



## REPORT TO CITY COUNCIL

**FROM:** Steven C. Carter, City Manager

**DATE:** March 25, 2011

**SUBJECT:** STORMWATER UTILITY FEE EXPENDITURE PLAN – SS 2011-019

**A. Introduction:** The purpose of this report is to review the Stormwater Utility Fee Expenditure Plans and to obtain Council input on the plans.

**B. Recommended Action:** Direct staff to proceed with the completion of the stormwater utility fee Expenditure, Revenue, and Billing 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.
- 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.

**D. Summary:**

- Currently, there is little or no funding available in the Stormwater Fund for additional capital projects. All remaining resources in the fund were committed to the Boneyard Creek Second Street Reach Project, 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 is to provide citizen input and review for the stormwater utility fee.
- September 2010, the advisory committee and staff began work on the Expenditure, Revenue, and Billing Plan. Specifically, work began on the Expenditure Plan. Preliminary work on developing the fee structure (Revenue Plan) and determining how the fee would be billed (Billing Plan) could be started but could not be finalized until the amount needed (Expenditure Plan) was finalized.
- February 2011, the advisory committee completed work on the Expenditure Plan and agreed to forward to Council for their consideration a \$2M and \$3M Expenditure Plan for a stormwater utility fee. The committee recommended expenditures that would provide benefits to all properties in the City. Since the fee would be assessed on all parcels in the City, the committee's recommendation is consistent with the legal concept of a fee, that there should be a relationship between paying a fee and receiving benefits from it.
- The majority of stormwater activities identified in the expenditure plans to be funded by the stormwater utility fee are currently funded by sales and property taxes. If these stormwater activities are funded in the future by a utility fee, those sales and property taxes could be used for additional stormwater capital needs.
- Additional stormwater needs that could be funded as a result of the stormwater utility fee include Washington Street West, Phinney Channel Improvements (Crescent to Windsor), and Boneyard Creek (University to CNRR).
- The next step for the advisory committee is to complete work on the stormwater utility fee revenue and billing plans. Staff estimates the committee could work on these plans by July 2011.

## **E. Background:**

**1. Stormwater Utility Fee.** 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 in the next several years. All remaining resources in the fund were committed to the Boneyard Creek Second Street Reach Project, Washington Street East and John Street Drainage Improvement Projects.

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 in a watershed 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 usually based on the amount of impervious area that has been constructed on a property. Impervious area is typically measured in terms of equivalent residential units (ERU), i.e. the amount of impervious area for a typical residential property.

A stormwater utility fee would incorporate a credit program. The credit program is designed to encourage property owners to construct and maintain improvements to their properties to reduce and treat the stormwater from their property.

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

**2. 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.

Additional revenue could also provide a means to reduce the backlog of rehabilitation needs. When the City cleans and televises the existing storm sewer system, structural deficiencies are found that require rehabilitation. The City currently has resources budgeted for rehabilitation. However, rehabilitation needs far exceed by several million dollars available resources. Additional resources could fix existing problems in the storm sewer system sooner.

Additional resources could also allow new stormwater management programs to be started. For example, over 100 detention basins are privately maintained by homeowner or lake owner associations. Unfortunately, most of these associations are not providing adequate resources for current or future maintenance needs. A stormwater utility fee could provide resources for a program to allow the City to become more actively involved in the maintenance of these detention basins.

Another example of a new program could be a stormwater overhead sewer cost share program. This would be very similar to the sanitary sewer cost share program. The City has hundreds of homes connected by gravity to the City's storm sewer system. These connections were made long ago. Current City code does not allow gravity connections. When the City's storm sewer surcharges, stormwater backs up these gravity connections and flood basements. A cost share program could be implemented to help property owners disconnect the storm sewer gravity connection, install a sump pump and piping, and eliminate the backup.

**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. The amount of burden (runoff) is directly related to the amount of impervious area on the property. Also, payers of the fee should receive some benefits funded by the fee. There does not have to be an exact one-to-one relationship between fees paid and services received, however.

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. Increasing the overall stability of revenues in the Stormwater Management Fund will become even more critical in the future if more capital projects are completed with bonding and the annual debt retirement is funded from revenues in the Stormwater Management Fund.

**3. 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. The development and implementation of a stormwater utility fee would require extensive technical and community input. A Stormwater Utility Fee Advisory Committee provides an opportunity for both technical and citizen input and review for the stormwater utility fee. The committee consists 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 has also been formed. It consists 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, a Council Bill was approved authorizing 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 has

extensive experience with this type of plan. AMEC help would also assure the utility fee plan would be completed in a timely fashion.

In September 2010, City staff, AMEC, and the Stormwater Utility Fee Advisory and Technical Committees began work on the Expenditure, Revenue, and Billing Plan. Specifically, work began on the Expenditure Plan. It was judged the first step should be identifying the stormwater expenditures that could be supported by the fee. Preliminary work on developing the fee structure (Revenue Plan) and determining how the fee would be billed (Billing Plan) could be started but could not be finalized until the amount needed (Expenditure Plan) was finalized.

The Expenditure Plan was 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 1) with the average annual expenditure amount. Exhibit C 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
<b>Total</b>	<b>\$5,100,000</b>

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 2. 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 2 were rated by the majority of committee members as either “top priority” or “moderate priority.” All other activities that were listed in Table 1 but not in Table 2 did not get majority support.

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 3 along with their estimated costs. Exhibit D provides a short description of each unfunded stormwater activity.

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 4. 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 3 but not Table 4 did not get majority support.

1. Additional Capital Projects	
• <b>Washington Street West .....</b>	<b>\$8,700,000</b>
• <b>Phinney Branch Channel Improvements (Crescent to Windsor) .....</b>	<b>\$4,300,000</b>
• <b>Boneyard Creek (University to CNRR).....</b>	<b><u>\$7,300,000</u></b>
	Total..... \$20,300,000
2. Additional Master Planning	
• <b>Storm Sewer .....</b>	<b>\$200,000</b>
• 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.

4. **Stormwater Utility Fee Expenditure Plan.** The Stormwater Utility Fee Advisory and Technical Committees developed two expenditure plans to forward to City Council. The plans are summarized in Table 5.

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
<b>TOTAL</b>	<b>\$1,756,000</b>	<b>\$2,611,000</b>

Per the selection criteria described in the previous section, the Expenditure Plan illustrated on the left side of Table 5 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 3 and 4 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.

**5. Stormwater Utility Fee Administrative Expenses.** The expenditure plans listed in Table 5 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 6 adds to the expenditure plans in Table 5, staff’s best estimate at this time for administrative expenses. An explanation of each administrative expense is provided below. Exhibit E provides a 10-year projection for both the \$2M and \$3M Expenditure Plans. Table 6 and Exhibit E both provide a total for the dollars that would be available for other uses if a stormwater utility fee is implemented.

<b>STORMWATER EXPENDITURES</b>	<b>\$2M Expenditure Plan</b>	<b>\$3M Expenditure Plan</b>
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
<b>ADMINISTRATIVE EXPENDITURES</b>		
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
<b>TOTAL</b>	<b>\$ 2,256,000</b>	<b>\$ 3,211,000</b>
<b>\$'s Available for Other Uses</b>	<b>\$ 1,756,000</b>	<b>\$ 2,611,000</b>

- 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. This cost could be much less if the Urbana and Champaign Sanitary District (UCSD) agrees to bill for the stormwater utility fee. UCSD staff has indicated the maximum charge would be four and a half percent (4.5 %) of revenue billed. Staff hopes to work with UCSD staff to determine if UCSD billing is a viable option.
- 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. Once the revenue and billing plans have been completed for the stormwater utility fee, staff will refine that estimate.

**6. Projected Stormwater Utility Fees.** Staff estimates for a single family property the annual stormwater utility fee for the \$2M and \$3M Expenditure Plans would be approximately \$60 and \$85, respectively. These estimates would be developed more fully as the Revenue Plan is completed. The Revenue Plan would also provide typical annual estimates for multi-family, commercial and industrial properties. The Revenue Plan would also provide annual cost estimates for the school district, park district, University of Illinois, and Parkland College.

**7. Additional Stormwater Capital Funding.** All the stormwater activities in the \$2M Expenditure Plan and all but one of the stormwater activities in the \$3M Expenditure Plan are currently funded by sales and property taxes. If those activities are funded 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.

Assuming these sales and property tax dollars are invested in stormwater, the tables in Exhibit F illustrate currently unfunded maintenance and capital needs that could be funded. If the sales and property taxes are not invested in these stormwater activities, then these needs probably would go unfunded for the next 20 years. The stormwater needs listed in the tables on Exhibit F are illustrative only. Council could select other stormwater projects to fund.

**8. Next Steps.** Staff would continue to work on completing the stormwater utility fee Expenditure, Revenue, and Billing Plan. After incorporating Council’s input into the \$2M and \$3M Expenditure Plans, staff would consider the Expenditure Plan complete.

The next step is for staff and the Stormwater Utility Fee Advisory and Technical Committees to complete work on the Revenue Plan. The Revenue Plan would calculate the impervious surface

areas of different land use types in the City in order to determine the number of billing units within the City limits. Additionally, rate models would be developed for both the \$2M and \$3M Expenditure Plans. The proposed stormwater utility fees for each of the rate models would be used to calculate the annual cost for different land uses and owners to illustrate the fees impact. The revenue plan would also address credit and incentive programs that could be incorporated into the rates. Staff estimates the committee would complete work on the Revenue Plan by July. A Council Study Session would be scheduled to review the Revenue Plan.

Staff and the committees would also work on completing the Billing Plan for the stormwater utility fee. Four billing options would be evaluated:

- contracting with organizations that currently send bills to most or all properties in Champaign, such as Illinois American Water or the Urbana-Champaign Sanitary District,
- establishing a billing and collection system in cooperation with the City of Urbana, should it adopt a stormwater utility fee,
- outsource billing to a private firm, and
- setting up an in-house billing operation.

The pros and cons for each option, plus the cost to implement the option would be identified. This would include an estimate of all significant one-time and recurring costs, including staffing needs for billing, customer service, collections, and other staff-related functions. Staff hopes to complete work on the Billing Plan at the same time work concludes on the Revenue Plan.

#### **F. Alternatives:**

1. Direct staff to proceed with completing the stormwater utility fee Expenditure, Revenue, and Billing Plan. This would involve incorporating Council's input into the \$2M and \$3M Expenditure Plans and then proceeding with the completion of both the Revenue and Billing Plans.
2. Do not direct staff to proceed with completion of the Expenditure, Revenue, and Billing Plan and provide further direction to staff.

#### **G. Discussion of Alternatives:**

**Alternative 1** would direct staff to complete the stormwater utility fee Expenditure, Revenue, and Billing Plan. After incorporating Council's input into the \$2M and \$3M Expenditure Plans, staff would proceed with the completion of both the Revenue and Billing Plans.

##### **a. Advantages**

- 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 proceed with completion of the Expenditure, Revenue, and Billing Plan and would provide further direction to staff.

**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 has established a Stormwater Utility Fee Advisory and Technical Committee. The committees have met monthly since September 2010. 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](http://www.ci.champaign.il.us/swufac). Committee meetings are recorded and available for viewing at: [www.ci.champaign.il.us/cgtv](http://www.ci.champaign.il.us/cgtv) (search keyword is "storm").

After the Expenditure, Revenue, and Billing Plan has been completed, a public outreach program would be developed and implemented to provide information to obtain input from the public on the stormwater utility fee. 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 estimates the total cost at \$500,000. Currently, the City is under contract for \$150,000 with AMEC to assist with preparation of the Expenditure, Revenue, and Billing Plan. Once the Expenditure, Revenue, and Billing Plan has been completed, and if Council decides to move forward with the implementation of the stormwater utility fee, then staff would need to budget an additional \$350,000 to complete the next implementation step.

The Stormwater Fund has sufficient resources to implement the stormwater utility fee. 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 budgeted in the Public Works Department to complete the stormwater utility fee Expenditure, Revenue, and Billing Plan. If Council approves the plan and decides to move forward with implementation of a stormwater utility fee, additional resources would be needed. Staff estimates a temporary Project Specialist would be needed at 10 hours per week to assist the Public Works Director and other existing staff to implement the fee. The Finance Department has not estimated the staff time required to implement a billing system for the fee because the alternative of another governmental entity billing the fee is still being explored. That alternative could result in lower cost because the stormwater management fee could be added to an existing billing system.

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: Existing Stormwater Activities and Expenditures  
Exhibit D: Unfunded Stormwater Needs  
Exhibit E: Tables 1 & 2: Stormwater Utility Fee – Expenditure Plan - \$2M and \$3M – Ten-Year Projections  
Exhibit F: Tables 3 & 4: Additional Stormwater Maintenance and Capital Projects - \$2M and \$3M – Ten-Year Projections

## 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.

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 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
<b>Total</b>	<b>\$5,100,000</b>

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](http://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.

**Exhibit 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).....	<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

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
<b>Boneyard Creek Master Plan</b>	
• 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
<b>Phinney Branch Master Plan</b>	
• Channel Improvements	\$ 5,000,000
<b>Copper Sough Master Plan</b>	
• 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
<b>TOTAL</b>	<b>\$ 46,200,000</b>

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.

**Table 1**  
**STORMWATER UTILITY FEE**  
**EXPENDITURE PLAN**  
**\$2M RANGE**

	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
<b>STORMWATER EXPENSES</b>										
1. Operation, Maintenance and Rehabilitation (City Crews)	\$ 694,000	\$ 714,820	\$ 736,265	\$ 758,353	\$ 781,103	\$ 804,536	\$ 828,672	\$ 853,532	\$ 879,138	\$ 905,513
2. Storm Sewer Cleaning and Television (Contractual)	\$ 556,000	\$ 572,680	\$ 589,860	\$ 607,556	\$ 625,783	\$ 644,556	\$ 663,893	\$ 683,810	\$ 704,324	\$ 725,454
3. Storm Sewer Pipe and Manhole Repair (Contractual)	\$ 506,000	\$ 521,180	\$ 536,815	\$ 552,920	\$ 569,507	\$ 586,593	\$ 604,190	\$ 622,316	\$ 640,986	\$ 660,215
<b>ADMINISTRATIVE EXPENSES</b>										
1. Utility Fee Implementation Cost Recovery	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000		\$ -	\$ -	\$ -	\$ -
2. Billing Costs	\$ 150,000	\$ 154,500	\$ 159,135	\$ 163,909	\$ 168,826	\$ 173,891	\$ 179,108	\$ 184,481	\$ 190,016	\$ 195,716
3. Administrative Fees	\$ 150,000	\$ 154,500	\$ 159,135	\$ 163,909	\$ 168,826	\$ 173,891	\$ 179,108	\$ 184,481	\$ 190,016	\$ 195,716
4. Utility Fee Credits and Incentives	\$ 100,000	\$ 103,000	\$ 106,090	\$ 109,273	\$ 112,551	\$ 115,927	\$ 119,405	\$ 122,987	\$ 126,677	\$ 130,477
<b>TOTAL</b>	<b>\$ 2,256,000</b>	<b>\$ 2,320,680</b>	<b>\$ 2,387,300</b>	<b>\$ 2,455,919</b>	<b>\$ 2,526,597</b>	<b>\$ 2,499,395</b>	<b>\$ 2,574,377</b>	<b>\$ 2,651,608</b>	<b>\$ 2,731,156</b>	<b>\$ 2,813,091</b>
<b>\$'s Available for Other Uses</b>	<b>\$ 1,756,000</b>	<b>\$ 1,808,680</b>	<b>\$ 1,862,940</b>	<b>\$ 1,918,829</b>	<b>\$ 1,976,393</b>	<b>\$ 2,035,685</b>	<b>\$ 2,096,756</b>	<b>\$ 2,159,659</b>	<b>\$ 2,224,448</b>	<b>\$ 2,291,182</b>

## NOTES:

- Fiscal Years FY14 through FY22 assumes a 3% inflation.
- Single Family - \$58.66 per year**

**Table 2**  
**STORMWATER UTILITY FEE**  
**EXPENDITURE PLAN**  
**\$3M RANGE**

	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22
<b>STORMWATER EXPENDITURES</b>										
1. Operation, Maintenance and Rehabilitation (City Crews)	\$ 694,000	\$ 714,820	\$ 736,265	\$ 758,353	\$ 781,103	\$ 804,536	\$ 828,672	\$ 853,532	\$ 879,138	\$ 905,513
2. Storm Sewer Cleaning and Television (Contractual)	\$ 556,000	\$ 572,680	\$ 589,860	\$ 607,556	\$ 625,783	\$ 644,556	\$ 663,893	\$ 683,810	\$ 704,324	\$ 725,454
3. Storm Sewer Pipe and Manhole Repair (Contractual)	\$ 506,000	\$ 521,180	\$ 536,815	\$ 552,920	\$ 569,507	\$ 586,593	\$ 604,190	\$ 622,316	\$ 640,986	\$ 660,215
4. Channel Maintenance	\$ 339,000	\$ 349,170	\$ 359,645	\$ 370,434	\$ 381,547	\$ 392,994	\$ 404,784	\$ 416,927	\$ 429,435	\$ 442,318
5. JULIE	\$ 47,000	\$ 48,410	\$ 49,862	\$ 51,358	\$ 52,899	\$ 54,486	\$ 56,120	\$ 57,804	\$ 59,538	\$ 61,324
6. Stormwater Quality (NPDES Permit Compliance)	\$ 188,000	\$ 193,640	\$ 199,449	\$ 205,433	\$ 211,596	\$ 217,944	\$ 224,482	\$ 231,216	\$ 238,153	\$ 245,297
7. Service Requests (Private Property Drainage Problems)	\$ 131,000	\$ 134,930	\$ 138,978	\$ 143,147	\$ 147,442	\$ 151,865	\$ 156,421	\$ 161,113	\$ 165,947	\$ 170,925
8. Master Plan Subdivision Detention Basins	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>ADMINISTRATIVE EXPENDITURES</b>										
1. Utility Fee Implementation Cost Recovery	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -
2. Billing Costs	\$ 200,000	\$ 206,000	\$ 212,180	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000
3. Administrative Fees	\$ 200,000	\$ 206,000	\$ 212,180	\$ 218,545	\$ 225,102	\$ 231,855	\$ 238,810	\$ 245,975	\$ 253,354	\$ 260,955
4. Utility Fee Credits and Incentives	\$ 100,000	\$ 103,000	\$ 106,090	\$ 109,273	\$ 112,551	\$ 115,927	\$ 119,405	\$ 122,987	\$ 126,677	\$ 130,477
<b>TOTAL</b>	<b>\$ 3,211,000</b>	<b>\$ 3,149,830</b>	<b>\$ 3,241,325</b>	<b>\$ 3,317,019</b>	<b>\$ 3,407,530</b>	<b>\$ 3,500,756</b>	<b>\$ 3,496,778</b>	<b>\$ 3,595,682</b>	<b>\$ 3,697,552</b>	<b>\$ 3,802,479</b>
<b>\$'s Available for Other Uses</b>	<b>\$ 2,611,000</b>	<b>\$ 2,534,830</b>	<b>\$ 2,610,875</b>	<b>\$ 2,689,201</b>	<b>\$ 2,769,877</b>	<b>\$ 2,852,973</b>	<b>\$ 2,938,563</b>	<b>\$ 3,026,720</b>	<b>\$ 3,117,521</b>	<b>\$ 3,211,047</b>

## NOTES:

- Fiscal Years FY14 through FY22 assumes a 3% inflation.
- Single Family - \$83.49 per year**

**Table 3  
ADDITIONAL STORMWATER  
MAINTENANCE & CAPITAL  
PROJECTS (\$2M Range)**

	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>\$'s Available for Other Uses</b>	\$ 1,756,000	\$ 1,808,680	\$ 1,862,940	\$ 1,918,829	\$ 1,976,393	\$ 2,035,685	\$ 2,096,756	\$ 2,195,659	\$ 2,224,448	\$ 2,291,182	
<b>ADDITIONAL PROJECTS</b>	<b>COST</b>										
1. Additional Channel Maintenance (e.g. Boneyard 2nd St. Reach, Phinney Branch - Mattis to Scotsdale, etc.)	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 2,000,000
2. Washington Street West - Drainage Improvements	\$ 8,700,000	\$ 1,556,000	\$ 1,608,680	\$ 1,662,940	\$ 1,718,829	\$ 1,776,393	\$ 377,158				\$ -
3. Kaskaskia Watershed Master Plan	\$ 200,000					\$ 200,000					\$ 200,000
4. Phinney Branch Channel Improvements (Windsor to Crescent)	\$ 4,300,000					\$ 1,258,527	\$ 1,896,756	\$ 1,144,717			\$ -
5. Boneyard Creek Improvements - Phase 3	\$ 7,300,000							\$ 850,942	\$ 2,024,448	\$ 2,091,182	\$ 4,966,572
<b>TOTAL EXPENDITURES</b>	<b>\$ 1,756,000</b>	<b>\$ 1,808,680</b>	<b>\$ 1,862,940</b>	<b>\$ 1,918,829</b>	<b>\$ 1,976,393</b>	<b>\$ 2,035,685</b>	<b>\$ 2,096,756</b>	<b>\$ 2,195,659</b>	<b>\$ 2,224,448</b>	<b>\$ 2,291,182</b>	
<b>BALANCE</b>	<b>\$ -</b>	<b>\$ -</b>									

NOTE:

1. Assumption was made that capital projects would be "pay as you go".

**Table 4  
ADDITIONAL STORMWATER  
MAINTENANCE & CAPITAL  
PROJECTS (\$3M Range)**

	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	TOTAL
<b>\$'s Available for Other Uses</b>	\$ 2,611,000	\$ 2,534,830	\$ 2,610,875	\$ 2,689,201	\$ 2,769,877	\$ 2,852,973	\$ 2,938,563	\$ 3,026,750	\$ 3,177,521	\$ 3,211,047	
<b>ADDITIONAL PROJECTS</b>	<b>COST</b>										
1. Additional Channel Maintenance (e.g. Boneyard 2nd St. Reach, Phinney Branch - Mattis to Scotsdale, etc.)	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 2,000,000
2. Washington Street West - Drainage Improvements	\$ 8,700,000	\$ 2,411,000	\$ 2,334,830	\$ 2,410,875	\$ 1,543,295						\$ -
3. Kaskaskia Watershed Master Plan	\$ 200,000			\$ 200,000							\$ 200,000
4. Phinney Branch Channel Improvements (Windsor to Crescent)	\$ 4,300,000			\$ 745,906	\$ 2,569,877	\$ 984,217					\$ -
5. Boneyard Creek Improvements - Phase 3	\$ 7,300,000					\$ 1,668,756	\$ 2,738,563	\$ 2,826,750	\$ 65,931		\$ 7,300,000
<b>TOTAL EXPENDITURES</b>	<b>\$ 2,611,000</b>	<b>\$ 2,534,830</b>	<b>\$ 2,610,875</b>	<b>\$ 2,689,201</b>	<b>\$ 2,769,877</b>	<b>\$ 2,852,973</b>	<b>\$ 2,938,563</b>	<b>\$ 3,026,750</b>	<b>\$ 265,931</b>	<b>\$ 200,000</b>	
<b>BALANCE</b>	<b>\$ -</b>	<b>\$ 2,911,590</b>	<b>\$ 3,011,047</b>								

NOTE:

1. Assumption was made that capital projects would be "pay as you go".