City of CHAMPAIGN

STORMWATER UTILITY FEE
ADVISORY COMITTEE
City of Champaign, Illinois

TO: Stormwater Utility Fee Advisory Committee

FROM: Vic McIntosh, Chair

DATE: September 8, 2010

SUBJECT: NOTICE OF MEETING

The Stormwater Utility Fee Advisory Committee will meet on Monday, September 13, 2010, at 4 p.m. in the City of Champaign Council Chambers, 102 North Neil Street, 61820.

AGENDA

1. Introductions
2. Advisory Committee
3. Project Overview
4. Introduction to Stormwater Management
5. Public Participation
6. Next Meeting
7. Adjourn

The City of Champaign strives to ensure that its programs, services and activities are accessible to individuals with disabilities. If you are planning on attending this meeting and would like to request special accommodations, please contact the Public Works Department at 217/403-4700 at least 72 hours prior to the start of the meeting with your specific request.

Stormwater Utility Fee Advisory/Technical Committee Meeting

September 13, 2010

4 – 5:30

September 13, 2010 Meeting Agenda

1. Introductions
2. Advisory Committee
3. Project Overview
4. Introduction to Stormwater Management
5. Public Participation
6. Next Meeting
7. Adjourn

1. Introductions

- Staff – Attachment A
- AMEC / Foth – Attachment B
- Advisory Committee – Attachment C
- Technical Committee – Attachment D

Staff

Attachment A

Attachment A

Dennis Schmidt, Director
403-4701 – office
217-417-3297 – cell
schmiddj@ci.champaign.il.us

Roland White, City Engineer
403-4710 – office
217-722-2434 – cell
roland.white@ci.champaign.il.us

Eleanor Blackmon, Assistant City Engineer
403-4710 – office
eleanor.blackmon@ci.champaign.il.us

Alex Nagy, Civil Engineer II
403-4710 – office
217-841-6497 – cell
alex.nagy@ci.champaign.il.us

Jamie Vermillion, Project Specialist
403-4737 – office
jamie.vermillion@ci.champaign.il.us

Debra Windlan, Secretary II
403-4703 – office
debra.windlan@ci.champaign.il.us

AMEC / Foth

Attachment B

Attachment B

AMEC

Douglas Noel, P.E., Vice President
Earth and Environmental
201 South Capitol Avenue
Suite 200
Indianapolis, Indiana 46225

Tel (317) 713-1700
Fax (317) 713-1710

douglas.noel@amec.com

Foth Infrastructure & Environment, LLC

Gregory P. Kacvinsky, P.E., Senior Project Manager
1610 Broadmoor Drive
Champaign, Illinois 61821

Front Desk (217) 352-4169
Fax (217) 352-0085
Direct (217) 353-7344

GKacvinsky@foth.com

Advisory Committee – Attachment C

Technical Committee – Attachment D

Attachment C

Stormwater Utility Fee Advisory Committee

Donald Agin	Chris Hamelberg
Charles Allen	Jim Jesso
Jim Bustard	Vic McIntosh
Clif Carey	Jim Spencer
Steve Cochran	David Tomlinson
James Creighton	Anna Maria Watkin
Jack Dempsey	Eliana Brown
Karen Foster	Bruce Walden

Attachment D

Stormwater Utility Fee Technical Committee

Mark Toalson
Leslie Lundy
Lorrie Pearson
Andrew Proctor
Shawn Luesse

2. Advisory Committee

- Public Meeting
- Chair – Vic McIntosh
- Meeting Minutes
  - Summary
- Meeting Packets
  - Electronic or Paper
- Meeting Length
  - 75 to 90 minutes

2. Advisory Committee

- Future Meeting Dates
  - 2nd Monday of the month (4 – 5:30 p.m.)
- Future Meetings and Agendas
  - October 11, 2010, Meeting
    - Stormwater Utility Fee
    - Champaign's Stormwater Management Program
    - Champaign's Stormwater Needs
  - November 8, 2010, Meeting
    - Champaign's Stormwater Needs
    - Champaign's Stormwater Priorities

2. Advisory Committee

- December 6, 2010, Meeting
  - Champaign's Future Stormwater Management Program
  - Future Stormwater Funding
- January 10, 2010, Meeting
  - No meeting scheduled
  - Council Study Session

2. Advisory Committee

- Advisory Committee Ground Rules
  - Encourage everyone to participate
  - All ideas are welcome
  - Respect the speaker
  - Avoid "side" conversations
  - Come prepared
  - Cell phones / other devices – OFF
  - Start on time / End on time

3. Project Overview

- March 23, 2010, Council Study Session – Attachment E
  - Previous Efforts (1992 – 2002)
  - Current Stormwater Funding ($5,100,000 per year)
  - Unfunded Stormwater Capital Projects (+$86,000,000)
  - Stormwater Utility Fee – Impervious surfaces, billing methods, equivalent residential unit, credits, exemptions, tax exempt properties, other Illinois communities

3. Project Overview

- Implementation Steps
- Benefits
- Stormwater Utility Fee (SWUF) – Next steps
  - Appoint SWUF Advisory Committee
  - Develop an Expenditure, Revenue, and Billing Plan – Champaign SWUF.

3. Project Overview

- June 15, 2010, Council Meeting – Attachment F
  - Established SWUF Advisory Committee
  - Appointed Members to SWUF Advisory Committee

3. Project Overview

- Section 3. The duties of the Stormwater Utility Fee Advisory Committee shall be to:
  - Develop goals and objectives for the expenditure, revenue, and billing plan for the stormwater utility fee;
  - Provide input and direction on the expenditure, revenue, and billing plan prepared by City staff and/or the Consultant for the stormwater utility fee.
  - Assist with obtaining public input on the expenditure, revenue, and billing plan for the stormwater utility fee.
  - Carry out such other responsibilities as may be determined by City Council.

3. Project Overview

- 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.

AMEC / Foth

- August 3, 2010, Council Meeting – Attachment G
- Scope of Work
  - Task 1 – Project Management
  - Task 2 – Expenditure Plan
  - Task 3 – Revenue Plan
  - Task 4 – Billing Plan
  - Task 5 – Stormwater Utility Fee Advisory Committee
  - Task 6 – Initial Rate Payer Outreach

AMEC / Foth

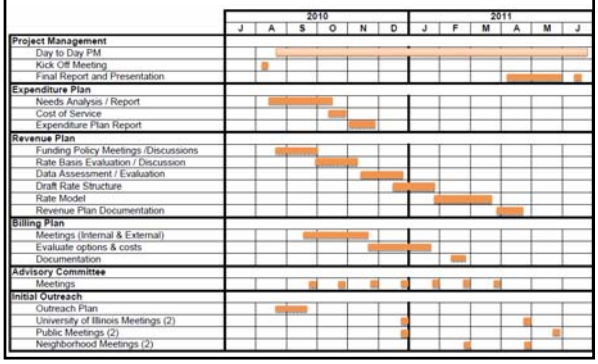
EXHIBIT C
SCOPE OF WORK
JUNE 29, 2010

AMEC will perform the first phase of the development of a stormwater utility fee for the City of Champaign. The project will include development of an expenditure plan that describes the level and cost of service for stormwater management, development of a revenue plan for the setting the utility fee, development of a billing plan for determination of how the utility fee bills will be delivered to the ratepayers, facilitation of an advisory committee, and implementation of some initial critical initial outreach steps. The project will provide an assessment of the options available to the City for funding the stormwater management program. The tasks required to complete the first phase of the development of a stormwater utility fee are described in the following sections.

Task 1. Project Management

Phase 1 Costs

Project Timeline



Task 2 – Expenditure Plan

- Storm Sewers
- Channels
- Detention Basins
- Capital Improvements
- NPDES – Stormwater Quality
- Overhead Sewer (Stormwater) Program
- Sustainable / Green Programs

Task 2 – Expenditure Plan

- Needs Analysis
  - List Current Activities
  - Future Needs
  - Priorities the Future Needs
- Cost
- Expenditure Plan

Task 3 – Revenue Plan

- Rate, basis, rate structure, and rate model
- Revenue Plan

Task 4 – Billing Plan

- In-house
- Private Company
- City of Urbana
- IAWC, UCSD, etc.

Task 5

Stormwater Utility Fee
Advisory Committee

City of CHAMPAIGN

Public Works Department
Staff Contact Information

Dennis Schmidt, Director
403-4701 – office
217-417-3297 – cell
schmiddj@ci.champaign.il.us

Roland White, City Engineer
403-4710 – office
217-722-2434 – cell
roland.white@ci.champaign.il.us

Eleanor Blackmon, Assistant City Engineer
403-4710 – office
eleanor.blackmon@ci.champaign.il.us

Alex Nagy, Civil Engineer II
403-4710 – office
217-841-6497 – cell
alex.nagy@ci.champaign.il.us

Jamie Vermillion, Project Specialist
403-4737 – office
jamie.vermillion@ci.champaign.il.us

Debra Windlan, Secretary II
403-4703 – office
debra.windlan@ci.champaign.il.us

Public Works Department
702 Edgebrook Drive
Champaign IL 61820
(217) 403-4700
fax (217) 403-4755
www.ci.champaign.il.us

Consultant Contact Information

AMEC

Douglas Noel, P.E., Vice President
Earth and Environmental
201 South Capitol Avenue
Suite 200
Indianapolis, Indiana 46225

Tel (317) 713-1700
Fax (317) 713-1710

douglas.noel@amec.com

Foth Infrastructure & Environment, LLC

Gregory P. Kacvinsky, P.E., Senior Project Manager
1610 Broadmoor Drive
Champaign, Illinois 61821

Front Desk (217) 352-4169
Fax (217) 352-0085
Direct (217) 353-7344

GKacvinsky@foth.com

Douglas C. Noel, P.E.

Vice President, Principal Engineer

Doug Noel has 34 years of experience in water resources engineering and studies since graduating from the University of Illinois (MS 1976). In his role as a Principal Engineer in AMEC's water resources business he directs the firm's water resources and stormwater management efforts in the Midwest. Doug's professional background includes water quality master planning, development of BMP plans for water quality, watershed protection programs, municipal and industrial storm water pollution prevention programs, stormwater management funding, and public awareness/ education/ training programs. During his 22 years with AMEC and its predecessor companies Mr. Noel has been involved extensively in the financial aspects of both NPDES stormwater quality permitting programs and stormwater utility funding programs. He has participated in more than eighteen stormwater funding studies, including seven in Illinois. AMEC, under Mr. Noel's direction, planned and implemented the stormwater utility for the City of Rock Island. The Rock Island utility was challenged and upheld in both the lower and appellate courts as a legitimate user fee system. Mr. Noel has been a frequent speaker on stormwater utility funding throughout the Midwest.

Prior to joining AMEC, Mr. Noel was an Associate Hydrologist at the Illinois State Water Survey in Champaign. During his ten years at the Survey he was involved in a number of urban runoff projects, including USEPA's Nationwide Urban Runoff Program element in Champaign and Urbana, in which he was an investigator looking at the impacts of street sweeping on the quality of stormwater runoff. He also was responsible for the State's stormwater runoff model and modeled the Boneyard Creek watershed as part of the calibration and testing of the model.

AMEC: BACKGROUND INFORMATION

AMEC Earth & Environmental, Inc. (AMEC) is a U.S. corporation with more than 4,400 employees in 125 U.S. and Canadian offices, and provides a broad spectrum of engineering and environmental services to both public and private sector clients. AMEC was created in 2000 when AMEC, plc acquired the former Ogden Environmental & Energy Services, Inc. and Agra Services, Inc.

AMEC focuses on delivering full service solutions to public and private sector clients across the United States. The Indianapolis office specializes in developing stormwater management plans, stormwater utilities, and compliance with National Pollutant Discharge Elimination System (NPDES) stormwater discharge permits. The following core services are offered through AMEC and subsidiary companies:

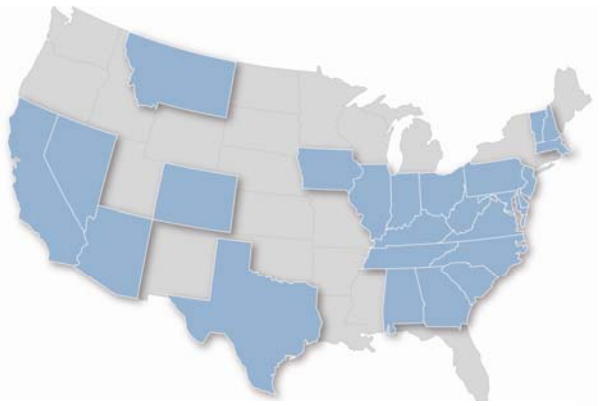
- Water Resources
- Transportation
- Mapping
- Environmental
- Hazardous Materials
- GIS Technology
- Civil Design
- Geotechnical
- Internet Applications

AMEC has been in the stormwater management business for more than 25 years. Our professionals have extensive experience developing stormwater management programs, in watershed planning and analysis, developing tools for operating and maintaining flood control facilities, floodplain delineation and mapping, water quality studies, stormwater management funding, and stormwater enforcement activities, as well as supporting program and data management elements such as GIS.

AMEC offers one of the most comprehensive suites of services in watershed management, protection, and restoration in the country. Water resources services include:

- Stormwater Management
- Floodplain Management and Mapping
- Civil Design Services
- NPDES Permitting and Compliance
- Ordinances and Design Manuals
- Water Quality Monitoring and Modeling
- TMDL Development
- GIS Applications Development
- Stakeholder Programs
- Stormwater Funding Programs
- Flood Hazard Restudies
- Dam Safety Engineering
- Watershed Master Planning
- Biological and Ecological Monitoring
- Stream and Wetlands Restoration/Mitigation
- Groundwater Services
- Teaching and Training
- Water Supply Studies

AMEC is one of the premier providers of stormwater utility planning and implementation services in the United States. We have assisted more than 100 communities nationwide, including seven in Illinois, in making strategic decisions about stormwater funding, many of which have resulted in utility development. We are regular speakers on stormwater utility-related subjects, have provided numerous workshops through the American Society of Civil Engineers and StormCon, and co-authored the U.S. Environmental Protection Agency (USEPA) guidance on developing stormwater utilities[1]. Our contract for managing the Marion County Storm Water Management District (Indianapolis) billing program, including the actual billing of third party bills, is one of a kind for an engineering services company.



AMEC Stormwater Utility Experience

[1] **Guidance Manual for Municipal Stormwater Funding**, 2006, USEPA and NAFSMA, 140 pp

Project Engineer

Education

M.B.A., University of Michigan, 2002

B.S., Civil Engineering, University of Wisconsin – Madison, 1995

License

Professional Engineer, Illinois No. 55992, 2002

Professional Engineer, Wisconsin No. 40503-6, 2009

Professional Engineer, Indiana No. 10302031, 2002

Professional Engineer, Michigan No. 6201045590, 1999

Gregory P. Kacvinsky, P.E.

Introduction

Mr. Kacvinsky has extensive experience in municipal engineering, focusing on watershed master planning, sewer system design, combined sewer system analysis, sanitary sewer evaluation studies, floodplain studies, capital improvement program development, and regulatory assistance. He also assists municipal clients with program funding options, including stormwater utility implementation and business planning for local enterprise funds.

Mr. Kacvinsky is an accomplished speaker and recognized expert in his field. He regularly presents at regional and national conferences on engineering issues relating to municipal sewer systems, stormwater management, Low Impact Development, hydrologic and hydraulic modeling, watershed master planning, and other wet weather phenomena.

Relevant Experience

- Stormwater Utility Feasibility Study, Town of Normal, Illinois. Project manager a preliminary analysis of the Town's current cost structure for its stormwater program, capital improvement needs, and regulatory compliance costs. Used the Town's GIS data to develop preliminary calculations on the impacts of stormwater user fees on specific land uses, major landowners and businesses, and Illinois State University.

- Stormwater Utility Implementation, Town of Normal, Illinois. Project manager assisting the town of Normal with the planning and full implementation of a Stormwater Utility. This project included four stakeholder meetings to define stormwater program priorities, preparation of a rate ordinance, coordination with key rate payers, and development of a master account file for the town's Water Department to use to begin the billing process. The stormwater utility was planned to generate approximately $1.7 million in annual revenues, helping the town to address much-needed capital improvement programs and stormwater permit compliance.

- Stormwater Utility Implementation, Village of St. Joseph, Illinois. Project manager for the development of a rate study and stormwater user fee recommendations to the village of St. Joseph to develop a funding mechanism for their stormwater infrastructure. Used GIS tools to determine appropriate billing methods and estimated potential revenue. Developed a 6-year cash flow analysis to identify necessary expenses and revenue needs.

Gregory P. Kacvinsky, P.E.
(cont.)

- Washington East Drainage Study, City of Champaign, Illinois. Project manager for a drainage study within a flood-prone area in response to recent street and yard flooding. The analysis included a Storm Water Management Model (using EPA SWMM) of the contributing watershed. Flooding locations, flood depths, and overland flood routing were quantified and improvement alternatives were identified to reduce the magnitude and frequency of flooding. The project also included presentations to impacted neighborhoods, preparation of a technical report, and preliminary cost estimates.

- Curtis/Mattis Phinney Branch Analysis, City of Champaign, Illinois. Project manager for a hydrologic and hydraulic analysis of the upper reaches of the Phinney Branch, an urbanizing watershed on the southern edge of Champaign. This study focused on hydrology and hydraulics with respect to future development in the area. The project included the analysis of future detention ponds within the watershed to determine the appropriate pond sizing in order to maintain manageable flow rates in downstream developed areas.

- Phinney Branch Hydraulic Analysis, City of Champaign, Illinois. Project manager for a hydrologic analysis of the upper reaches of the Phinney Branch watershed and a hydraulic analysis of the existing drainage channel, in coordination with a Phase 1/Phase 2 services for a roadway improvement project (Curtis Road, Champaign County). This study focused on hydrology and hydraulics with respect to future development in the area. The project included the analysis of future detention ponds within the watershed to determine the appropriate pond sizing in order to maintain manageable flow rates in downstream developed areas. Worked with city staff to develop a unique channel cross section design to provide a low flow channel for frequent storm events and an overflow "floodplain shelf" for larger storms. Analyzed hydraulic impacts of multiple channel cross section alternatives and presented findings to city staff.

- Copper Slough Watershed Master Plan, City of Champaign, Illinois. Project manager for a study of the Copper Slough Watershed, a 10 square mile area on the west side of Champaign. Project included a system-wide solutions development to alleviate flooding, erosion, and reduce the potential for stormwater pollution. Special attention was given to unconventional improvements such as channel restoration, off-line stormwater detention, and stormwater BMPs within a large industrial area in the watershed headwaters.

Foth

Personalized, Client-Centered Service

Background

Founded in 1938 in Green Bay, Wisconsin, Foth offers a tradition of personalized service and smart solutions to government, industrial and commercial clients. Our firm provides expertise in environmental, industrial and infrastructure consulting and engineering. Multiple office locations allow us to serve clients throughout the United States in a timely and cost-effective manner. Professional publications consistently rank Foth among the nation's top engineering consulting firms. Clients also rank Foth at the top: each year more than 85 percent of our business comes from repeat clients.

Foth Companies

- **Foth Production Solutions, LLC** provides engineer-led production solutions to our partner clients for product innovation and manufacturing optimization.
- **Foth Infrastructure & Environment, LLC** offers a full range of strategic planning, consulting and engineering to governments and businesses.
- **Foth Asset Management, LLC** specializes in bringing together resources to transform under-utilized properties into high-value land assets.

Learn more about us on the web at **www.foth.com**.

Foth's Locations

- Battle Creek, MI
- Cedar Rapids, IA
- Champaign, IL
- Chicago, IL
- Des Moines, IA
- Florham Park, NJ
- Green Bay, WI
- Jefferson City, MO
- Kansas City, KS
- Madison, WI
- Mehoopany, PA
- Milwaukee, WI
- Minneapolis/St. Paul, MN
- Omaha, NE
- Peoria, IL
- Springfield, MO
- St. Louis, MO
- Washington, DC

Foth

City of CHAMPAIGN

REPORT TO CITY COUNCIL

FROM: Steven C. Carter, City Manager

DATE: March 19, 2010

SUBJECT: STORMWATER UTILITY FEE SS 2010-022

A. Introduction: The purpose of this report is twofold;

- to provide Council with information on stormwater utility fees,
- to obtain Council input on whether staff should proceed with the next implementation step for the stormwater utility fee. This would involve establishing a stormwater utility fee advisory committee and developing a preliminary expenditure, revenue, and billing plan for a City of Champaign stormwater utility fee.

B. Recommended Action: Direct staff to proceed with the next implementation step for the stormwater utility fee. Specifically, this would involve establishing a stormwater utility fee advisory committee and developing a preliminary expenditure, revenue, and billing plan for a City of Champaign stormwater utility fee.

C. Prior Council Action: The first part of the Background Section below titled "Previous Efforts" summarizes prior Council action on a stormwater utility fee.

D. Summary:

- The City has discussed and considered a stormwater utility fee before. Prior efforts took place between 1992 and 2002. Previous considerations centered around providing additional revenue to fund a storm sewer preventative maintenance program.
- The City's Stormwater Management Fund provides resources for stormwater improvement projects, operation, maintenance and rehabilitation activities, plus support for water quality improvements required by the City's National Pollutant Discharge Elimination System permit.
- All current revenues in the Stormwater Management Fund have been committed. The City has over $80 million of unfunded stormwater capital needs.
- 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. The fee amount is based on the amount of runoff the property contributes to the stormwater drainage system.
- The typical implementation steps for a stormwater utility fee are: 1) appoint a stormwater utility fee advisory committee, 2) complete a feasibility study, 3) adopt a stormwater utility fee ordinance and credit manual, 4) developing a billing system including a database of properties' contributions to rainwater runoff, and 5) provide community outreach.

- The benefits for a stormwater utility fee are: 1) the fee could provide more resources for stormwater management, 2) the fee is considered an equitable means to paying for stormwater management because charges are relative to each property's contribution to runoff, and 3) the fee is a more stable revenue source for stormwater management than many other sources including most taxes.
- Staff recommends the following next steps: 1) establish a stormwater utility fee advisory committee and 2) develop an expenditure, revenue and billing plan for a City of Champaign stormwater utility fee.
- To develop the stormwater utility fee expenditure, revenue and billing plan, staff would need the help of a consultant. The cost of the consultant is estimated in the range of $105,000 to $125,000.
- Staff estimates the work to complete the next step in the development of a stormwater utility fee could take ten to twelve months.

E. Background:

1. Previous Efforts. The City has discussed and considered a stormwater utility fee before. Prior efforts took place between 1992 and 2002. Previous considerations have centered around providing additional revenue to fund a storm sewer preventative maintenance program.

a. March 1992 – Due to concerns about drainage and flooding, the City Council established a Stormwater Management Task Force. The purpose of the task force was to develop a comprehensive surface drainage strategy. Development of this strategy was a top priority Council goal.

b. 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.

c. 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.

d. 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.

e. 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.

f. 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.

g. 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.

2. Current Stormwater Funding. The City's Stormwater Management Fund provides resources for stormwater improvement projects, operation, maintenance and rehabilitation activities, plus support for water quality improvements required by the City's NPDES permit.

Table 1 provides an overview of the fund's revenues and expenditure categories for a typical year.

Table 1
Stormwater Management Fund
Revenues and Expenditures

Revenues		
.25 % Sales Tax		$ 3,000,000
Property Tax		$ 1,300,000
General Fund Transfer		$ 600,000
Other		$ 200,000
	Total	$ 5,100,000
Expenditures		
Operating Budget		$ 1,100,000
Recurring Projects		$ 1,500,000
Debt Service		$ 2,500,000
	Total	$ 5,100,000

The major revenue source for the Stormwater Management Fund is the one-quarter percent sales tax that the City levies under its Home-Rule Authority. Additionally, in accordance with Council policy a portion of the City's property tax levy and general fund dollars are transferred to the fund.

The Stormwater Management Fund expenditures provide resources for the following activities:

- Operating Budget includes all the day-to-day expenditures associated with maintaining the City's storm sewer system. Examples are: responding to service requests, repairing an inlet or storm sewer pipe, helping a citizen solve a basement flooding or backup problem. This category includes the cost to locate City storm sewers for JULIE, expenses for the encephalitis program, and the City's annual cost share for United States Geological Survey stream and rain gauges. All annual costs for the review, issuance, and inspection of drainage and erosion control permits are also included in this expenditure category. These permits implement City and Federal regulations that ensure appropriate drainage elevations and limit the amount of runoff into drainage creeks and the downstream waterways that they feed into.

- Recurring projects include the annual expenditures for stormwater programs. This includes all stormwater quality activities the City must complete in order to comply with its stormwater NPDES permit. It includes the annual cost to clean and televise portions of the City's storm sewer system. The goal is to clean and televise the entire City storm sewer system on a 10-year cycle. This is currently being done entirely with contractual forces. This expenditure category also includes the annual contractual cost to repair storm sewer inlets, manholes, and pipes. When the City's storm sewer system is being cleaned and televised, structural deficiencies are found. This annual contract hires a contractor to repair those deficiencies.

- Debt service includes the annual payments on the bonds that were sold for the Boneyard Creek channel improvements that were completed in the 1990s through Campustown (First to Sixth Streets). Debt service also includes the future annual payments for bonds sold to finance all three phases of the Boneyard Creek Second Street Reach (Scott Park, Second Street channel/detention improvements, and viaduct storm sewers), plus the storm sewer projects for John Street and Washington Street East.

3. Unfunded Stormwater Capital Projects. All current revenues in the Stormwater Management Fund have been committed.

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 in Table 2.

Table 2
Watershed Master Plans
Recommended Capital Projects - Unfunded

	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	$ 2,000,000
Subtotal	$ 13,600,000
Phinney Branch Master Plan	
Channel Improvements	$ 5,000,000
Copper Slough Master Plan	
Phase 1 – channel stabilization/reconstruction, detention	$ 10,000,000
Phase 2 – channel stabilization/reconst., sewer improvements	$ 11,300,000
Phase 3 – channel stabilization/reconst., water quality ponds	$ 6,600,000
Subtotal	$ 27,600,000
TOTAL	$ 46,200,000

The Phinney Branch Master Plan is currently being updated so Table 2 does not reflect any changes in the recommended drainage needs. Staff has also assumed the cost for the recommended drainage project for Washington Street West will reduce the Copper Slough Master Plan needs by an equivalent amount.

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.

4. Stormwater Utility Fee. 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. If there is a public drainage system in the watershed, then the properties that contribute runoff to the drainage system should support the operation, maintenance, and rehabilitation of the system. The amount of support is based on the amount of runoff the property contributes to the stormwater drainage system.

a. Impervious Surfaces. Water, electric, and gas meters are used to measure the level of demand that a user places on the utility. Likewise, for a stormwater utility fee, the total amount of impervious area on a property is a measure of demand a property places on a stormwater drainage system. The larger the impervious area, the more runoff produced and the more demand this property places on the stormwater drainage system.

Impervious surfaces consist of roofs, sidewalks, driveways, parking lots, and any other surface that does not allow rainfall to soak into the ground. The impervious area on a property is directly proportional to the amount of runoff a property will produce.

Figures 1 and 2 illustrate impervious areas and runoff.

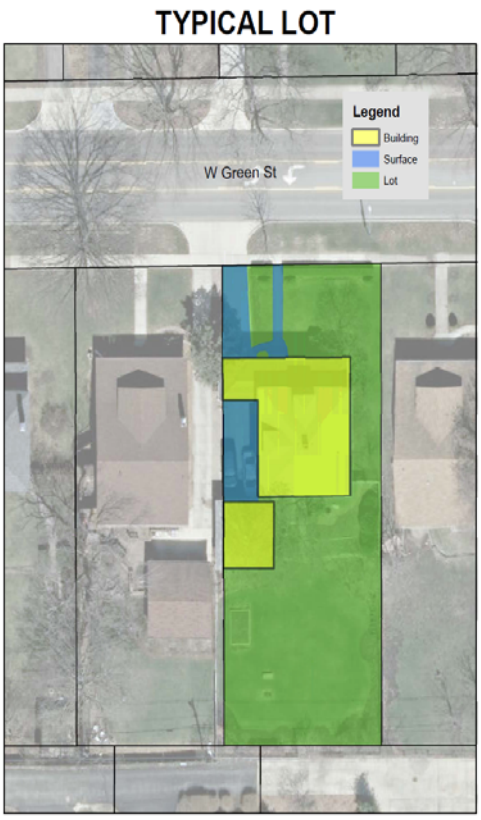


Figure 1
Residential Property
The roof and driveway equals approximately 3,600 square feet of impervious area. Total lot area is approximately 11,000 square feet.

Figure 2
Commercial Property
The roof and parking equal 156,000 square feet of impervious area. Total lot area is approximately 167,000 square feet. Demand on the stormwater drainage system would be equal to 43 residential properties.

Figure 1 is a typical residential lot with a house and driveway. Impervious surface area for this residential lot calculates to 3,600 square feet. (Normal used 3,200 square feet. Rock Island used 2,800 feet.) Figure 2 is a developed commercial property with a large building and parking lot. Impervious surface for the commercial property calculates to 156,000 square feet. The commercial property would produce 43 times more runoff than the residential property, it places 43 times more demand on the stormwater drainage system and its stormwater utility fee should be 43 times higher than the residential property.

b. Billing Methods. Table 3 was taken from the Town of Normal, July 2005 Stormwater Utility Feasibility Study. The table lists typical billing methods for stormwater utility fees along with a description of each method plus the methods pros and cons.

Table 3
Stormwater Utility Billing Methods

Billing Method	Description	Pros	Cons
Customer Classifications *Also known as: Intensity Development Factors (IDFs)*	Customers are billed based on the type of property they own (i.e. residential / commercial / industrial). Parcel size is often considered in determining fee.	Simplifies billing process. Zoning class often dictates how the user fees are calculated.	Large properties can be unfairly undercharged or overcharged if their impervious area varies significantly from other properties within their zoning class.
Impervious Plus Gross Area	Non-residential customers are billed for impervious surfaces and gross parcel area, recognizing that pervious (unpaved) areas do generate some stormwater runoff.	Fairly represents the true runoff potential for large parcels, as impervious surfaces are not the only source of stormwater runoff.	Adds complexity to the billing system – two variables (impervious area and gross area) required to establish fee for each parcel.
Runoff Factor / Runoff Coefficient *Also known as: Effective Hydraulic Area Method*	Runoff coefficients are calculated for individual properties to determine appropriate user fees.	Provides accurate representation of runoff potential for individual parcels.	Very labor intensive. The cost to calculate runoff coefficients for individual properties may outweigh benefits of accurate billing system.
Billing Unit (ERU)	Equivalent Residential Unit. Customers are charged a fee based on their impact on stormwater runoff relative to that of a typical residential parcel.	Equitable distribution of fees to those who impact the stormwater infrastructure. Non-residential customers charged based on actual impervious surface.	Requires measurement of impervious areas for individual non-residential parcels. Single residential rate (if chosen) may not be representative of smallest or largest residential properties.
Flat Fee	Parcel owners are charged a single fee, based on land use classification, regardless of land area or impervious surface area.	Simplest of all billing methods. Lower cost to facilitate billing process.	Low billing equity. Many property owners are significantly undercharged or overcharged relative to actual impact on stormwater runoff.

The most common billing methods are based on impervious areas. Specifically, a billing method utilizing Equivalent Residential Unit (ERU) is the type used most often.

c. Equivalent Residential Unit (ERU). With ERU, the impervious area for a typical residential property is determined and becomes the standard for the stormwater utility fee. The impervious area for an individual property is calculated by using the aerial photographs that have been incorporated into a municipal GIS mapping system.

The residential ERU is determined by evaluating several hundred properties. If there are significant impervious area differences among residential properties, the properties are broken down into categories and the largest group is used to determine the standard ERU.

The impervious area for each individual non-residential property is then measured. This calculated impervious area is divided by the residential impervious area standard, and this determines the ERUs for the individual non-residential property. In the example above, if a stormwater utility fee established the ERU residential standard at 3,600 square feet of impervious area than a commercial property with 156,000 square feet of impervious area would be considered to have 43 ERUs.

d. Credits. Typically, a stormwater utility fee will 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. These credits result in a percentage reduction in the stormwater utility fee. Improvements eligible for credits could include stormwater detention provided in the subdivision, on-site stormwater detention, pervious pavement, rain gardens, plantings that filter stormwater prior to it entering the drainage system, and rain barrels.

e. Exemptions. Most stormwater utility fees exempt the streets and sidewalks in the public right-of-way. These are impervious surfaces that are used by all property owners. Additionally, the streets are part of the stormwater drainage system, conveying stormwater downstream when the underground stormwater system is at capacity. Exemptions are also typically applied to undeveloped parcels because these parcels have no impervious surfaces.

f. Tax Exempt Properties. These property owners pay other utility fees (gas, water, electricity, etc.), contribute stormwater to the drainage system, and have been included in stormwater utility billing systems by other municipalities. Municipal facilities (parking lots, fire stations, public works facilities, etc.) have also been billed stormwater utility fees. With respect to the City's Sanitary Sewer Fee, the policy has been to treat tax-exempt properties (including other governmental entities) the same as taxable properties.

g. Other Illinois Communities. There are several communities in Illinois with stormwater utility fees. Table 4 lists the municipality, population, and annual revenues generated by the fee.

Table 4
Annual Stormwater Utility Revenues

Municipality	Population	Revenues	Per Capita
Aurora	170,900	$ 3,025,000	$18
Bloomington	75,000	$ 2,600,000	$35
Highland Park	31,500	$ 650,000	$21
Moline	43,000	$ 1,800,000	$42
Morton	16,600	$ 900,000	$54
Normal	52,500	$ 1,700,000	$32
Rock Island	40,000	$ 1,400,000	$35
Rolling Meadows	23,300	$ 540,000	$23
Total	452,800	$ 12,615,000	$28

Evaluation of the table indicates the average annual amount per capita collected by the fee is $28 (ranging from approximately $54 to $18).

The table above does not include Rantoul. Rantoul also has a stormwater utility, but it is a tax. Rantoul's population is 12,400 and the tax generates $542,000 (approximately $44 per capita annually).

The City of Urbana staff has also provided information to its Council concerning a stormwater utility fee. The Urbana Council has requested more information from staff to learn more about the fee. Both Champaign and Urbana staff are sharing information and are considering options for working together if stormwater utility fees are pursued by both entities.

5. Implementation Steps. Summarized below are typical implementation steps for a stormwater utility fee. The steps are just a guideline. The steps can be re-ordered as needed or they can be modified, added, or deleted to meet the needs of the community.

a. Appoint a Stormwater Utility Fee Advisory Committee. The purpose of the group is to review and provide input on the development of the stormwater utility fee. The group would consist of nine to twelve members and would meet five to six times over a seven to nine month period of time. The goal would be to appoint an individual from each major land use. For the City of Champaign, this could mean representation from the University of Illinois/Parkland College, School District, Park District, industry, commercial, Downtown/Campustown, non-profit organizations, apartment owners, and neighborhood groups.

b. Complete a Feasibility Study. The objective of the study is to estimate the amount of revenue a stormwater utility fee could generate and to determine what stormwater improvement expenditures are needed in the community. Usually, the feasibility study also

evaluates how the stormwater utility fee would be billed and estimates the staff and costs that would be needed to manage the stormwater utility fee billing structure.

c. Adopt a Stormwater Utility Fee Ordinance and Credit Manual. This step involves all the work required to develop the billing policies, fee structure, and rate for the stormwater utility fee. It also includes identifying what property owner activities associated with reducing stormwater runoff or improving stormwater quality would be eligible for stormwater fee credits. Also, how fee credits would be calculated and applied would be determined at this implementation stage.

d. Complete the Billing Database. This step would be completed after Council adopts the stormwater utility fee ordinance and credit manual. This step is a major effort and a significant cost, using GIS to calculate from aerial photographs the impervious area of each parcel. To reduce the effort and associated cost, the impervious area for single family homes is calculated by using a statistically valid sampling of 100 to 200 single family properties. However, for non-single family parcels, impervious area for each parcel is calculated. For Champaign, this would mean measuring the impervious area of an estimated 5,300 parcels.

e. Provide Community Outreach. Even though this step is listed last, it is completed throughout the implementation process. It involves providing information to the public and educating the public on the stormwater utility fee. Specifically, how the stormwater utility fee would work, its purpose, benefits, and cost to each individual property owner. Community outreach also includes collecting public input on the stormwater utility fee during each implementation stage and incorporating that input into products that are produced.

A community would usually contract with a consultant to help with the implementation of a stormwater utility fee. The consultant would have experience with stormwater utility fees and would provide professional advice on all stages of the implementation process.

The typical time frame for implementing a stormwater utility fee is 12 to 18 months. The typical cost for a consultant ranges from $400,000 to $500,000.

6. 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. Table 5 provides a summary of the average cost per parcel per land use for approximately $1,000,000 of stormwater utility fees.

Table 5
City of Champaign
Stormwater Utility Fee

Land Use Type	Total Acreage	"C" Factor	ERU's	Fee Per Land Use Type	Parcels	Average Fee Per Parcel
Parks	607.82	0.05	389.63	$6,401.59	192.00	$33.34
Industrial/ Commercial	2,595.74	0.70	23,295.10	$382,738.54	1,896.00	$201.87
In-Town	273.22	0.45	1,576.27	$25,898.10	735.00	$35.24
Single-Family Residence	5,112.56	0.40	26,218.26	$430,765.95	16,777.00	$25.68
Multi-Family Residence	1,629.93	0.45	9,403.44	$154,498.56	2,528.00	$61.11
Total			**60,882.70**	**$1,000,302.74**	**22,128.00**	
Fee per ERU based on approximately $1,000,000 target = $16.43						

Additional resources could mean more dollars to complete unfunded 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 is 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.

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 rehabilitation expenditures. This reduction causes the several million dollar backlog to grow even larger.

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. A stable revenue source 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.

7. Next Steps. Most of the background information provided in this report on a stormwater utility fee is very generic and not specific to the City of Champaign. Staff feels before any decisions can be made, more information needs to be developed on a stormwater utility fee specific to the City of Champaign. The many options concerning a fee would need to be explored as discussed below. Additionally, more public involvement and education concerning a City stormwater utility fee is needed. Staff recommends as the next step is to appoint a citizen advisory group and develop a preliminary expenditure, revenue and billing plan for the stormwater utility fee.

a. Stormwater Utility Fee Advisory Committee. The group would be appointed by the City Council and consist of eight to twelve members. The goal would be to have representation on the committee from the different land use types in the City such as;

- University of Illinois
- School District
- Park District
- Non-profit organizations
- Single Family
- Multi-family/Apartments
- Commercial
- Industrial

There could be multiple representatives from a single land use. The committee's mission would be review and provide input on the stormwater utility fee. The group would be established for a 12-18 month period. It would probably meet six to nine times during that period.

b. Expenditure, Revenue, & Bill Plan. This plan would provide information on the feasibility of a stormwater utility fee for the City of Champaign. The advisory committee would help develop the plan by providing input and review.

There would also be a public outreach component to the plan's development. The goal would be to provide the public with information and education on the stormwater utility fee and to obtain their input on the fee. This would be accomplished with public and neighborhood meetings.

Developing this plan would require several Council Study Sessions. Council would need to provide staff with direction on numerous stormwater expenditure and revenue policy issues. Staff has not identified all policy issues at this time but some questions would be:

- What revenue sources would fund stormwater management in the future? Would it be funded solely by a stormwater utility fee or would current revenue sources (property taxes, general fund transfers, and sales taxes) still be a part of the equation?
- What role should traditional stormwater funding mechanisms such as cost share and special assessment play in future stormwater funding, if any?
- Which current stormwater expenditures should be funded by a stormwater utility fee?
- Should future stormwater expenditures be increased to include additional capital improvements and/or other needs? If so, should this expansion be funded with the stormwater utility fee?
- What incentive and/or credits would be incorporated into a stormwater utility fee?
- What type of land uses would be exempt from a stormwater utility fee?
- What rate structure would be used for a stormwater utility fee?

Staff would need a consultant to assist in the preparation of the plan. Staff has limited expertise on stormwater utility fees; a consultant can help bridge that gap and provide the resources to complete the plan in a timely fashion. Furthermore, developing a plan is an extensive effort that would be difficult for staff to accomplish along with other projects, particularly considering the "learning curve" required.

Staff estimates consultant cost for this phase of work at $105,000 to $125,000. It is also estimated this phase of the work would take ten to twelve months to complete once the advisory committee is appointed and the consultant is under contract.

The scope of work for the expenditure, revenue and billing plan would include the following specific items:

- Expenditure. A multi-year stormwater expenditure plan would be developed. The plan would identify the stormwater expenditures that would be funded by the stormwater utility fee. This could include all or a portion of the existing stormwater expenditures associated with operation, maintenance, rehabilitation and debt retirement on capital improvements. The plan would also need to include any new stormwater expenditures.

- Revenue. This component of the plan would calculate the impervious surface areas of different land use types in order to determine the number of billing units within the City limits. Additionally, a rate model would be developed that could estimate the revenue generation potential for varying rate scenarios. The proposed stormwater utility fees would be calculated for five to six properties in different land use categories to illustrate the fees impact.

- Billing. 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 & 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 would be identified plus the cost to implement the option. 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.

F. Alternatives:

1. Direct staff 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 a preliminary expenditure, revenue and billing plan for a City of Champaign stormwater utility fee.

2. Do not direct staff to proceed with the next step for the stormwater utility fee and provide further direction to staff.

G. Discussion of Alternatives:

Alternative 1 directs staff 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 a preliminary expenditure, revenue and billing plan for a City of Champaign stormwater utility fee.

a. Advantages

- Could provide additional resources so more stormwater maintenance, rehabilitation and improvement activities 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. Recommended Alternative 1 has an estimated cost of $105,000 to $125,000. The cost to implement a complete stormwater utility fee is estimated at $400,000 to $500,000.

Alternative 2 does not direct staff to proceed with the next step for the stormwater utility fee and provide further direction to staff.

a. Advantages

- Does not require the expenditure of $105,000 to $125,000 and those resources could be used of 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.

If Council directs staff to proceed with the recommended alternative, there would be significant public input. A stormwater utility fee advisory committee would be appointed to review and provide input on a fee. A public outreach program would be developed and implemented to provide information and to obtain input from the public on the stormwater utility fee. Also there would be several Council Study Sessions to discuss policy issues pertaining to the stormwater utility fee. The public would have an opportunity to provide input at the Study Sessions.

I. Budget Impact: Preparation of the Report had no budget impact. The recommended alternative would require the City to hire a consultant. Staff estimates the cost for the consultant to range from $105,000 to $125,000. Currently, no funds are budgeted for this effort. A budget amendment would be required prior to the approval of the consultant's contract. Staff believes that adequate resources in the Stormwater Management Fund are available to fund the recommended alternative.

J. Staffing Impact: It took approximately 150 staff hours to prepare this report. Staff estimates it will take approximately 1,200 hours to implement recommended Alternative 1. The staffing impact of Alternative 1 would be lessened by the use of a consultant. It is estimated the consultant would provide approximately 600 of the 1,200 hours needed for Alternative 1. Staff will need to re-prioritize projects to provide the balance of staff hours to accomplish recommended Alternative 1.

Prepared by:	Reviewed by:
Dennis Schmidt, P.E. Public Works Director	Richard Schnuer Finance Director

Attachments: Exhibit A – "The Drainage Utility Fee: An Approach to Funding Champaign's Stormwater Management Program" – October 9, 1996

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

COUNCIL BILL NO. 2010 – 128

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

City of CHAMPAIGN

REPORT TO CITY COUNCIL

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

DATE: **June 11, 2010**

SUBJECT: **EXPLANATION OF COUNCIL BILL NO. 2010-127 AND 2010-128**

A. Introduction: The purpose of these Council Bills is to authorize the following actions:

1. Establish a Stormwater Utility Fee Advisory Committee, and

2. Appoint individuals to the above referenced advisory committee.

B. Recommended Action: The Mayor and Administration recommends the approval of these Council Bills.

C. Prior Council Action:

- March 17, 1992, CB 1992-79 – Council established a Stormwater Management Task Force to provide input and direction for the Stormwater Management Plan Report.
- May 19, 1994, CB 1994-129 and CB 1994-130 – Council established and appointed members to the Phinney Branch Task Force. The task force provided input and direction for the Phinney Branch Master Plan.
- Exhibit A attached to this report provides a summary of prior City efforts concerning a stormwater utility fee.
- March 23, 2010, Study Session – The Background section below summarizes Council direction at this Study Session.

D. Summary:

- City Council has established development of a plan to fund stormwater drainage improvements as a 2009-11 City Council goal.
- A stormwater utility fee is one method of providing this funding.
- At the March 23, 2010, Study Session, Council directed staff to proceed with the next implementation step for the stormwater utility fee. Staff indicated the next step would be 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.

- A Stormwater Utility Fee Advisory Committee provides an opportunity for technical and citizen input on a stormwater utility fee.
- The Stormwater Utility Fee Advisory Committee will consist of fifteen members.
- The advisory committee would cease to exist after the stormwater utility fee expenditure, revenue, and billing plan has been completed.

E. Background:

1. Stormwater Utility Fee. City Council has 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.

2. Council Study Session. At the March 23, 2010, Study Session, Council directed staff to proceed with the next implementation step for the stormwater utility fee. Staff indicated the next step would be 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.

The Council Bills associated with this report establish a Stormwater Utility Fee Advisory Committee and appoints individuals to this committee. Staff has also completed the selection process for a consultant. The consultant would help staff complete the expenditure, revenue, and billing plan. Staff anticipates Council action on the consultant's professional services agreement at the July 20 Council meeting.

3. Stormwater Utility Fee Advisory 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. The duties of the committee are outlined in the resolution that establishes the committee.

The committee would meet six to nine times over the course of the next 12 months. The committee would cease to exist after the stormwater utility fee expenditure, revenue, and billing plan has been presented to the City Council.

4. Committee Membership. The proposed Stormwater Utility Fee Advisory Committee would have 15 members. Working with the Mayor, the John Street, Washington Street East and

West Steering Committees, Unit 4 School District, Champaign Park District, Parkland College, University of Illinois, and the Central Illinois Apartment Association were contacted by staff and asked to recommend an individual from their organization to serve on the advisory committee. The Champaign County Chamber of Commerce recommended individuals for the commercial and industrial businesses.

Staff proposed two property owners. The goal for one position was to select someone who owned property in a subdivision that was constructed to current City stormwater infrastructure standards (Vic McIntosh, 501 Clearwater). The goal for the other position was to select someone who owned property in a subdivision that had none or very little stormwater infrastructure. Council Member Dodds helped in finding a property owner willing to serve from that area (Anna Maria Watkin, 1721 West Haven Drive). Including property owners from these neighborhoods on the committee will help address questions concerning the benefit of a stormwater utility fee to them.

At this time, the one member to represent non-profit organizations on the advisory committee has not been identified. The Church of the Living God is assisting the City in this selection. The Mayor will ask Council to confirm the non-profit representative appointment to the committee at a later Council meeting.

The University of Illinois will also have Bruce Walden serve as an alternate to Jack Dempsey when he cannot attend an advisory committee meeting. All individuals have been contacted by the City and they have agreed to serve. Vic McIntosh has agreed to serve as chair of the committee at the request of the Mayor.

F. Alternatives:

1. Approve the Council Bills establishing the Stormwater Utility Fee Advisory Committee and appointing individuals to the advisory committee.

2. Do not approve the Council Bills and provide direction to staff.

G. Discussion of Alternatives:

Alternative 1 establishes the Stormwater Utility Fee Advisory Committee and appoints individuals to the committee.

a. Advantages

- Consistent with Council's direction to proceed with the next implementation step for a stormwater utility fee.
- Provides a means for staff to obtain stakeholder (individual and major property owner) input on a stormwater utility fee.

b. Disadvantages

- Initially requires additional staff time.
- Could marginally increase the cost for implementing a stormwater utility fee.

Alternative 2 does not approve the Council Bills.

a. Advantages

- Allows Council the opportunity to revise either the purpose or membership of the Stormwater Utility Fee Advisory Committee.
- Dependent upon Council direction, there could be other advantages.

b. Disadvantages

- Individual disadvantages would be dependent on Council's direction.
- Could result in delays to the City's efforts to investigate a stormwater utility fee.

H. Community Input: No specific public input was sought for these Council Bills. The public had an opportunity to provide input on the Stormwater Utility Fee Advisory Committee at the March 23, 2010, City Council Study Session. The public would have an opportunity for input on the advisory committee when these Council Bills are considered for Council action.

I. Budget Impact: Budget impact from Stormwater Utility Fee Advisory Committee would be minimal. Staff recommended the hiring of a consultant to assist with the preparation of the Expenditure, Revenue, and Billing Plan for the stormwater utility fee. Staff will want the consultant to attend most, if not all, advisory committee meetings. Staff estimates the cost of this attendance at less than $10,000.

J. Staffing Impact: The Stormwater Utility Fee Advisory Committee staffing impact would be significant. Staff estimates it will take approximately twenty to thirty hours to prepare for, attend, and document each of the six to nine advisory committee meetings. The City Engineer, Public Works Director, and one Public Works project specialist (ten hours per week) would provide most, if not all, staffing needs of the Stormwater Utility Fee Advisory Committee.

Prepared by:

Dennis Schmidt, P.E.
Public Works Director

Attachments: Exhibit A: Stormwater Utility Fee – Prior City Efforts

City of CHAMPAIGN

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. 2010-168

A RESOLUTION

AUTHORIZING THE PURCHASE OF
PROFESSIONAL SERVICES FOR
THE STORMWATER UTILITY FEE PROJECT
(City Project No. 21-0000-07900-0605-700)
(Public Works Department – AMEC Earth & Environmental, Inc.)

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

Section 1. That a standard professional services agreement between the City and AMEC Earth & Environmental, Inc. in an amount not to exceed One Hundred Fifty-three Thousand One Hundred Eighty-four Dollars ($153,184.00) for the scope of services attached to this Resolution is hereby approved.

Section 2. That the City Manager is hereby authorized to execute a standard professional services agreement for the amount approved in Section 1 above for substantially the same scope of services approved in Section 1 above.

COUNCIL BILL NO. 2010-168

PASSED:

APPROVED:_____
Mayor

ATTEST:_____
City Clerk

APPROVED AS TO FORM:

_____
City Attorney

EXHIBIT C
SCOPE OF WORK
JUNE 29, 2010

AMEC will perform the first phase of the development of a stormwater utility fee for the City of Champaign. The project will include development of an expenditure plan that describes the level and cost of service for stormwater management, development of a revenue plan for the setting the utility fee, development of a billing plan for determination of how the utility fee bills will be delivered to the ratepayers, facilitation of an advisory committee, and implementation of some initial critical initial outreach steps. The project will provide an assessment of the options available to the City for funding the stormwater management program. The tasks required to complete the first phase of the development of a stormwater utility fee are described in the following sections.

Task 1. Project Management

Project management is a component of all projects. AMEC will provide diligent schedule management due to keep the execution of this project on schedule. The quality assurance process at AMEC also requires an internal peer review. This review will be performed by a senior AMEC staff member that is experienced in storm water utility development. In the cost analysis peer review time is included in the cost of the individual tasks for which the review is provided.

a. *Document and Data Request.* AMEC will prepare a document and data request for the project to be submitted to the City immediately upon approval of the Scope of Services. The list of requested information will include, but not be limited to, documents such as the City's NPDES Phase II Notice of Intent and/or an annual report, organization charts, relevant ordinances, annual budget information, geographic information system (GIS) data, examples of existing local utility bills, and points of contact that can be contacted by AMEC for follow-up questions. The requested documents should be provided to AMEC, to the extent possible, prior to the kick-off meeting to facilitate discussion of the information during the kick-off meeting. A phone call may be scheduled to clarify the data and document requests.

b. *Kick-Off Meeting.* AMEC will work with the City to schedule a Project Kick-Off Meeting soon after receiving Notice to Proceed. AMEC will provide the document and data request to the City prior to this meeting. The kick-off meeting will be a working meeting in which the scope of all project meetings will be discussed, tentative schedules for the project will be set, and project specifics, such as the Stormwater Utility Fee Advisory Committee (see Task 5) will be discussed. There will also be initial discussion of the requested data and documents.

c. *Status Meetings and Reports.* AMEC will prepare regular status reports and attend meetings with City staff to discuss the status of the project. Status reports will be prepared and submitted monthly.

d. *Final Project Report and Presentation.* AMEC will prepare a final report on the project for publication and presentation to Council. The report will be a compilation of the Expenditure, Revenue, and Billing Plan reports, and will include relevant information from other aspects of the project, primarily the Stormwater Utility Fee Advisory Committee and the initial outreach efforts. After incorporation of City comments the report will be presented to Council.

Deliverable Summary
The deliverables of the Project Management task will be:

1. ***Document / Data Request***
2. ***Kick-Off Meeting***, including the actual meeting and minutes of the meeting.
3. ***Regular Project Status Meetings***, which includes the meetings and the minutes of the meetings.
4. ***Other Meeting Minutes***, which includes minutes for all project meetings not included in items 2 & 3 above, including teleconferences.
5. ***Status Reports***, which will be included with project billings.
6. ***Final Report and Presentation,*** which will communicate the findings and recommendations of the project to Council and the citizens of Champaign.

Task 2. Expenditure Plan.

AMEC will work with City staff to develop a ten-year stormwater management program expenditure plan. The development of the expenditure plan includes the following three components; a needs analysis to identify services that are being provided and services that need to be provided, identification of the level of service to be provided to meet those needs, and identification of the cost of providing the identified level of service.

a. *Needs Analysis.* The program needs analysis will identify the stormwater management activities that are currently performed by the City, program needs that have been identified through previous studies that have yet to be funded, and those activities that might be added (or deleted) over a ten year planning period. Specific program elements to be evaluated as part of the needs analysis are:

    1. Storm sewers (cleaning, replacing, rehabilitating, mapping)
    2. Open drainage channels (channel maintenance, future detachments from drainage district)
    3. Detention basins (shoreline stabilization, outlet structure protection, private vs. public)
    4. Watershed Master Plans, associated Capital Improvement Plans, and ongoing neighborhood stormwater projects
    5. NPDES / MS4 permit compliance
    6. Overhead sewer program
    7. Sustainable / green stormwater design and implementation

    The evaluation of the above items will include the analysis of existing O&M data, GIS data related to system inventories and maintenance history, existing budget reports, and interviews with City staff to confirm existing and desired levels of service. Existing master plans, technical reports, and associated cost estimates will be evaluated and documented. GIS data will be compiled and formatted to illustrate the coverage and complexity of the City's stormwater system needs. This task will include multiple meetings with Public Works and Finance staff.

    Specifically, for each program element listed above, a narrative will be provided in the Needs Report that describes what the City's current level of service is for that program element, the narrative will also describe deficiencies associated in the current level of service and actions needed to correct the deficiency along with very general cost estimated for the deficiency correction.

    For program element 4, master plans and existing neighborhood storm sewer studies will be reviewed, recommendations will be identified, listed, and described, and cost estimates will be updated. Public Works staff will be interviewed and flood prone areas and areas with little or no stormwater infrastructure will be identified and included in the narrative developed for the Needs Report. GIS maps will be developed, identifying all needs.

    For program element 5, the impact of any proposed Federal regulations will be evaluated and included as a future need in the Needs Report.

For program element 7, specific sustainable practices will be identified that could be funded with a stormwater utility fee and described/listed in the Needs Report.

Public Works staff will be relied on to identify and locate the materials, including master plans, GIS information, spreadsheets, etc, necessary to complete this task.

A Needs Report will be prepared that details the program needs and associated costs. The program needs report will be a comprehensive analysis that covers program needs that may require more than ten years to be addressed.

b. *Level of Service*. The level of service for the program will be determined by the program needs report, the projected administrative program to support a stormwater utility fee, and the program priorities as determined by a technical steering committee composed of City staff. The utility's administrative needs will represent general administration, billing, customer service, database maintenance, and other support activities. Whereas the needs analysis will define total program needs, the level of service analysis will define the stormwater program for the ten year expenditure and revenue analyses.

   The level of service component of the Expenditures Plan, at least its schedule of implementation, may be iteratively modified during the finalization of the Revenue Plan as part of the process of determining the stormwater utility rate.

c. *Cost of Service*. The costs of all existing, new, and modified stormwater management activities will be estimated for the ten year planning period level of service. The sources of cost information will include the needs analysis and estimation of both one time and on-going costs for the implementation of the stormwater utility fee. The cost estimates reported in the needs report that were developed in previous master plans and O&M studies will be reviewed and updated to reflect 2011 costs. Estimated costs for projects that have already been executed from those plans will be identified and appropriate adjustments made. Place holder cost estimates will be developed and included in the cost of service for both the one time and on-going administrative costs, including implementation costs, customer service costs, of initial credit application review costs, etc. The placeholder cost estimates will be replaced with actual costs as they become available later in the project.

   The cost of service component of the Expenditures Plan may be modified during the finalization of the Revenue Plan as part of the iterative process of determining the stormwater utility rate.

d. *Prepare an Expenditure Plan Report*. An Expenditure Plan Report will be provided that will clearly communicate the existing and future level and cost of service for stormwater management in the City of Champaign. The Expenditure Plan will include only those specific items that will be included in the ten year revenue planning process for the stormwater utility fee. (It should be noted that during the rate modeling process (Task 3) it will be necessary to test alternative strategies that may impact the program content, scheduling or rate structure decisions.)

Deliverable Summary

The deliverables of the Expenditure Plan task will be:

1. ***Stormwater Needs Report***, describing the stormwater program's known and projected needs and costs. Because of the age of several of the source documents, costs will be updated to reflect 2011 costs.

2. ***Expenditure Plan Report***, describing the ten year level and cost of service for the stormwater program. The report will include expected program milestones and policy recommendations of the advisory group, City staff, and the consultant.

Task 3. Revenue Plan.

AMEC will work with City staff to develop a stormwater management program revenue plan that details how the projected costs of the City's stormwater management program will be funded. The development of the revenue plan includes the following components;

a. *Policy Recommendations*. AMEC will lead discussions on a number of policy issues for which recommendations must be made, including but not limited to issues such as:
   - The inclusion of existing and potential revenue sources in the rate structure, such as plan review and inspection fees, connection fees, fee in lieu of detention, special assessments, etc.
   - The framework of a credit program?
   - Will the City bill itself for roadways?
   - Will the City charge properties owned by not-for-profit organizations?

b. *Rate Basis*. The rate basis for establishing the billing units for the fee will be determined. AMEC will lead staff through an evaluation of the common methods, such as Equivalent Residential Units (ERU), Effective Hydraulic Area (EHA), and impervious plus gross area. Once a method is selected statistical sampling of properties in several common land uses will be performed to characterize the runoff potential of the land use types. As a part of this subtask an evaluation will be made of charging flat rates for single family residential. Utilizing this information and the number of parcels in the City for the prominent land uses, AMEC will estimate the number of billing units in the City of Champaign.

c. *Rate Structure*. A rate structure must be designed for the stormwater management program. The rate structure analysis will determine the role that traditional stormwater funding mechanisms - such as cost share and special assessments - would play in future stormwater funding. The rate structure analysis will result in a preliminary assignment of costs to revenue sources. As the rate modeling process is completed it may be necessary to revisit the rate structure to fine tune the revenue sources for various program costs.

d. *Rate Model*. AMEC will produce a rate model that will assist in the evaluation of multiple scenarios of the expenditure and revenue plans. The rate model will utilize the 10 year expenditure plan, the estimated number of billing units, annual escalation assumptions for billing units and costs, and assumptions for expenses, such as credits, delinquencies in collections, bad debt, interest on carried over balances, etc. The rate model will be used to determine the rate required to fund those items to be paid for by the utility fee, and to determine the amount of rate increases that may need to be incorporated into the rate ordinance to cover debt service on capital improvements paid for by bonds.

e. *Prepare a Revenue Plan Report*. AMEC will prepare a Revenue Plan Report that relays the process and results of the analyses in Tasks 3.a through 3.d. This report will also include example rate calculations to show generally how the stormwater fee would be calculated under the recommended rate scenario. Specific examples will be provided for parcels owned by the University of Illinois, Unit 4 Schools, and the Champaign Park District, as well as for three additional example ratepayers. The examples for the multi-parcel ratepayers will include some digitizing of parcels and extrapolation of the digitized results to represent ratepayers' estimated bills.

Deliverable Summary
The deliverable of the Revenue Plan task will be:

1. ***Revenue Plan Report***, describing rate base, rate structure, and fee requirements necessary to properly fund the ten year level and cost of service of the stormwater program. The report will include policy recommendations of the advisory group, staff, and the consultant, information on assumptions made in the rate modeling and alternative scenarios that were considered, example bill calculations for up to six key ratepayers, and a procedure to be used by other ratepayers to estimate the number of billing units and thus the bill for their property.

Task 4. Billing Plan.

AMEC will develop a billing plan based on review of the potential utility billing options available to the City. The billing options to be reviewed include:

- contracting with organizations that currently send bills to most or all properties in the City of Champaign, including Illinois American Water, UCSD, and Champaign County;
- establishing a billing and collection system in cooperation with the City of Urbana (Urbana has an existing single family residential property billing system and is also investigating a stormwater utility);
- outsourcing to a private firm; and,
- setting up an in-house billing operation for a stormwater utility fee.

The tasks included in the billing plan development include:

a. *Meetings*. AMEC will collect information from both staff and potential billing agents from which to evaluate the various billing options. The data collection will occur as a result of both meetings and telephone calls.

b. *Evaluation of Options.* AMEC will evaluate the various billing options, including both the practicality and flexibility of the billing agents, the level of effort required to implement stormwater billing, significant one-time costs, the integration of customer service, collections rates, and an estimate of the periodic costs (including any staff additions) for billing, collections, and related staff functions.

c. *Documentation of Billing Plan*. The primary deliverable of the review will be a document summarizing the pluses and minuses of each of the options, and making a preliminary recommendation of a preferred approach.

Deliverable Summary
The deliverables of the Billing Plan task will be:

1. ***Minutes of billing agent meetings***, describing the meetings and discussions with potential billing agents.
2. ***Billing Plan Report***, describing the evaluation of each billing option and the pros and cons of each option considered.

Task 5. Stormwater Utility Fee Advisory Committee.

AMEC will facilitate up to 9 meetings with the Stormwater Utility Fee Advisory Committee (Advisory Committee). The focus of the Advisory Committee meetings will be primarily on the City's expenditure plan, revenue needs, and the implementation of a funding program. The Advisory Committee process will be planned and executed with the following guidelines:

- Topical agendas for the first six meetings will be developed and submitted to the City prior to the project kick-off meeting and will be discussed during the kick-off meeting. The topical agendas will identify the discussion issues, the reason for discussion, and the desired results for each meeting. Two open agenda meetings are included to pursue new issues identified by the Advisory Committee and/or to continue discussion on issues of interest to the Advisory Committee members, and one meeting is scheduled to formally summarize and adjourn the Advisory Committee process. A tentative schedule of meetings will be produced and discussed during the kick-off meeting. Advisory Committee meeting guidelines will be developed, agreed upon, and followed.
- AMEC will provide discussion materials to the City for review and approval with the objective of getting the approved materials to the Advisory Committee members at least one week prior to each meeting.
- AMEC will facilitate and participate in the Advisory Committee meetings.
- Meeting minutes will be produced within 48 hours of the Advisory Committee meetings and submitted for approval by the City before distribution to the Advisory Committee members.

The expected outcomes are policy recommendations and citizen input on issues that will be raised during the meetings that will ultimately shape some aspects of the expenditure, revenue, and billing plans. The deliverable for the task will be documentation of the policy discussions and the group's recommendations on each topic.

Deliverable Summary
The deliverables of the Advisory Committee task will be:

1. ***Meeting materials***, agendas and handouts for preview by the City before distribution to the Advisory Committee members.
2. ***Meeting facilitation***, the consultant will both facilitate and participate in the Stormwater Utility Fee Advisory Committee meeting process. Seven meetings are assumed. Additional meetings may be added at a unit cost of $3,400 per meeting, including preparation, distribution of meeting materials, a meeting, meeting minutes, and meeting recommendations.
3. ***Policy recommendations***, including the recommended actions from the Advisory Committee on issues relevant to the potential implementation of a stormwater utility fee.

Task 6. Initial Ratepayer Outreach.

AMEC will develop a general plan for ratepayer outreach on the stormwater program, its costs, and the potential revenue sources. The plan will outline the steps necessary for the outreach program. The content of the messages to be related to the ratepayers by the plan's components will come from the meetings with Advisory Committee, with the public, and with City staff. The following activities will be part of the initial outreach.

- *Outreach Plan.* The outreach plan framework document will be developed.
- *Public Works PIO and City Communication Advisory Team Meetings.* Meetings will be held with each to provide the basis for preparing the message the City wants to convey to the public regarding the stormwater utility fee.
- *University of Illinois meetings*. Two meetings will be held with representatives of the University of Illinois to discuss the need for a dedicated funding source, the rationale behind the chosen rate basis, the estimated impact of the fee on the University, and the potential for utility fee credits.
- *Neighborhood association meetings.* Multiple meetings will be held with neighborhood associations, consultant assistance may be necessary for two of those meetings
- *Public meetings*. Two general public meetings will be held requiring consultant assistance.

Deliverable Summary
The deliverables of the Advisory Committee task will be:

1. ***Outreach plan***, a framework of the outreach activities needed both in the planning and implementation phases of setting up a stormwater utility fee.
2. ***Ratepayer meetings***, which will include initial meetings with the University of Illinois, neighborhood associations, and general public information meetings on the stormwater fee.

Project Period of Performance

AMEC will perform the project in twelve months or less. The period of performance will be from July 20, 2010 and through July 19, 2011.

City of Champaign Stormwater Utility Fee - Phase 1 Costs

Updated June 29, 2010

$153,184	Name	Project Staff									Labor	Expenses		Expenses	Total Cost
	Role	DN	KR	NC	MF	RW	RS	GK	Foth	Foth	Total	Direct	Travel	Total	Cost
	Rates (Line 68)	Pr/PM	Pr	Pro Sci	Sr Tech	Tech	Clerical	Sr Eng	Staff Eng	GIS Tech	By			By	By
		$254	$240	$89	$79	$45	$45	$149	$102	$80	Task	$1	$1	Task	Task
Task	Sub-task														
1.0 Project Management															
	1 Day to Day PM	3		6			7	6			22	50			
	2 Kick Off Meeting	4	4	8				4			20		$1,632		
	3 Final Report and Presentation	16		32				12			60	$ 960.00	915		
Task 1 Labor		23	4	46	0	0	7	22	0	0	102				
Task 1 Costs		$5,842	$960	$4,104	$0	$0	$316	$3,283	$0	$0	$14,505	$1,010	$2,547	$3,824	$18,329
2.0 Expenditure Plan															
	a Needs Analysis / Report														
	Storm Sewers							*8*	*16*	*16*	*40*				
	Open Channels							*4*	*8*	*8*	*20*				
	Detention Basins							*6*	*16*	*16*	*38*				
	CIP / Master Plans	*2*						*16*	*16*	*4*	*38*				
	NPDES / MS4 Permit	*4*						*6*	*12*		*22*				
	Overhead Sewer							*2*	*4*	*4*	*10*				
	Sustainable / Green Programs	*2*						*8*	*12*	*4*	*26*				
	Review City Budget Data	*2*						*4*	*8*		*14*				
	City Staff / Council Meetings	*2*						*8*			*10*				
	Report Documentation	*4*						*16*	*32*	*16*	*68*	*250*			
	b Level of Service	2		4							6				
	c Cost of Service	2		4							6				
	d Expenditure Plan Report	4		16			8				28	200			
Task 2 Labor		24	0	24	0	0	8	78	124	68	326				
Task 2 Costs		$6,096	$0	$2,141	$0	$0	$361	$11,639	$12,698	$5,440	$38,375	$450	$0	$484	$38,859
3.0 Revenue Plan															
	a Funding Policy Meetings /Discuss	6		4							10				
	b1 Rate Basis Evaluation / Discussio	8		12				4			24				
	b2 Data Assessment / Evaluation	5	20	4	24	130					183		$162.0		
	c Draft Rate Structure	4		2							6				
	d Rate Model	24									24				
	e Revenue Plan Documentation	8		16	3		4	3			34	200			
Task 3 Labor		55	20	38	27	130	4	7	0	0	281				
Task 3 Costs		$13,970	$4,800	$3,390	$2,130	$5,824	$181	$1,045	$0	$0	$31,339	$200	$162	$389	$31,728
4.0 Billing Plan															
	a Meetings (Internal & External)	4	20		8						32		$1,005		
	b Evaluate options & costs	4	16		4						24				
	c Documentation	2	8	4			8				22				
Task 4 Labor		10	44	4	12	0	8	0	0	0	78				
Task 4 Costs		$2,540	$10,560	$357	$947	$0	$361	$0	$0	$0	$14,765	$0	$1,005	$1,080	$15,845
5.0 Advisory Committee															
	a Prep	34			4	12		27			77	$108			
	b Meetings	27						27			54		5040		
	c Minutes & Policy Statements	9					9	9			27				
Task 5 Labor		70	0	0	4	12	9	63	0	0	158				
Task 5 Costs		$17,780	$0	$0	$316	$538	$407	$9,401	$0	$0	$28,440	$108	$5,040	$5,534	$33,974
6.0 Initial Outreach															
	a Outreach Plan	2		6							8				
	b PIO and Advisory Team	4						2			6				
	c University of Illinois Meetings (2)	16			2	8		8			34	$22	2050		
	d Public Meetings (2)	4						8		4	16	$22			
	e Neighborhood Meetings (2)							8		4	12	$22			
Task 6 Labor		26	0	6	2	8	0	26	0	8	76				
Task 6 Costs		$6,604	$0	$535	$158	$358	$0	$3,880	$0	$640	$12,175	$65	$2,050	$2,273	$14,448
Labor		208	68	118	45	150	36	196	124	76	1021				2042
Costs		$52,832	$16,320	$10,527	$3,550	$6,720	$1,627	$29,246	$12,698	$6,080	$139,600	$1,833	$10,804	$13,585	$153,184
Revised Grand Total															**$ 153,184**

City of CHAMPAIGN

REPORT TO CITY COUNCIL

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

DATE: **July 30, 2010**

SUBJECT: **EXPLANATION OF COUNCIL BILL NO. 2010-168**

A. Introduction: This Council Bill would authorize the City Manager to execute a standard professional services agreement with AMEC Earth and Environmental, Inc., Indianapolis, Indiana, in an amount not to exceed $153,184. AMEC will assist staff with the preparation of an Expenditure, Revenue, and Billing Plan for a City of Champaign stormwater utility fee.

B. Recommended Action: The Administration recommends approval of the Council Bill.

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, SS2010-022, 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.

D. Summary:

- Implementing a stormwater utility fee, based upon a property's stormwater runoff, could be a funding source for stormwater expenditures.
- Council has directed staff to pursue the next implementation step for a City of Champaign stormwater utility fee.
- The next implementation step, per staff's recommendation, is the establishment of a Stormwater Utility Fee Advisory Committee (which has been completed) and the development of an Expenditure, Revenue, and Billing Plan for a City of Champaign stormwater utility fee.
- A consultant will be used to provide staff with technical expertise in the preparation of the Expenditure, Revenue, and Billing Plan.

- Following the City's Administrative Policy for the selection of consultants, AMEC Earth and Environmental, Inc., was selected as the most qualified firm to assist staff. AMEC has teamed with Foth Infrastructure and Environmental, LLC on this project.
- A scope of work and fee was negotiated with AMEC/Foth. The consultant's fee for these services will be a not to exceed amount of $153,184.

E. Background:

1. Stormwater Utility Fee. City Council has 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.

2. Stormwater Utility Fee Prior Actions. Exhibit A, attached to this report, summarizes City efforts concerning a stormwater utility fee from 1996 through 2002.

A stormwater utility fee was discussed at the March 23, 2010, Council Study Session. Council directed staff to proceed with the next implementation step for the stormwater utility fee. Staff indicated the next step would be 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.

At the June 15, 2010, City Council meeting, Council Bills were approved that established the Stormwater Utility Fee Advisory Committee and appointed individuals to the committee.

3. Why a Consultant is Needed. At the March 23, 2010, Council Study Session, staff indicated that if Council decided to proceed with the next implementation step for a stormwater utility fee, the City would need to hire a consultant. Staff explained it had limited expertise on stormwater utility fees and a consultant would help to bridge that gap. Additionally, developing an Expenditure, Revenue, and Billing Plan for a City of Champaign stormwater utility fee is an extensive effort which would be difficult for staff to accomplish along with other projects, particularly considering the learning curve required. A consultant would help accomplish this task in a more timely fashion.

4. Consultant Selection. The consultant to assist staff with the stormwater utility was selected by using the City's qualification based selection process as outlined in Administrative Policy 2.08, Procurement of Architects, Engineers and Land Surveyors.

Requests for letters of interest were mailed to 32 firms. The request was also advertised in the News-Gazette on April 4, 2010. Letters of interest were received from eight firms.

The eight letters of interest were reviewed by a committee consisting of staff from Public Works, Information Technologies, and Finance Departments. Based on the information presented by the firms in their letters of interest, the committee selected four firms for interviews. The selection was based on the firm's past experience and qualifications with stormwater utility fees.

The four firms selected are listed below. All four firms had teamed with another firm to improve their qualifications.

- AMEC Earth & Environmental, Inc., Indianapolis, Indiana – Foth Infrastructure and Environmental, LLC, Champaign, Illinois
- CDM, Chicago, Illinois – Berns, Clancy and Associates, Urbana, Illinois
- Clark Dietz Engineers, Champaign, Illinois – Baker Inc., Chicago, Illinois
- Crawford, Murphy and Tilly, Inc., Springfield, Illinois – GRW, Inc., Indianapolis, Indiana

The interviews were completed on May 17, 2010. The committee selected the team of AMEC/Foth for the following reasons:

- Presented the most extensive experience with stormwater utility fees; completed over 300 stormwater program evaluations and 150 funding studies.
- Had the most extensive experience working for Illinois communities; worked on stormwater utility fees for DuPage County, Peoria, Normal, Morton, and Rock Island.
- Helped establish stormwater utility fees in numerous university communities, including; Illinois State, Butler, Purdue, Duke, and Kentucky.
- Demonstrated the most experience with establishing new billing systems. AMEC is under contract with Indianapolis for billing and customer service.

AMEC is in compliance with the City's Equal Opportunity in Purchasing Ordinance. AMEC was also selected by the City of Urbana to assist with their stormwater utility fee. There may be some potential savings to the cities utilizing the same consultant.

5. Scope of Work. Staff has successfully negotiated with AMEC/Foth a scope of work and fee for the project. If staff had failed, negotiations would have taken place with the firm that finished second in the selection process. The second place firm was Clark Dietz Engineers/Baker. The third place firm was CDM/Berns, Clancy and Associates.

AMEC/Foth would assist City staff in the preparation of an Expenditure, Revenue, and Billing Plan for the City of Champaign stormwater utility fee (estimated hours 685). The specific negotiated scope of work is attached to the Council Bill. Generally, the scope of work includes:

- Expenditure. A multi-year stormwater expenditure plan would be developed. The plan would identify the stormwater expenditures that would be funded by the stormwater utility fee. This could include all or a portion of the existing stormwater expenditures associated with operation, maintenance, rehabilitation and debt retirement on capital improvements. The plan would also need to include any new stormwater expenditures.

- Revenue. This component of the plan would calculate the impervious surface areas of different land use types in order to determine the number of billing units within the City limits. Additionally, a rate model would be developed that could estimate the revenue generation potential for varying rate scenarios. The proposed stormwater utility fees would be calculated for five to six properties in different land use categories to illustrate the fees impact.

- Billing. 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 or Champaign County.
    - Establishing a billing & collection system in cooperation with the City of Urbana, should it adopt a stormwater utility fee.
    - Outsource billing to a private firm.
    - Setting up an in-house billing operation.

    The pros and cons for each option would be identified plus the cost to implement the option. 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.

The AMEC/Foth scope of work includes working with the Stormwater Utility Fee Advisory Committee (estimated hours 158). The consultant would assist staff with the preparation of the agenda and materials/reports that would be presented at the meeting for committee input. AMEC/Foth would attend the meeting and prepare meeting minutes. They would also assist staff with follow-up activities that result from each advisory committee meeting.

The AMEC/Foth scope of work also includes a community outreach component (76 hours). This includes;

- assisting staff to develop an overall outreach plan for the stormwater utility fee,
- meeting with the City's Public Information Officers to develop the message the City wants to convey to the pubic regarding the fee,
- assisting the City staff with public information meetings, neighborhood meetings, and meetings with the University of Illinois concerning the stormwater utility fee.

Foth, the local consultant, would complete approximately 21% of the total scope. After completing the AMEC/Foth scope, the City will need additional help from the consultant if Council decides to move forward with the implementation of a stormwater utility fee.

6. Fee. The not to exceed limit for the AMEC/Foth fee is $153,184. This includes a total of $139,600 of labor for 1,021 hours at an average hourly rate of $136.73. Staff's original hourly target rate was $150.00, so the actual average falls below the target. Staff feels this is a very competitive rate for the work that will be provided.

AMEC/Foth's fee also $13,585 for expenses. The total includes $10,804 for travel.

For the March 23, 2010, Council Study Session, staff estimated the consultant cost for this phase of the work at $105,000 to $125,000. The actual negotiated fee was 22.5% higher or $153,184.

The reason for the additional cost is because staff increased the scope of work for the expenditure plan. Staff expanded the expenditure plan scope to include a Stormwater Needs Report. The report would summarize all stormwater needs that have been identified to date. Specifically, identified needs in the following stormwater areas would be summarized:

- Storm sewer cleaning, televising, and rehabilitation,
- Channel and detention basin maintenance and rehabilitation,
- Stormwater improvements recommended in master plans, neighborhood storm sewer studies and the capital improvement plan,
- Stormwater quality needs (NPDES/MS4)
- Overhead sewer program for basement flooding,
- Sustainable/green stormwater program needs.

This needs report would become the Stormwater Master Plan. Once all the stormwater needs have been summarized, it would be easier to prioritize them and identify which needs should be addressed by the stormwater utility fee.

Anther reason for the addition cost is because staff increased the number of advisory committee meetings from seven to nine. The goal is to complete the advisory committee's work in seven meetings. To be conservative, the budget was estimated for nine meetings.

7. Schedule. The AMEC/Foth project schedule is attached as Exhibit B. The schedule indicates completing this phase of the work by July 2011. The schedule is very dependent on the advisory committee. Their discussions and actions could cause the schedule to lengthen a few months.

F. Alternatives:

1. Approve the Council Bill authorizing the City Manager to execute a standard professional services agreement with AMEC Earth and Environmental, Inc., Indianapolis, Indiana, in an amount not to exceed $153,184.

2. Do not approve the Council Bill and provide direction to staff.

G. Discussion of Alternatives:

Alternative 1 approves the Council Bill authorizing the City Manager to execute a professional services agreement with AMEC Earth and Environmental, Inc., in an amount not to exceed $153,184.

a. Advantages

- Could provide additional resources so more stormwater maintenance, rehabilitation and improvement activities 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.
- Provides City staff with technical expertise and resources to complete the next implementation step for the stormwater utility fee in an efficient and timely manner.
- Is consistent with Council direction from the March 23, 2010, Study Session.

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 total cost to implement a complete stormwater utility fee is estimated at $400,000 to $500,000. These resources could be used for other stormwater projects.

Alternative 2 does not approve the Council Bill.

a. Advantages

- Does not require the expenditure of $153,184 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: No specific community input was sought for this Council Bill. 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. There was a study session on stormwater utility fees.

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 have 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. A copy of the report was also sent to the members of the Stormwater Utility Fee Advisory Committee. The public will have an opportunity to provide input on this issue when the Council Bill is presented to Council for action. If Council approves the Council Bill, there will be significant public input. There will be numerous meetings with the Stormwater Utility Fee Advisory Committee. There will be several public information meetings and neighborhood meetings. A public outreach program will be developed and implemented to provide information and to obtain input on the stormwater utility fee. There will also be several Council Study Sessions to discuss the stormwater utility fee. The public will have an opportunity to provide input at the study sessions.

I. Budget Impact: Approval of the Council Bill would hire a consultant to assist City staff with the implementation of the next step for the stormwater utility fee. The cost for the consultant would be $153,184.

The next step would also require a temporary employee working 10 hours per week. Approval of this position (Project Specialist) has been included in the staffing amendment Council Bill that will be considered the same night as this Council Bill. The annual cost for the temporary position has been estimated at $12,200. A budget amendment to reallocate funds for that purpose is also on the same agenda.

J. Staffing Impact: The staffing impact would be lessened by the use of a consultant. However, implementing the next step for stormwater utility fee will still require significant staff resources. The staff resources will be provided by the Public Works Director, the City Engineer, and the temporary Project Specialist. Staff will need to re-prioritize other projects in order to provide the staff hours needed for this project. Depending on how quickly the project moves to completion, the Project Specialist may be needed in FY12.

Prepared by:

Dennis Schmidt, P.E.
Public Works Director

Attachments: Exhibit A: Summary of Efforts Stormwater Utility Fee 1996-2002
Exhibit B: AMEC/Foth Project Schedule

City of CHAMPAIGN

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.

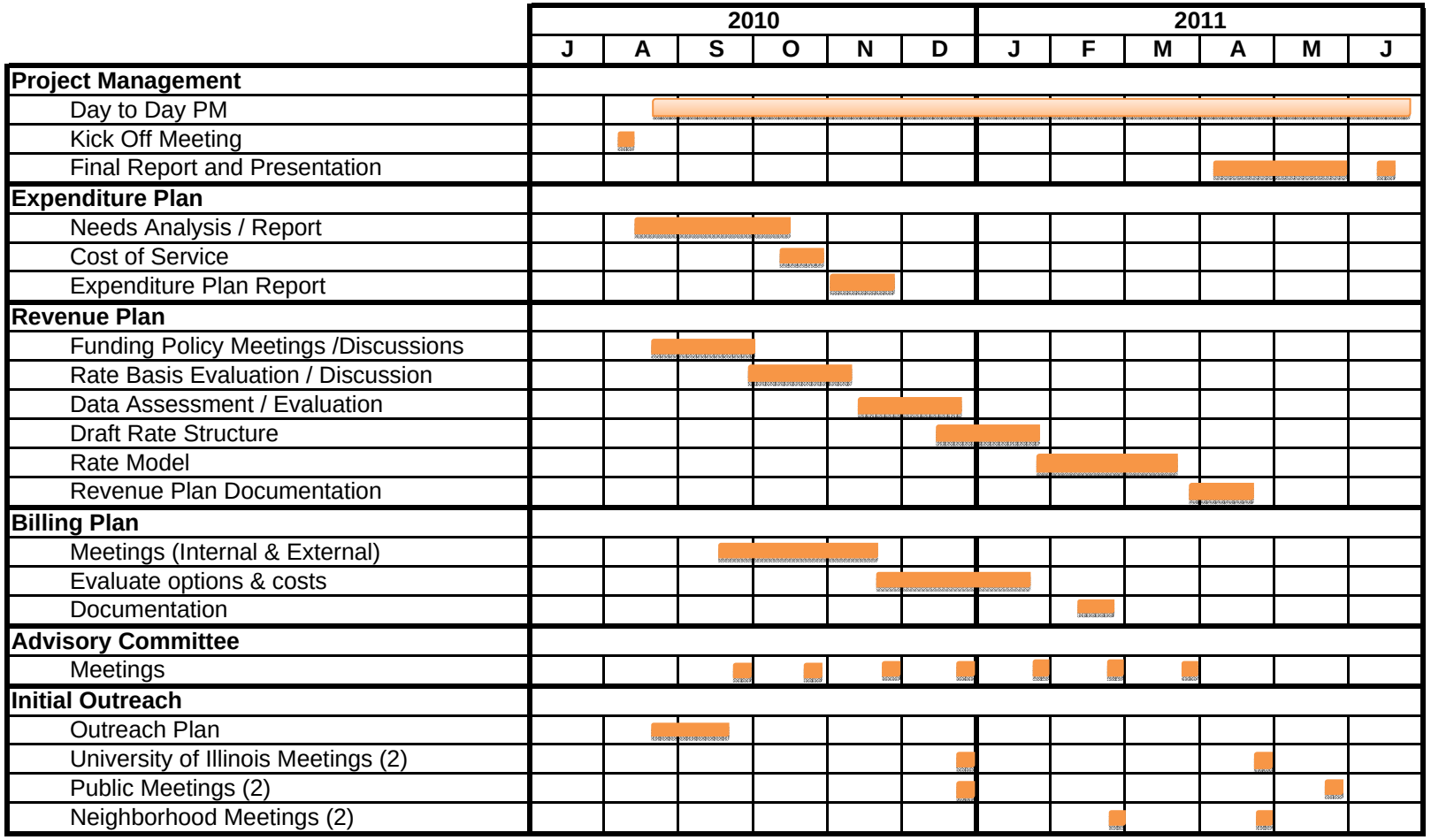
November 1998 – Staff presented two methods for funding an expanded storm sewer preventive maintenance program. One method would involve funding additional maintenance activities with a stormwater utility fee. The other method scaled back the storm sewer maintenance program and funded the additional 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.

City of Champaign Stormwater Utility Fee - Phase 1 Costs

Updated June 29, 2010



DRAINAGE 101

September 13, 2010

City of Champaign

Stormwater Utility Fee Advisory Committee

DRAINAGE 101

AGENDA

System Statistics

Stormwater Runoff

Watershed

Drainage Systems and Flooding

Sustainable/Green Infrastructure

NPDES Requirements

Stormwater Infrastructure Statistics

City of Champaign has a significant stormwater system

Number of Major Watersheds = 6

Feet of Storm Sewer Pipe = 1.6 million
(Ranging in size from 8 inch to 78 inch)

Number of Manholes and Inlets = 15,000

Number of Ponds = 200

Miles of Ditches

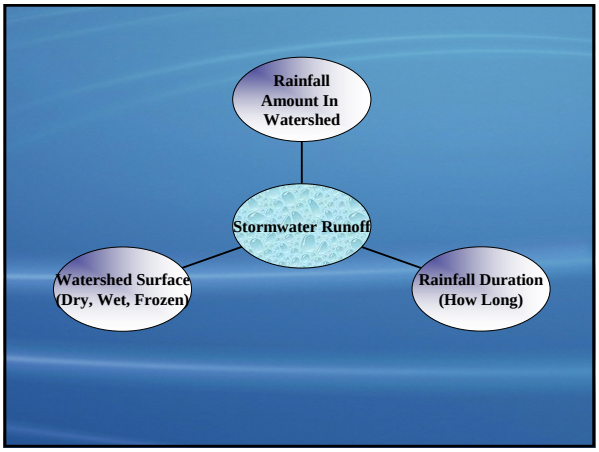
Major Channels/Streams/Watersheds
(Phinney Branch, Boneyard Creek, Beaver Lake, Copper Slough, Embarras, Kaskaskia)

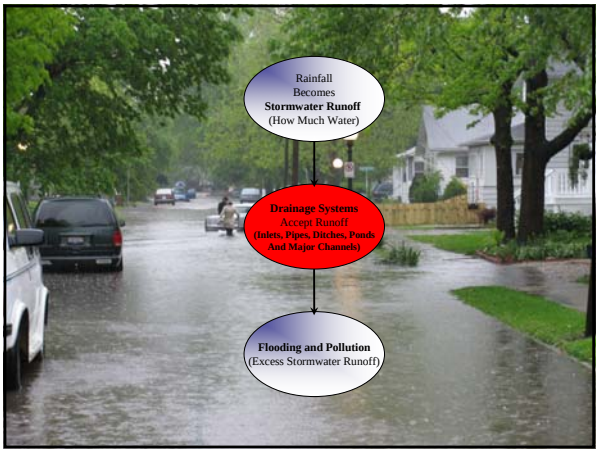
Large Regional Stormwater Management Facilities
(Eureka/Elm Basin, Healey St Basin, Green/Healey Underground, Oak Ash Basin, 2nd Street Reach Basin)
(Pump Stations at Healey St Basin and Washington St. Viaduct)

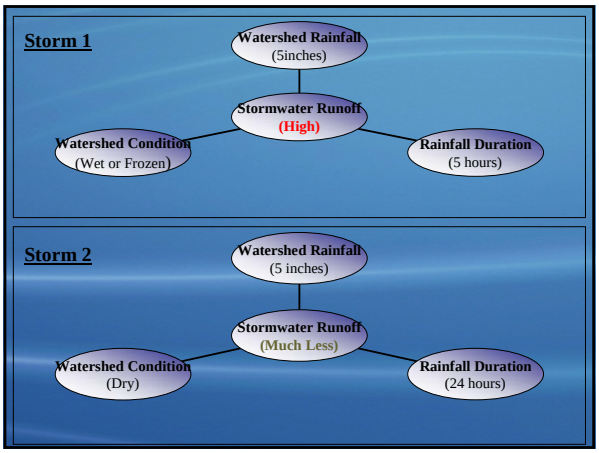
Stormwater Runoff

rainwater which does not infiltrate into the soil and runs off the land

Surface runoff is the water flow that occurs when soil is infiltrated to full capacity and excess water from rain, melt-water, or other sources flows over the land. This is a major component of the hydrologic cycle. Runoff that occurs on surfaces before reaching a channel is also called a nonpoint source runoff. If a nonpoint source contains man-made contaminants, the runoff is called nonpoint source pollution. A land area which produces runoff that drains to a common point is called a watershed. When runoff flows along the ground, it can pick up soil contaminants such as silt, petroleum, pesticides (in particular herbicides and insecticides), or fertilizers that become discharge or nonpoint source pollution.







Watersheds

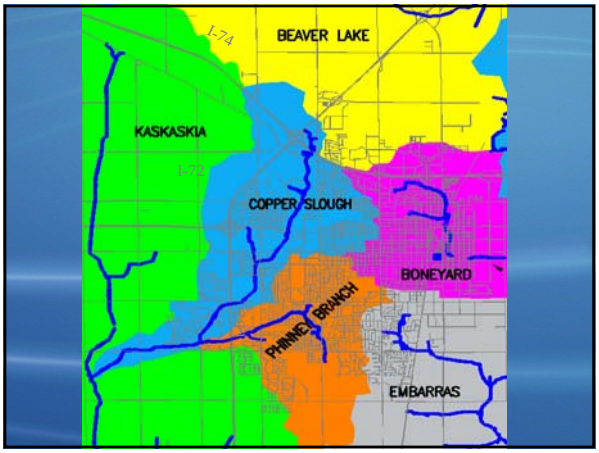
An area of land that has common a point of discharge for stormwater runoff

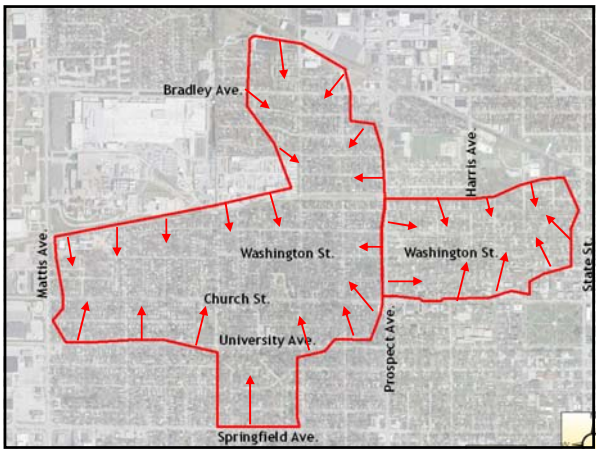
What is a Watershed (US EPA)?

A watershed is the area of land where all of the water that is under it or drains off of it goes into the same place. John Wesley Powell, scientist geographer, put it best when he said that a watershed is:

"that area of land, a bounded hydrologic system, within which all living things are inextricably linked by their common water course and where, as humans settled, simple logic demanded that they become part of a community."

Watersheds come in all shapes and sizes. They cross county, state, and national boundaries. In the continental US, there are 2,110 watersheds; including Hawaii Alaska, and Puerto Rico, there are 2,267 watersheds.





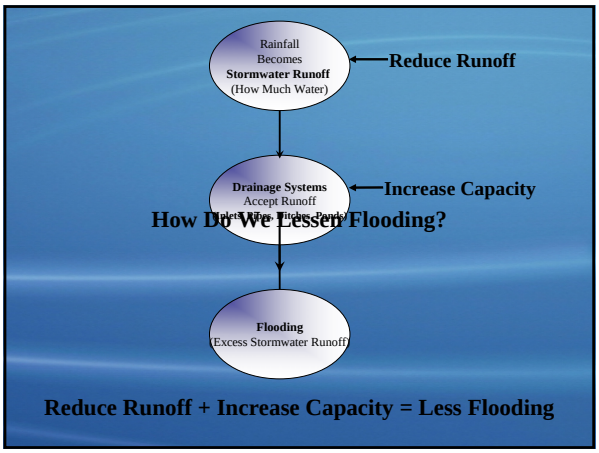
Drainage System

A system of watercourses or drains that carry off excess stormwater runoff

What is a Drainage System?
An interconnection of swales, ditches, piping, streets, ponds, channels and major waterways that convey and/or hold stormwater runoff.

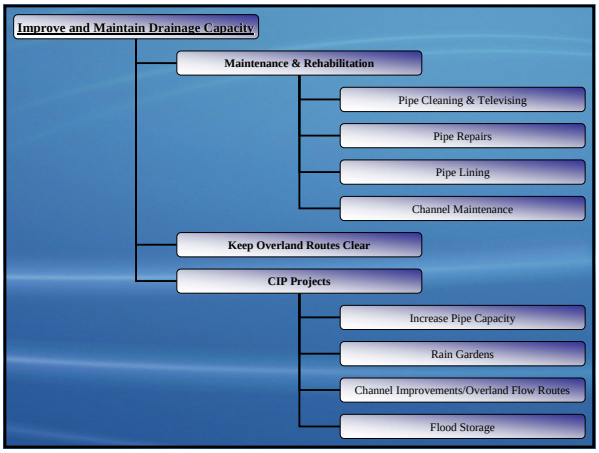
Drainage Systems (Old Versus New)

- **Old Standard**
  - Pipes/Inlets Designed for 2-year storm or less
  - No Detention Storage
  - No Emergency Overland Flow
  - Footing Tiles/Gravity Service Connections
- **New Standard**
  - Pipes/Inlets Designed For 10-Year Storm
  - 100-Year Detention Storage
  - Overland Flow Routes To Detention Basin
  - Footing Tiles/Sump Pumps
  - Basement Sanitary Pumped



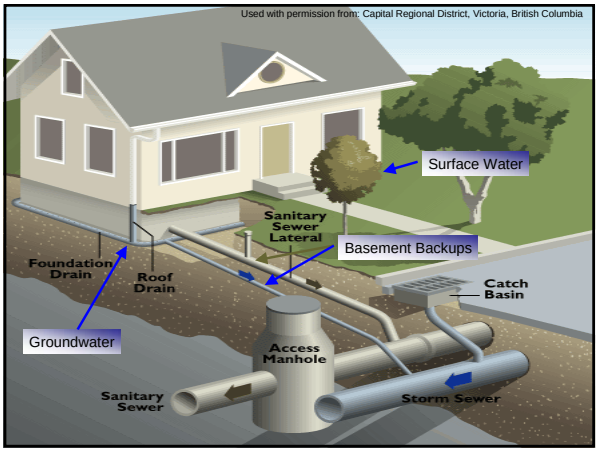
Conventional Methods of Flood Control

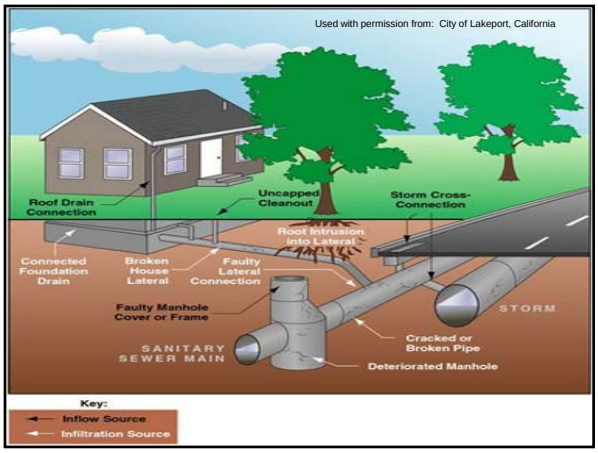
Increase Conveyance and Detention Capacity: Pipes and Ponds



HOW HOMES FLOOD

- **Surface Water** (through windows wells, doors)
- **Groundwater** (through walls/floors)
- **Basement Backups** (through sanitary/storm service connections)
- **Pump Failure**
- **Often Multiple Causes**





Sustainable/Green Drainage Infrastructure

Reduce Runoff by Increasing Opportunities for absorption and infiltration

Vital Statistics

Besides Air, Water is arguably the most valuable resource on Planet Earth

2.5%

66%

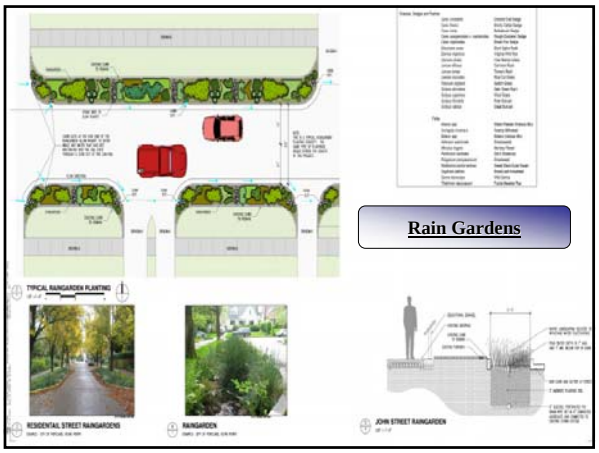
100/98/20/2/<1

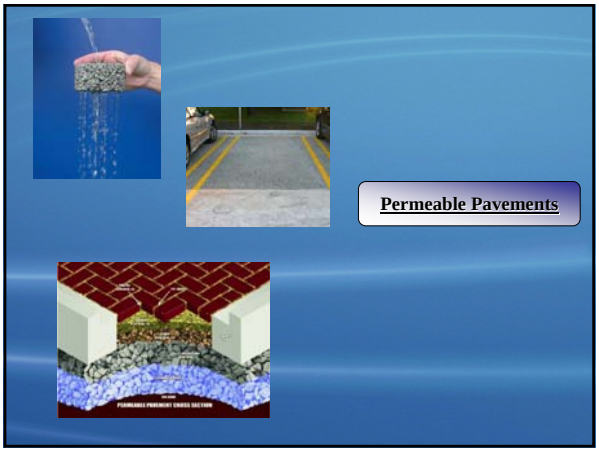
One Table Spoon

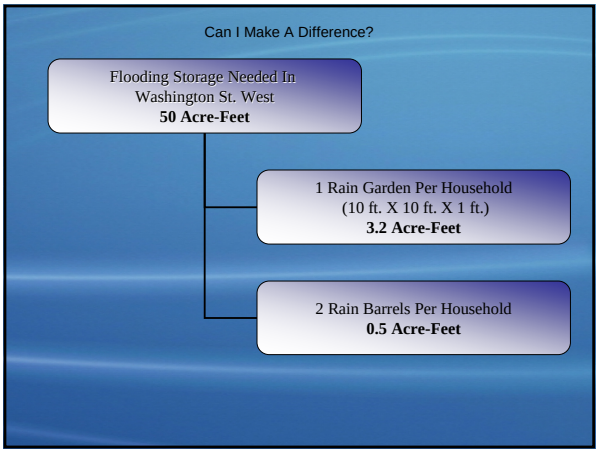
3 Hours

10,000

Rain Barrels


Rain Gardens
TYPICAL RAINGARDEN PLANTING
RESIDENTIAL STREET RAINGARDENS
RAINGARDEN
JOHN STREET RAINGARDEN


Permeable Pavements


Can I Make A Difference?
Flooding Storage Needed In Washington St. West
50 Acre-Feet
1 Rain Garden Per Household
(10 ft. X 10 ft. X 1 ft.)
3.2 Acre-Feet
2 Rain Barrels Per Household
0.5 Acre-Feet

NPDES Phase II Requirements

U.S. EPA requirements for Cities like Champaign, IL

What is a NPDES?
National Pollution Discharge Elimination System

What are Phase II Requirements?
In 1999 Phase II regulations required that Cities/MS4's less than 100,000 persons Obtain a NPDES permit to coverage for their stormwater discharge. Prior to that only Phase I communities (greater than 100,000 pop.) were regulated.

What is a MS4?
Municipal Separate Storm Sewer System: In the Champaign area, Urbana, Champaign, University of Illinois and the Village of Savoy are part of a combined MS4.

What are the Minimum Requirements of Our NPDES Phase II Permit?
- Public Education and Outreach
- Public Participation and Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post-Construction Runoff Control
- Pollution Prevention/Good Housekeeping

QUESTIONS?

Reference Slides

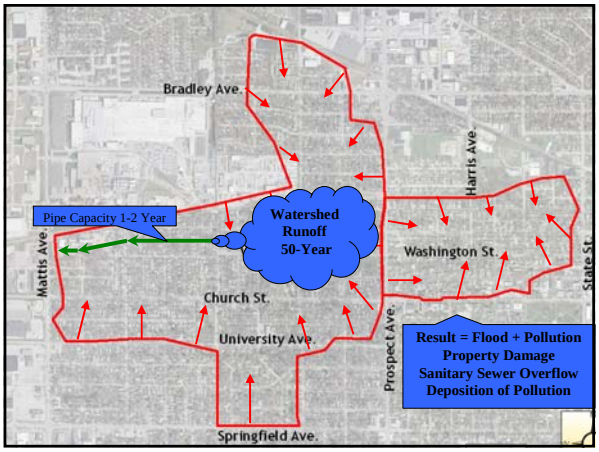
City Mission and Responsibilities

Vision Statement

"Champaign is an inclusive community that welcomes all. City residents enjoy a great quality of life, first class educational opportunities and easy mobility. Champaign is a vibrant community with an active center city and healthy neighborhoods. The City is designed for quality and sustainability, and has a growing economy."

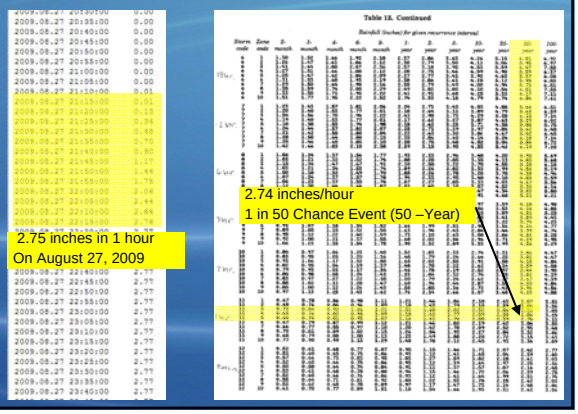
Stormwater Management Vision

Manage stormwater using a watershed approach in the most efficient manner possible in order to provide our community with sustainable, safe, reliable conveyance of stormwater that limits the potential for flooding and protects the natural environment.



USGS Copper Slough Rain Gage

Illinois State Water Survey Bulletin -70



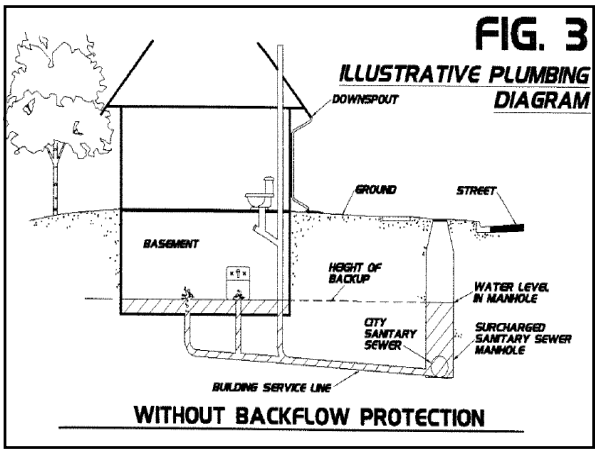


FIG. 3
ILLUSTRATIVE PLUMBING DIAGRAM
DOWNSPOUT
GROUND
STREET
BASEMENT
HEIGHT OF BACKUP
WATER LEVEL IN MANHOLE
CITY SANITARY SEWER
SURCHARGED SANITARY SEWER MANHOLE
BUILDING SERVICE LINE
WITHOUT BACKFLOW PROTECTION

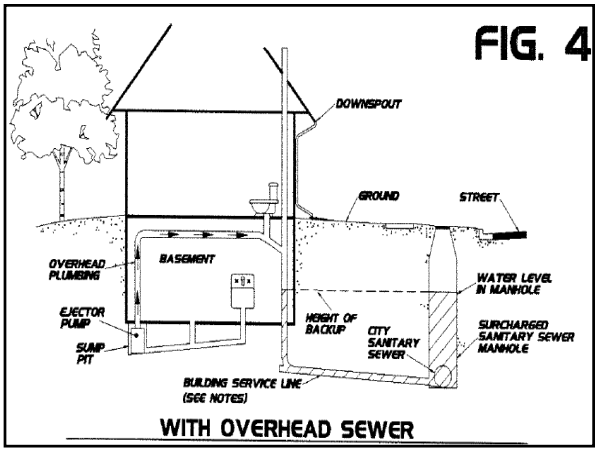


FIG. 4
DOWNSPOUT
GROUND
STREET
OVERHEAD PLUMBING
BASEMENT
WATER LEVEL IN MANHOLE
EJECTOR PUMP
HEIGHT OF BACKUP
CITY SANITARY SEWER
SURCHARGED SANITARY SEWER MANHOLE
SUMP PIT
BUILDING SERVICE LINE (SEE NOTES)
WITH OVERHEAD SEWER