cleaning inlets, responding to street and viaduct flooding, and repairing storm sewer inlets and manhole frames/covers.
4. **Storm Sewer Cleaning and Televising** (Contractual). This is an annual amount (\$556,000) typically budgeted each year to clean and televise pipes in the City's storm sewer system. This work is competitively bid each year and is completed by contractual forces. The City has approximately 1,500,000 lineal feet (l.f.) of pipe in its collection system. Annually, the City tries to clean and televise 150,000 l.f. of pipe (10-year cycle). This program was started four years ago. To date, approximately 600,000 l.f. of pipe (40% of the total) has been completed.
5. **Storm Sewer Pipe and Manhole Repairs** (Contractual). Approximately, \$506,000 is currently budgeted in the Stormwater Fund for this activity. The activity includes the cost for repairing storm sewer manholes and sewer pipes. The work is done with contractual forces that are competitively bid each year. Annually, the City completes 100-125 individual manhole and storm sewer repairs. Currently, the City has a backlog of 4,300 repairs.
6. **Channel Maintenance**. This is the annual amount (\$339,000) typically budgeted in the Stormwater Fund for maintenance of channels. This work is performed by both City crews and contractors. The City currently maintains the Boneyard channel and sections of the Phinney Branch and Beaver Lake channels that are within the City's corporate limits.

Also included in the budget line item are maintenance expenses associated with roadside ditches and City-owned detention basins (Healey Street, Eureka/Elm, Oak/Ash, and Upper Boneyard). Channel and detention basin maintenance activities typically include removing debris, trimming bank vegetation, repairing storm sewer inlets, bank stabilization projects, mowing, and maintenance of pump stations.

7. **Intergovernmental Maintenance Agreements**. Approximately, \$149,000 is currently budgeted annually in the Stormwater Fund for these activities. Activities included are:
 - JULIE Program. The City is required by State law to locate its utilities prior to the start of any construction activities in the City. JULIE charges the City approximately \$1.50 for each of the 10,000 locate requests the City receives from JULIE. All City utilities are located by a contractor. Annually, the JULIE and contractor locating costs are approximately \$141,000. The cost is split evenly between traffic and lighting, sanitary sewers, and storm sewers, or \$47,000 per year for each utility.
 - USGS Stream and Rain Gauges. The City has an agreement with the United States Geological Survey (USGS) to maintain two rain and two stream gauges. The USGS maintenance services cost the City approximately \$26,500 annually. The USGS maintains a rain gauge in both the Copper Slough and Boneyard watersheds, plus a stream gauge on both of the channels in these watersheds. The information collected by these gauges is used by the City to update computer models for the Copper Slough, Phinney Branch, Boneyard, and Beaver Lake watersheds. The gauge data is also used to analyze drainage problems and design drainage improvements in these watersheds.

- Encephalitis Program. The Champaign-Urbana Public Health Department has an agreement with Champaign, Urbana, and Savoy to treat storm sewer inlets in the right-of-way with a larvicide to control mosquito populations that could carry encephalitis. Champaign's pro-rated share of the program based on population is \$24,500 per year.
 - City of Urbana. In the late 1990s, the City executed a Boneyard Maintenance Agreement with the City of Urbana. This agreement was part of a complex series of agreements that transferred maintenance responsibilities for the Boneyard Creek from the Urbana and Champaign Sanitary District (UCSD) to the Cities of Urbana and Champaign. The agreement obligates Champaign to contribute to Boneyard maintenance projects completed by Urbana. The agreement limits Champaign's contribution to Urbana's Boneyard maintenance projects to \$25,000 per year.
 - Saline Drainage District. As part of the jurisdictional transfer of the Boneyard Creek, the Cities agreed to take over UCSD's maintenance obligations to the Saline Drainage District for the Boneyard. The Boneyard Creek discharges to the Saline Branch. According to the maintenance agreement, if the drainage district completes a maintenance project on the Saline Branch, Urbana and Champaign are each obligated to contribute a one-time maximum payment of \$25,000 to the project.
8. **Erosion Control, Grading, and Drainage Permits.** This is a self-supporting activity where the fees charged for the permits equal the City's cost to review and issue the permits plus inspect the site after the work has been completed. Erosion control, grading, and drainage permits are issued whenever new construction exceeds designated thresholds for surface disruption by construction or construction of new impervious areas.
9. **Stormwater Quality (NPDES Permit Compliance).** Approximately, \$188,000 is budgeted in the Stormwater Fund annually for the City's National Pollutant Discharge Elimination System (NPDES) permit compliance activities. NPDES compliance activities improve stormwater quality.

The City is required to have a NPDES permit for its storm sewer system. To obtain the 5-year NPDES permit, the City had to list activities it planned to complete each year in the following six areas that are referred to by IEPA as minimum control measures.

- Public Education and Outreach
- Public Participation and Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post Construction Site Runoff Control
- Pollution Prevention and Good Housekeeping

Typical activities listed under the above control measures that are completed by the City annually includes street sweeping, cleaning/televising storm sewers, monthly inspections of channels, investigation of illicit discharges, issuance of erosion control, grading and drainage permits, etc.

The City is required to submit an annual NPDES report to IEPA. The report highlights City accomplishments in stormwater quality. Specifically, the annual report lists the stormwater quality activities the City planned to complete and it also lists the activities that were actually

completed. The City's April 1, 2009 – March 31, 2010 NPDES annual report is posted on the City's website at: www.ci.champaign.il.us/stormwater.

10. **Service Requests** (Private Property Drainage Problems). This stormwater expenditure funds City staff time to help property owners find solutions to drainage problems on their property. Typical drainage problems that staff helps with include basement flooding, sump pump discharges, and surface grading issues. Public Works budgets 600 – 900 staff hours annually for this activity for a total cost of \$131,000. During wet years like 2008 and 2009, Public Works will spend two to three times this amount assisting property owners with drainage problems.

11. **Hazardous Sump Pumps**. Annually, \$45,000 is budgeted in the Stormwater Fund to eliminate hazardous sump pump discharges. Hazardous sump pump discharges are those that reach the City's sidewalk or street and causes algae buildups in the summertime or icing hazards in the wintertime.

The goal of this program is to connect these sump pump discharges into the City's storm sewer system. The City pays for all right-of-way costs associated with this connection while the property owner pays for all costs on their property.

This program typically eliminates 15-20 hazardous sump discharges annually. The City's current inventory of hazardous locations is 164 sites.

12. **Overhead Sewer Program**. This program would disconnect basements from the City's storm sewer system. Currently, the City has thousands of basements connected to the storm sewer system. These connected basements flood when the City's storm sewer system is overloaded (surcharged) from a rainstorm event.

This program would cost share with the property owner to install an overhead sewer connection for their basements. The program would be very similar to the City's sanitary overhead sewer program. This program has eliminated sanitary sewer backups into 100's of homes in the City.

Due to staffing constraints, Public Works has not been able to get this program started. However, funds are budgeted for the program and once staff time is available, work can begin.

13. **Rain Garden / Rain Barrels**. Approximately, \$25,000 is budgeted annually for incentives for property owners to install rain gardens and barrels. Currently, there is no rain garden incentive. All the budgeted funds are used for the rain barrel incentive. The rain garden incentive will be developed either when additional dollars are budgeted for these incentives or the demand for rain barrels diminish.

Attachment B Unfunded Stormwater Needs

| | |
|--|--------------------|
| 1. Additional Capital Projects | |
| • Washington Street West..... | \$8,700,000 |
| • Phinney Branch Channel Improvements (Crescent to Windsor)..... | \$4,300,000 |
| • Boneyard Creek (University to CNRR)..... | <u>\$7,300,000</u> |
| Total..... | \$20,300,000 |
| 2. Additional Master Planning | |
| • Storm Sewer..... | \$200,000 |
| • Private Detention Basins..... | \$150,000 |
| 3. Additional Channel Maintenance | |
| • Phinney Branch | \$200,000 |
| • Boneyard Creek Second Street Reach | |
| 4. Additional Storm Sewer Rehabilitation | |
| | \$0 |
| 5. Additional Stormwater Quality..... | |
| | \$0 |

1. **Additional Capital Projects.** The need for stormwater capital funding is significant. Stormwater master plans have been completed for the Boneyard Creek, Phinney Branch, Copper Slough, and Beaver Lake watersheds. The master plans have identified many drainage improvement needs. The capital drainage projects that were recommended in the master plans and currently unfunded are listed below.

| | Cost Estimate 2010 Dollars |
|---|-------------------------------|
| Boneyard Creek Master Plan | |
| • Phase 3 – Upper Second Street (Oak-Ash to University Ave.) | \$ 3,500,000 |
| • Phase 4 – Oak-Ash Detention Basin | \$ 2,600,000 |
| • Phase 5 – North Branch (Oak-Ash to Neil St.) | \$ 3,000,000 |
| • Phase 6 – West Fork | \$ 2,500,000 |
| • Phase 7 – Relief Storm Sewers | <u>\$ 2,000,000</u> |
| Subtotal | \$ 13,600,000 |
| Phinney Branch Master Plan | |
| • Channel Improvements | \$ 5,000,000 |
| Copper Sough Master Plan | |
| • Phase 1 – channel stabilization/reconstruction, detention | \$ 10,000,000 |
| • Phase 2 – channel stabilization/reconstruction, sewer improvements | \$ 11,300,000 |
| • Phase 3 – channel stabilization/reconstruction, water quality ponds | <u>\$ 6,600,000</u> |
| Subtotal | \$ 27,600,000 |
| TOTAL | \$ 46,200,000 |

In addition to the recommendations in the master plans, staff is also aware of other drainage needs in the City. The existing storm sewers on White Street (Prospect to Randolph), Healey Street (Prospect to Lynn to White), Lincolnshire Drive, Mayfair Road, and Maywood Drive all need to be replaced and upgraded. These projects will be very similar to size, scope, and cost of

the John and the Washington Street East projects. There are also needs for stormwater outlet improvements and storm sewers in the Garden Hills, Green Street (between Mattis and Russell) and the Balboa Road/Dover Place area. Cost estimates have not been prepared for these drainage needs. However, it is very conceivable these storm sewer projects in total could exceed \$40 million.

Finally, drainage master plans need to be completed for the Kaskaskia and Embarras watersheds. The City is tributary to six watersheds. Drainage master plans have been completed for the other four watersheds. The cost of a drainage watershed master plan is estimated at a one-time cost of \$200,000. The first priority would be Kaskaskia Watershed.

If a stormwater utility fee was used to fund additional capital projects, the projects listed below would be staff's top priority.

- Washington Street West \$ 8,700,000
- Phinney Branch Channel Improvement (Crescent to Windsor)..... \$ 4,300,000
- Boneyard Creek – Phases 3 & 4 (University to CNRR) \$ 7,300,000
- Kaskaskia Watershed Master Plan..... \$ 200,000
- Additional Master Planning for Storm Sewer (Garden Hills, White Street, Healey Street, etc.)..... \$ 200,000

The Washington Street West project would essentially complete the first phase of the Copper Slough Master Plan. The Phinney Branch project would complete the large majority of channel improvements recommended in the Phinney Branch Master Plan. The Boneyard Creek Phases 3 & 4 would complete all Boneyard improvements east of the Canadian National Railroad.

The Kaskaskia Watershed is essentially located west of Rising Road. It is strongly recommended the drainage master plan be completed before any substantial development takes place in this watershed. If the drainage master plan is completed prior to development, then needed drainage improvements identified in the master plan can be incorporated in either the developer's plan or infrastructure improvements needed by the development. Completing drainage improvements in this manner can be done at a fraction of the cost versus completing drainage improvements after the development has occurred.

Finally, a stormwater utility fee could be used to fund preparation of master plans for unsewered areas (Garden Hills, the residential neighborhood south of Kirby and east of Prospect, etc.) or areas that are sewered but the sewers are inadequate White Street, Healey Street, etc. Once these master plans have been completed, the recommendations in these plans could compete for stormwater funding along with the recommendations from other watershed master plans.

2. **Private Detention Basin Master Planning.** To comply with the City's drainage subdivision regulations, developers were required to install detention basins. The detention basins and their supporting infrastructure have been very effective in providing excellent drainage for the subdivisions that have been built over the last 20 years. There are very few, if any, significant drainage problems in these subdivisions currently.

However, staff is concerned about whether or not these detention basins are being maintained adequately. Approximately, 200 detention basins have been built. They are all privately owned. They are all supposed to be maintained by property owners who benefit from them.

Staff would recommend that a portion of the additional resources from a stormwater utility fee be used to prepare a master plan for these private detention basins. Specifically, the master plans would evaluate the effectiveness of current private detention basin maintenance. If detention basin maintenance was determined to be inadequate, the master plan would provide recommendations to correct the deficiencies. Staff estimates the cost for the private detention basin master planning at a one-time cost of \$150,000. The plan's recommendations could have recurring cost for the City. Adequately maintained detention basins are very important for the overall long-term effectiveness of the City's drainage system.

3. **Additional Channel Maintenance.** Currently, the City budgets approximately \$339,000 annually for channel maintenance activities. However, additional funding is needed to perform more annual routine maintenance activities on the channel south of Olympian Drive and the Phinney Branch channel from Mattis Avenue to Crescent Drive. More efforts are needed on these channels to control woody growth. If left uncontrolled, the woody growth can accumulate on the channel banks and create an impediment to stormwater flow.

Additionally, more resources will be needed to maintain the Boneyard Creek Second Street Reach Improvement from Springfield Avenue to University Avenue. This improvement is a community asset that will be highly utilized and will need to be maintained to high standards.

Staff estimates additional funding needs for channel maintenance at \$200,000 per year. If additional funding is not provided for channel maintenance, staff will need to reduce funding for other stormwater activities.

4. **Additional Storm Sewer Rehabilitation.** The City contractually cleans and televises approximately 150,000 lineal feet of storm sewer pipe annually. The contractual cleaning and televising was started approximately four years ago. Prior to that the City had no routine preventative maintenance program for its storm sewer system.

The City's total inventory of storm sewer pipe is approximately 1,500,000 lineal feet. To date, approximately 40% of the system has been cleaned and televised. The goal is to clean and televise each foot of storm sewer pipe once every ten years.

A result of the storm sewer cleaning and televising is the identification of structural deficiencies in the storm sewer pipe. The City repairs 100-125 of these deficiencies annually. However, the backlog of repairs is estimated at 4,300 with a rehabilitation cost estimated at approximately \$10,000,000.

Additional resources are not recommended for storm sewer rehabilitation. The backlog of needed repairs is significant but staff feels it is manageable. Annually, the need for emergency repairs for the storm sewer system is not needed. The need for emergency repairs is a key indicator if sufficient storm sewer rehabilitation is occurring on an annual basis. Staff will continue to monitor the storm sewer system if emergency repairs start to increase stormwater

activities will be reprioritized and additional dollars will be re-budgeted from other maintenance activities to storm sewer rehabilitation.

5. **Additional Stormwater Quality.** Currently, the City budgets annually approximately \$300,000 for stormwater quality activities. This amount is a little over 5% of the total amount spent annually on stormwater. The City is currently meeting all requirements of its NPDES permit. There are no deficiencies that staff is aware of concerning stormwater quality.

USEPA has started the process to propose changes to the nation's stormwater regulations. The goal of these changes is to "strengthen stormwater regulations." It is hard to quantify at this time, what these changes will exactly mean to the City of Champaign, but it is probably safe to assume that compliance will result in the City investing more resources into stormwater quality.

USEPA has indicated the new regulations are scheduled to be completed by the end of 2012. Experience indicates USEPA will change the regulations but it will take much longer (years) than what USEPA estimated. Once USEPA has completed the rule change than IEPA needs to determine what the new rules mean to Illinois. The IEPA process could also take an additional year or two to complete.

Exhibit E

Stormwater Utility Fee Sample Calculations (Non-Residential)

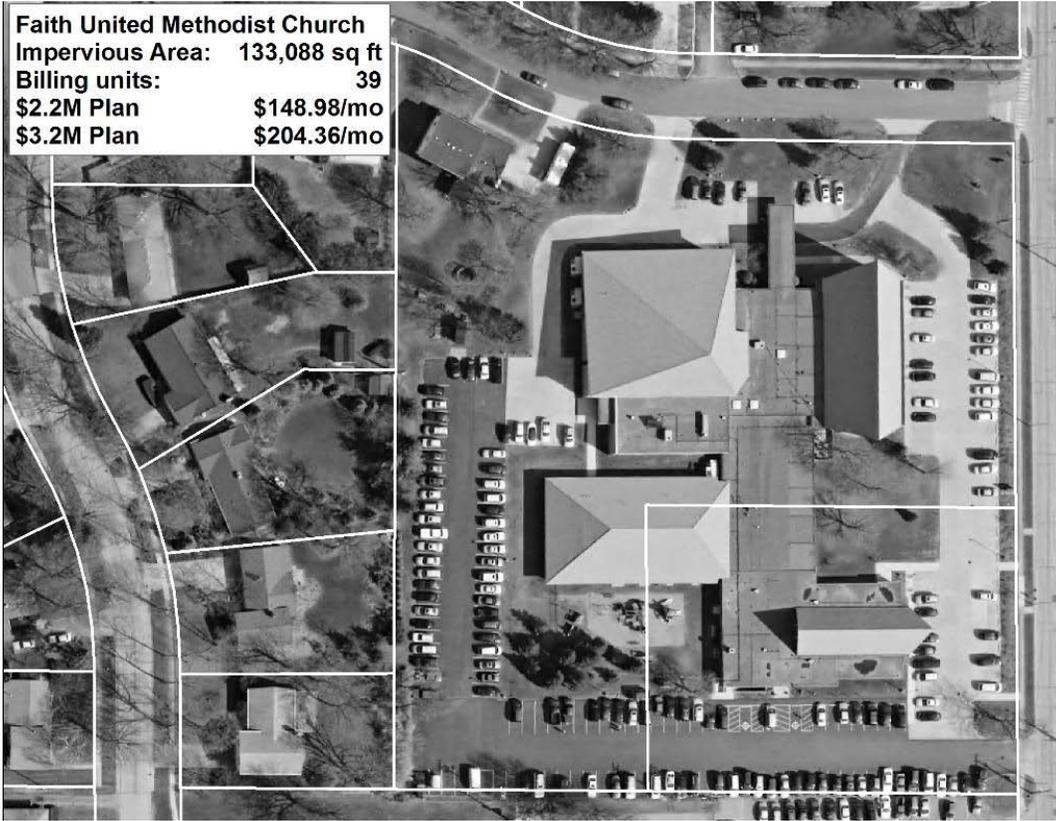
Exhibit E
Stormwater Utility Fee
Sample Calculations
Non-Residential Stormwater Utility Fee Bills

For Example:

- Assumptions:
 - \$3.2M Expenditure Plan
 - Commercial Parcel
 - 10,000 Sq. Ft. of Impervious Area
- Stormwater Utility Fee
 - $10,000 \text{ Ft}^2 \div 3,478 \text{ Ft}^2/\text{ERU} = 2.87$
 - $3.0 \text{ ERU} \times \$5.42/\text{month} = \15.72 per month
($\$188.64/\text{year}$)



Faith United Methodist Church
Impervious Area: 133,088 sq ft
Billing units: 39
\$2.2M Plan \$148.98/mo
\$3.2M Plan \$204.36/mo



Scott Park Apartments
Impervious Area: 51028 sq ft
Billing units: 15
\$2.2M Plan \$57.30/mo
\$3.2M Plan \$78.60/mo



Thomas More High School
Impervious Area: 244,603 sq ft
Billing units: 71
\$2.2M Plan \$271.22/mo
\$3.2M Plan \$372.04/mo



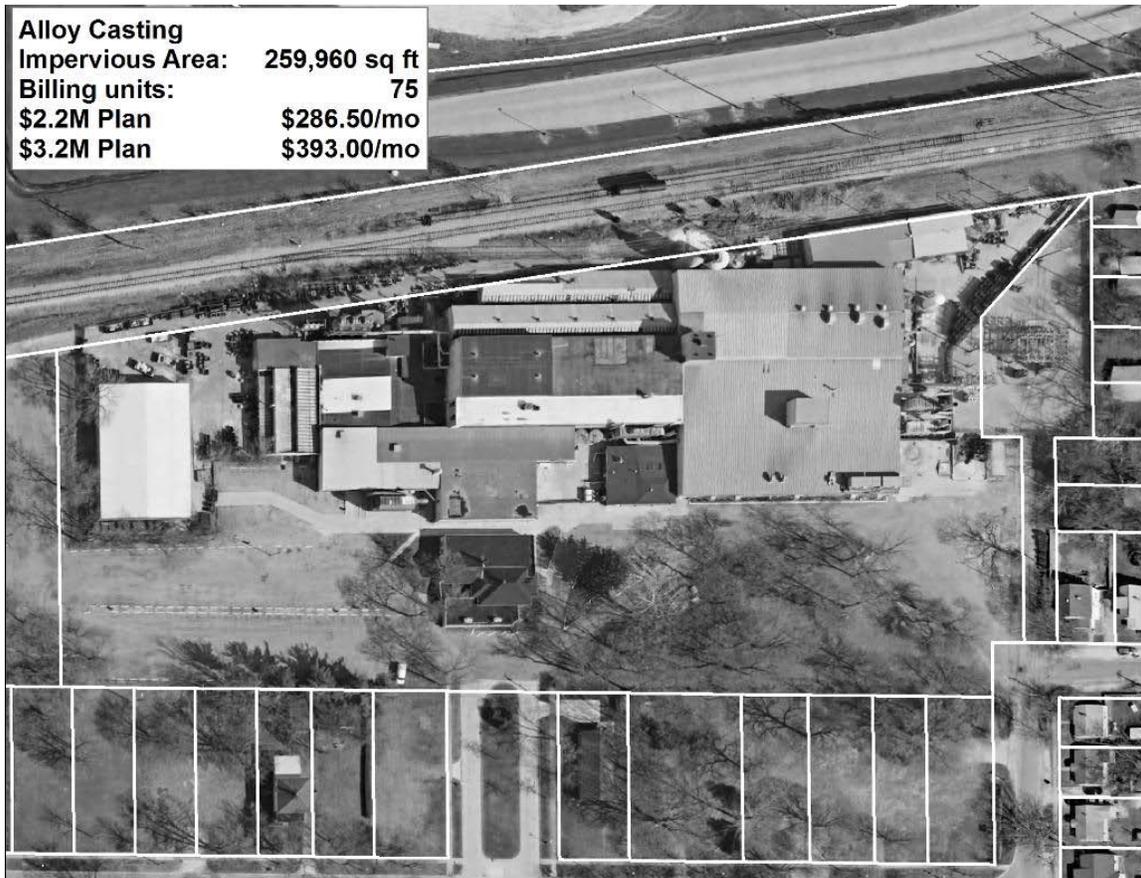
WalMart
Impervious Area: 894,353 sq ft
Billing units: 258
\$2.2M Plan \$985.56/mo
\$3.2M Plan \$1,351.92/mo

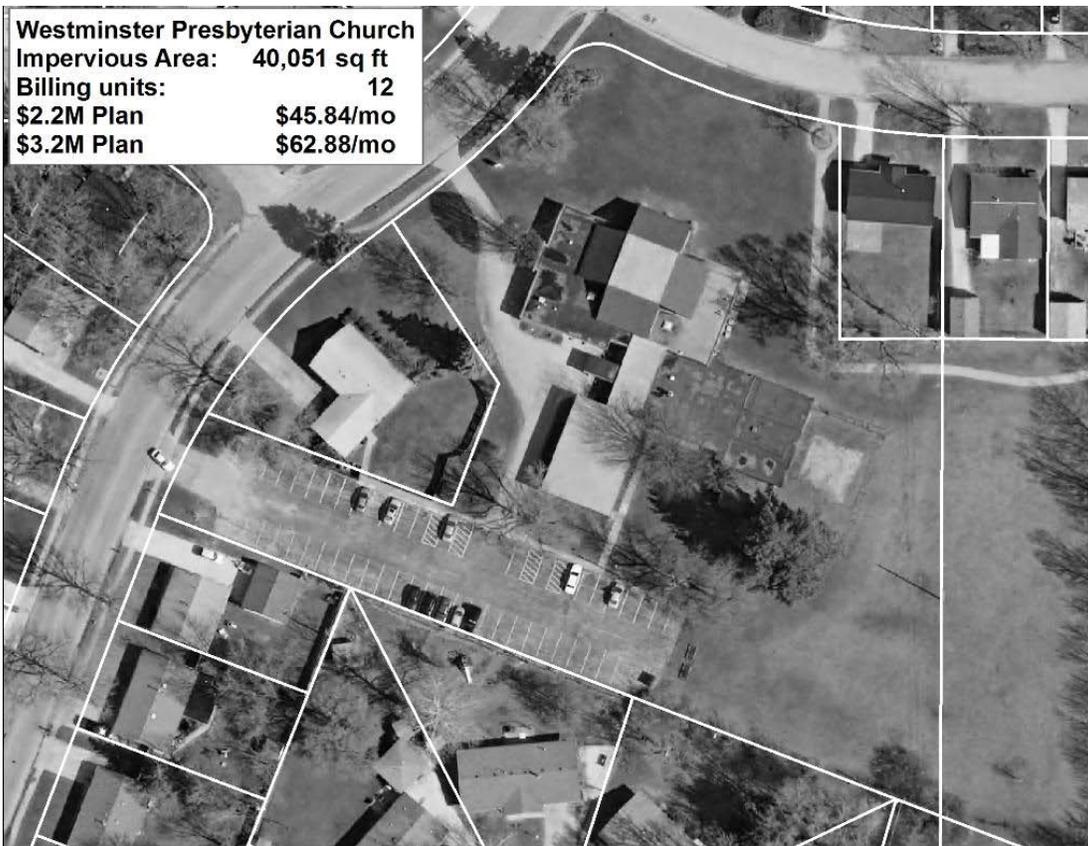


U of I Ice Arena
Impervious Area: 57,170 sq ft
Billing units: 17
\$2.2M Plan \$64.94/mo
\$3.2M Plan \$89.08/mo



Alloy Casting
Impervious Area: 259,960 sq ft
Billing units: 75
\$2.2M Plan \$286.50/mo
\$3.2M Plan \$393.00/mo





Old Farm Shopping Center
Impervious Area: 171,934 sq ft
Billing units: 50
\$2.2M Plan \$191.00/mo
\$3.2M Plan \$262.00/mo



Exhibit F

Stormwater Utility Fee Structures Other Illinois Communities

Exhibit F
Stormwater Utility Fee
Summary of Stormwater Utility Fee Programs in Illinois

| City | SF Rate Base Type | SF Rate Amount (Monthly) | Non-SF Property Rate Amount (Monthly) | Properties Exempt | Annual Revenue from SWUF | Population (2010) |
|------------------|--------------------------|--|---|-------------------|--------------------------|-------------------|
| Aurora | Per Parcel (Flat) | \$3.45 | \$3.45 | None | \$4,009,000 | 197,899 |
| Bloomington | Gross Area (Tiered) | \$2.90 - ≤ 7,000 SF \$4.35 - 7,000 – 12,000 SF \$7.25 - ≥ 12,000 SF | \$5.80 ≤ 4,000 SF (\$1.45) x (# of IAU) OR \$5.80 whichever is greater ≥ 4,000 SF | None | \$2,762,000 | 76,610 |
| East Moline | Impervious Area (Tiered) | \$2.54 - 1 ERU \$4.45 - 1-1.75 ERUs \$6.35 - 1.75 - 2.5 ERUs | (\$2.54) x (# of ERUs) | None | \$350,000 | 21,302 |
| Freeport | Per Parcel (Flat) | \$4.00 | Commercial/ Public: \$20 Industrial: \$40 | None | \$600,000 | 25,638 |
| Highland Park | Unavailable | Unavailable | Unavailable | Unavailable | Unavailable | 29,763 |
| Moline | Gross Area (Tiered) | \$1.46 - < ¼ Ac \$2.81 - ¼ to < ½ Ac \$5.77 - ½ to 2 Ac EHA x \$87.33 - 2 Ac+ | (\$87.83) x (#EHAs) | None | \$1,800,000 | 43,483 |
| Morton | Per Parcel (Flat) | \$4.74 (gross) or \$4.50 (net) | (\$4.74) x (# of ERUs) | None | \$900,000 | 16,600 |
| Normal | Per Parcel (Flat) | \$4.60 | (\$4.60) x (# of ERUs) | None | \$1,713,000 | 52,497 |
| Richton Park | Per Parcel (Flat) | \$5.85 | Commercial: \$11.70/mo. Multiple Family: \$5.85/unit | None | \$500,000 | 13,646 |
| Rock Island | Gross Area (Tiered) | \$2.89 - ≤ 6,000 SF \$3.83 - 6,000 – 18,000 SF \$4.80 - 18,000 - 87,120 SF | (\$3.83) x (# of IAUs) | None | \$1,600,000 | 39,018 |
| Rolling Meadows | Per Parcel (Flat) | \$3.05 | (\$1.65) x (# of ERUs) | None | \$560,000 | 23,300 |
| Tinley Park | Water Consumption | \$1.62 + \$0.27 per 1,000 gallons consumed over 6,000 gallons | \$1.62 + \$0.27 per 1,000 gallons consumed over 6,000 gallons | None | \$475,000 | 56,703 |
| Champaign \$2.2M | Per Parcel (Flat) | \$3.82 | \$3.82 per 3,478 sf | None | \$2,200,000 | 81,055 |
| Champaign \$3.2M | Per Parcel (Flat) | \$5.24 | \$5.24 per 3,478 sf | None | \$3,200,000 | 81,055 |
| Urbana | Per Parcel (Flat) | \$4.90 - \$5.15 | \$4.90 - \$5.15 per 3,118 sf | None | \$1.8M - \$2M | 41,250 |

STORMWATER UTILITY FEE SURVEY RESULTS

Aurora

Fee Structure: The stormwater utility fee for all properties in Aurora is a flat fee of \$3.45 per parcel per month.

Exemptions: Tax exempt/non-profits, parks and schools are all required to pay the stormwater utility fee.

Activities Funded through SWUF: The stormwater utility fee is used to fund Rehabilitation, Capital Improvements, Stormwater Quality Programs, EPA Phase II Stormwater Permit Requirements and Activities Dictated through the MS4 Permit.

Annual Revenue: Annually, the stormwater utility fee generates \$4,009,000 in revenue.

Population: The population of Aurora based upon 2010 census figures is 197,899.

Effect of SWUF on Traditional Funding: Once the stormwater utility fee was established, “traditional” funding was added to revenues acquired by the fee. The fee has helped to fund a number of large capital projects.

Bloomington

Fee Structure: The stormwater utility fee for single family properties in Bloomington is based upon the property’s gross area. Single-family properties are divided into tiers as follows:

- Small parcel (gross area less than or equal to 7,000 sq. ft.) = \$2.90 per month
- Medium parcel (gross area greater than 7,000 sq. ft. and less than or equal to 12,000 sq. ft.) = \$4.35 per month
- Large Parcel (gross area over 12,000 sq. ft.) = \$7.25 per month

Non-single family properties are charged based upon an Impervious Area Unit (IAU). One IAU is equal to 1,000 square feet of impervious area. The charge per IAU is \$1.45 per month. Parcels less than or equal to 4,000 square feet are be charged a flat rate equal to four IAUs or \$5.80 per month. Parcels greater than 4,000 square feet are charged for the actual number of IAUs within the parcel, OR four IAUs, whichever is greater.

Exemptions: Tax exempt/non-profits, parks and schools are all required to pay the stormwater utility fee.

Activities Funded through SWUF: The stormwater utility fee is used to fund Operation & Maintenance, Rehabilitation, Capital Improvements and Stormwater Quality Programs.

Annual Revenue: Annually, the stormwater utility fee generates \$2,762,000 in revenue.

Population: The population of Bloomington based upon 2010 census figures is 76,610.

Effect of SWUF on Traditional Funding: Once the stormwater utility fee was established, “traditional” funding was diverted to other projects, i.e. sanitary sewer projects.

East Moline

Fee Structure: The stormwater utility fee for single family properties in East Moline is based upon an Equivalent Residential Unit (ERU). One ERU is equal to 2,200 square feet of impervious surface. Single-family properties are divided into tiers as follows:

- Small parcel (under ¼ acre) = 1 ERU = \$2.54 per month
- Medium parcel (¼ – ½ acre) = 1.75 ERUs = \$4.45 per month
- Large Parcel (½ - 2 acres) = 2.5 ERUs = \$6.35 per month
- Larger than 2 acres = \$2.54 x # of ERUs

Non-single family properties are charged \$2.54 per ERU.

Exemptions: Tax exempt/non-profits, parks and schools are all required to pay the stormwater utility fee.

Activities Funded through SWUF: The stormwater utility fee is used to fund Operation & Maintenance, Rehabilitation, Capital Improvements, Stormwater Quality Programs and Street Cleaning.

Annual Revenue: Annually, the stormwater utility fee generates \$350,000 in revenue.

Population: The population of East Moline based upon 2010 census figures is 21,302.

Effect of SWUF on Traditional Funding: Once the stormwater utility fee was established, “traditional” funding was diverted to other projects, i.e. sanitary sewer projects.

Freeport

Fee Structure: The stormwater utility fee for single family properties in Freeport is a flat fee of \$4.00 per parcel per month.

Non-single family properties classified as commercial or public pay \$20.00 per month and those categorized as industrial pay \$40.00 per month.

Exemptions: Tax exempt/non-profits, parks and schools are all required to pay the stormwater utility fee.

Activities Funded through SWUF: The stormwater utility fee is used to fund Operation and Maintenance, Rehabilitation, Capital Improvements and Debt Service.

Annual Revenue: Annually, the stormwater utility fee generates \$600,000 in revenue.

Population: The population of Freeport based upon 2010 census figures is 25,638.

Effect of SWUF on Traditional Funding: Once the stormwater utility fee was established, “traditional” funding was diverted to other projects.

Highland Park

No response to information request.

Moline

Fee Structure: The stormwater utility fee for single family properties containing less than 2 acres in Moline is based upon the property's gross area. Single-family properties are divided into tiers as follows:

- Small parcel (gross area less than ¼ acre) = \$1.46 per month
- Medium parcel (gross area of ¼ acre to under ½ acre) = \$2.81 per month
- Large Parcel (gross area of ½ acre to 2 acres) = \$5.77 per month

The stormwater utility fee for single family properties containing more than 2 acres and all other non-single family properties is based upon the Equivalent Hydraulic Acreage (EHA). The formula for calculating each property's EHA is:

$$(\text{Impervious Acreage} \times 0.95) + (\text{Pervious Acreage} \times 0.15)$$

The fee charged is equal to the EHA x \$21.96 (monthly) or EHA x \$87.83 (quarterly).

Exemptions: Tax exempt/non-profits, parks and schools are all required to pay the stormwater utility fee.

Activities Funded through SWUF: The stormwater utility fee is used to fund Operation & Maintenance, Rehabilitation, Capital Improvements, Stormwater Quality Programs, EPA Phase II Stormwater Permit Requirements and Activities Dictated through the MS4 Permit.

Annual Revenue: Annually, the stormwater utility fee generates \$1,800,000 in revenue.

Population: The population of Moline based upon 2010 census figures is 43,483.

Effect of SWUF on Traditional Funding: Once the stormwater utility fee was established, "traditional" funding was diverted to other projects.

Morton

Fee Structure: The stormwater utility fee for single family properties in Morton is a flat fee charged on a per parcel basis. The fee per parcel is currently \$4.74. On May 1, 2011 the fee will increase to \$4.88.

Non-single family properties are charged based upon an Equivalent Residential Unit (ERU). One ERU is equal to 3,300 square feet of impervious area. The charge per ERU is currently \$4.74 per month. On May 1, 2011, the charge per ERU will increase to \$4.88 per month.

Exemptions: Tax exempt/non-profits, parks and schools are all required to pay the stormwater utility fee.

Activities Funded through SWUF: The stormwater utility fee is used to fund Operation & Maintenance, Rehabilitation, Capital Improvements, Stormwater Quality Programs and Compliance Efforts with NPDES.

Annual Revenue: Annually, the stormwater utility fee generates \$900,000 in revenue.

Population: The population of Morton based upon 2010 census figures is 16,600.

Effect of SWUF on Traditional Funding: Once the stormwater utility fee was established, “traditional” funding was diverted to other projects. Prior to the adoption of the fee, there was no dedicated source of funding for stormwater. Funding was obtained from the General Fund.

Normal

Fee Structure: The stormwater utility fee for single family properties in Normal is a flat fee charged on a per parcel basis. The fee per parcel is currently \$4.60.

Non-single family properties are charged based upon an Equivalent Residential Unit (ERU). One ERU is equal to 3,200 square feet of impervious area. The charge per ERU is currently \$4.60 per month.

Exemptions: Tax exempt/non-profits, parks and schools are all required to pay the stormwater utility fee.

Activities Funded through SWUF: The stormwater utility fee is used to fund Operation & Maintenance, Rehabilitation, Capital Improvements and Stormwater Quality Programs.

Annual Revenue: Annually, the stormwater utility fee generates \$1,713,000 in revenue.

Population: The population of Normal based upon 2010 census figures is 52,497.

Effect of SWUF on Traditional Funding: Once the stormwater utility fee was established, “traditional” funding was diverted to other projects.

Richton Park

Fee Structure: The stormwater utility fee for single family properties in Richton Park is a flat fee charged on a per parcel basis. The fee per parcel is currently \$5.85 per month.

The stormwater utility fee for commercial properties is double that of single family properties, which equates to \$11.70 per month. Multiple family properties are charged on a per unit basis of \$5.85 per month per unit, i.e. an apartment building with fifty (50) units pays \$5.85 multiplied by fifty (50) or \$292.50 per month.

Exemptions: Tax exempt/non-profits, parks and schools are all required to pay the stormwater utility fee.

Activities Funded through SWUF: The stormwater utility fee is used to fund Operation & Maintenance, Rehabilitation and Capital Improvements.

Annual Revenue: Annually, the stormwater utility fee generates \$500,000 in revenue.

Population: The population of Richton Park based upon 2010 census figures is 13,646.

Effect of SWUF on Traditional Funding: Once the stormwater utility fee was established, “traditional” funding was diverted to other projects. Prior to the adoption of the fee, there was no dedicated source of funding for stormwater. Funding was obtained from the General Fund.

Rock Island

Fee Structure: The stormwater utility fee for single family properties in Rock Island is based upon the property’s gross area. Single-family properties are divided into tiers as follows:

- Gross Area less than or equal to 6,000 sq. ft. = \$2.89 per month
- Gross area greater than 6,000 sq. ft. and less than or equal to 18,000 sq. ft. = \$3.83 per month
- Gross area greater than 18,000 sq. ft. and less than 87,120 sq. ft. = \$4.80 per month
- Gross area greater than 87,120 charged as a commercial property.

Non-single family properties are charged based upon an Impervious Area Unit (IAU). One IAU is equal to 2,800 square feet of impervious area. The charge per IAU is \$3.83 per month.

Exemptions: Tax exempt/non-profits, parks and schools are all required to pay the stormwater utility fee.

Activities Funded through SWUF: The stormwater utility fee is used to fund Operation & Maintenance, Rehabilitation, Capital Improvements, Stormwater Quality Programs, Compliance Efforts through NPDES and the City’s Levy System.

Annual Revenue: Annually, the stormwater utility fee generates \$1,600,000 in revenue.

Population: The population of Rock Island based upon 2010 census figures is 39,018.

Effect of SWUF on Traditional Funding: Once the stormwater utility fee was established, “traditional” funding supplemented revenues obtained through the fee.

Rolling Meadows

Fee Structure: The stormwater utility fee for single family properties in Rolling Meadows is a flat fee charged on a per parcel basis. The fee per parcel is currently \$3.05 per month.

Non-single family properties are charged based upon an Equivalent Residential Unit (ERU). One ERU is equal to 3,604 square feet of impervious area. The charge per ERU is currently \$1.65 per month.

Exemptions: Tax exempt/non-profits, parks and schools are all required to pay the stormwater utility fee.

Activities Funded through SWUF: The stormwater utility fee is used to fund Operation & Maintenance, Rehabilitation, Capital Improvements, Stormwater Quality Programs, Streambank Stabilization, Matching Grants and Stormwater Engineering Services.

Annual Revenue: Annually, the stormwater utility fee generates \$560,000 in revenue.

Population: The population of Rolling Meadows based upon 2010 census figures is 23,300.

Effect of SWUF on Traditional Funding: Once the stormwater utility fee was established, “traditional” funding supplemented revenues obtained through the fee.

Tinley Park

Fee Structure: The stormwater utility fee for all properties in Tinley Park is based upon water consumption. Properties are charged \$1.62 plus \$0.27 for every 1,000 gallons of usage over 6,000 gallons on a monthly basis.

Exemptions: Tax exempt/non-profits, parks and schools are all required to pay the stormwater utility fee.

Activities Funded through SWUF: The stormwater utility fee is used to fund Operation & Maintenance, Rehabilitation, Capital Improvements and Stormwater Quality Programs.

Annual Revenue: Annually, the stormwater utility fee generates \$475,000 in revenue.

Population: The population of Tinley Park based upon 2010 census figures is 56,703.

Effect of SWUF on Traditional Funding: Once the stormwater utility fee was established, “traditional” funding was added to revenues obtained through the fee.

Exhibit G

City of Champaign Stormwater Utility Fee Credit and Incentive Plans

Exhibit G
CITY OF CHAMPAIGN
STORMWATER UTILITY FEE
CREDIT AND INCENTIVE PLAN

1. Background

The City of Champaign is considering implementation of a stormwater utility fee. The City does not have funding to complete any additional stormwater capital improvements for the next 20 years. There are stormwater capital improvement projects that neighborhoods want the City to complete. Instead of cutting other City services or raising taxes, a stormwater utility would fund these needed neighborhood stormwater capital improvement projects.

The proposed stormwater utility fee in the City of Champaign would include a flat fee for single family residential and duplex properties, and a demand-based fee for all other properties. The measure of demand for these properties would be the amount of impervious surface on the property. Impervious surface prevents the infiltration of stormwater into the soil, generating runoff. The selected billing unit for these impervious areas would be based on 3,478 square feet of impervious surface, which is equivalent to the average amount of impervious area found on single family residential properties in the community.

While not every property impacts the system exactly the same way, and not each property realizes the same benefits from the City's stormwater management program, there are some properties whose impact on the program and drainage system actually lessen the City's cost of providing stormwater services. To acknowledge the impact that these activities or facilities have on the City's stormwater management program costs, the City has developed a system of credits and incentives through which a ratepayer could reduce their total stormwater user fee.

2. Credits and Incentives

Credits are recurring discounts against stormwater utility user fees that are granted because the ratepayer installed and/or implemented on their property a qualifying stormwater management activity. Incentives are one-time disbursements that are granted to the ratepayer for doing the same. Qualifying stormwater management activities that are eligible for either credits or incentives must provide either a reduction in peak discharge, a reduction in stormwater runoff volume, a water quality benefit, or some combination of the three.

3. Goals

Two goals were used to develop the City's Credit and Incentive Plan:

- Use the Credit and Incentive Plan to encourage property owners to incorporate sustainable stormwater management practices on their property.
- Develop the Credit and Incentive Plan in a way that makes it easy for the property owner to use and does not overly complicate the stormwater utility fee billing system.

4. Single Family Residential and Duplex Properties

Incentives would be available for single family residential and duplex properties that install specific stormwater management activities on their property. The City would budget \$20,000 per year for the single family residential and duplex incentive program. Allocation would be on a first come, first serve basis. Once the budgeted amount has been allocated, there would be no additional incentive payments for the fiscal year. Those property owners eligible for the incentive but there was insufficient funds available to pay the incentive would be first on the list for reimbursement for the next fiscal year.

4.1. Rain Gardens

Rain gardens are shallow depressions planted with native perennial plants that are either located near a downspout or that are in an area that sheds noticeable amounts of rainwater. Rain gardens reduce runoff, absorb pollutants, and sustain some wildlife.

The City would reimburse property owners up to \$250 for a rain garden that is a minimum of 100 sq. ft. There would be only one reimbursement rain garden per property.

The property owner would be required to submit their rain garden plan to the City for review and approval. The City would pay the incentive to the property owner after construction has been completed and the construction inspected and approved by the City.

4.2. Rain Barrels

Rain barrels are structures designed to intercept and store runoff from rooftops. Typically, a rain barrel is a 55-gallon drum connected to a downspout. Stored water can provide irrigation for a garden or can be released slowly to a lawn.

The City would provide an incentive of \$25 to the property owner for the purchase of rain barrels. The incentive would be limited to one per property. The incentive payment would be made after the property owner provides proof of purchase to the City.

4.3. Other Incentives

Single family residential and duplex properties would be eligible for incentives for installing and/or implementing activities that provide either a reduction in peak discharge, a reduction in stormwater runoff volume, a water quality benefit or some combination of the three. The property owner could be required to submit their plan to the City for review and approval. The amount of the incentive would be 25% of the construction cost for the activity up to a maximum incentive of \$250. The City would pay the incentive to the property owner after construction has been completed and the installation inspected and approved by the City.

These incentives could be earned individually, i.e. one \$250 incentive for installing a water quality management activity or one \$250 incentive for installing a volume

reduction management activity. It would also be possible to combine activities, i.e. installing one management activity that accomplishes either a rate reduction, volume reduction, or water quality improvement. In the case of combination, it would be possible to achieve \$750 of credit for installing one single stormwater management activity valued at \$3,000, if it achieves all three categories.

Eligible construction cost for calculation of the incentive payment must be directly related to cost associated with the stormwater management activity. Stormwater activities constructed for new homes would be eligible for the incentives.

5. Properties other than Single Family Residential and Duplex

For properties other than single family residential and duplex, there would be both a credit and an incentive program. For installing a stormwater management activity, a property owner could choose to participate in either the credit or incentive program, but not both.

There are four categories of credits available to this group of properties: 1) rate reduction credits; 2) volume reduction credits; 3) water quality/BMP credits; and 4) direct discharge credits.

5.1. Rate Reduction Credit

5.1.1. *Private Detention Basin (Maximum 15%)*

Property owners would be eligible for a rate reduction credit that discharge a portion or all of their impervious area runoff to a private detention basin that was required by the City's stormwater management regulations and built to those standards and are complying with Chapter 23 of the City's Manual of Practice for Detention Basins Standards for Maintenance and Repair Responsibilities. The credit would be applied after the City has reviewed and approved the annual report on the detention basin condition. The credit would be renewed each year upon receipt of the detention basin annual condition report and its review and approval by the City. The credit would be renewed on the fifth year upon receipt of the professional engineer's condition report and its review and approval by the City. The professional engineer's condition report is required in Chapter 23 of the City's Manual of Practice. Individual single family residential or duplex properties tributary to a private detention basin in compliance with the above requirements would be eligible for this credit.

5.1.2. *Other (Maximum 15%)*

Developed non-single family residential and duplex properties that install and maintain a stormwater rate reduction device which is not required to be installed by City stormwater management regulations would be eligible for a rate reduction credit. The property owner would be required to submit their plan for the rate reduction stormwater management device to the City for review and approval. The property owners plan must be prepared and certified by a professional qualified to submit stormwater management plans. A professional engineer registered in the State of Illinois would satisfy this requirement. The rate reduction achieved by the stormwater management

device must meet or exceed the requirements of the City's stormwater management regulations. The rate reduction device could earn up to a maximum credit of 15% depending on the fraction of the total impervious area served.

The City would apply the credit after the City approved rate reduction plan has been constructed and inspected by the City. Every five years, the City would consider renewal of the credit upon receipt of a report from the property owner prepared by a certified professional indicating the rate reduction stormwater management practice is functioning as designed and is being maintained. Credit renewal would take place after the City reviewed and approved the five-year report.

5.2. Volume Reduction Credit (Maximum 15%)

Volume reduction credits would be provided for those activities that reduce the total volume of runoff from a property. A volume reduction credit would require implementation of a stormwater infiltration or reuse practice. Many of these practices are also referred to as rainfall or stormwater harvesting practices, as rather than allowing the rainfall to simply runoff into a drainage system or receiving water body, the rainfall or runoff is intercepted and stored for a beneficial use, such as irrigation of lawns or plantings, or for non-potable uses such as toilet flushing.

Volume reduction practices would be able to earn up to a 15% credit, depending on the fraction of the total impervious area served and the equivalent depth of rainwater or runoff that is either infiltrated or reused.

Volume reduction practices also provide a water quality benefit. A practice designed to capture 1.0 inches of rainfall in Champaign, Illinois would be capturing almost all runoff for 90% of the annual rainfall events, meaning 100% capture of suspended and many dissolved stormwater pollutants for most events, and a significant capture and removal for events exceeding 1.0 inches of rainfall. Therefore, a Volume Reduction Credit in all likelihood would also qualify for a Water Quality credit.

Stormwater controls that are constructed with underdrains do not qualify for this credit.

Stormwater controls must be drained within 72 hours to qualify for a Volume Reduction Credit.

The following sections define a variety of rainfall harvesting and reuse techniques that would qualify for a Volume Reduction Credit. The City is willing to consider other techniques not listed here for Volume Reduction Credits.

5.2.1. Cisterns

A cistern is a watertight receptacle for holding rainwater. Cisterns range in capacity from a few gallons to thousands of cubic feet, effectively forming covered reservoirs. The water in cisterns can be used for irrigation or other types of reuse and infiltration practices.

5.2.2. Rain barrels

Rain barrels, are structures designed to intercept and store runoff from rooftops. Typically they are approximately 55 gallon drums. Stored water can provide irrigation for a garden or can be released slowly to a lawn.

5.2.3. Green roofs

A green roof is a roof of a building that is partially or completely covered with vegetation and a growing medium, planted over a waterproof membrane.

Green roofs serve several purposes for a building, such as absorbing rainwater, providing insulation, creating a habitat for wildlife, and helping to lower urban air temperatures and combat the heat island effect. There are two types of green roofs: intensive roofs, which are thicker and can support a wider variety of plants but are heavier and require more maintenance, and extensive roofs, which are covered in a light layer of vegetation and are lighter than an intensive green roof.

5.2.4. Permeable pavement

Pervious and permeable pavements are a range of materials and techniques for paving roads, parking lots and pavements that allow the movement of water and air around the paving material. Although some porous paving materials appear nearly indistinguishable from traditional nonporous materials, their environmental effects are qualitatively different. Whether pervious concrete, porous asphalt, paving stones or bricks, all these pervious materials allow precipitation to percolate through areas that would traditionally be impervious.

To qualify for the Volume Reduction Credit, the property owner would need to submit their volume reduction plan to the City for review and approval. The property owner's plan must be prepared and certified by a professional qualified to submit stormwater management plans. A professional engineer registered in the State of Illinois would satisfy this requirement. The City would apply the credit after the approved volume reduction plan has been constructed and inspected by the City. Every five years, the City would consider renewal of the credit upon receipt of a report from the property owner prepared by a certified professional indicating the volume reduction stormwater management practice is functioning as designed and is being maintained properly. Credit renewal would take place after the City has reviewed and approved the report.

5.3. Water Quality Credit (Maximum 15%)

Properties that provide measures to improve the quality of stormwater runoff that leaves the property would be eligible to receive a Water Quality Credit. For those properties that are granted either a rate or volume reduction credit, the Water Quality Credit may be added to those credits.

5.3.1. Water Quality / BMP Credit (Maximum 10%)

A credit would be provided to those applicants' properties that discharge a portion or all of their impervious area runoff to structural or non-structural best management practices (BMPs). The water quality credit would be granted if the applicant can demonstrate that the BMPs are designed to provide a minimum of 75% reduction in total suspended solids (TSS), as measured on an annual basis. Engineering calculations and, if applicable, vendor specifications for manufactured BMPs shall be submitted to demonstrate the minimum 75% TSS removal efficiency of the BMPs.

The maximum amount of water quality / BMP credit that will be provided is 10%. Credit is prorated based on the fraction of the impervious surfaces on site that actually flow through the facility.

To qualify for the Water Quality Credit, the property owner would need to submit their water quality plan to the City for review and approval. The property owner's plan must be prepared and certified by a professional qualified to submit stormwater management plans. A professional engineer registered in the State of Illinois would satisfy this requirement. The City would apply the credit after the approved water quality plan has been constructed and inspected by the City. Every five years the City would consider renewal of the credit upon receipt of a report from the property owner prepared by a certified professional indicating the water quality stormwater management practice is functioning as designed and is being maintained properly. Credit renewal would take place after the City has reviewed and approved the report.

The following sections define a variety of BMP's that would qualify for Water Quality Credits. The City is willing to consider other techniques not listed here for Water Quality Credits.

5.3.1.1. Vegetated swales

Vegetated swales, or "bioswales", are landscape elements designed to remove silt and pollution from surface runoff. They consist of a swaled drainage course with gently sloped sides and filled with vegetation, compost and/or riprap. The water's flow path, along with the wide and shallow ditch, is designed to maximize the time water spends in the swale, which aids the trapping of pollutants and silt. Biological factors also contribute to the breakdown of certain pollutants. A common application is around parking lots, where substantial automotive pollution is collected by the paving and then flushed by rain. The bioswale, or other type of biofilter, wraps around the parking lot and treats the runoff before releasing it to the storm sewer.

5.3.1.2. Bioretention

Bioretention is the process in which contaminants and sediment are removed from stormwater runoff. Stormwater is collected into the treatment area which consists of a grass buffer strip, sand bed,

ponding area, organic layer, or mulch layer, planting soil, and plants. Runoff passes first over or through a sand bed, which slows the runoff's velocity and distributes it evenly along the length of the ponding area. Water is ponded to a depth of approximately 6 inches and gradually infiltrates into the bioretention area or is evapotranspired. Water stored in the bioretention area planting soil exfiltrates over a period of days into the underlying soils. Rain gardens are a bioretention technique.

5.3.2. NPDES Permit Credit (5%)

This credit will apply only to property owners who currently are subject to either an industrial or municipal NPDES Stormwater Permit issued by the Illinois Environmental Protection Agency. This credit is conditional upon the proof of permit coverage and continuing compliance. The applicant shall submit annual site compliance inspection/audit updates to remain eligible for this credit.

This credit will be in the amount of 5% for the entire site.

5.4. Educational Credits

This credit is only applicable to local K-12 education institutions. National studies have shown that programs targeted at these students can be very effective at spreading the messages throughout a household. There are numerous water quality-based education programs that may be adopted by local school systems.

The City will provide a credit to educational institutions on an annual basis at a rate of \$5.00 per student for providing instruction in accordance with an approved curriculum. Education credits are based on the number of students actually participating in the education curriculum in a school year. All instruction curricula for which credit applications are to be submitted must be approved by the City, whether it is a nationally accepted program or a program written by the institution.

5.5. Direct Discharge Credit (up to 50%)

Properties that discharge directly to stormwater facilities that are not maintained by the City exert a lower demand for service on the City's stormwater program than do properties whose runoff must be accommodated by drainage system capacity, planning, and floodplain management. In recognition of that reduction in demand, the City would provide up to a 50% credit to those qualifying properties.

To receive this credit, the applicant must submit site plans for the property demonstrating which portion(s) of the parcel that would qualify for this credit.

5.6. Incentives

Incentives identical to those available for single family residential and duplex properties would be made available for non-single family residential and duplex properties that do not want to or are not able to participate in the credit program.

For a stormwater management activity, non-single family residential and duplex properties would be able to choose which program to participate in (credit or incentive) but they could not participate in both.

The City would budget \$10,000 per year for these incentives. Allocation would be on a first come, first serve basis. Once the budgeted amount has been allocated, there would be no additional incentive payments for the fiscal year. Those property owners eligible for the incentive would be first on the list for reimbursement the next fiscal year.

Exhibit H

Stormwater Utility Fee
Credit and Incentive Program
Other Illinois Communities

Exhibit H
Stormwater Utility Fee

Municipal Credit Programs Summary

| | Champaign | Normal | Highland Park | Moline | Rock Island | Morton | Bloomington |
|-----------------------------------|------------------|------------|---------------|----------|-------------|---------|-------------|
| Rate Reduction Credit & Incentive | \$250 – 15 - 30% | 10 – 20% | - | 0 – 100% | 0 – 35% | 0 – 50% | 25% - 50% |
| Volume Reduction Credit | 15% | - | - | - | - | - | - |
| Water Quality Credit | 15% | 15% | - | - | 10% | - | - |
| Direct Discharge Credit | 50 - 95% | 50% - 100% | 0 – 100% | 100% | 100% | 50% | 0 – 100% |
| Education Credit | \$5 | \$2.50 | | | | | |

Note: Rolling Meadows, Tinley Park, East Moline, Freeport, and Aurora have a stormwater utility fee but no incentive/credit program. Urbana is still working on the details of their program. They will probably have incentives for rain barrels (\$25) and rain gardens (\$250).

Summary of Stormwater Utility Fee Credit Programs in Illinois

| | Credit Program Available | Runoff Quantity Credit | Water Quality Credit | Education Credit | Direct Discharge Credit |
|-----------------|--------------------------|------------------------|----------------------|------------------|-------------------------|
| Normal | Yes | Yes | Yes | Yes | Yes |
| Moline | Yes | Yes | No | No | Yes |
| Highland Park | Yes | No | No | No | Yes |
| Rolling Meadows | No | - | - | - | - |
| Rock Island | Yes | Yes | Yes | No | Yes |
| Morton | Yes | Yes | No | No | Yes |
| Bloomington | Yes | Yes | No | No | Yes |
| Tinley Park | No | - | - | - | - |
| East Moline | No | - | - | - | - |
| Freeport | No | - | - | - | - |
| Aurora | No | - | - | - | - |

STORMWATER UTILITY FEE CREDIT PROGRAMS IN ILLINOIS

Normal

The maximum credit that can be received for an individual property is 50% except for those who qualify for the 100% Direct Discharge Credit as described below.

Types of Credits:

Runoff Quantity Credit – Level 1 (20% Credit) for new and existing properties which provide storm water detention for a 100-year storm event meeting these criteria:

- 100-year recurrence interval post-development peak flow shall not exceed the 3-year recurrence interval pre-developed peak flow.
- One vertical foot of freeboard for the design (100-year) high water level.
- Emergency spillway for storms exceeding the 100-year design.

Partial Level 1 Credit (50 year detention pond design) (10% Credit) for new and existing properties which provide storm water detention for a 50-year storm event meeting these criteria:

- 50-year recurrence interval post-development peak flow shall not exceed the 3-year recurrence interval pre-developed peak flow.
- One vertical foot of freeboard for the design (50-year) high water level.
- Emergency spillway for storms exceeding the 50-year design.

Runoff Quantity Credit – Level 2 (15% Credit) for properties that provide wet or dry detention facilities to address more frequent storm events meeting these criteria:

- Provide detention volume for the runoff produced by 0.75 inches of rainfall (first flush storm) and release this volume over a period not less than twenty-four hours.
- Provide detention volume for a 2-year recurrence interval 24-hour duration rainfall event and release this volume over a period not less than 36 hours. This volume shall be determined by calculating the runoff volume from a 2-year 24-hour hydrograph as calculated using the SCS Unit Hydrograph Method.
- For storms exceeding the 2-year magnitude, provide a defined outlet to the receiving drainage facility.

Properties draining to public storm water detention facilities are NOT eligible for a Runoff Quantity Credit.

Water Quality Credit (15% Credit) for properties that provide measures to improve the storm water quality that leaves the property:

- 10% BMP Credit for applicants who discharge a portion or all of their parcel runoff to structural or non-structural best management practices. Must demonstrate that the BMPs are designed to provide a minimum of 75% reduction in Total Suspended Solids as measured on an annualized basis.
- 5% NPDES Compliance Credit for industrial property owners who can demonstrate ongoing compliance with their NPDES Industrial Storm Water Discharge Permit.

Education Credit

- Public and private elementary schools will be allowed a credit of \$2.50 per 3rd grade child each year. Schools must develop a lesson plan and teach their students about storm water management issues. This satisfies the Town's requirement in their NPDES permit to provide a storm water quality education program to elementary school children.

Direct Discharge Credit

50% Direct Discharge Credit for developed properties within the Town of Normal that discharge their storm water directly to unincorporated areas.

100% Credit for Direct Discharge Credit applicants who discharge their storm water directly to unincorporated areas and who also hold an Industrial NPDES Stormwater Permit issued by the IEPA.

Moline

- Properties consisting of 100% vacant land do not have to pay stormwater utility fee.
- Properties which discharge to an approved stormwater retention system or which discharge 100% into Mississippi River or Rock River do not have to pay stormwater utility fee.
- A rate discount equal to the % you retain on your property is available with documentation provided by a P.E., topographical maps, etc.

Highland Park

Credits are awarded on an individual basis only to property owners whose properties do not impact the City's stormwater utility system.

Rolling Meadows

No credit system.

Rock Island

Direct Discharge Credit – 100% Direct Discharge Credit for properties which discharge all or a portion of their runoff directly to the Rock or Mississippi River.

Rate Reduction Credit – 25% Rate Reduction Credit for properties that control post-developed runoff rates for the two, ten and one-hundred year design storms to pre-development levels.

Additional Rate Reduction Credit – 10% Additional Rate Reduction Credit for properties which achieve further reduction of post-developed runoff rates for said design storms at least 20% below pre-development levels.

Additional Volume Credit – 5% Additional Volume Credit for those properties which provide at least 20% additional storage beyond what is required for the one-hundred year design storm.

Quality Credit – 10% Maximum Credit to be granted at a rate of 5% per use of approved Best Management Practices. Acceptable use of 2 or more approved BMPs will receive the maximum credit of 10%

NPC - \$200 annual credit for properties which obtain/maintain a National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permit. Proof of compliance is required.

Morton

No credits available for detached single family residential property.

The following credits are available to properties whose land use is other than detached single-family residential, including, but not limited to duplexes, multi-family with 3 or more units, institutional, commercial or industrial:

50% Rate Reduction Credit if no storm water runs off the site, up to and including the one hundred year design storm

40% Rate Reduction Credit for those properties that control the post-development peak rate of storm water runoff for the one hundred year design storm with a release rate less than or equal to a two year pre-developed runoff in accordance with the Village of Morton's storm water detention ordinance.

20% Rate Reduction Credit for those properties that control the post-development peak rate of storm water runoff for the fifty year design storm with a release rate less than or equal to a two year pre-developed runoff in accordance with the Village of Morton's storm water detention ordinance.

*This credit is not intended to be extended to single-family residential properties with their own individual or subdivision detention facility as required by the Village or Morton's storm water ordinance.

*Maximum aggregate credit for any individual property is 50% of its gross billing amount for the Storm Water Service Charge.

Bloomington

50% Rate Reduction Credit is available for those properties that control the post-development peak rate of storm water runoff for the one hundred year design storm with a release rate less than or equal to a three year pre-developed runoff in accordance with the City of Bloomington's Manual of Practice for the Design of Public Improvements.

25% Rate Reduction Credit is available for those properties that control the post-development peak rate of storm water runoff for the fifty year design storm with a release rate less than or equal to a three year post-developed runoff in accordance with the City of Bloomington's Manual of Practice for the Design of Public Improvements.

These credits are created for properties whose land use is other than single family residential, such as, but not limited to, multifamily with 3 or more units, institutional, commercial, business or industrial.

Single family residential properties served by a privately maintained regional detention facility may be eligible for a Rate Reduction Credit. It is not intended that this credit be extended to Single Family Residential properties with their own individual on-site detention facility.

Any entity which directly discharges to Sugar Creek, Skunk Creek, Pheasant Creek, Goose Creek or Kickapoo Creek without flowing through any portion of the Municipal Sewer System, and is arranged in such a manner that no surface flow from said property is discharged from it without first undergoing an NPDES permitted water treatment process approved by the Director of Engineering shall be eligible for a 100% Rate Reduction Credit.

Maximum aggregate credit for any individual property is 100% of its gross billing amount for the Storm Water Service Charge.

Tinley Park

No credit system.

East Moline

No credit system.

Freeport

No credit system.

Aurora

No credit system.