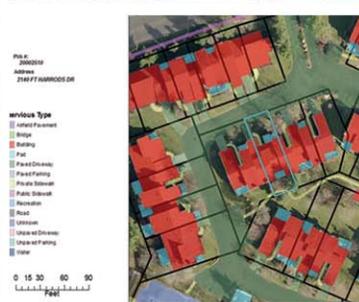


Stormwater Utility Feasibility Study: Final Report City of Urbana, Illinois

September 14, 2011



2009 Fiscal Year Budget

Date	Account	Description
1/22/09	Streetlights	Streetlights 1st 5th
3/22/09	Other Street	Other Street 1st 5th
5/22/09	Street	Street 1st 5th
Expenses		
1/22/09	Highways	21321.78
1/22/09	Highways	2343.08
3/22/09	Highways	767.78
5/22/09	Highways	967.89
5/22/09	Other	9887.78
Revenues		
3/22/09	Other	45,676.88
5/22/09	Other	65,456.34
Balances		

Program Assessment • Cost of service
Rate Structure • Stakeholder / Outreach

STORMWATER UTILITY FEASIBILITY STUDY

EXECUTIVE SUMMARY

The City of Urbana, Illinois is a small Midwestern city. At just over 175 years old the city has begun to show its age as some of the old infrastructure has reached or exceeded its designed useful life. Being a city of over 40,000 residents, the county seat, and the home of a major university the expectations for a functional, efficient drainage system are understandably high.

The City currently provides stormwater management services in seven broad categories; storm sewer operations and maintenance, engineering services, Boneyard Creek and regional pond maintenance, capital improvements, a sump pump reimbursement program, GIS-based mapping, and stream flow and rainfall gauging (in conjunction with USGS).

The two key issues driving the stormwater program funding levels are the deteriorating condition of the storm sewer infrastructure (pipes, manholes, and inlets) and the State mandated requirements that the City reduce the amount of pollution in its stormwater discharges.

Due to the funding levels of the stormwater program the Public Works Department has had to adopt a reactive infrastructure management policy rather than the preferred proactive management approach. A reactive approach address problems as they manifest themselves as sinkholes forming in streets or localized flooding from deteriorating pipes, manholes, and inlets. A proactive infrastructure management approach involves identifying infrastructure problems in an early stage, prioritizing the time frame for the repair, and then fixing the problem before it manifests itself in a failure evident as a sinkhole or localized flooding problems. Generally proactive infrastructure repairs result in less expense and less impact on adjacent properties than reactive repairs since the problem is addressed before the surrounding infrastructure (street, sidewalk, driveway, etc.) is damaged.

Any storm sewer repairs for the 2011-2012 Fiscal Year are anticipated to be reactive repairs. The Public Works Department prioritizes the reactive repairs on a worst-first basis with an increasing number of repairs and rehabilitation being deferred to the future. Storm sewer repairs are a significant portion of the costs incurred on street construction and resurfacing projects. Program funds for those repairs from the stormwater utility fee would make more of the limited motor fuel tax funds available for necessary street maintenance.

The Illinois Environmental Protection Agency (IEPA) has required the City operate under a National Pollution Discharge Elimination System (NPDES) permit for the discharge of City stormwater to the local creeks and streams. The City's NPDES permit requires that the City implement six minimum measures to reduce the amount of pollution in the City's stormwater. The six minimum measures result in 40 Best Management Practices (BMPs) that the City must complete annually which include public education pollution prevention activities, street sweeping, storm sewer cleaning, administration of an erosion control permit program, illegal discharge elimination program, and in-house pollution prevention practices. The cost of complying with the six minimum measures mandated by IEPA has been borne by the stormwater management program budget without any offsetting funding allocations.

In June 2010 the City Council authorized the Public Works Division to investigate the feasibility of implementing a stormwater utility fee method of funding the stormwater management program in the City of Urbana. Stormwater utility fees are based on many of the same principles as utility fees for other infrastructure programs, such as water and wastewater. An important characteristic of these programs is that the fees are dedicated to the program and cannot be used for unrelated purposes. Another is that the fee is program driven, covering the cost of providing a predetermined level of service. They are also equitable because they are based on the runoff-producing potential of all the properties in the community, rather than being based on assessed value or income.

The Stormwater Utility Feasibility Study has been an in-depth look at both the City of Urbana's stormwater management program and its funding options. The study utilized a combination of staff, citizen, businesses, and consultant input, and research of other stormwater management

funding programs to evaluate the available options. Using these inputs the consultant was able to define limits for the stormwater management program in terms of what, at a minimum, the Public Works Department must be doing to meet both its regulatory requirements, as well as an enhanced level of activities that should provide the level of service expected by the citizens of Urbana.

The enhanced stormwater management program is an upgrade to the existing program in that it increases the frequency of stormwater infrastructure inspections and the resulting maintenance, it adds more resources for compliance with the National Pollutant Discharge System (NPDES) permit for municipal separate storm sewer systems (MS4s), it updates the 30 year old Stormwater Master Plan, and it increases funding levels for infrastructure repairs and capital improvement projects. The estimated expenses of the proposed future stormwater management program are \$1,710,000 for Fiscal Year 2012-2013.

Impervious area is widely cited in engineering literature as the single most important factor influencing the peak rate of runoff, the total volume of stormwater discharged, and key pollutant loads typically found in stormwater runoff from developed urban properties. This is particularly true for storms occurring at or near the design storm frequencies for storm sewer infrastructure. For these reasons impervious area was chosen as the basis for billing in the proposed stormwater utility.

Many of the 1400 communities that have established stormwater utilities have based their rate structure on a flat rate for single family residential properties because those properties make up a large majority of the total number of parcels and have a relatively low amount of impervious area on each property as compared to other land uses. By sampling a statistically significant sample of the single family properties a representative amount of impervious area can be determined. This representative amount of impervious area is referred to as an Equivalent Residential Unit, or ERU, and is used as the billing unit for the stormwater fee in much the same manner as kilowatt hours are the billing unit for electrical service. For commercial and other non-single family properties the actual impervious area is computed and their charges determined based on the

number of ERUs on the property. The sampling in Urbana determined that 3100 square feet of impervious area is the local ERU.

In a rate structure that includes flat rates for single family residential properties, there are two choices for billing those properties; there could be a single flat rate for all single family properties, or there could be tiers that establish a second and/or a third flat rate for single family properties. Both approaches were examined in the feasibility study.

A rate model was developed to simulate annual cash flow and to determine the preliminary rate. The model is based on the cost of providing the services defined in the stormwater management business plan and on a number of policy assumptions that were discussed with City staff. Through the rate modeling process the impact of distributing the cost of service of the proposed program over an impervious area-based rate structure was evaluated. Using this rate structure the preliminary rates are estimated to be \$4.90- \$5.15 per month for single family residential and duplex properties and \$4.90 - \$5.15 per month per 3100 square feet of impervious area for all non-residential properties.

The consultant makes a number of recommendations as a result of the evaluations performed in the feasibility study. Those recommendations include:

- The City should create an enterprise fund dedicated solely to the funding of the stormwater management program.
- The primary source of revenue for the stormwater enterprise fund should be a dedicated utility fee.
- The level of service that is to be provided should be that described as the Stormwater Management Business Plan with an initial estimated annual cost of \$1.71 million.
- Stormwater fees should be based on the runoff potential of each property as indicated by impervious surfaces.
- All properties whose runoff enters or impacts the City's stormwater drainage system infrastructure will be included.

- The public right-of-way will not be charged as it is designed to be part of the stormwater conveyance system.
- Single family and duplex residential properties will be billed a flat monthly rate.
- Billing of all other property types will be based on increments of thirty-one hundred (3100) square feet of impervious surface.
- There should be credit and incentive programs that recognize the potential beneficial impacts of on-site stormwater management controls.

Example utility fee computations are provided for four properties. The fees for the example properties and a single family residential property are summarized in the following table.

Examples of Annual User Fees

Property Type	Impervious Area (ft ²)	Computed Billing Units (ERUs)	Annual Fee Range
Single Family Home	3100	1	\$59 - \$62
Small Business	12,700	4.1	\$235 - \$255
County Courthouse	103,100	33.1	\$1920 - \$2100
Apartment Complex	410,400	132.4	\$7680 - \$8220
Urbana High & Middle School	645,800	208.3	\$12,120 - \$12,900

The recommended funding program would upgrade the stormwater program to a level that meets the needs of the City, the expectations of the residents, and the regulatory requirements of both the United States Environmental Protection Agency (USEPA) and the IEPA.

The City of Champaign is also considering the adoption of a stormwater utility fee for its stormwater management program. The Champaign City Council voted on August 23, 2011 to accept the stormwater feasibility study recommendations prepared by their Public Works Department including a \$3.2 million dollar stormwater management program operating budget that would be funded by a stormwater utility fee. The resulting stormwater utility fee in Champaign would be \$5.24 per ERU per month. The Urbana Public Works Department has been closely coordinating its efforts with the City of Champaign with the goal of being prepared to

implement stormwater utility fees in the two cities at about the same time. Both the City of Urbana and the City of Champaign retained the AMEC Earth and Environmental, Inc. from Indianapolis, Indiana to perform the stormwater utility feasibility studies.

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STORMWATER UTILITY FEASIBILITY STUDY

1. INTRODUCTION

The City of Urbana, Illinois is a 175 year old, small Midwestern city. The City is beginning to see signs of its age, with infrastructure inspection, maintenance, and replacement needs high among local priorities. Located in east-central Illinois, the City experiences the same types of stormwater management issues that plague other relatively flat, densely developed areas; flashy runoff events and stormwater runoff that ponds frequently around inlets to the storm sewer system, and aging stormwater drainage system infrastructure. With an approximate area of 11.7 square miles, a population over 40,000 people, and a major university in the community, the expectations for a highly functional, efficient stormwater drainage system are high.

The stormwater drainage system includes nearly 129 miles of storm sewer and almost 7,800 manholes, inlets, headwalls, and similar features. In 1980 a stormwater master plan was prepared that identified and evaluated stormwater drainage problems. The plan included proposed solutions to the problems that were identified. Due to funding limitations only a portion of the stormwater master plan recommended capital improvement projects have been completed.

The two key issues driving the stormwater program funding levels are the deteriorating condition of the storm sewer infrastructure (pipes, manholes, and inlets) and the State-mandated requirements that the City reduce the amount of pollution in its stormwater discharges.

Due to the funding levels of the stormwater program the Public Works Department has had to adopt a reactive infrastructure management policy rather than the preferred proactive management approach. A reactive approach addresses problems as they manifest themselves in sinkholes forming in streets or localized flooding from the deteriorating pipes, manholes, and inlets. A proactive infrastructure management approach involves identifying infrastructure problems at an early stage, prioritizing the time frame for the repair, and then fixing the problem

before it manifests itself in a failure evident as a sinkhole or localized flooding problems. Generally, proactive infrastructure repairs are less expensive and have less impact on adjacent properties than reactive repairs since the problems are addressed before the surrounding infrastructure (street, sidewalk, driveway, etc.) is damaged.

All storm sewer repairs anticipated for the 2011-2012 Fiscal Year are anticipated to be reactive repairs. The Public Works Department prioritizes the reactive repairs on a “worst-first” basis with an increasing number of repairs and rehabilitation needs being deferred to the future. Additionally, the City’s Motor Fuel Tax has had to pay for an increasing number of storm sewer repairs on reconstruction and resurfacing projects due to limited stormwater program funding. This has resulted in a reduction in the number of street reconstruction and resurfacing projects that the City can complete.

The replacement value of the total drainage system is estimated to be \$129 million in 2011 dollars.

Additionally, the IEPA requires the City operate under a NPDES permit for the discharge of City stormwater to the local creeks and streams. The City’s NPDES permit requires that City implement six minimum measures to reduce the amount of pollution in the City’s stormwater. The six minimum measures result in 40 BMPs that the City must complete annually which include public education pollution prevention activities, street sweeping, storm sewer cleaning, administration of an erosion control permit program, illegal discharge elimination program, and in house pollution prevention practices. The cost of complying with the six minimum measures mandated by IEPA has been borne by the stormwater management program budget without any additional funding allocated to it.

The Urbana Public Works Department currently provides a number of stormwater management services, including;

- Capital construction projects
- Storm sewer pipe, manhole and inlet repair or replacement
- Ditch grading and mowing

- Vine Street Viaduct Pump Station operation and maintenance
- Storm sewer pipe, manhole, and inlet cleaning
- Boneyard Creek and Saline Branch inspection and maintenance
- Regional detention facility maintenance
- Hazardous sump pump discharge elimination program
- Responding to citizen drainage concerns and property flooding issues
- Compliance with State and Federal storm water regulations

In order to provide the level of service in the stormwater management program expected by Urbana's population and to comply with new water quality requirements of the IEPA the City has undertaken an investigation of alternative funding methods for its stormwater management program. The objective of this investigation has been to evaluate the stormwater utility concept to determine whether it is capable of bringing an adequate, stable, dedicated, and equitable method of funding stormwater management to the City of Urbana. Stormwater utility fees are a form of demand based funding, or funding that is based on the demand for services that is exerted by each individual property in the City. This document, the *Stormwater Utility Feasibility Study*, provides the results of that investigation.

2. STORMWATER FUNDING

The goal of this study is to determine the practicality of moving the revenue base for stormwater management in the City of Urbana from its current tax-based system to a fee-based program. In order to make the, “Can we do it?” and “Should we do it?” determinations, we are beginning by asking four questions:

1. Where do the funds for stormwater management come from now, and are they adequate?
2. What funding methods are used around the country to finance stormwater management?
3. How are stormwater utility rates typically structured?
4. What is the statutory basis for the establishment of a utility fee?

In the following pages we will answer each of these questions. The question “Should we do it?” can only be answered after completing all of the steps of the feasibility study.

2.1. Where Does Our Current Stormwater Management Funding Come From?

The approved budget for the City of Urbana for Fiscal Year 2011-2012 is approximately \$48.3 million. The General Fund is the City’s chief operating fund and is the revenue source for most City programs. The General Fund is the revenue source for approximately \$30 million of City-funded activities in the FY 2011-2012 budget. The fund is made up of general, undesignated revenue streams such as sales, income, and property tax levies that can be used to fund any function of local government.

Of this FY2011-2012 annual budget approximately \$371,360 was identified as being specifically budgeted for the stormwater management program. When looking more broadly at the budgeting of supporting operation and maintenance activities and other capital, it was determined that the effective annual budget for the stormwater program as defined in Section 3 of this report was approximately \$811,000 for the fiscal year. If the program that is proposed in Section 4 of this feasibility study were to be implemented, the annual budget would need to be increased to approximately \$1.71 million, an increase of about \$900,000 annually. This would be an annual City budget increase of just under 1.9 percent. If we look at the increase in terms of

a property tax increase only, the current property tax revenues of \$7.31 million would need to be increased by 12.3 percent. It should be remembered that this increased revenue would come from the 94 percent¹ of the properties in Urbana that pay property taxes, though the stormwater management program improvements would benefit all properties.

As mentioned previously, this projected funding increase is for the entire stormwater management program, not just a specific project, so we are not looking at a one or two year spike in the stormwater program budget, this is a long term effort to bring the program level of service up to the expectations of the community and therefore represents a long-term budget need.

Are the funding sources in use today adequate? In the Mayor's Message in the City of Urbana Budget for Fiscal Year 2011-2012 the Mayor states that there is a funding gap that is being dealt with through freezing employee salaries, leaving open City job positions vacant, increasing fees, and borrowing from other program funds. It is unlikely that the stormwater program would be able to grow as proposed in the near future if the General Fund remains as its funding source.

2.2. What Funding Methods Are Used For Stormwater Management Programs?

This assessment of the feasibility of user fee funding for stormwater management in the City of Urbana examined a full range of revenue sources and funding mechanisms. Even though user fees are the stated focus of the study, other typical of methods of funding stormwater were reviewed. These other funding methods, if added to the rate structure, would add equity to the funding program. The alternative funding methods that were investigated include:

- General Fund appropriations
- Stormwater utility fees
- Special assessments
- Bonding for capital improvements
- In lieu of construction fees

¹ The approximate 6 percent of tax-exempt and non taxable parcels in Urbana make up almost 31 percent of the City's land area, not including the public right of way along city streets.

- Credits and offsets against stormwater service charges
- System development charges
- Plan review, development inspection, and special inspection fees
- Impact fees
- Developer extension/latecomer fees
- Federal and state funding opportunities

Even though any of the funding methods listed above may be available to fund a specific portion or portions of the local stormwater management program, only the first two, General Fund appropriations and stormwater utility fees, are capable of funding the entire program. These two funding sources are described below. Short descriptions of the other nine methods may be found in Attachment A to this document.

2.2.1. General Fund Appropriations

As mentioned above, the General Fund is the primary source of tax-based funding in City of Urbana. The stormwater management program in the City of Urbana has been funded from General Fund allocations for many years. There are a lot of demands on the General Fund from programs citywide, and those demands grow annually.

The demands placed on the stormwater systems that result in needs for operational programs and capital investment in systems and other assets have no relationship to salaries and wages, property values, or business activity levels. They are a function of the peak rate and the total volume of stormwater runoff that must be carried safely through the community; and what must be done to meet NPDES stormwater discharge permit conditions to reduce pollution of receiving waters. However, the revenue sources that support the General Fund are based on a “taxation” philosophy. The purpose of taxes is simply to raise revenue, and there need not be a relationship between the source of revenue and the purpose to which it is applied. Equity, the basic fairness of how and from whom those funds are generated, is not a consideration.

The greatest inequity in using General Fund appropriations for stormwater management is that many properties that place demands on the stormwater systems are exempt from property taxes. These properties include government properties, churches, and others who do not generate

property tax revenue. As a result, they do not participate in funding stormwater management through the General Fund. Even some private properties, such as parking lots and storage warehouses that have large expanses of impervious coverage, do not pay property or occupational taxes commensurate with the demands they impose on the stormwater systems. Conversely, those parties that have little impact on stormwater runoff but pay property and occupational taxes are paying more for stormwater management through the General Fund than they would through funding methods based on the demands placed on the stormwater program and systems.

General Fund appropriations are also highly uncertain from year to year. Revenues within the General Fund are not dedicated to any specific purpose, and allocations shift with perceived priorities. Stormwater management needs are likely to receive better treatment in the budget in a year following severe storms and drainage problems than in a year following a drought. This makes it difficult to plan and consistently carry out a long-term program plan that depends on a reliable level of funding year after year.

2.2.2. Stormwater Utility Fees

Stormwater utility fees, or service charges, are part of an increasing trend in local government toward charging fees for services for which the demand for service is easily quantifiable. Over the last 35 years, several types of demand-based services have been migrated from tax-based funding to fees in order to ensure that the funding level provided to the programs would be adequate, stable, and equitable. Examples of local government programs that have made this migration include water, sewer, solid waste, recycling, and in many locations, stormwater. More than 1400 communities have elected to charge stormwater utility fees over the last 40 years.

The Illinois Compiled Statutes (ILCS) provide Illinois municipalities the authority to create fee-based funding programs for stormwater management in both the Home Rule Powers and in the Public Works Statutes, as will be discussed in Section 6.4.

In most communities that have implemented stormwater utility fees the rates have been based on the physical conditions of properties that affect the peak rate of runoff, total runoff volume

discharged, and pollutant loads delivered to receiving waters. The most common stormwater service charge rate structures are based on the amount of impervious area (roofs, paved areas, etc.). Impervious coverage dramatically increases the proportion of rainfall that runs off the land, particularly for events that occur at frequencies utilized for infrastructure design. Impervious area rate methodologies are used in Rock Island, Normal, Bloomington and Rolling Meadows, Illinois, and more than 700 other cities and counties around the country. The revenue generated by a stormwater utility fee is a function of the design of the rate structure and the land use make up of the community. Example single family residential rates from around the state of Illinois are shown in Table 1.

Table 1. Single Family Residential Rates In Illinois

City	Monthly Rate*
Aurora	\$ 3.45
Bloomington	\$ 4.35
Highland Park	\$ 4.00
Moline	\$ 3.75
Morton	\$ 4.74
Normal	\$ 4.60
Richton Park	\$ 5.63
Rock Island	\$ 3.72
Rolling Meadows	\$ 2.76
Champaign **	\$5.24
Proposed Urbana	\$4.90-\$5.15

*Based on average single family property (ERU)

** In process of being adopted

Equity of funding is enhanced through the rate structure design process. For example, stormwater service charges may be applied to non-taxable (public) as well as privately owned properties. Taxable (private) properties are thus relieved of a portion of the cost of stormwater management. Credits can be given against stormwater service charges to encourage and reward

stormwater BMPs and to compensate for activities performed by the property owners which are beneficial to the City's stormwater management program.

A stormwater utility fee could also be coordinated with other funding methods to create a rate structure that exhibits increased equity over funding based on a single source. For example, revenue from other types of fees, such as in-lieu of detention or plan review and inspection fees can reduce the revenue needed from utility fees by assigning specific costs to the sector of the community that benefits from the service.

The stability of revenue from a stormwater service charge ensures that long-range scheduling of capital improvements and operations can be done with reasonable assurance that funding will be available.

The City of Champaign is also considering the adoption of a stormwater utility fee for its stormwater management program. The Champaign City Council voted on August 23, 2011 to accept the stormwater feasibility study recommendations prepared by their Public Works Department including a \$3.2 million dollar stormwater management program operating budget that would be funded by a stormwater utility fee. The resulting stormwater utility fee in Champaign would be \$5.24 per ERU per month. The Urbana Public Works Department has been closely coordinating its efforts with the City of Champaign with the goal of being prepared to implement stormwater utility fees in the two cities at about the same time. Both the City of Urbana and the City of Champaign retained the AMEC Earth and Environmental, Inc. from Indianapolis, Indiana to perform the stormwater utility feasibility studies.

2.3. How Is A Stormwater Utility Fee Program Structured?

Stormwater utilities have been in existence since the early 1970s. The rate of growth of utility fee programs for stormwater management is increasing over time, and not surprisingly the increases tend to coincide with new water resources regulations. There are currently more than 1400 stormwater utilities in the United States, and many hundreds more that fund all or part of

their stormwater programs using special fees. As can be seen in Figure 1, the trend does not appear to have peaked yet.

The common components of a stormwater utility include: a fee as the primary revenue producer, a rate basis dependent on the intensity of development, a rate structure that may include secondary funding mechanisms for the purpose of enhancing the equity of the system, a billing system, a public outreach program, a customer service program, an appeals process, and a master account file maintenance program.

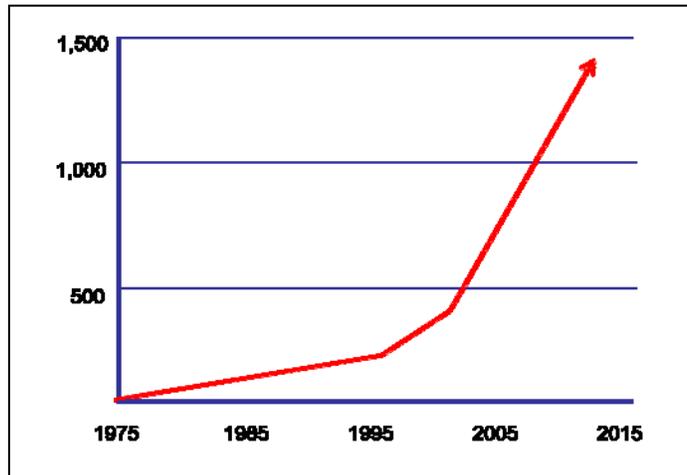


Figure 1. Growth of Stormwater Utilities

When establishing a utility fee based funding program for stormwater management there are a number of policy decisions that must be made. These policy decisions address such issues as the rate structure, stormwater fee credits or incentives, the frequency of rate reviews, rate modeling parameters, exemptions for the fee, etc.

The basic component of a utility fee program is the fee itself. The fee is determined by distributing the cost of the services that will be provided over the computed rate base². Most stormwater user fee programs use some measure of development intensity as the rate basis. Some use only the amount of impervious surface³ as the rate base, while others utilize a combination of impervious and pervious areas. Most of the stormwater utility rates around the country are based only on the imperviousness of properties because basing the fee on a single

² The rate basis is the physical parameter that billing of the fee is based on, such as impervious area. The rate base is the total number of billing units represented by all ratepayer properties

³ Impervious surfaces are surfaces that block or slow the infiltration of stormwater into the ground, such as rooftops, driveways, and roads

parameter simplifies the rate structure and because imperviousness has been shown to be the dominant parameter influencing runoff peak, volume, and quality in urban areas.

After selecting the rate basis a decision must be made as to how it will be incorporated into the rate structure. In the case of imperviousness, the decision must be made whether the total impervious area on each parcel will be measured and incorporated into the rate base, or if the data analysis process will be based on some incremental amount of imperviousness. Most stormwater utility communities have chosen to utilize flat rates for single family residential properties because the cost and time involved in developing an impervious area database for residential properties is considerable, and the variability of the impervious area on single family residential properties is somewhat limited. For Urbana, a sampling process was implemented that shows that the typical single family residential property in the City has 3100 square feet of impervious area. In an impervious area based billing program 3100 square feet of impervious area would become the billing unit (ERU) that the utility rate would be based on. All properties would pay based on the number of ERUs on the property.

In a rate structure that includes flat rates for single family residential properties, there are two choices for billing those properties; there could be a single flat rate for all single family properties, or there could be tiers that establish a second and/or a third flat rate for single family properties. Both approaches were examined in the feasibility study and are described in Section 7.2.1.

Once the method of incorporating the rate basis into the rate structure is made and the total number of impervious units is known, the utility's annual rate can be determined by dividing the cost of service by the rate base after the costs have been adjusted for any other sources of revenue or other costs. The sources of additional revenue may be from the collection of specialty fees, such as plan review and inspection fees, detention variance fees, and the like. Additional costs may include estimated bad debt or delinquencies, stormwater fee credits, etc.

In addition to the fee structure itself, there are a number of supporting services that are part of a user fee program. These services, mentioned earlier, include public outreach, billing and cash

management, customer service, maintenance of the master account file, an appeals process for ratepayers that wish to contest their fees, and periodic updates to the cost of service and rate.

2.4. What Is The Statutory Basis For The Establishment Of A User Fee?

This report is focused on the feasibility of funding City of Urbana’s stormwater management program with a user fee based revenue source. The legality of user fee based funding is a key consideration in this process. In Illinois both the Home Rule Powers and the Public Works Statutes empower City government to establish programs to own and operate stormwater management and flood control systems and facilities. These statutes also provide the authority necessary to fund the programs.

2.4.1. What Are Home Rule Powers?

The City of Urbana is a Home Rule community as defined by the 1970 Illinois Constitution⁴. Home Rule powers shift decision making from the state level to the local level enabling communities to find local solutions to local problems. Home Rule communities are granted a broad range of powers for the local good unless specifically exempted by the State. Home Rule communities are exempted from meeting requirements mandated by state legislation.

Home Rule provides communities with the flexibility to explore new funding sources, such as licensing fees for service businesses (banks, landscapers, etc.), restaurant taxes, real estate transfer taxes, etc. Home Rule status also allow the City to use fees to finance infrastructure and related program needs (streets, sewers, storm drainage, etc.) instead of limiting revenue sources to numerous types of tax levies.

2.4.2. What Are Public Works Statutes?

The Public Works Statutes are a subset of the Corporate Powers and Functions statutes⁵ that specifically address the powers granted to municipalities to own and manage various public

⁴ Illinois Constitution, Article VII, Section 6, “Powers of Home Rule Units”

⁵ ILCS Chapter 65, Article 11

works infrastructure and programs. These statutes address streets, public buildings, sanitary sewers, water, and stormwater, among other services. Of particular interest in these statutes are the definition of a sewerage system (65 ILCS 11/139) and the discussion on how sewerage systems can be funded (65 ILCS 11/141). Sewerage systems are defined to include separate storm drainage systems as are owned and operated by the City of Urbana, and all aspects of the stormwater management program that supports them. The statutes specify that either taxes or service charges, or both may be used to fund the program, and that the service charge revenues may be used to service debt for bonds that may be issued for capital projects.

2.4.3. Have The Courts Weighed In On The Concept?

The service charge approach to funding stormwater management has been tested in the court systems of several states and the federal courts. In those cases the complaints were generally distilled down to the simple question, “Is this a tax or a fee?” The federal courts have defined three basic criteria to distinguish a service charge from a tax. These criteria are;

- 1) The service being charged for must have a regulatory nature.
- 2) There must be a rational relationship between the fee charged and the service provided.
- 3) There must be a voluntary nature to a fee.

The regulatory nature of a stormwater utility fee would be accomplished by the adoption of an ordinance establishing a stormwater enterprise fund, a fund that is dedicated to pay for stormwater management services, and the adoption of a stormwater utility rate ordinance that establishes the fee and dedicates its proceeds to the stormwater enterprise fund.

The rational relationship between the service provided and the fee charged for the service (*rational nexus*) is a fundamental of any user fee or service charge. This basically means that the fee is being imposed to support all or part of the cost of providing the community with stormwater management services, but that no unrelated programs or costs are to be paid for using the stormwater fee revenues. Each ratepayer does not have to receive the same amount of each service from the utility in order for the fee to be legitimate. For example, telephone customers or cable television subscribers pay a flat monthly fee for basic service regardless of the number of

local calls made or the number of hours of television watched. In the case of stormwater, the customer at the top of the hill may not need or receive the same level of flood protection as the customer at the bottom of the hill, but the customer at the top of the hill uses much more of the drainage system than the customer at the bottom of the hill.

“Voluntary nature” has two meanings as it applies to stormwater utility feasibility. The service charges can be said to have a voluntary nature if the mechanism exists to allow the ratepayer to reduce his or her service charge if the ratepayer can significantly lessen the burden of the community to provide stormwater management services to his or her property. This is typically accomplished by including a credit program that is based on meeting specific threshold criteria for on-site stormwater management as defined by the municipality.

In the Church of Peace v. City of Rock Island lawsuit, the Appellate Court⁶ ruled that the voluntary nature test was satisfied by the fact that the plaintiffs elected to discharge to the drainage system that is owned and operated by the City of Rock Island rather than retain and manage their stormwater runoff on-site. In this case of first impression⁷ in Illinois, both the district and appellate courts found in favor of the City of Rock Island that the stormwater utility fee is indeed a fee and not a tax.

Stormwater utilities have been implemented in Illinois by Moline, East Moline, Rantoul, Aurora, Freeport, Rolling Meadows, Bloomington, Normal, Highland Park, Morton and Rock Island. It is important to note that while any of the eleven could have been established under the municipal public works statutes, only Morton and East Moline specifically used this authority as the other nine are all Home Rule cities.

⁶ Third District Appellate Court, Ottawa, Illinois, May 1, 2005, Case 3-04-0480

⁷ A case of first impression is the first court challenge of a particular issue that is seen to set legal precedence

3. FEASIBILITY STUDY PROCESS

The creation of a stormwater utility is typically a two-phased process. The first phase is a feasibility study for the implementation of a stormwater management fee. The goal of the feasibility study is to thoroughly vet the options, policy decisions, and financial decisions that would need to be made in order to implement a stormwater utility in the City of Urbana. The second phase, implementation, would occur only if the City Council feels that a utility fee is both feasible and desirable for the City of Urbana. The stormwater utility implementation process is defined in Section 10.3.

The feasibility study process includes six steps; the development of a stormwater management business plan, data analysis, review of billing options, development of a preliminary rate, a public participation process, and development and partial implementation of a public outreach plan. Each of these items will be expanded on below.

The development of the proposed stormwater management business plan for the City of Urbana included three steps. The first step was an assessment of the existing program and the program costs. The second step was the identification of the goals and objectives of the program and the program's needs, the elements that allow it to transform from its existing content to a program that would meet the identified goals and objectives. The third step was to add detail to the program goals by identifying staff requirements, equipment needs, program modifications, a timeline, and costs. The result is the proposed 10-year business plan for stormwater management in the City. The stormwater management business plan is described in detail in Section 4.

The data analysis included a review of the existing information within the City from which to develop a master account file for delivery to a selected billing agent. In this process AMEC reviewed GIS data, including aerial photography and parcel information, property data from the Cunningham Township Assessor's Office, and existing tax and utility bill samples. In addition, statistical sampling of the amount of impervious area on representative parcels of about 11 land use classes was performed. The results of the sampling were used in estimating the size of the

potential stormwater utility rate base. The sampling results are presented in more detail in Section 5.

The billing option review was a look at the available options for delivering a stormwater utility bill and the approximate billing costs. The options that were reviewed included the possibility of adding a stormwater fee line item to existing bills sent to residents of the City of Urbana by Illinois American Water Company, the Urbana-Champaign Sanitary District, or the County Treasurer, and in-house billing services for a portion of the rate base. The results of the billing review are discussed in Section 6.

The process for estimating the preliminary range of utility rates had several steps. First, the program cost of service was derived from the stormwater management business plan. The rate basis was determined through discussions with staff and recommendations of an advisory committee to be the amount of imperviousness on every parcel in the community. An estimate of the amount of impervious area was made as part of the data evaluation. Preliminary policy recommendations related to who would be billed and for what were made and a rate model was developed that predicted the range of preliminary rates that would be necessary to fund the proposed stormwater management business plan. The preliminary rate development is discussed in more detail in Section 7.

The approach included input from the public in the form of a stormwater advisory committee (SWAC). The SWAC was composed of 17 citizens representing a wide cross-section of peer groups across the City, groups that would potentially represent multiple viewpoints on the funding issue. Additionally, representatives from the City of Urbana's Departments of Public Works and Community Development participated in the process. The advisory group members were asked to comment on the aspects of a possible stormwater utility fee structure that would impact the equitability of its application.

The SWAC meetings were open to the public. Notice of each of the meetings was posted on the City website in advance of the meeting. All presentation materials and the minutes of each SWAC meeting were posted on the City website and available to the public. A discussion of the

SWAC process, including a list of the participants, is provided in Section 8. The recommendations of the Stormwater Advisory Committee are included as Attachment B to this document.

The public information and outreach plan is a framework for educating the community about stormwater funding. The plan includes a variety of action items that assist the City staff in targeting messages and audiences that need to be informed of the stormwater program, its needs, its direction, its funding options, and how a stormwater utility fee might impact the public.

A number of public outreach initiatives have taken place during the feasibility study, including outreach to the University of Illinois, a presentation to the Developers' Roundtable, and 22 meetings with "Key Ratepayers". In the key ratepayer initiative the representatives of a variety of tax exempt properties and properties with large amounts of impervious area were asked to attend one-on-one meetings with city staff to discuss the stormwater program, its funding needs, and the specific potential financial impacts of a stormwater utility on each. The public information and outreach program, including more information on activities that have already taken place, is discussed in Section 9 of the report and the plan of future activities is provided in Attachment C.

The study culminates with the feasibility study report and its presentation to the public and to City Council.

4. STORMWATER MANAGEMENT BUSINESS PLAN

One of the basic philosophies in the development and implementation of stormwater utility fees is that the stormwater program drives the cost of service, and therefore the rates that are billed to each property within the City's corporate limits. It is therefore crucial to determine the program strategy, or business plan, that is most appropriate for an agreed upon planning period. The program strategy is the culmination of a multi-step process. The steps involved in the process include:

1. Assessment of the existing program.
2. Identification of the problems, needs and goals facing the program.
3. Determination of the program elements or enhancements that would satisfy the problems, needs, and goals.
4. Identification and prioritization of the steps necessary to take the existing program from where it is today to the strategic levels identified in step 3

In the following sections of this Section the City of Urbana's existing stormwater management program will be described, followed by a description of the needs analysis, and the proposed stormwater management business plan.

4.1. The Existing Stormwater Program

Stormwater management has been a function of the City of Urbana for more than one hundred and fifty years. As in many cities around the country, the program's focus has changed over time from moving water to the side of roads, to moving it underground, to conveying it quickly to the nearest stream, to managing its impact on the streams, to managing its quality. Along the way a great deal of infrastructure has been created that makes up the City's storm water drainage system. The system currently includes approximately 129 miles of storm sewer, 7800 inlets, manholes, and related structures, and a regional stormwater detention basin. It is estimated that the cost to replace the storm sewer system would be in excess of \$129 million.

The very nature of storm sewer systems like the one in Urbana makes it hard for the average citizen to understand the resources required to manage it. Storm sewer systems are often referred to as the “forgotten utility”. They are out of sight (and out of mind) for the most part and rarely become noticeable to the public unless there is a significant storm event. For most storms the system will live up to its intended purpose and collect and convey the water to Boneyard Creek, the Saline Branch, or south to the Embarrass River tributaries. The capacity of the system has been designed to convey a certain amount of stormwater runoff. When this design capacity is exceeded, water is either stored on the street surface or conveyed to the next drainage system inlet. Thus the streets are designed to be an integral part of the drainage system.

As infrastructure ages it can lose capacity if not inspected on a regular basis and maintained or repaired as necessary. The capacity loss can be a function of failure of the pipes or inlets, or by clogging of the pipes and inlets by sediment and debris. Failed infrastructure can also result in sinkholes or damaged sections of street pavement resulting in lane closures and traffic delays to the City’s transportation network.

There are seven key components to the City of Urbana’s existing stormwater management program. These components are:

1. Storm sewer operations & maintenance
2. Engineering services
3. Boneyard Creek / detention basin maintenance
4. Capital improvement program
5. Sump Pump Reimbursement Program
6. GIS-based mapping
7. Streamflow / rainfall gage maintenance

In addition to these program specific services, there is also administrative support, including; human resource services, legal services, financial services, etc. Descriptions of the program components are provided in the following sections.

Storm Sewer Operations & Maintenance

Storm sewer operation and maintenance includes such services as inspections of storm sewer infrastructure, cleaning and televising of storm sewers, manhole/inlet cleanout, street sweeping, and ditch grading and mowing. Figure 2 shows a storm sewer failure photographed by City inspectors.



Figure 2. Collapsing Storm Sewer

Engineering Services

The engineering services provided in support of the stormwater management program include complaint response, site plan review for development, NPDES permit compliance, erosion control inspection, storm sewer and manhole replacement design, and floodplain management

Boneyard Creek / Detention Basin Maintenance

Maintenance of Boneyard Creek and the regional detention basin includes the removal of flow blockages and debris, management of vegetation along channels, repair of channel erosion, operation and maintenance of the Vine Street pump station, inspections of detention ponds, mowing, inlet and outlet repairs, and making an annual payment to the St. Joseph Drainage District for maintenance of the St. Joseph Drainage District open channel infrastructure that collects runoff from properties in southeast Urbana.

Capital Improvement Program

The capital improvement component of the City's stormwater management program includes storm sewer system infrastructure repair, rehabilitation, and replacement projects, development and updating of storm water master plans, stormwater system analysis, planning and design, construction management, street repair (when incidental to drainage system repair), utility relocations, and meeting regulatory commitments.

Sump Pump Reimbursement Program

The purpose of the Sump Pump Reimbursement Program is to eliminate hazardous discharges from basement sump pumps, to reduce and/or eliminate icing along sidewalks and roadways, and to maintain a popular cost-share program with residents.

GIS-Based Mapping

The role of the GIS-based mapping program in stormwater management is to create and maintain a City-wide inventory of manholes, sewers, inlets, etc., to track drainage complaint locations, to track sewer televising and structural condition assessments, and to map floodplain hazards.

Streamflow / Rainfall Gage Maintenance

The purpose of the streamflow and rainfall gage maintenance program is to insure that real-time monitoring of flow rates and water levels is provided for City services and projects, to evaluate the impacts of storm water detention in Champaign, to assist in future floodplain mapping updates, and to provide planning tools for future capital improvements.

FY 2011-2012 Program Costs

The total stormwater management program budget for Fiscal Year 2011-2012 was \$811,000, based on the services that are identified above. The breakdown of the budget by program component is provided in Table 2.

Table 2. FY 2011-2012 Stormwater Management Program Budget

Storm sewer operations & maintenance	\$ 439,000
Engineering services	\$ 140,000
Boneyard Creek / detention basin maintenance	\$ 33,000
Capital improvement program	\$1 40,000
Sump Pump Reimbursement Program	\$ 25,000
GIS-based mapping	\$ 17,500
Streamflow / rainfall gage maintenance	\$ 15,000
Total FY 2011-2012 Cost	\$ 811,000

4.2. Problems, Needs, And Goals

The City of Urbana's stormwater management program has undergone a number of changes over the last 10 years in an effort to live within its available funding. The changes that have been made include cutbacks in the scope or frequency of services as well as deferral of stormwater management program activities where possible. These activities include:

- Drainage system inspections (reduced)
- Stream and pipe maintenance (reduced)
- Facility maintenance and repairs (deferred)
- Capital projects (deferred)

Managing the quality of stormwater runoff is another aspect of the City's stormwater management program that has been impacted by funding. The City has been addressing its compliance requirements in a minimalist way for several years now, squeezing compliance activities into an already stressed budget. There has been little if any room for new tasks. The USEPA announced early in 2010 that it will promulgate revised rules for stormwater management in the fall of 2012. These new NPDES stormwater rules, if promulgated on schedule, will likely necessitate changes to the City's stormwater management program beginning in the third permit term (after 2013).

This needs analysis was performed with the issues identified above in mind. The objective was not to create a model program, but to enhance or upgrade the existing program to the point where the useful life of aging infrastructure can be extended safely, and to a level where compliance with the NPDES stormwater permit can be assured. By making these changes to the program it is felt that the City will be providing an appropriate level of service in stormwater management and meeting the expectations of its citizens in a responsible and cost effective manner. The program needs that have been identified in this process are described below.

Storm Sewer Operations & Maintenance

The following program needs have been identified for the Storm Sewer Operations & Maintenance program.

- Over the past 10 years the cleaning maintenance frequency of the entire storm drainage system has been reduced by nearly fifty percent, from 7 or 8 years to approximately 15 years. For an aging and deteriorating drainage system the inspection frequency must be more frequent to catch potential problems before they become system failures. A 5-7 year cleaning maintenance frequency is the desired level of activity.
- The rate of sewer rehabilitation projects needs to keep pace with the rate of failing sewers. This type of problem cannot be allowed to roll into a project backlog.
- There is a need to increase the number of point repairs in the storm sewer system. There are numerous such repairs needed for inlets and manholes each year, more than can currently be addressed in a typical year's budget. As the inspection frequency increases so will the backlog of needed repairs.

Capital Improvement Projects

There is a need to begin to address several types of capital improvement projects, including the following:

- The stormwater master plan is now more than thirty years old and is in need of updating. This update should include the use of sustainable methods as alternatives when evaluating infrastructure improvements.
- The City should begin to address capital projects identified in the new master plan and sewer rehabilitation projects that have been identified through sewer televising inspections. The price tag for these improvements is estimated to be \$3.6 million in 2011 dollars.
- The City should pay for the stormwater component of roadway projects from stormwater program funds. Dedicating these funds will allow the City's Motor Fuel Tax Street Maintenance Program to perform more road repairs each year.

Engineering Services

The needs identified for engineering services, aside from design and overall management of the stormwater program includes primarily NPDES permit-related tasks.

- There need to be more frequent inspections for both construction sites and existing stormwater management controls
- The NPDES permit requires the City to promote the use of green (sustainable) infrastructure. Programs like a rain barrel or rain garden reimbursement program would help to meet this requirement.
- There will need to be changes to the site plan review process to accommodate the increased use of green (sustainable) infrastructure
- The City needs to increase the level of its public education and outreach program for stormwater quality issues (NPDES compliance)

Boneyard Creek / Regional Pond Maintenance

The City will need to fund the increased maintenance costs associated with the improved reaches of the Boneyard Creek. This represents a new cost to the City that is stormwater related.

4.3. Stormwater Management Business Plan

This Stormwater Management Business Plan is a 10-year stormwater management program strategy. The plan contains all of the elements necessary to address the identified problems, needs, and goals of the existing program and to position the City to move forward with a program that meets the needs and expectations of the community. As with any program for which there are not well-defined, absolute steps that must be taken, the approach of this feasibility study incorporated the identification and testing of multiple alternative strategies, any of which can provide at least minimal satisfaction of the program needs, while others more aggressively address the restoration of previously curtailed programs.

The first step in the development of this business plan strategy was to identify the practical limits of the program. These limits will be referred to as the “minimum” and “comprehensive” programs. For this study it was determined that the current program would serve as the

definition of the minimum program, and that the minimum program provides an unacceptable level of service. The comprehensive program would require an intensive increase in system inspections, operations and maintenance expenditures, and an aggressive capital improvement program. Although the program may approach this level over time, the comprehensive program was determined to be too aggressive to meet the City's current goals, which are to provide an expected and acceptable level of stormwater management services to the community. Therefore, the program being proposed defines a slate of activities that the City *should* be doing, based on the goals and objectives that were defined by staff and by recommendations of the SWAC.

4.3.1. SWAC Recommendations

As a part of the SWAC process, time was spent providing a general overview of municipal stormwater management to the committee members, followed by specific information on the stormwater management program in the City of Urbana, and what the shortcomings, or problems and needs, of the local program are in the eyes of City staff and its consultants. After discussing the program and needs for two sessions the committee members were asked to weigh in on what the priorities should be for the stormwater management program moving forward. A list of seventeen suggestions (see Appendix B) was created by the SWAC members. The members were asked to select their top five priorities from the list. The top two suggestions from the SWAC priority voting and a statement regarding the extent of service for the stormwater program are included below:

1. The City should increase the frequency of inspection and maintenance for City-owned and operated infrastructure to maximize its useful life and to reduce repair and replacement costs.
2. The City should update and maintain the drainage system master plan to identify stormwater drainage quantity and quality problem areas, to identify sustainable solutions where practical, and to prioritize the identified capital improvements.

3. The extent of service should be limited to City owned and operated stormwater infrastructure, with consideration given to other projects and/or programs deemed to be beneficial to the City’s stormwater management program.”

4.3.2. Proposed Stormwater Management Program

The stormwater management program that is defined in this subsection of the feasibility study is the proposed business plan for the next 10 years. Included with the description of the program’s components are estimated costs and staffing requirements of the program enhancements.

Administration and Finance

This component of Urbana’s future stormwater program includes the initial (one-time) costs necessary to create a customer billing database and “roll out” the stormwater utility. This component also includes long-term maintenance of the customer billing data and ongoing billing costs. Whether or not the actual billing component is handled by the City or a third party, there will be a cost associated with establishing a billing system and getting bills out to customers. The overhead or administrative cost to run a stormwater utility is generally higher during the first year or two, and decreases as administrative staff become more efficient at handling billing issues and the number of billing issues subsides.

The list below consists primarily of new costs associated with the management of a stormwater utility and are not part of the City’s existing stormwater budget. Staffing requirements are shown as full time equivalents (FTE), where 1.0 FTE is equivalent to one full time employee.

1. Billing and Customer Service: Existing 0.25 FTE will be dedicated to this program component. This component includes City staff time to answer questions that arise from customers.
2. Billing Costs: this component includes the ongoing costs to get bills to and payments from customers, whether handled internally or through another billing entity. This typically includes billing software and data entry costs, postage, and regular updates to the master account file.

3. **Stormwater Utility Public Awareness:** the roll-out of a stormwater utility generates questions and concerns among property owners. The public awareness program consists of an initial investment of local advertising and outreach to educate people on the concept of a stormwater utility. This is a one-time cost.
4. **Stormwater Utility Implementation:** this is a one-time cost during the startup of the stormwater utility that is necessary to establish a Master Account File (customer billing database). This task includes identifying non-single-family parcels and establishing appropriate user fees based on the selected rate basis. The costs under this component include one-time reimbursements to the City's General Fund of \$110,000 for the cost of the Stormwater Utility Feasibility Study and the costs for implementation of the utility.

Planning and Engineering

This component of Urbana's future stormwater program includes the staffing necessary to manage the City's stormwater infrastructure. This includes:

1. **Public Works Civil Engineer:** Existing 0.5 FTE (licensed engineer) will be dedicated to this program component. The Civil Engineer will be responsible for the enforcement of local stormwater rules, complying with state and federal stormwater requirements, and reviewing development within floodplain areas. The engineer will lead the capital improvement program and coordinate related design and construction efforts.
2. **Public Works Engineering Technician:** 1.0 FTE will be dedicated to this program component. This will consist of two Engineering Technicians (one existing and one new), each 50% dedicated to the stormwater program. The Engineering Technicians will assist the Civil Engineer with design efforts, including GIS work related to the storm sewer system and maintaining the stormwater utility billing database, and miscellaneous site plan review and field assistance as deemed necessary by the Civil Engineer.

3. Training for GIS, Erosion Control, and Stormwater: It is necessary to provide external training opportunities for City engineering staff in order to satisfy professional license requirements and maintain knowledge on current best practices, and maintain compliance with staff training requirements in the NPDES permit.
4. GIS Professional Services: this cost component includes an appropriate share of the City's costs to participate in the Champaign County GIS Consortium.

Operation and Maintenance

This component of Urbana's future stormwater program includes the day-to-day maintenance of the system of storm sewer pipes, inlets, manholes, detention basins, the Vine Street Viaduct Pump Station, and the street sweeping program. This component also includes the ongoing cost of cleaning and televising the storm sewer system. The cost of maintaining the storm sewer system has been well-documented by City staff and includes:

1. Cost of operations staff, tools, equipment, and associated insurance to provide "on call" services for emergency sewer cleanout and televising. This work is typically associated with storm sewer blockages that require immediate attention.
2. Street sweeping: this is necessary to reduce stormwater pollution and is part of the City's obligations under its NPDES permit. Street sweeping also prevents the inlet grates from becoming plugged with leaves and debris resulting in localized street flooding.
3. Storm sewer cleaning and televising: this includes regular cleaning of the City's sewers to remove debris and roots. Sewers are also televised to determine where repairs are needed. City staff has identified the need to commit more resources to the sewer cleaning/televising program in order to keep up with the blockages in storm sewer pipes and reduce the threat of blocked sewers and flooding. The future stormwater program includes enough budget to clean the entire storm sewer system on a 7-year cycle, which City staff has identified as the necessary frequency to minimize future sewer blockages.

4. Stream and rain gage monitoring (partnering with the USGS on hardware maintenance): this monitoring program is important to determine flood risk in populated areas. Measured flow rates are also used to evaluate the impacts of constructed stormwater detention in Champaign and will serve as a useful planning tool for future capital improvements.
5. Boneyard Creek maintenance: includes vegetation management, fence repairs, erosion protection, and other maintenance activities along the Boneyard Creek from Gregory Street to the confluence with the Saline.
6. Ditch grading and mowing: the City maintains open ditches throughout its storm sewer network. Cleaning and mowing ditches is necessary to maintain adequate drainage and prevent localized flooding.
7. Mosquito surveillance and abatement program: the City monitors the presence of mosquito larvae in the storm sewer system (usually at inlets/manholes where stagnant water exists) and takes appropriate measures to prevent breeding in these areas.
8. Regional detention pond maintenance: It is necessary to mow regional detention ponds and to clean/repair the pond outlet structures on a regular basis.
9. Vine Street pump station operation and maintenance: the existing pump station at the Vine Street viaduct (under the railroad, south of University) requires regular maintenance. This cost includes the depreciation of the pumps (which require replacement on a 20-year cycle) and costs for electricity.
10. Bridge maintenance projects: the City owns and maintains numerous bridges across drainage ditches, including the Boneyard Creek, Saline Branch, and other smaller side streams. The cost to maintain these bridges, including structure repair and deck replacement, is partially attributable to the Stormwater Program, as these bridges are used

to convey stormwater safely through the City. Under the future Stormwater Program, one-third (33%) of bridge maintenance costs will be funded by the stormwater user fee.

11. St. Joseph Drainage District Payment: this is an annual fee paid to the St. Joseph Drainage District. The City of Urbana storm sewer system and ditches (on the City's east side) discharge into this Drainage District.

National Pollution Discharge Elimination System Permit Compliance

This component of Urbana's future stormwater program includes ongoing costs associated with meeting the requirements of the City's NPDES stormwater permit administered by the IEPA.

Key cost components include:

1. Payment of the annual NPDES permit fee.
2. Public education / involvement program: includes costs for advertising and organizing public education and participation events.
3. Engineering Technician for permit compliance activities: New 0.50 FTE will be dedicated to this program component. The Engineering Technician will manage the City's ongoing NPDES compliance activities, including public education, erosion control inspections and enforcement, illicit discharge detection and elimination, post-construction runoff control, and good housekeeping practices at City-owned facilities.

Future regulatory changes will impact this program component and may increase compliance costs. City staff will likely need to revisit its permit compliance efforts in 2012-2013 when additional requirements are likely to be included in the MS4 permit language. This may require an adjustment to the NPDES compliance budget.

Water Quality

This component of Urbana's future stormwater program includes emerging programs intended to reduce stormwater runoff volumes and improve stormwater quality. These programs will

subsidize the implementation of Best Management Practices (BMPs) by private property owners to encourage stormwater infiltration and reuse of stormwater through roof drainage collection. The purpose of these programs is to increase public awareness for emerging trends in stormwater management in advance of pending federal regulations that will likely require their implementation. Cost components include:

1. Rain barrel reimbursement program: the City will subsidize the purchase of a single rain barrel for each participating Urbana resident.
2. Rain garden reimbursement program: the City will assist property owners who wish to construct rain gardens by providing a cash reimbursement (up to a prescribed maximum cost share component) to residents who construct a rain garden to City specifications. Rain gardens encourage the capture and infiltration of stormwater runoff (as opposed to direct discharge to the City's storm sewer system).

Incentives or Credits

This component of Urbana's future stormwater program includes emerging programs intended to reduce stormwater runoff volumes and improve stormwater quality. These programs will subsidize the implementation of Best Management Practices (BMPs) by private property owners to encourage stormwater infiltration, reuse of stormwater, and other similar practices.

1. Non-Residential Incentive or Credit Program: the City will provide incentives for non-residential development to implement stormwater BMPs to enhance stormwater quality (including infiltration/evaporation measures, stormwater filtration, water reuse, and other similar designs). This component also includes City staff time to review credit applications and to verify compliance for properties in the credit program. Stormwater user fee credits allow property owners to reduce their fee by implementing BMPs on their properties such as stormwater detention, infiltration, or filtration.

Capital Construction

This component of Urbana's future stormwater program includes the costs necessary to replace aging components of the stormwater infrastructure. . As the current City budget does not allow for adequate re-investment in the City's stormwater infrastructure, revenues from a stormwater user fee will allow the City to implement high-priority projects that have been delayed by many years.

1. **Stormwater Master Planning:** this is a one-time cost to hire a consultant to conduct a City-wide analysis of stormwater infrastructure as the previous Master Plan is over 30 years old and needs to be updated. This analysis will include an updated Master Plan to set recommendations on future stormwater management policy, identify specific capital improvements, and identify changes in system maintenance necessary to minimize flooding and enhance public safety. This document will also outline a plan to address stormwater management in future development outside the City's current corporate boundary.

2. **Capital Improvement Projects:** includes stormwater infrastructure projects throughout the City. These projects allow the City to reduce the occurrence of neighborhood flooding, address stormwater quality, and replace failing sewers that have reached the end of their service life. Capital improvement projects will be implemented after the update of the City's Stormwater Master Plan, intended to be completed during the second year of the City's enhanced stormwater program.
 - a. Based on a review of recent street reconstruction bid tabulations, approximately 7% of the cost of a typical road improvement project is attributable to storm sewer components (pipes, inlets and manholes). The City can use revenue from a Stormwater Utility to fund this component of roadway projects, thereby leaving more money available for pavement maintenance. This program will allow the City to better leverage its limited revenue through the state's Motor Fuel Tax program. The cost estimates for Capital Improvement Projects include this component of future roadway improvements.

- b. Boneyard Creek Improvements: related portion of the costs of the next round of Boneyard Creek improvements will be paid for in the FY 2014-2015 bond issue.
3. Sump pump discharge abatement program: the City participates in the cost of eliminating hazardous sump pump discharges, which helps to reduce the occurrence of standing water and ice buildup along sidewalks and streets during winter months.

Bond Debt

As capital improvements require a significant investment, it may be easier to manage annual cash flows and control user fees through the use of bonds, either alone or in combination with Pay-As-You-Go funding. General Obligation (G.O.) Bonds can be issued to fund the majority of the capital improvement projects. This will reduce the initial funding needs and allow the City to take a more aggressive approach to implementing much-needed capital improvements during the first 5-10 years of the future stormwater program.

The 10-year stormwater program budget assumed two rounds of bond issues (all numbers below are inflation-adjusted):

- Year 3: \$4.14 million (20-year bond at 4.75%, 1% underwriting cost)
- Year 8: \$2.77 million (20-year bond at 5.25%, 1% underwriting cost)

As of mid-February 2011, the prevailing interest rate paid by municipalities for 20-year bonds is approximately 4.60% (source: Bloomberg).

Stormwater Business Plan Staffing

As can be gleaned from the previous discussions, the recommended stormwater business plan does not propose a large number of staff salaries be transferred to a utility. In fact, Table 3 shows that the net impact on staffing will be that 1.25 existing FTEs will have their salaries reassigned to the stormwater fee and that only 1.0 FTE's would be hired as a result of the expansion of the stormwater management program (partial FTEs indicate the inclusion of staff whose entire compensation is not covered from the stormwater enterprise fund).

The manpower for all other activities being funded under this plan will come from other departments or divisions, or will be acquired through outsourcing.

Table 3. Stormwater Business Plan Staffing

Future Stormwater Program: Employee Projections		
	FTE	Status
Administration & Finance		
Billing and Customer Service	0.25	E
Planning and Engineering		
Civil Engineer	0.50	E
Engineering Technician	0.50	N
Engineering Technician	0.50	E
NPDES MS4 Compliance		
Engr. Tech.	0.50	N
Subtotal:	New Employees	1.0
Subtotal:	Existing Employees	1.25

E = existing employee N = new hire

Stormwater Business Plan Costs

The annual costs of the recommended stormwater business plan have been prepared for a 10-year planning period. In the interest of readability, the table has been split into two tables, with Program Years 1 through 5 shown in Table 4 and Program Years 6 through 10 shown in Table 5.

Table 4. Stormwater Management Business Plan Cost of Service

Stormwater Management Business Plan Cost Detail						
PROGRAM YEAR		FY2012-13	FY2013-14	FY2014-15	FY2015-16	FY2016-17
		→ 1	2	3	4	5
A	Administration & Finance					
A1	Billing and Customer Service	\$11,250	\$11,250	\$11,250	\$11,250	\$11,250
A2	Billing Costs	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000
A3	Stormwater Utility Public Awareness	\$20,000				
A4	Storm Water Utility Implementation	\$200,000				
<i>Subtotal - Admin & Finance</i>		<i>\$311,250</i>	<i>\$91,250</i>	<i>\$91,250</i>	<i>\$91,250</i>	<i>\$91,250</i>
E	Planning and Engineering					
E1	Civil Engineer	\$51,000	\$51,000	\$51,000	\$51,000	\$51,000
E2	Engineering Technician	\$41,000	\$41,000	\$41,000	\$41,000	\$41,000
E2a	Engineering Technician	\$41,000	\$41,000	\$41,000	\$41,000	\$41,000
E3	Training for GIS, Erosion Control, Storm Water	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
E4	GIS Professional Services	\$17,500	\$17,500	\$17,500	\$17,500	\$17,500
<i>Subtotal - Planning & Engineering</i>		<i>\$155,500</i>	<i>\$155,500</i>	<i>\$155,500</i>	<i>\$155,500</i>	<i>\$155,500</i>
M	Operation and Maintenance					
M1	Operations staff, tools, insurance, equip.	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
M2	Street Sweeping	\$188,000	\$188,000	\$188,000	\$188,000	\$188,000
M3	Storm Sewer Cleaning and Televising	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
M4	Stream and rain gauge monitoring	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
M5	Boneyard Creek Improved Area Maintenance		\$30,000	\$40,000	\$40,000	\$40,000
M6	Ditch grading and mowing	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000
M7	Mosquito surveillance/abatement program	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
M8	Regional Detention Pond Maintenance	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
M9	Vine Street Pump Station Operation & Maint.	\$13,700	\$13,700	\$13,700	\$13,700	\$13,700
M10	Bridge Maintenance Projects (33% Coverage)	\$22,500	\$22,500	\$22,500	\$22,500	\$22,500
M11	St Joseph Drainage District Payment	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
<i>Subtotal - O&M</i>		<i>\$709,200</i>	<i>\$739,200</i>	<i>\$749,200</i>	<i>\$749,200</i>	<i>\$749,200</i>
N	NPDES MS4 Compliance					
N1	NPDES Permit Fee	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
N2	Public Education/Involvement Program	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
N3	Engr. Tech. Permit Compliance Activities	\$41,000	\$41,000	\$41,000	\$41,000	\$41,000
<i>Subtotal - NPDES MS4 Compliance</i>		<i>\$92,000</i>	<i>\$92,000</i>	<i>\$92,000</i>	<i>\$92,000</i>	<i>\$92,000</i>
W	Water Quality					
W1	Rain Barrel Reimbursement Program	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500
W2	Rain Garden Reimbursement Program	\$15,000	\$17,500	\$20,000	\$22,500	\$25,000
<i>Subtotal - Water Quality</i>		<i>\$22,500</i>	<i>\$25,000</i>	<i>\$27,500</i>	<i>\$30,000</i>	<i>\$32,500</i>
I	Incentives or Credits					
	Non-Residential Incentive or Credit Program	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
<i>Subtotal - Incentives or Credits</i>		<i>\$50,000</i>	<i>\$50,000</i>	<i>\$50,000</i>	<i>\$50,000</i>	<i>\$50,000</i>
C	Capital Construction					
C1	Capital Improvement Projects (Pay-Go)	\$345,000	\$550,000	\$345,000	\$345,000	\$345,000
C2	CIP - Bond Debt Payments	\$0	\$0	\$340,000	\$340,000	\$340,000
C3	Sump Pump Discharge Abatement Program	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
<i>Subtotal - Capital Construction</i>		<i>\$370,000</i>	<i>\$575,000</i>	<i>\$710,000</i>	<i>\$710,000</i>	<i>\$710,000</i>
TOTALS		\$1,710,450	\$1,727,950	\$1,875,450	\$1,877,950	\$1,880,450
TOTALS with 3.5% inflation per year		\$1,710,450	\$ 1,788,428	\$ 1,984,812	\$ 2,045,153	\$ 2,107,702

Note: The index on the left side of each line item refers to the numbered bullet item in the description of the related program area. For example, entry “A1” refers to bullet number “1” under the Administration & Finance component of the stormwater management business plan.

Table 5. Stormwater Management Business Plan Cost of Service, Continued

Stormwater Management Business Plan Cost Detail						
		FY2017-18	FY2018-19	FY2019-20	FY2020-21	FY2021-22
PROGRAM YEAR		6	7	8	9	10
A	Administration & Finance					
A1	Billing and Customer Service	\$11,250	\$11,250	\$11,250	\$11,250	\$11,250
A2	Billing Costs	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000
A3	Stormwater Utility Public Awareness					
A4	Storm Water Utility Implementation					
<i>Subtotal - Admin & Finance</i>		<i>\$91,250</i>	<i>\$91,250</i>	<i>\$91,250</i>	<i>\$91,250</i>	<i>\$91,250</i>
E	Planning and Engineering					
E1	Civil Engineer	\$51,000	\$51,000	\$51,000	\$51,000	\$51,000
E2	Engineering Technician	\$41,000	\$41,000	\$41,000	\$41,000	\$41,000
E2a	Engineering Technician	\$41,000	\$41,000	\$41,000	\$41,000	\$41,000
E3	Training for GIS, Erosion Control, Storm Water	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
E4	GIS Professional Services	\$17,500	\$17,500	\$17,500	\$17,500	\$17,500
<i>Subtotal - Planning & Engineering</i>		<i>\$155,500</i>	<i>\$155,500</i>	<i>\$155,500</i>	<i>\$155,500</i>	<i>\$155,500</i>
M	Operation and Maintenance					
M1	Operations staff, tools, insurance, equip.	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
M2	Street Sweeping	\$188,000	\$188,000	\$188,000	\$188,000	\$188,000
M3	Storm Sewer Cleaning and Televising	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
M4	Stream and rain gauge monitoring	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
M5	Boneyard Creek Improved Area Maintenance	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000
M6	Ditch grading and mowing	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000
M7	Mosquito surveillance/abatement program	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
M8	Regional Detention Pond Maintenance	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
M9	Vine Street Pump Station Operation & Maint.	\$13,700	\$13,700	\$13,700	\$13,700	\$13,700
M10	Bridge Maintenance Projects (33% Coverage)	\$22,500	\$22,500	\$22,500	\$22,500	\$22,500
M11	St Joseph Drainage District Payment	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
<i>Subtotal - O&M</i>		<i>\$769,200</i>	<i>\$769,200</i>	<i>\$769,200</i>	<i>\$769,200</i>	<i>\$769,200</i>
N	NPDES MS4 Compliance					
N1	NPDES Permit Fee	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
N2	Public Education/Involvement Program	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
N3	Engr. Tech. Permit Compliance Activities	\$41,000	\$41,000	\$41,000	\$41,000	\$41,000
<i>Subtotal - NPDES MS4 Compliance</i>		<i>\$92,000</i>	<i>\$92,000</i>	<i>\$92,000</i>	<i>\$92,000</i>	<i>\$92,000</i>
W	Water Quality					
W1	Rain Barrel Reimbursement Program	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500
W2	Rain Garden Reimbursement Program	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
<i>Subtotal - Water Quality</i>		<i>\$32,500</i>	<i>\$32,500</i>	<i>\$32,500</i>	<i>\$32,500</i>	<i>\$32,500</i>
I	Incentives or Credits					
	Non-Residential Incentive or Credit Program	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
<i>Subtotal - Incentives or Credits</i>		<i>\$50,000</i>	<i>\$50,000</i>	<i>\$50,000</i>	<i>\$50,000</i>	<i>\$50,000</i>
C	Capital Construction					
C1	Capital Improvement Projects (Pay-Go)	\$345,000	\$345,000	\$120,000	\$120,000	\$120,000
C2	CIP - Bond Debt Payments	\$340,000	\$340,000	\$570,000	\$570,000	\$570,000
C3	Sump Pump Discharge Abatement Program	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
<i>Subtotal - Capital Construction</i>		<i>\$710,000</i>	<i>\$710,000</i>	<i>\$715,000</i>	<i>\$715,000</i>	<i>\$715,000</i>
TOTALS		\$1,900,450	\$1,900,450	\$1,905,450	\$1,905,450	\$1,905,450
TOTALS with 3.5% inflation per year		\$ 2,193,325	\$ 2,258,191	\$ 2,269,065	\$ 2,328,533	\$ 2,390,081

5. DATA ANALYSIS

An analysis of the existing information from which to develop a stormwater utility was performed as part of the study. In this process AMEC reviewed data from the Champaign County GIS Consortium, including aerial photography and parcel information, property data from the Cunningham Township Assessor's Office, and local tax and utility bill samples. In addition, statistical sampling of the amount of impervious area on representative parcels of 11 land use classes was performed. As will be described below, the results of the sampling were used in estimating the size of the potential stormwater utility rate base.

5.1. Data Collection And Evaluation

Geographic information system (GIS) data was obtained from the Champaign County GIS Consortium. For the purposes of implementing a stormwater utility the data is good. The parcel coverage inside city limits appears to be complete. The aerial photography is very good for the purposes of this study. The aerial photography has a six inch pixel resolution and was delivered to the consortium in 2009, so it is relatively current. The metadata, or attribute data that describes the imagery, will allow characterization of land uses and assignment of property owners to each parcel. Street name spelling, particularly abbreviations, appears to be consistent.

The biggest problem observed with the information in the GIS is with location of some parcel boundaries. Parcel boundaries should be at the edge of the public right-of-way. The public right-of-way typically includes the street and the adjacent area to the backside of sidewalks (on streets that have sidewalks). There are several locations throughout the community where older parcel boundaries still extend through what should be the right-of-way to the centerline of the adjacent streets. This happens often on the University of Illinois campus. In these areas an *equivalent* right-of-way will need to be determined if the public right-of-way is excluded from billing in order avoid unfairly including these impervious areas in the computation of the bill for the property. Figure 3 provides an example of parcel bounds (shown in yellow) that are behind the sidewalks as expected to the west (left side of picture) and across the street from the Martin

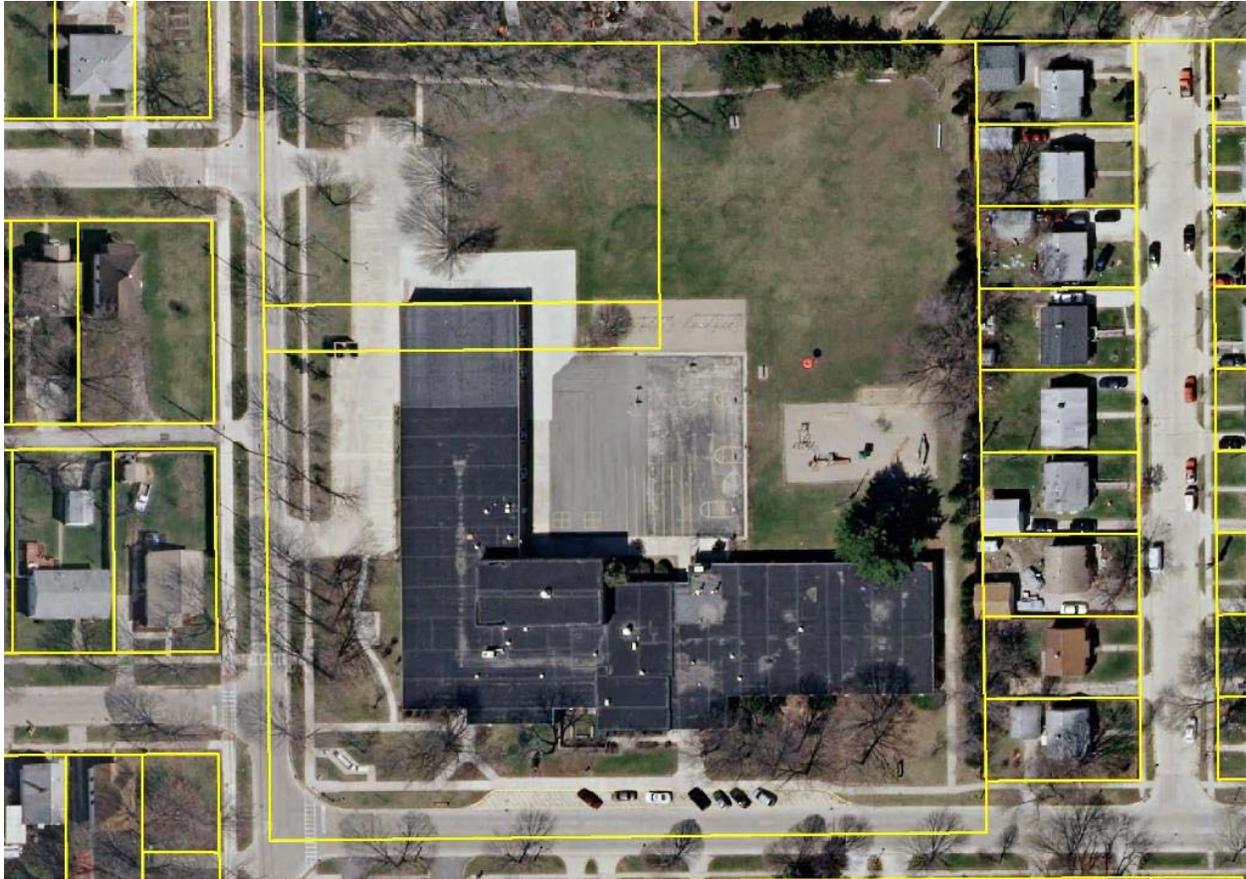


Figure 3. Parcel Boundaries Near Martin Luther King Elementary School

Luther King Jr. Elementary School, and parcel lines for the school itself that extend to the centerline on the west and south sides of the school.

Most communities with stormwater utilities around the country have elected to create flat rates for their single family residential properties. Some of those utilities have also decided that a single flat rate may not be appropriate so they have created tiers within the single family ratepayer class. These tiers represent increasing levels of imperviousness on the properties and are typically determined by statistical analysis of property data obtained from the local assessor's office. In order to ascertain whether or not tiers would be practical in a City of Urbana rate structure, the consultant contacted the Cunningham Township Assessor to obtain sample property data for a single family residential parcel. It was determined that the assessor maintains the data on paper cards rather than in digital format. In order to obtain the information necessary to perform the statistical analysis and apply the resulting equation to all 7480 single family

residential properties, each property data card would need to be pulled from the file and the necessary data would need to be manually transcribed into a database of property attributes for analysis. This effort would exceed the effort required to digitize the impervious area for each of the 7480 single family properties from the aerial photography.

As a part of the data evaluation process the consultant also reviewed sample bills from the local utilities and the treasurer to determine how many line items were being billed on each, whether the types of billing units and the unit rates for the line items were being displayed, the amount of detail that is provided for any or all line items, and how ratepayers are directed to the appropriate customer service location or phone number as referenced on the bills. Any of the three bill formats would appear to be acceptable for billing a stormwater utility fee.

5.2. Data Analysis

In order to have an estimate of the rate base for distribution of the stormwater management program costs to the ratepayers some preliminary policy guidance recommendations were made by City Staff and a limited amount of data analysis was performed. The policy recommendations that were necessary were related to determination of the basis for billing a stormwater utility fee. The key tenets of this guidance were to keep it simple, keep it equitable, and to use methods that are already in place in Illinois and regionally. The policy guidance included the following:

- Almost every stormwater utility rate base utilizes impervious area, either alone or in conjunction with the total area of the property. It was decided for the sake of simplicity, consistency with other utilities, and the demonstrated relationship of imperviousness to runoff rates, volumes and quality in urban areas to base the rate on impervious area only.
- It was decided that to reduce the cost of creating the initial rate base estimate and the long term maintenance cost of the ratepayer database that single family residential properties, as well as duplex properties, would be billed at a single flat rate. The impervious area for all other properties would be measured from aerial photography

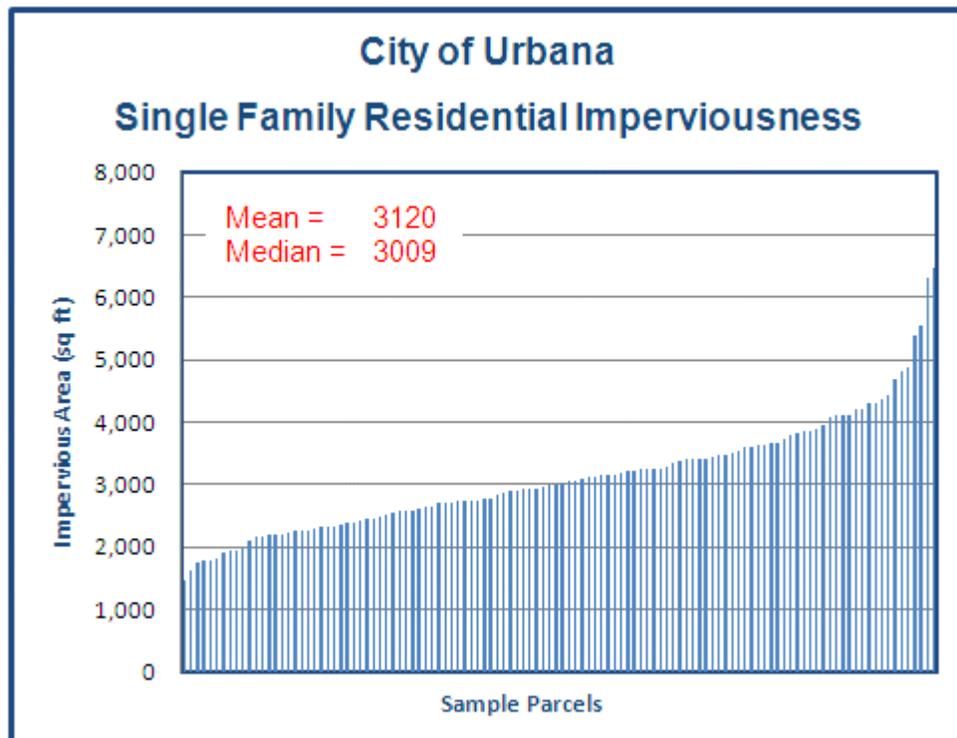


Figure 4. Single Family Residential Imperviousness in Urbana

- It was decided that the imperviousness of single family residential properties would be estimated by digitizing a statistically significant sample of single family residential properties. Multiplying the average impervious area by the total number of single family residential and duplex lots would provide an estimate of this portion of the citywide rate base.
- It was decided that the imperviousness of all other property classes would similarly be estimated by digitizing a significant sample of properties in each class and then multiplying the average impervious fraction of those properties by the total area of properties in the respective land use classes, thus providing an estimate of the citywide rate base represented by each land use class.

In order to characterize the impervious area on the single family residential parcels 120 parcels were selected randomly to be digitized (see Figure 4). After completing the digitizing the two parcels with the highest amount of impervious area and the two with the lowest amount were

removed from the sample and the remaining 116 property sample was evaluated. The average level of imperviousness on single family residential properties in the City of Urbana is 3120 square feet. Therefore each single family residential parcel (7480 parcels) and each duplex property (454 parcels) are assigned a single billing unit. The total rate base from these two land use classes is estimated to be 7934 billing units. These billing units are often referred to as Equivalent Residential Units, or ERUs. For the purpose of the study the ERU size was rounded to 3100 square feet of impervious area.

As mentioned above, similar analyses were performed for the remaining land use classes, but this time the analysis was looking at the average level of imperviousness by land use. The result of this analysis is shown in Table 6. Samples of the indicated land uses were evaluated to estimate the imperviousness for each land use as is shown in the 4th column. The total gross area inside the City for each of the 9 land use classes (3rd column) was then multiplied by its respective imperviousness value to arrive at the estimated impervious area (5th column) for each land use class. (The impervious area in the single family residential and duplex land use classes was estimated by multiplying the number of parcels by the ERU of 3100 square feet.)

Table 6. Estimated Impervious Area In Urbana By Land Use Class

Land Use	No. of Parcels	Gross Area	Impervious %	Impervious Area
Single Family	7,483	69,433,634		23,331,994
Duplex	454	3,932,438		1,415,572
Multi-Family	447	13,200,113	51%	8,283,326
Condo	246	1,546,393	43%	664,949
Industrial	37	10,527,138	68%	7,126,077
Commercial	739	40,360,055	71%	28,630,822
Churches	111	3,746,313	53%	1,996,596
Government	253	47,127,810	45%	21,316,061
University	213	25,206,946	39%	9,733,149
Misc	47	11,748,694	53%	751,355
Agriculture	56	46,216,931	1%	554,603
Total Area	10,086	273,046,463		103,804,504

In order to insure that the relative level of impervious area for each land use class is properly reflected in the rate base estimate, the ERU of 3100 square feet of impervious area was used as the common unit of measure for each of the land use classes. Based on this assumption there are approximately 32,800 billing units, or ERUs in the City of Urbana's rate base.

It is important to remember that anomalies were identified in some of the parcel boundaries that would need to be accounted for in the development of a utility billing file, and that this process of estimating the rate base is *approximate*, but entirely appropriate for the purpose of this study.

6. BILLING OPTIONS

A review was performed of the billing options available to the City for delivering a stormwater utility bill. The options that were reviewed included the possibility of adding a stormwater fee line item to existing bills sent to residents of the City of Urbana; Illinois American Water Company (IAWC), the Urbana-Champaign Sanitary District (UCSD), the Champaign County Treasurer, and to an in-house billing service for residential recycling. The review was coordinated with the City of Champaign as they are also considering the feasibility of a stormwater utility.

Meetings were held with each of the three agencies, representatives of the two cities, and the consultant. An informal presentation was made explaining that the cities are each considering the implementation of a stormwater utility, the size of the programs, and how the amount of each ratepayer's bill would probably be determined. The discussions then focused on how each agency bills its ratepayers, who receives the bills (owner or occupant), how delinquencies, short pays, and bad debt are handled, and how a master account file for billing stormwater might be delivered to the billing agency.

Shortly after the meetings the County Treasurer and the IAWC excused themselves from consideration as a stormwater utility biller for the cities. The UCSD is still considering the option of providing these services.

In Urbana the billing program could rely on a single biller or it could be a combined program where the City bills residential properties using its in-house billing program and outsources only the billing for the remaining properties to a third party.

No firm decision on a biller or negotiations of billing fees can be pursued until the decision is made by the City Council whether or not to pursue the adoption of a stormwater utility. Champaign's decision should have no impact on the cost per account for Urbana. The cities might reduce the up-front setup costs by using the same billing agent for their stormwater bills.

7. PRELIMINARY RATE ANALYSIS

The preliminary rate analysis is based on the Stormwater Management Business Plan that was described in Section 4 of this document. The recommendation of staff early in this process was that that a simple, but equitable stormwater utility fee rate structure be considered so that it can be easily explained to and understood by the community. The recommended rate structure relies on a utility fee to provide the program funding. An as yet undefined credit and incentive program will be incorporated into the program to enhance the overall equity to the ratepayers. The following sections provide detail on the proposed rate structure, the rate basis, and the preliminary rate.

7.1. Rate Structure

The recommended rate structure relies on a stormwater utility fee to generate the program funding. This rate structure is in line with the recommendations of both the City staff and the citizen stormwater advisory committee who advised the consultant that the initial rate structure should be simple to implement and easy to understand. In the case of the recommended rate structure, the proposed utility fee rate basis is extremely simple and straightforward.

7.1.1. SWAC Recommendations

As a part of the Stormwater Advisory Committee process time was spent providing information on municipal stormwater management funding to the committee members, followed by specific information on stormwater utility rate structures, including the options available and the strengths and weaknesses of each, national and regional trends, and the experience of the consultants. During the course of the SWAC process the members were asked to comment on what they thought the priorities should be for the stormwater rate structure if the City would elect to move forward with a stormwater utility. The following recommendations were made:

1. It is recommended that if a stormwater utility fee is implemented, the City of Urbana adopt a rate structure that is both equitable and simple to understand by its ratepayers.

2. If the City elects to implement a stormwater utility fee, the method for distributing the stormwater program's costs should be based on the impervious area of each property.
3. If the City elects to implement a stormwater utility fee, it should adopt a single flat rate method for billing single family residential property.
4. If the City elects to implement a stormwater utility fee, it should include programs of both incentives and stormwater utility fee credits.
5. If the City elects to implement a stormwater utility fee credit program, participation in the credit program should be limited to qualifying non-single family residential properties only.
6. If the City elects to implement a stormwater utility fee credit program, credits should only be available to those properties that exceed local stormwater management standards.
7. If the City elects to implement a stormwater utility fee credit program, credits should be available for reducing the peak discharge rate and / or total volume of stormwater runoff leaving the property.
8. If the City elects to implement a stormwater utility fee credit program, credits should be available for reducing the water quality impact of stormwater runoff leaving the property.

The SWAC members were also asked to vote on the inclusion of specific stormwater management measures and activities in the credit and incentive program. The measures voted on can be seen in the SWAC questionnaire detail that is provided in Attachment B. Further consideration of these recommendations would occur as part of developing a credits and incentives policy in the implementation phase of the stormwater utility should City Council elect to move forward with this initiative.

7.1.2. Rate Basis

The rate basis is the process for distributing the cost of service over all of the properties that are receiving stormwater management services from the City. The rate basis is the indicator of the demand that a property places on the City's program and drainage system for service. The recommended rate basis for the stormwater utility fee is the impervious area of each property in the City that is outside the public right-of-way. As was mentioned in Section 5 and above, impervious area was the recommended rate basis by both the City staff and the SWAC. To satisfy technical standards, the rate basis must be a fair and reasonable approach that results in service fees that bear a substantial relationship to the cost of providing stormwater services and facilities to the ratepayers. The impervious area methodology satisfies all of these requirements. Impervious area is widely cited in engineering literature as the single most important factor influencing the peak rate of runoff, the total volume of stormwater discharged, and key pollutant loads typically found in stormwater runoff from developed properties in urban areas. This is particularly true for storms occurring at or near the design storm frequencies for storm sewer infrastructure. It is also the most commonly used stormwater service fee rate parameter for stormwater utilities nationwide. A national survey found that fifty-four (54) percent of all stormwater utility rate methodologies are based solely on impervious area.⁸

Most communities that use an impervious area rate basis choose to implement a flat rate for all single family residential properties. This flat rate is based on the statistical average amount of imperviousness on a single family residential lot and is referred to as an Equivalent Residential Unit, or ERU. This process results in a system in which there appear to be inequities in the amount that owners of small homes pay relative to the amount the owners of larger homes pay because the amounts are the same while the demand for service, or runoff potential, is not. The issue is not actually as simple as it seems. Most small lot residential areas have a higher impervious cover percentage than larger lot residential properties thus mitigating the difference in demand on a unit area basis. Another misconception is that each ratepayer is paying only for the immediate impact of his or her property's runoff. Though that is partly correct, each property owner is also paying for the common elements of the City's stormwater program. Each property

⁸ *Stormwater Utility Survey; 2005.* Black & Veatch Management Consulting

owner has routes he or she takes shopping, to work, to school, to church, etc., and stormwater along all of those routes must be managed too. With 7480 single family residences, the entire citywide system must be managed.

As previously mentioned in Section 5, some communities have elected to broaden the equity of the flat rate billing by creating small, medium, and large tiers within the single family residential property classification. It has been determined that it is impractical to readily create these tiers in Urbana due to the format of the township assessor data required for the analysis. However, an alternative method of applying single family residential tiers has been investigated that would address the apparent inequities. This tier approach is described further in Section 7.2.1.

In Illinois, only four of the eleven existing stormwater utilities have adopted a rate structure with more than one single family residential rate.

As was shown in Section 5, the estimated amount of impervious surface in City of Urbana meeting the requirements of the proposed rate basis is approximately 103.8 million square feet. Based on 3100 square foot billing units, or ERUs, the rate base for the City is estimated to be 32,800 billing units.

7.1.3. Rate Structure Assumptions

The proposed rate structure for the City of Urbana would have the following characteristics:

- The preliminary level and cost of service will be defined by the stormwater management business plan that is described in Section 4.3
- The rate basis is the ERU, estimated to be 3100 square feet of impervious area.
- All properties will be billed at least 0.5 ERU.
- All single family residential and duplex properties will pay a flat rate of 1.0 ERU.
- All other properties will have their impervious area measured and will be billed based on the number of increments of 3100 square feet of impervious area existing on the parcel, rounded to the nearest one tenth (1/10).
- A currently undefined credit and/or incentive program will be part of the rate structure.
- There are no secondary revenue sources included in the rate structure.

7.2. Preliminary Rate Study

The primary purpose of the preliminary rate study is to identify the approximate range of utility fee rates that would meet the funding requirements of the proposed program strategy, or business plan. The concept is clear and simple. Funding needs to be sufficient to meet operating, non-operating, and capital expenditures throughout the period of time addressed in the study, in this case five years. Basically, income (revenues) must be greater than expenditures, although financing mechanisms like bonding can be used to spread capital expenditures incurred in any single year over several years thus stabilizing the annual revenue requirements.

A cash-flow analysis is necessary to evaluate the adequacy of the revenue stream and to plan for stormwater fee rates and other funding in the context of the projected expenditures. A rate model is used to organize the information and perform the calculations. Fees are the primary source of funding for this rate structure. Funding (e.g., loans) from a variety of other sources can be used to bridge periods of cash flow shortages.

The format of the cash-flow analysis module in the rate model provides a logical sequence of information leading to a conclusion regarding the needed stormwater utility rates. Several iterations, or “runs”, of the model are typically needed to identify the best fit of rates with costs over the analysis period. The rate model is an essential tool for determining whether it is advisable to hold rates constant throughout the five-year rate planning period, or to program increases in the rate structure during the period.

The estimated Annual Operating Expense and Annual Capital Expense are derived directly from the Cost of Service Analysis (see Section 5), which is summarized in a module of the rate model. The total of direct expenses each year constitutes the rate structure's projected annual expenditures.

The estimated annual revenues are the sum of the service charge receipts and other revenue sources. Other revenues include unexpended funds carried forward from previous years, fees and charges for special services, funds available from the sale of bonds, interest income, recovered

delinquencies, and other resources such as federal or state grants and loans. These other revenues are deducted from the total expenses to determine how much revenue must be generated from the annual stormwater service fees.

Revenue Reduction Allowances are then considered in the rate model to determine how much revenue will be needed to actually meet the Stormwater Fee Revenue Requirement. For example, the utility will not receive full payment of all fees it bills. Some payments will be delayed (delinquent) and some may never be paid (bad debt). Credits allowed against the service fee component of the rates could also reduce the actual amount of income generated through fees if the actual level of participation exceeds the budgeted level of participation.

The cash-flow analysis estimates the rate of delinquency, proportion of bad debt, and amount of credits that must be allowed for. Recovery of delinquencies (late payments) is sequenced through the five years covered in the analysis. Non-recoverable delinquencies are shown as bad debt. The total of Revenue Reduction Allowances is added to the Fee Revenue Requirement to calculate the Adjusted Fee Revenue Requirement each year. This figure is the actual annual revenue objective for all stormwater fees, allowing for Other Revenues and Revenue Reduction Allowances.

The Adjusted Fee Revenue Requirement is divided by the estimated total number of billing units for impervious areas to determine roughly how much must be charged to each 3100 square foot billing unit. In the initial analysis, this estimated figure varies from year to year as the Adjusted Fee Revenue Requirement and the number of billing units change. Once an estimate of the rates has been determined, a Recommended Rate per Billing Unit is entered in the Rate Model, from which the estimated revenue projection is then calculated, cash-flow is projected, and the year-end Revenue Surplus (Deficit) is estimated. The Surplus (Deficit) becomes the Funds Carried Forward entry in the calculations for the following year.

An iterative analysis continues until a point is reached where the service fee results in sufficient total revenue to meet cash-flow requirements and create an average Revenue Surplus each year. Because the City has chosen to include a contingency line item the guidance for the Revenue Surplus and Fund Balance Allowance Tests are that both stay positive at the end of each year.

This allowance provides a minimal cushion against possible errors in the data and adjustments that may be made to specific accounts as the master account file is refined. This ensures that a positive cash balance occurs throughout the year since it is not allowable to operate at a deficit.

7.2.1. Rate Model Analysis

Several iterations of the rate model were run to refine the cost, rate base, and cash flow data and arrive at a stormwater utility rate. Because of the nature of the estimate of the rate base size it was decided that the rate would be represented as a range. The range was estimated based on starting with 100% of the estimated rate base and 95% of the estimated rate base. The Revenue / Expenditure Analysis spreadsheet shown in Table 7 depicts the recommended rate structure for the 100% rate base scenario based on the best fit of the costs and rates given the numerous assumptions enumerated below and adherence to the fund balance test.

Operating and Capital Expense

The estimated Annual Operating Expense of the stormwater utility for Fiscal Year 2012-2013 is \$1.71 million. The maximum annual operating expense during the five years is \$2.11 million. A compounding annual inflation factor of three and a half (3.5) percent is applied to all variable annual operating expense over the analysis period and is built into the total Operating Expense from the Cost of Service Analysis.

Total Expenses

The Total Expenses of the stormwater management program under this alternative, including operating, capital, and non-operating costs, are estimated to be \$1.74 million in planning year 2012-2013 to a maximum of \$2.13 million during the first five years.

Other Revenues

Other Revenues such as Funds Carried Forward, Other Fees and Charges, Interest Income, Recovered Delinquencies, and Other Resources diminish the amount that must be funded from stormwater fees in each year. Total Other Revenues are projected to range from approximately \$115,000 to \$248,000 over the five-year period. The bulk of this amount is the funds carried forward from the previous year-end fund balances.

Revenue Reduction Allowances

The Revenue Reduction Allowances for delinquencies and bad debt are estimated as a percentage of the amount of stormwater service fee revenue billed. It is estimated that the bad debt rates will be two percent annually. The delinquency rate is assumed to be two percent for an average of two months throughout the 5 year planning period. Recovery on delinquent bills is assumed to be 100.0 percent. The recovered delinquencies show up as revenue in the following program year. In total, all revenue reduction allowances, including delinquency and bad debt allowances, range from \$39,800 to \$47,100.

Table 7. Revenue / Expenditure Analysis

City of Urbana Stormwater Utility Rate Model					
	Program Year				
	FY 2012-13 1	FY 2013-14 2	FY 2014-15 3	FY 2015-16 4	FY 2016-17 5
Expenses					
Administration and Finance	311,250	94,444	97,749	101,171	104,711
Planning and Engineering	155,500	160,943	166,575	172,406	178,440
Operation and Maintenance	709,200	765,072	802,562	830,651	859,724
NPDES MS4 Compliance	92,000	95,220	98,553	102,002	105,572
Water Quality	22,500	25,875	29,459	33,262	37,294
Incentives or Credits	50,000	51,750	53,561	55,436	57,376
Capital Construction	370,000	595,125	396,353	410,226	424,584
Subtotal: Annual Operating Expense	1,710,450	1,788,428	1,644,812	1,705,153	1,767,702
Bond Expense / Debt Service	0	0	340,000	340,000	340,000
Subtotal: Program plus Debt Service	1,710,450	1,788,428	1,984,812	2,045,153	2,107,702
Contingency / Emergency Reserves	25,000	25,000	25,000	25,000	25,000
Total: Expenses	1,735,450	1,813,428	2,009,812	2,070,153	2,132,702
Other Revenues					
Funds Carried Forward	0	133,673	236,865	183,483	106,288
Other Fees and Charges	0	0	0	0	0
Interest Income	0	2,673	4,737	3,670	2,126
Recovered Delinquencies	0	5,785	6,365	6,493	6,624
Other Resources	0	0	0	0	0
Total: Other Revenues	0	142,132	247,968	193,646	115,037
Service Fee Revenue Requirement	1,735,450	1,671,297	1,761,845	1,876,507	2,017,665
Revenue Reduction Allowances					
Delinquencies	5,785	6,365	6,493	6,624	6,756
Bad Debt	34,709	33,426	35,237	37,530	40,353
Total: Revenue Reduction Allowances	40,494	39,791	41,730	44,154	47,110
Adjusted Total Service Fee Revenue Requirement	1,775,944	1,711,088	1,803,575	1,920,660	2,064,775
Estimated Number of ERUs	32,811				
Adjusted / Effective Number of ERUs (100%)	32,811	32,975	33,140	33,306	33,472
<i>Recommended Monthly Service Charge per ERU</i>	4.85	4.92	5.00	5.07	5.15
<i>Recommended Annual Service Charge per ERU</i>	58.20	59.07	59.96	60.86	61.77
Total Estimated Annual Revenue	\$1,909,617	\$1,947,953	\$1,987,058	\$2,026,948	\$2,067,639
Year-end Revenue Surplus (Deficit)	\$133,673	\$236,865	\$183,483	\$106,288	\$2,865
Fund Balance Allowance Test	7.00%	12.16%	9.23%	5.24%	0.14%

Annual Rates

The rate model calculates the revenue generated by the service fee rate. For the stormwater management business plan described in Section 4 the rate using 100% of the estimated rate base would be approximately \$4.90 per ERU per year. For the conservative scenario using only 95% of the rate base the preliminary rate would rise to \$5.15 per ERU per year.

In both cases an annual rate increase of 1.5% was assumed. Holding the rate constant for the two years prior to the bonds would result in a slightly lower rate in the first two years and higher rate in the third through fifth years. Holding the rate constant for the entire five year period would require a higher initial rate and would result in larger fund balances at the end of the first four years.

Single Family Residential Tiers

As an alternative to a single flat rate for all single family residential properties a tier system was investigated that would provide a set of three flat rates for single family residential and duplex properties whose impervious area fall within three tiers, or ranges of impervious area. The tiers were established so as to preserve the fraction of the total revenue that would be generated from these properties under a single flat rate. The tiers and the associated rates are shown in Table 8. The rates for Tiers 2 and 3 are based on the number of ERUs of the median property in the tier. The Tier 1 rates were calibrated so that the total single family and duplex revenue contribution remains at 24% as under the single flat rate.

Table 8. Single Family Residential Tier Structure

Flat Rate/ Tier No.	Tier Size	Tier Median	Percent of Properties	Rate: Lower End	Rate: Upper End
Flat	Impervious Area	Impervious Area	100%	\$4.90	\$5.15
Tier 1	0 to 4500	NA	93%	\$4.55	\$4.75
Tier 2	4500 to 6000	5250	4%	\$8.30	\$8.75
Tier 3	6000 and up	7000	3%	\$11.05	\$12.15

7.2.2. Example Applications Of Recommended Rates

The following examples show the digitized impervious area of representative properties and provide example computation of the possible range of utility fees based on the recommendations of the previous section.



Figure 5. Example User Fee Determination - Apartment Complex

The apartment development shown in Figure 5 has a measured impervious surface (purple shading) of approximately 410,100 square feet. Dividing by 3100 square feet and rounding to the nearest tenth of an ERU there are 132.4 billing units on the three parcels. Applying preliminary rates (\$4.90 - \$5.15), this property's annual stormwater fee would be between \$7680 and \$8220.



Figure 6. Example User Fee Determination - Champaign County Courthouse

The Champaign County Courthouse (see Figure 6) has a measured impervious surface (purple shading) of approximately 103,100 square feet. Dividing by 3100 square feet and rounding to the nearest tenth of an ERU there are 33.1 billing units on the parcel. Applying preliminary rates (\$4.90 - \$5.15), this property's annual stormwater fee would be between \$1920 and \$2100.

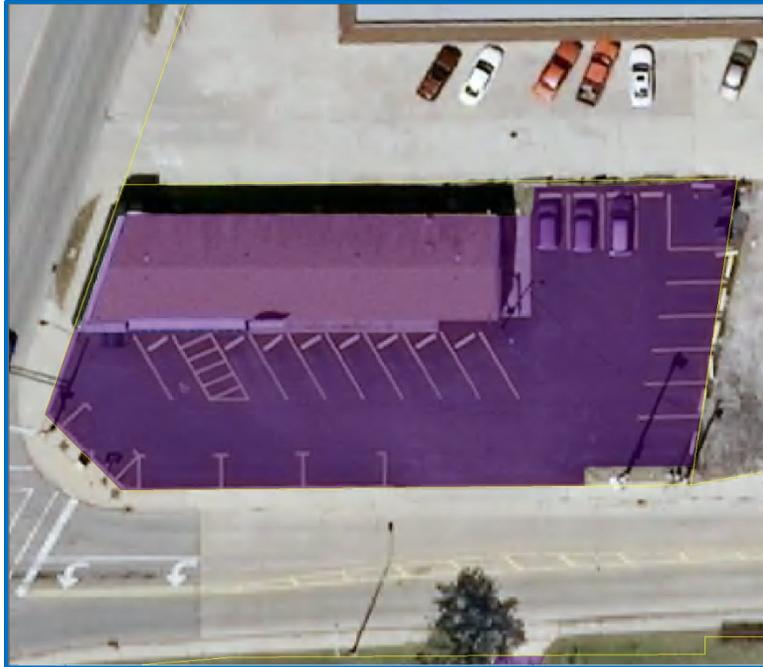
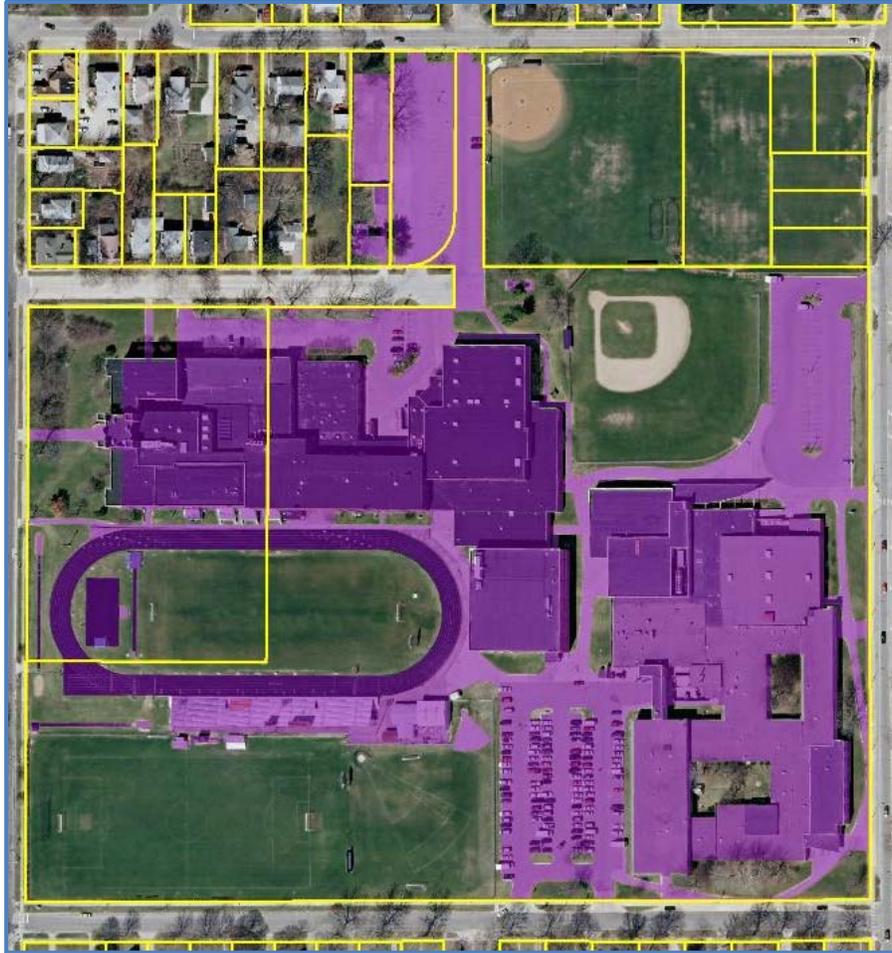


Figure 7. Example User Fee Determination - Small Business

The small business shown in Figure 7 has a measured impervious surface (purple shading) of 12,700 square feet. Dividing by 3100 square feet and rounding to the nearest tenth of an ERU, there are 4.1 billing units on the parcels. Applying the rates (\$4.90 - \$5.15), this property's annual stormwater fee would be between \$235 and \$255.



**Figure 8. Example User Fee Determination -
Urbana Middle & High Schools**

The Urbana Middle and High School complex (Figure 8) has a measured impervious surface (purple shading) of 645,800 square feet. Dividing by 3100 square feet and rounding to the nearest tenth of an ERU there are 208.3 billing units on the parcels. Applying the preliminary range of user fee rates (\$4.90 - \$5.15), this property's annual stormwater fee would be between \$12,120 and \$12,900.

8. STORMWATER ADVISORY COMMITTEE (SWAC)

This feasibility study approach included a formal process to solicit input from the public in the form of a stormwater advisory committee. The SWAC was composed of 17 citizens representing a wide cross-section of peer groups across the City (see Table 9), groups that would potentially represent varying viewpoints on the funding issue. Additionally, representatives from the City of Urbana's Public Works and Community Development Departments participated in the process. This advisory group was asked to comment on the aspects of a possible fee that would impact the equitability of its application.

Table 9. Stormwater Advisory Committee Members

<ul style="list-style-type: none">• Urbana Schools• University of Illinois• Champaign County• Urbana Park District• Carle Hospital• Solo Cup• Busey Bank• Atkins Group	<ul style="list-style-type: none">• St Matthews Lutheran Church• Homeowner• West Urbana Neighborhood Association (N.A.)• JSM• Historic East Urbana N.A.• North Urbana Residents• Boneyard Creek Commissioner
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The group met seven times. The meeting format allowed discussion of issues at any time, though the format was generally old business, new business, and discussion. The attendance level was fairly high, with at least 11 of the 17 members present at each meeting. There was a lot of discussion of the issues presented with participation by all. The SWAC meetings were open to the public. Notice of each of the meetings was posted on the City website in advance of the meeting. All presentation materials and the minutes of each SWAC meeting were posted on the City website and available to the public.

The SWAC was asked for its recommendations on three specific issues; the stormwater program priorities, the characteristics of a stormwater utility rate structure, and on a stormwater utility credits and incentives program. The recommendation requests were typically in the form of a

series of multiple choice questions or agree/disagree statements. The questions were emailed to the group after the meetings and the responses were discussed during the old business segment at the start of the following meeting. The recommendations of the SWAC are included as Attachment B to this document. This approach for soliciting input has been used by the consultant in the past because it allows recommendations to be made in private as a representative of one's peer group with ample time for discussion of the issues in the meetings prior to and following the recommendations request. This approach was also recommended by one of the SWAC members during the first meeting as a means to accomplish the goals of the SWAC process over the course of the seven meetings.

The SWAC members provided energetic and thought-provoking commentary along the way. For example, although revamping the stormwater management program's basic philosophy was not an objective of this process, there was an interest expressed in making sustainability a cornerstone of the program by some members of the group. The sustainable approach to stormwater management that was discussed would be centered around treatment of both the quality and quantity of stormwater runoff on individual properties, employing practices that imitate nature to infiltrate runoff into the ground as well as rainwater harvesting techniques to capture and reuse rainwater for landscape watering and other uses. While some residents and businesses are practicing these techniques voluntarily now, the thought would be to make these practices mandatory for future development. City staff indicated that the sustainability issue is under consideration by USEPA as it completes its process to change the NPDES stormwater program's objectives and requirements and that it is in the City's best interest to see what is required by the new guidelines before making substantive changes to the program.

There was also interest expressed in the development of a regional stormwater program, not unlike the wastewater program, to more effectively eliminate political boundaries from the stewardship of local water resources and to realize economies of scale. This change would require an extensive amount of time to implement and the participation of multiple entities, including the County, the University, Champaign, Urbana, Savoy and a number of drainage districts.

The process has been of great value to the study. The SWAC members invested their time and energy in the process and the City wants to express its gratitude for the assistance that has been provided.

9. PUBLIC EDUCATION AND OUTREACH

A Public Education and Outreach Plan was developed as part of the feasibility study. The City must reach out to its residents, businesses, and institutions to explain what a stormwater utility fee is, why it is under consideration, how the fees will be determined, and why the concept is right for Urbana.

The plan is a very general framework for educating the public about the City's stormwater program, its functional and funding needs, and how utility fee funding will provide a sustainable funding source. The Public Education and Outreach Plan is included in this document as Attachment C.

The Key Ratepayer Meetings element of the outreach plan was completed during the feasibility study. This element was a series of one-on-one meetings with owners of highly impervious and/or tax exempt properties. The purpose of the meetings was to explain what a utility is, why the City is considering it, how the fees will be determined for their specific properties, and to provide a preliminary idea of what those fees might be. These potential ratepayers were able to

Table 10. Key Ratepayer Meetings

Carle Hospital	Provena Hospital
Solo Cup	Wal-Mart
Meijer	Flex-N-Gate
Super Value	Urbana School District
Adkins Group	Vineyard Church
Lincoln Square Mall	Champaign County
Sunnycrest Mall	MACC – North Lincoln Avenue
Lincoln LLC – 1 North and 1 South	O-Brien Autopark
Schnucks	Frasca
Grumish Properties	Clark-Lindsey Village
CPM	JSM Property Management

ask questions and provide feedback to the City that will be important when detailing and implementing the other components of the public education and outreach plan. A list of the key ratepayer meetings is provided in Table 10.

A dialog has also been established with the University of Illinois, including two meetings that were attended by U of I representatives and staff of both the cities of Urbana and Champaign to discuss the utility concept, why it is being considered, how it might impact the University, and future coordination between the university and the two cities on this and related topics.

Public Works Department staff made a presentation on the proposed stormwater utility fee at the Developer's Roundtable Meeting on August 16, 2011. In that meeting the stormwater management program, its needs, its costs, and the proposed stormwater utility approach in Urbana were discussed.

Information regarding the stormwater utility feasibility study and proposed storm water fee has been posted on the City website at <http://www.urbanaininois.us/residents/storm-water> for the public to access.

10. SUMMARY AND RECOMMENDATIONS

The *Stormwater Utility Feasibility Study* is a comprehensive look at the City of Urbana's stormwater management program and its funding options. The study utilized a combination of staff, citizen, and consultant input and research of other stormwater utility programs to evaluate the available options. The utilization of these various inputs allowed the consultants to define limits for the stormwater management program in terms of what, at a minimum, the City must be doing to meet its regulatory / legal mandates and a more comprehensive look at the activities the City *should* be doing to provide a program that meets both its own goals and objectives and the expectations of its citizens. The following sections summarize the results of the feasibility study, followed by the consultant's recommendations and a list of the activities that will be required to implement the recommendation should the City Council elect to proceed to implement a stormwater utility.

10.1. Summary Of Feasibility Study

The Stormwater Utility Feasibility Study included a number of specific reviews pertinent to the potential adoption of a utility fee to fund stormwater management. These activities included:

- Assessing the current stormwater management program and its needs
- Developing a proposed 10-year stormwater management business plan, including estimation of the program's annual revenue requirements
- Evaluating the legal authority to implement a utility fee for stormwater management
- Facilitation of a citizen advisory committee to discuss issues related to the program and its funding
- Evaluation of the available data from which to base a utility rate structure
- Investigation of billing options
- Configuration of the framework of a rate structure
- Rate modeling to identify a range of possible rates for the recommended stormwater program

- Development of a public education and outreach plan for utility implementation
- Meetings with potential ratepayers to get initial feedback on the concept

An enhanced stormwater management business plan has been proposed. The plan would have an estimated Fiscal Year 2012-2013 cost of \$1.71 million. The annual cost would increase over the 10 year planning period at a rate of approximately 3.5 percent per year. The rate study showed an estimated initial range of rates of \$4.90 to \$5.15 per month for single family residential and duplex properties, and \$4.90 to \$5.15 per month per 3100 square feet of impervious area for all other land use classes. Compared to other stormwater utilities in the State of Illinois (see Table 11), this range of rates is very consistent with the other utilities. The comparison of rates is provided for the sole purpose of looking at the amounts being charged for stormwater management from one city to the next. The stormwater management programs and costs are different for each of the cities and looking only at the rates can lead one to draw potentially erroneous conclusions.

Table 11. Single Family Residential Rates In Illinois

City	Monthly Rate*
Aurora	\$ 3.45
Bloomington	\$ 4.35
Highland Park	\$ 4.00
Moline	\$ 3.75
Morton	\$ 4.74
Normal	\$ 4.60
Richton Park	\$ 5.63
Rock Island	\$ 3.72
Rolling Meadows	\$ 2.76
Champaign **	\$5.24
Proposed Urbana	\$4.90-\$5.15

*Based on average single family property (ERU)

** In process of being adopted

Based on these analyses it would appear that the adoption of a stormwater utility in the City of Urbana is fully feasible. The concept is a cost effective, equitable approach for providing dedicated program funding for infrastructure that is in need of attention.

10.2. Recommendations

The following recommendations summarize the funding approach that the consultant feels best meets the needs of City of Urbana and its citizens. The recommendations are based on the guidance provided by the Stormwater Advisory Committee and City staff, as well as from the results of the various reviews and analysis performed for this study. The recommendations are grouped into three categories; level of service, preliminary rate structure, and credit program.

10.2.1. Level Of Service Recommendation

It is the recommendation of the consultant that the City should adopt the level of service for its stormwater management program that is defined in the Stormwater Management Business Plan. The referenced level of service is not overly aggressive but will allow the City to upgrade its current level of service to one that allows more efficient and complete management of its aging infrastructure and a heightened level of NPDES compliance. The Stormwater Management Business Plan should be revisited in the fourth program year to benchmark the program's progress and to coordinate with the selected rate review cycle. At that time the impact of new regulations that are expected to be promulgated by USEPA and implemented by the IEPA will be known and can be incorporated into the City's stormwater management business plan.

10.2.2. Preliminary Rate Structure Recommendations

Based on the feasibility study's results the consultant makes the following recommendations related to the preliminary definition of a stormwater utility rate structure:

- a. The City should create an enterprise fund for stormwater management, and the primary source of revenue for that fund should be a stormwater utility fee specifically dedicated to the fund. Utility fee-based funding of infrastructure programs, particularly stormwater

management programs, has been shown to be both a successful and a legal method of funding stormwater management nationally and in the State of Illinois. By establishing such an enterprise fund all revenues collected for stormwater will remain in the stormwater fund and be expended on elements of the stormwater management business plan.

- b. The stormwater utility rate should be based on the demand for service that each property in the service area places on the City. The demand for service should be approximated by the developed density of each property, as measured by the impervious surfaces on the property. The actual distribution of program costs should be based on billing units equal to thirty one hundred (3100) square feet of impervious area. The number of billing units should be rounded to the nearest tenth. The billing units should be referred to as “Equivalent Residential Units”, or ERUs.
- c. All single family residential and duplex properties should be billed a single flat rate in the range of \$4.90 - \$5.15 per month.⁹
- d. All other property classes in the City of Urbana should be billed at a rate of \$4.90 - \$5.15 per month per ERU⁹.
- e. All properties in the City of Urbana should be charged the fee, with the exception of streets and sidewalks within the public right-of-way or its equivalent (public streets are designed to provide storage, conveyance, and drainage system access for stormwater runoff).
- f. There should be a minimum charge equal to one half of a billing unit for any undeveloped property.

⁹ The preliminary estimate of the rate is in the range of \$4.90 - \$5.15 per month and will be finalized when a citywide impervious surface database has been created.

- g. The rate should have provisions for annual escalation in order to better manage cash flow and control year end fund balances.

10.2.3. Credit And Incentive Program Recommendation

In order to maximize the equity of the rate structure it is recommended that a credit and/or incentive program be defined and implemented. The credit and/or incentive program would recognize the beneficial impact of on-site stormwater management efforts of individual property owners based on criteria established by the City's Public Works Department. This program should be defined by policy early in the implementation phase of the process. Special emphasis should be placed on providing either credits or incentives for the use of sustainable practices in stormwater management.

10.3. Stormwater Utility Implementation Plan

The implementation phase of the stormwater utility includes a number of tasks that will take the stormwater utility fee from the feasibility stage to the adoption of the rate ordinance to the mailing of the first bill. The tasks included in the stormwater utility implementation process are described in the following sections.

10.3.1. Billing System Selection

The City will need to make a decision as to how it intends to deliver the stormwater utility bills to the ratepayers. At the time this report was prepared the options that were still available were to enter into a contract with Urbana-Champaign Sanitary District (UCSD) to provide the billing services, expand the in-house billing program to bill the fee utilizing City resources, or some combination of the two. If the selected billing program includes expansion of the in-house capability the actual billing method, including software, must be determined. Depending on the decision made this task could impact the implementation schedule and cost.

10.3.2. Stormwater Utility Outreach

A Public Education and Outreach Plan has been developed as part of the feasibility study (see Attachment C). The outreach plan includes the outline for a number of activities to explain the reason for implementing a utility, how the revenues will be used, how to interpret information in the bill, and where to look or who to call to get more information on the stormwater utility.

10.3.3. Stormwater Utility Enterprise And Rate Ordinances

The adoption of the stormwater utility will require the creation of a stormwater enterprise fund. The enterprise fund will be dedicated to funding of the stormwater management program only and will have the stormwater utility fee as a dedicated revenue source, thus prohibiting the use of the stormwater utility fee revenues for any purpose other than stormwater management. This fund will be a protected special fund like the sewer fund.

A rate ordinance will also be needed to define the rate structure and the appeals process, and to dedicate the revenue collected from the fee to the enterprise fund. The actual rate amount(s) may be included in the ordinance or may be part of a master fee schedule.

10.3.4. Impervious Surface Database Development

The impervious surface database is the basis for determining the base number of billing units for each parcel in the City. The impervious surface database development process begins with the digitizing of all properties in the City other than single family residential or duplex. Concurrent with this step will be the corrections for right-of-way and other identified parcel boundary issues. The result will be a database by parcel that indicates the gross amount of impervious area on the parcel. Depending on the billing system to be used, a large portion of this task could be the determination of property owners and billing addresses for parcels that are not already included in the billing system. For example, parking lots are typically not customers of a sewer utility and customer accounts would have to be created for them as stormwater-only accounts.

If a credit program becomes part of the rate structure a decision will need to be made whether to maintain the credits separately to be applied to customer charges in the billing system or whether

the credits should be tracked in the impervious surface database, resulting in both a gross and net billing amount to export to the master billing account file.

The information in this database will not change from year-to-year for most properties. A long term maintenance plan for the impervious surface database is essential for those properties that do change however and will be provided as part of this task.

10.3.5. Master Account File Development

The master account file is the billing database for the stormwater utility. Depending on the billing method this file may be part of the impervious surface database or it may be a standalone billing file that is delivered to the billing agent on a regular or periodic basis.

The first step in the master account file development is to insure that the data to be exported from this database is an exact match to the billing databases of the billing entity. This will require providing information on stormwater only accounts to the billing entity so that the customer accounts can be set up. The next step is to compute the number of billing units per parcel by dividing the impervious surface of each parcel by 3100 square feet. This will be accurate to the nearest tenth of a billing unit.

The last step in the creation of the master billing account file is to apply the fee reductions to those parcels' billing unit totals that have applied for and received credits. (In most situations credits will be applied for and approved after the master account file has been created)

Once the master account file is complete it will be provided to the billing entity to test the upload of the billing file. Once the master account file upload is found to be compliant with the billing program, the billing file will be migrated into the billing system. The billing system operator will generate sample bill prints for the quality control review of the billing program.

The information in this database will not change from year-to-year for most properties. A long term maintenance plan for the master account file will be provided as part of this task.

10.3.6. Credit Program Development

The credit program can be a key element of the overall rate structure as it is widely considered to be the element of a rate structure that allows the user fee to meet the “voluntary nature” test of a user fee. The credit program consists of a credit policy, a credit manual, and training for local engineers and developers on the proper computation of credit amounts. The credit policy defines issues such as who can apply for credits, how much credit they can get, and how they qualify for credits. The credit manual defines the process for applying for credits, including policies, conditions, step by step instructions, application forms, information on how the owner retains his or her credit from year to year, and information on how to appeal credit decisions. The training program is an outreach effort intended to reduce the incidence of credit application revisions and repeat submittals.

A database of credits applied for and approved will be kept that provides information that can be used in the master account file maintenance process.

10.3.7. Program Support

When a new municipal program, such as a stormwater utility, is initiated there are a variety of items that need to be in place to support a smooth introduction. The implementation of a new fee will require that customer service representatives provide answers to a wide range of questions for callers in varying moods about their bills. Consistency in answering the more routine questions is essential to an effective customer service program. Consistency is enhanced by the development of a Frequently Asked Questions (FAQ) guide and a training program for the customer service representatives.

10.3.8. Council Action

The final step in the implementation process is for City Council to give the approval to begin billing of the stormwater utility fee.

10.3.9. Stormwater Utility Implementation Schedule

The estimated schedule for the implementation of the stormwater utility is dependent on several items. First and foremost, the decision to adopt the user fee will be the start of the process. If the delivery method for the bills is known and all of the necessary software and trained staff are in place, the critical path for schedule will be the impervious surface database and master account file development, which should take about six to eight months from the time that the work begins until the import of the master account file is complete and test bills have been printed and checked.

All of the supporting tasks, including credit program development, implementation of the education and outreach plan, and the development of the customer service support tools can be performed during the master account file development.

If the billing system is not known or is not in place at the time that the decision is made to move forward, making all the decisions relative to the delivery of the first bill and implementing those decisions could easily take control of the schedule. If a new billing program is to be rolled out it might be prudent for the sake of schedule to contract the first year of the billing out to a local bank for print, mail, lockbox and cash management services. The account information could be managed offline in a database until such time as it is uploaded into the selected billing system.

When all goes smoothly, the implementation phase is usually complete in between 9 and 12 months.

ATTACHMENT A

STORMWATER MANAGEMENT FUNDING METHODS

ATTACHMENT A

STORMWATER MANAGEMENT FUNDING METHODS

The stormwater utility feasibility study process, though focuses on the utility fee method of program funding, examines a full range of revenue sources, funding and borrowing mechanisms. The funding methods that are typically reviewed include:

- General Fund appropriations
- Stormwater utility fees
- Special assessments
- General obligation and revenue bonds
- In-lieu of construction fees
- System development charges
- Developer extension/latecomer fees
- Plan review, development inspection, and special inspection fees
- Impact fees
- Federal and state funding opportunities

The following pages provide short descriptions of these funding methods, along with a subjective analysis of the pros and cons of each method.

A.1 General Fund Appropriations

General Fund revenues are the most common source of funding for municipal stormwater programs. The revenues in the General Fund are derived from a wide spectrum of ad valorem taxes, income taxes, exactions from service providers (i.e., utility taxes), etc. General Fund resources are subject to market values of taxable properties and economic conditions for income and general sales based revenues. Municipal services that are funded by the General Fund are provided to all properties, regardless of taxable status.

Dedicated levies, based on property, sales, or other taxes, are sometimes used to fund stormwater management programs, or components of the programs. Tax levies are in many instances subject to the same limits on increase as are the base taxes.

Table A.1. Pros and Cons of General Fund Appropriations

Pros	Cons
<ul style="list-style-type: none">• Common governmental revenue source• Few constraints on uses• Can accommodate one time costs• Has capacity to fund entire program	<ul style="list-style-type: none">• Generally not dedicated for long term use• Tax-based budgets are subject to reallocation• Taxes have no relationship to stormwater service and facility demands• Generally not adequate to sustain multi-year funding for infrastructure

A.2 Stormwater Utility Fees

Stormwater utility fees have become an increasingly popular method of funding stormwater management programs. There are currently between 1400 and 1500 stormwater utilities in the United States. A stormwater utility may be established as a funding mechanism, as a new service line under an existing department, or as a self-sufficient department of local government. In most cases the utility is established as a funding mechanism that ensures adequate funding for stormwater management, just as may be done for water, sewer, solid waste, or other government services.

The popularity of the utility approach is tied to the nature of such funding programs. An enterprise fund is established for stormwater management and a service charge is established by ordinance to fund the enterprise. The establishment of the enterprise guarantees that the funds collected for stormwater management cannot be redirected for unrelated uses. The funding level and therefore the fee charged to properties is based on the program that will be paid for by the charges. The program scope, or level of service, can range from everything stormwater to only specific programs, such as capital, compliance, operations and maintenance, etc. The fee is determined by determining the cost of providing the identified level of service and distributing those costs based on the demand that properties place on local government for service. The most common basis for the utility fees is the runoff production potential of each property.

There is a lot of flexibility in the design of a rate structure for stormwater utility fees. The rate structure can be as simple as the fee paying for the entire program, or may be made more equitable to ratepayers by adding specialty fees, such as plan review and inspection fees, that pay for services that are only provided to specific properties on a one time basis. Equity in the rate structure can also be provided by including a credit / incentive program. A credit program allows properties to reduce their fee by providing a prescribed level of on-site stormwater runoff control that results in a reduction in the level of the effort required for the city or county to provide the service.

Table A.2. Pros and Cons of Stormwater Utility Fees

Pros	Cons
<ul style="list-style-type: none"> ● Adequate revenue capacity ● Dedicated revenue source ● Flexibility in design of cost allocations ● Broadest financial participation ● Incentives for responsible actions ● Survived Illinois legal challenge ● Follows philosophy of other public infrastructure programs ● Has capacity to fund entire program 	<ul style="list-style-type: none"> ● Tax exempt / non-taxed ratepayers tend to not like the concept ● Cost of billing can be high ● Seen as a tax by public ● Portrayed as a tax cap end run by some ● Elected officials sometimes shy away from ● Commonly given the negative connotation of “rain tax”

A.3 Special Assessments

Special assessments are a fee or tax that is assessed to a property for receipt of a direct benefit from local government. As opposed to a general tax, the fee or tax is billed only to those properties that are the direct beneficiaries of the service that was provided. Special assessments can be used to pay for improvements or services that have a specific geographic scope, which can be as small as a couple of

properties, or as large as several city blocks. Special assessments can require a significant level of justification.

Because special assessments can not be used to pay for services that provide general benefits to properties, they obviously cannot be used to pay for an entire stormwater program. Special assessments can be a valuable tool in a stormwater utility rate structure to recoup the cost of providing services that are definitely above the defined level and / or extent of service of the utility. For example, if it is beneficial to several properties to have a severe erosion problem addressed in an area outside the defined drainage system, such as in a backyard drainage ditch, a special assessment could be used to recover the cost of the project from the benefiting properties.

Table A.3. Pros and Cons of Special Assessments

Pros	Cons
<ul style="list-style-type: none"> ● Best used for local, small capital improvement projects ● Use for special request projects ● Equity builder for projects not city-wide in value 	<ul style="list-style-type: none"> ● Constraints on qualifying projects ● Cannot be used to fund the entire citywide program ● Difficult to use for general stormwater quality and other program aspects

A.4 General Obligation and Revenue Bonds

Bonding is not a revenue source but a **borrowing** mechanism. Through the use of bonds funding of major capital improvements may be expedited relative to procuring funds through the annual budget process. Many cities prefer not to incur long term debt if it can be avoided and will utilize pay as you go financing for all capital improvement projects, or they will use a combination of bonding and pay as you go to limit the amount of long term debt.

When bonding for capital improvements the debt must be secured either by the general revenues of the city or county (general obligation bonds) or by a dedicated revenue stream, such as revenues produced by a stormwater user fee (revenue bonds). In the later case, the utility must be up and running for a few years and have a history of reliable collections before the bond banks will accept the obligation of the revenue stream for servicing the debt .

Table A.4. Pros and Cons of General Obligation and Revenue Bonds

Pros	Cons
<ul style="list-style-type: none"> ● Allows spending for projects sooner than would otherwise be possible ● Flexibility in design of debt service 	<ul style="list-style-type: none"> ● Long term debt is incurred ● Restrictions on use or reallocation of funds

A.5 In-Lieu of Construction Fees

In-lieu of construction fees provide local government an alternative to universal on-site detention systems. Rather than encouraging a proliferation of small, often times ineffective detention ponds, a fee is collected to help pay for larger, more strategically located, much more efficient regional facilities. The fee amount is typically based on the equivalent cost of providing on-site detention that would meet local

standards, including the estimated costs of engineering design, land and/or easements, construction, contingencies, and operation and maintenance for the design life of the facility. Among the many benefits of the approach is that it can make public inspection and maintenance responsibilities more manageable by reducing the number of facilities to be managed.

In the instance where regional detention is needed quickly to manage the impacts of development pressure, a fee in lieu program may be tied to or replaced by system development charges or latecomer fees, approaches that are more appropriate for building the regional facilities before collecting fees from properties that utilize them.

Table A.5. Pros and Cons of Fee-In-Lieu

Pros	Cons
<ul style="list-style-type: none"> ● Finances more efficient stormwater controls ● Can help pay for regional systems ● Can support watershed-based management ● Allows developers greater use of property 	<ul style="list-style-type: none"> ● Rarely generates sufficient revenue alone to construct facilities, requires support funding ● Results in higher levels of imperviousness ● Fund use is restricted

A.6 System Development Charges

System development charges, sometimes referred to as capitalization charges, provide a mechanism whereby the public recoups its front-end investment in a publicly owned and operated stormwater system from developers as they build out the contributing drainage area. This approach is usually a more economical and prudent long-term system development policy than attempting to increase service capacity to meet the demands of growth on a case by case basis as it occurs.

Connection fees are a related capital recovery method whereby a share of the cost of providing adequate stormwater management capacity by providing new infrastructure or infrastructure upgrades at the public expense is recovered from new development and redevelopment projects.

Table A.6. Pros and Cons of System Development Charges

Pros	Cons
<ul style="list-style-type: none"> ● Allows “big picture” infrastructure planning ● Recoups previous public investment in stormwater infrastructure ● Adds equity to rate structure ● Multiple ways to structure cost recovery 	<ul style="list-style-type: none"> ● Incapable of supporting entire stormwater management program cost ● Actual infrastructure development occurs as a public expense ● Risk that benefit/cost ratio fails if little or no development occurs

A.7 Developer Extension/Latecomer Fees

Developer extension/latecomer fees are not a revenue source. They are a means of properly distributing capital investment costs among several properties when a facility is built by one developer with excess capacity to accommodate adjacent or nearby properties that are to be subsequently developed in the same drainage area. This type of fee is commonly used for water and sewer system extensions. They are very

similar to system development charges, but the funding source for the up front construction of facilities is private rather than public.

Table A.7. Pros and Cons of Developer Extension \ Latecomer Fees

Pros	Cons
<ul style="list-style-type: none"> ● Allows “big picture” infrastructure planning ● Recoups previous private investment in stormwater infrastructure ● Adds equity to rate structure ● Multiple ways to structure cost recovery 	<ul style="list-style-type: none"> ● Developers do not like the approach unless they are developing the entire drainage area ● Risk that benefit/cost ratio fails if little or no development occurs

A.8 Plan Review, Development Inspection, and Special Inspection Fees

The City of Urbana has been reviewing stormwater plans in conjunction with development plan approvals for many years. Although there is no specific statutory authority for special service fees for stormwater management plan review and inspections, they could reasonably be included under the scope of a stormwater rate methodology since they are clearly fees for special services.

The rationale for including such fees in a rate methodology is based on the “origin of demand for service” concept, in which costs are apportioned only among those whose needs require the service. Not all “service” provided by a stormwater management program is uniform throughout a community. Some services, such as plan reviews and inspections, are provided only to a specific clientele. Instead of distributing the cost of such services among all service charge ratepayers, special service fees can be adopted which apply only to the parties who are served.

Table A.8. Pros and Cons of Special Inspection Fees

Pros	Cons
<ul style="list-style-type: none"> ● Focuses financial responsibility for a service with limited applicability ● Provides flexibility in cost allocations for support services ● Regulatory enforcement tool ● Can recover entire cost of services 	<ul style="list-style-type: none"> ● Incapable of supporting entire stormwater management program cost ● Revenue is a function of economy / development starts

A.9 Impact Fees

Impact fees have been associated with a variety of public infrastructure programs across the country. They are often popular with existing residents who wish to see developers pay the entire cost of new capital facilities. Naturally, they are just as often highly unpopular with developers. Specific applications of this type of funding method have been the subject of a great deal of litigation nationally. An unusual aspect of impact fees is that state courts around the country have been notably inconsistent in their definition of them and decisions on their application.

Impact fees are typically limited to situations in which the impact of new development on existing infrastructure systems is: 1) measurable and certain; 2) of definable geographic or systemic extent; and 3)

quantifiable in terms of the incremental capital investment that will be required to maintain (not attain) an adequate service level. The final point is critically important in terms of stormwater management systems. Impact fees cannot be used to bring an inadequate system up to an adequate service level, and thus are not useful in correcting the many problems that might currently exist in the stormwater systems in Urbana. Impact fee revenues must also be earmarked for specific projects or uses, must be expended relatively quickly, and, if not spent for the stated purpose, must be returned to the developer.

Table A.9. Pros and Cons of Impact Fees

Pros	Cons
<ul style="list-style-type: none"> ● Recovers entire cost of maintaining service level ● Collected only from properties that “impact” the system or service, therefore increases rate structure equity 	<ul style="list-style-type: none"> ● Significant planning and accounting overhead ● Usually has a “sunset” provision, and must be returned if not spent in timely manner ● Do not address legacy problems

A.10 Federal and State Funding

State and federal funding generally fall into the categories of grants and loans. Grants may be used to pay all the costs of a project, or may be a cost share mechanism that requires some level of local participation, or “match.” The local match may be hard dollars or soft match, such as the fair market value of in-kind services such as staff time, facilities, or other resources.

State and federal loan programs operate in much the same way as other borrowing programs, such as revenue bonds, but might have more advantageous borrowing terms. The State of Illinois has made a fraction of its budget under the state revolving fund (SRF) loan program available for green infrastructure projects to address water quality.

Most state and federal funding opportunities are limited in scope and might be used to fund “opportunity” projects, but not to fund an entire program. Many state and federal grant programs also have strings attached that restrict their use in complying with regulatory programs, such as the Municipal NPDES Phase II Stormwater Permit. These methods of financing projects typically impose constraints on the types of solutions available to stormwater runoff problems, and rely on the availability of funds, the prioritization of proposed projects, and the level of participation in the programs.

Table A.10. Pros and Cons of Federal and State Funding

Pros	Cons
<ul style="list-style-type: none"> ● Helpful for funding program “opportunities” ● Provides low cost loans for water quality improvements using green infrastructure 	<ul style="list-style-type: none"> ● Opportunities can be very limited ● Constraints based on funding source ● Timing is rarely coincident with priorities ● Compliance and/or reporting burdens ● Many grants cannot be used for NPDES compliance

ATTACHMENT B

STORMWATER ADVISORY GROUP RECOMMENDATIONS

ATTACHMENT B

STORMWATER ADVISORY GROUP RECOMMENDATIONS

The Stormwater Utility Feasibility Study included a formal process to solicit input from the public in the form of a stormwater advisory committee (SWAC). The SWAC was composed of 17 citizens representing a wide cross-section of peer groups across the City (see Table B.1). Additionally, representatives from the City of Urbana's Public Works and Community Development Departments participated in the process. This advisory group was asked to comment on several aspects of a possible fee that would impact the equitability of its application.

Table B.111. Stormwater Advisory Group Members

• Urbana Schools	• St Matthews Lutheran Church
• University of Illinois	• Southeast Urbana Homeowner
• Champaign County	• West Urbana Neighborhood Association (N.A.)
• Urbana Park District	• JSM
• Carle Hospital	• Historic East Urbana N.A.
• Solo Cup	• North Urbana Residents
• Busey Bank	• Boneyard Creek Commissioner
• Atkins Group	

The group met 7 times. The meeting format allowed discussion of issues at any time, though the format was generally old business, new business, and discussion. The attendance level was fairly high, with at least 11 of the 17 members present at each meeting. There was a lot of discussion of the topics presented with participation by all attendees.

The SWAC was asked for its recommendations on three specific issues; the stormwater program priorities, the characteristics of a stormwater utility rate structure, and on a stormwater utility credits and incentives program. The recommendation requests were typically in the form of a series of multiple choice questions or agree/disagree statements. The questions were emailed to the group after the meetings and the responses were discussed during the old business segment at the start of the following meeting. The recommendations of the SWAC are provided in the following pages.

B.1 Program Priorities Recommendations

The SWAC members were asked at the October 6th meeting to provide a list of activities or policies that they felt should be the priorities of the local stormwater management program. Each member had an opportunity to add to the list. The eventual list had 27 entries. After consolidation a list of 17 suggested program priorities had been created. This list was sent to the members via email with a request for each member to select her / his top 5 priorities from the list. The results were compiled and are summarized in Exhibit B.1 below. As seen in the Exhibit, only two of the priorities received votes from more than half of the group.

Exhibit B.1. Program Priorities Worksheet Results

City of Urbana Storm Water Program Priorities Worksheet October 15, 2010	
Description	Votes
Provide maintenance for city owned / operated infrastructure to maximize useful life and reduce replacement costs.	13
Update and maintain a storm water master plan for both runoff quantity and quality management.	10
Encourage the use of sustainable ("green") storm water management techniques (i.e.; rain gardens, reuse, etc.).	7
Establish program funding priorities based on both systemwide and local needs.	7
Adopt clear local storm water regulations <i>and</i> enforcement policies.	6
Provide public education on storm water management, including flooding, infrastructure maintenance, and green technologies.	6
Focus on NPDES permit compliance.	5
Coordinate and cost share with local entities (USGS, UI, Champaign, etc.).	5
Create a simple, equitable fee structure.	4
Provide fee system credits for on-site storm water management.	4
Provide flexibility in land development regulations for areas of new development and redevelopment.	4
Allow both prescriptive <i>and</i> performance based options for compliance with storm water standards.	4
Monitor storm water controls to confirm performance per design standards.	3
Maintain technical tools for storm water management (GIS, system models, etc).	3
Fully explore outside funding sources to supplement funding for storm water.	2
Consider public health and safety in project prioritization and design standards.	2
Cost share on private projects (i.e.; overhead sewer, sump pump, etc).	1
Total Survey Participants	17

During the November 3rd and December 1st meetings of the SWAC these results were discussed. From these discussions came four recommendations; three related to the stormwater management program's operational priorities and one related to a potential stormwater utility funding program. The recommendations are shown in Exhibit B.2.

Exhibit B.2. Program Priorities Recommendations

“Based on the program priorities exercise and related discussions, the following enhancements should be made to the City of Urbana’s stormwater management program level of service:

1. The City should conduct inspections necessary to maintain city-owned and operated infrastructure to maximize its useful life and to reduce repair and replacement costs.
2. The City should update and maintain the drainage system master plan to identify stormwater drainage quantity and quality problem areas, to implement sustainable solutions where practical, and to prioritize the identified capital improvements.
3. The extent of service should be limited to City owned and operated stormwater infrastructure, with consideration given to other projects and/or programs deemed to be beneficial to the City’s stormwater management program.
4. It is recommended that if a stormwater utility fee is implemented, the City of Urbana adopt a rate structure that is both equitable and understandable by its ratepayers.”

B.2 Rate Structure Recommendations

The discussion of rate structure concepts, including the bases for distributing costs among ratepayers spanned portions of three meetings. Rate base concepts were introduced during the December 1st meeting and discussed further on February 16th. From these discussions came three recommendations. The voting forms and results for three recommendations are shown in Exhibit B.3. The votes are shown in red to the left of the voting options. The numbering of these recommendations assumes that the fourth recommendation under the program priorities is the first of the rate structure recommendations.

Exhibit B.3. Rate Structure Recommendation Voting

CITY OF URBANA STORMWATER ADVISORY COMMITTEE FEBRUARY 16, 2010 MEETING RECOMMENDATIONS

The three recommendations below have been created to reflect the general content of the discussions held during the December 1st and February 16th meetings of the Stormwater Advisory Committee. Please review and vote on these recommendations and return your votes to Brad Bennett.

Rate Structure Recommendations: Rate Base

The City of Urbana is considering the implementation of a stormwater utility fee to fund its stormwater management program. A key component of stormwater utility fee planning is the determination of the method for equitable distribution the program costs among the properties that benefit from the city's stormwater infrastructure and programs. Virtually all rate methods that comply with the test that the charges should be commensurate with the demand for service include an impervious area-based component to their rate base. As was shown in our meetings, the documentation of the relationship between development, as measured by imperviousness, and peak runoff rates, runoff volume and water quality is extensive.

The three rate methods under consideration are based on impervious area only, impervious area plus the gross area of the property, and impervious area plus the grassed or otherwise pervious area of the property. The City's preference is to keep the initial rate as simple and understandable as possible, which is consistent with Rate Structure Recommendation Number 1 of the Stormwater Advisory Committee. The simplest rate method would be based on impervious area only as it is based on one directly measurable parameter. The various applications of the other two methods introduce uncertainty in the rate base due to the subjective nature of determining how much weight to give impervious area and either gross or pervious areas, respectively.

Rate Structure Recommendation Number 2

If the City elects to implement a stormwater utility fee, the method for distributing the stormwater program's costs should be based on the:

- 11 A. Impervious area of each property
- 5 B. Impervious plus gross area of each property.
- 0 C. Impervious plus pervious area of each property.

Exhibit B.3. Rate Structure Recommendation Voting, Continued

Rate Structure Recommendations
February 16, 2011
Page 2

Rate Structure Recommendations: Single Family Flat Rate

Whichever rate base is selected in Rate Structure Recommendation Number 2, the basis for the fee on all properties in the city will be in some way based on the amount of impervious surfaces on the property. While the amount of imperviousness on a commercial, industrial, or institutional property might range from a couple of thousand square feet to several acres, the amount of impervious area on a single family residential lot typically ranges from a couple of thousand square feet to six thousand square feet. Because of this significantly lower amount of variability, and because typically 70 percent (74% in Urbana) of the parcels in Midwestern cities are single family residential, most cities send a flat rate single family residential bill to all single family residences in the city rather than measuring the imperviousness on each of the parcels. Applying a flat rate to these parcels reduces the initial cost of setting up the master billing account file and eliminates the need to track changes on these parcels, thus reducing ongoing administrative costs.

Under a flat rate system, the representative amount of imperviousness on the typical single family property is determined by digitizing the aerial photographs for a statistically significant sample of the properties. The mean or median amount of impervious area then becomes the billing unit for properties under all other land use types. All single family properties are charged for a single billing unit. For all other land uses the amount of imperviousness on the parcel is digitized from aerial photography and the equivalent number of billing units is determined. For example, for a rate based on impervious area only, if the single family billing unit is determined to be 3100 square feet, and the digitized impervious area for the corner convenience mart is 10,000 square feet, the number of billing units for the convenience mart property is computed as 10,000 square feet divided by 3100, or 3.2 billing units. (Other rate modifiers, such as credit for on-site stormwater management, will be discussed at a future meeting.)

Rate Structure Recommendation Number 3

If the City elects to implement a stormwater utility fee, it should:

- 13** A. Adopt a flat rate method for billing single family residential property.
- 3** B. Measure the impervious area on every property, including single family residential.

Exhibit B.3. Rate Structure Recommendation Voting, Continued

Rate Structure Recommendations
February 16, 2011
Page 3

Rate Structure Recommendations: Single Family Flat Rate

As mentioned previously, the range of imperviousness in the single family residential sample that was evaluated was between 1500 and 6500 square feet, with 85 percent of the samples falling between 2000 and 5000 square feet. The mean level of imperviousness in the sample was 3118 square feet. A common question in stormwater rate structure development is whether or not there is a need to further refine the charges within the single family residential property category to reflect the variation in impervious area on those properties. Most stormwater utilities nationally have a single flat rate for single family residential properties; approximately 25% have multiple rates within the single family residential flat rate. In most rate structures that include tiers, the rate is lowered by \$12-15 per year per account for the low tier and raised by the same amount for the higher tier, with same number of properties in the high and low tiers.

In Illinois, the following cities have / have not included single family residential tiers within their rate structures:

Illinois Cities With / Without Single Family Rate Tiers

<u>With</u>	<u>Without</u>
Bloomington	Aurora
East Moline	Freeport
Moline	Highland Park
Rock Island	Morton
	Normal
	Rolling Meadows

The consultant does not believe that the data shows significant enough variation to justify tiers within a single family flat rate structure. In addition, the property data needed to develop regression equations from which to implement tiers is not readily available from the Cunningham Township Assessor's office. This would result in considerable effort to assemble and analyze the necessary property data. For these reasons, and recognizing the Stormwater Advisory Committee's direction to have a simple and understandable rate structure, the consultant recommends a single flat rate for single family residential properties.

Rate Structure Recommendation Number 4

If the City elects to implement a stormwater utility fee with flat rates for single family residential properties, it should include:

- 9** A. A single rate for all single family residential properties.
- 7** B. Multiple single family tiers (e.g.; low, medium, high levels of imperviousness).

B.3 Credit and Incentive Program Recommendations

The concepts of stormwater utility credits and incentives were discussed during the February 16th and March 2nd SWAC meetings. The request for advisory committee input on the credit and incentive program was divided into two requests. First, immediately following the March 2nd meeting a request was sent to the group asking whether or not the SWAC members felt that a credit and/or incentive program was needed. The result was that the committee overwhelmingly felt that both a credit and an incentive program are necessary if the city implements a stormwater utility. The voting results are shown in Exhibit B.4.

Once it was established that the SWAC members favored having a credit and incentive program, a second voting form was distributed that requested input on specific aspects of a City of Urbana stormwater utility credit program that the members would like to see. The results of that exercise are provided as Exhibit B.5.

Exhibit B.4. Credit and Incentive Program Recommendation – Part 1

CITY OF URBANA STORMWATER ADVISORY COMMITTEE MARCH 2, 2011 MEETING RECOMMENDATIONS

The recommendations requested in the following pages are a follow-up to the discussion of stormwater utility credits in incentives from the March 2nd meeting of the Stormwater Advisory Committee. Please review the explanatory text and provide your input on the identified issues. Please read through all of the recommendations before responding. When you are finished please return your recommendations to Brad Bennett.

BACKGROUND

The City of Urbana is considering the implementation of a stormwater utility fee to fund its stormwater management program. Many stormwater utilities include credit and/or incentive programs in their rate structures.

Credits

While serving similar purposes, credits and incentives have fundamental differences. Credits are recurring discounts against stormwater utility charges that are granted because the ratepayer meets on-site stormwater management criteria specifically identified as reducing costs to the City's Stormwater Management Program. The qualifying activities typically provide either a reduction in peak discharge, a reduction in stormwater runoff volume, a water quality benefit, or some combination of the three.

Credit programs typically have well-defined qualification criteria and an application process. The application may require certification by a qualified professional. Annual inspections or certifications of maintenance may be required to keep the credit once approved. Finally, the actual level of participation in the credit program is not known in advance and must be estimated during the rate making process, giving over- or under-estimation a high probability of occurrence.

Incentives

Stormwater management program incentives are typically one time disbursements that partially compensate a property owner for "partnering" with the city to achieve a stormwater management objective, such as the installation of a rain garden or rain barrel. Incentive programs are sometimes available to any property owner, and other times they are open only to single family residential and other properties that may not be eligible to participate in a credit program. An attractive characteristic of these programs for stormwater utilities is that incentive programs are a line item in the annual budget, so the maximum annual expense is known.

Exhibit B.4. Credit and Incentive Program Recommendation – Part 1, continued

Credits and Incentives Recommendations
March 2, 2011
Page 2

Credits and Incentives Recommendation Number 1

If the City elects to implement a stormwater utility fee, it should include the following:

- 2 A. Credits only.
- 2 B. Incentives only.
- 13 C. Both incentives and credits.
- 0 D. Neither incentives nor credits.

Exhibit B.5. Credit and Incentive Program Recommendations – Part 2

CITY OF URBANA STORMWATER ADVISORY COMMITTEE MARCH 2, 2011 MEETING FOLLOW-UP RECOMMENDATIONS

The recommendations requested in the following pages are a follow-up to the discussion of stormwater utility credits in incentives from the March 2nd meeting of the Stormwater Advisory Committee and to the request for a recommendation as to whether or not the City should have a credit or incentive program as a part of its stormwater management program rate structure. The response of this group to Credits and Incentives Recommendation Number 1 was that the City should have both an incentive and a credit program. We now need the Committee's input on some aspects of credit and incentive programs.

Please review the explanatory text and provide your input on the identified issues. Please read through all of the recommendations before responding. When you are finished please return your recommendations to Brad Bennett.

BACKGROUND

The City of Urbana is considering the implementation of a stormwater utility fee to fund its stormwater management program. Many stormwater utilities include credit and/or incentive programs in their rate structures.

Credits

While serving similar purposes, credits and incentives have fundamental differences. Credits are recurring discounts against stormwater utility charges that are granted because the ratepayer meets on-site stormwater management criteria specifically identified as reducing costs to the City's Stormwater Management Program. The qualifying activities typically provide either a reduction in peak discharge, a reduction in stormwater runoff volume, a water quality benefit, or some combination of the three.

Credit programs typically have well-defined qualification criteria and an application process. The application may require certification by a qualified professional. Annual inspections or certifications of maintenance may be required to keep the credit once approved. Finally, the actual level of participation in the credit program is not known in advance and must be estimated during the rate making process, giving over- or under-estimation a high probability of occurrence.

Incentives

Stormwater management program incentives are typically one time disbursements that partially compensate a property owner for "partnering" with the City to achieve a stormwater management objective, such as the installation of a rain garden or rain barrel. Incentive programs are sometimes available to any property owner, and other times they are open only to single family residential and other properties that may not be eligible to participate in a credit

Exhibit B.5. Credit and Incentive Program Recommendations – Part 2, continued

Follow-Up Credits and Incentives Recommendations

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program. An attractive characteristic of these programs for stormwater utilities is that incentive programs are a line item in the annual budget, so the maximum annual expense is known.

Credits and Incentives Recommendation Number 2

If the City elects to implement a stormwater utility fee credit program, participation in the credit program should be limited to qualifying non-single family residential properties only.

11 A. Agree.

6 B. Disagree.

{Because it is difficult for single family residential properties to have a measurable impact on a city's level and cost of service for stormwater management, many cities do not allow credits for single family residential and duplex properties. Incentive programs that target homeowner control of stormwater runoff are often seen as a reasonable alternative to credit program eligibility for those ratepayers.}

Credits and Incentives Recommendation Number 3

If the City elects to implement a stormwater utility fee credit program, credits should only be available to those properties that exceed local stormwater management standards.

16 A. Agree.

1 B. Disagree.

{The primary premise behind the credit concept is that the property owner is receiving financial acknowledgement that he or she is reducing the city's cost of providing stormwater management service. Many cities plan their programs and budgets based on the assumption that complying with local standards is required, not optional, therefore credits should only be provided to those properties that provide treatment that exceeds the required level.}

Credits and Incentives Recommendation Number 4

If the City elects to implement a stormwater utility fee credit program, credits should be available for reducing the peak discharge rate and / or total volume of stormwater runoff leaving the property.

17 A. Agree.

0 B. Disagree.

Exhibit B.5. Credit and Incentive Program Recommendations – Part 2, continued

Follow-Up Credits and Incentives Recommendations

April 11, 2011

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Credits and Incentives Recommendation Number 5

If the City elects to implement a stormwater utility fee credit program, credits should be available for reducing the water quality impact of stormwater runoff leaving the property.

16 A. Agree.

1 B. Disagree.

Credits and Incentives Recommendation Number 6

If the City elects to implement a stormwater utility incentive program, incentives for single family residential properties should be made available for the following activities: (Please select as many items you are interested in having an incentive program for.)

11 A. Rain Barrels

15 B. Rain Gardens

11 C. Bioswales

5 D. Other – Please specify _____

Credits and Incentives Recommendation Number 7

If the City elects to implement a stormwater utility incentive program, incentives for non-single family residential properties should be made available for the following activities: (Please select as many items you are interested in having an incentive program for.)

6 A. Rain Barrels

15 B. Rain Gardens

16 C. Pervious Pavements

16 D. Bioswales

16 E. Bioretention

16 F. Peak Flow Reduction Best Management Practices

16 G. Total Volume Reduction Best Management Practices

3 H. Water Quality Best Management Practices

Exhibit B.5. Credit and Incentive Program Recommendations – Part 2, continued

Follow-Up Credits and Incentives Recommendations

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Incentive Practice Definitions

- A. *Rain Barrels are used to collect, store, and reuse rooftop runoff from rainfall events. The barrels are connected directly to downspouts for collection. The storage capacity is typically 55 gallons or more. The barrels are equipped with spigots for release of the stored water. This process is also referred to as rainwater harvesting.*
- B. *Rain Gardens are planted depressions that allow rainwater runoff from impervious urban areas like roofs, driveways, walkways, parking lots, and compacted lawn areas the opportunity to be absorbed into the ground. This reduces runoff by allowing stormwater to soak into the ground (as opposed to flowing into storm drains and surface waters which causes erosion, pollution, flooding, and diminished groundwater.*
- C. *Pervious Pavements are a range of materials and techniques for paving roads, cycle-paths, parking lots and pavements that allow the movement of water and air around the paving material. Although some porous paving materials appear nearly indistinguishable from traditional nonporous materials, their environmental effects are qualitatively different. Whether pervious concrete, porous asphalt, paving stones or bricks, all these pervious materials allow precipitation to percolate through areas that would traditionally be impervious.*
- D. *Bioswales are landscape elements designed to remove silt and pollution from surface runoff. They consist of a swaled drainage course with gently sloped sides and filled with vegetation, compost and/or riprap. The water's flow path, along with the wide and shallow ditch, is designed to maximize the time water spends in the swale, which aids the trapping of pollutants and silt. Biological factors also contribute to the breakdown of certain pollutants. A common application is around parking lots, where substantial automotive pollution is collected by the paving and then flushed by rain. The bioswale, or other type of biofilter, wraps around the parking lot and treats the runoff before releasing it to the storm sewer.*
- E. *Bioretention is the process in which contaminants and sediment are removed from stormwater runoff. Stormwater is collected into the treatment area which consists of a grass buffer strip, sand bed, ponding area, organic layer or mulch layer, planting soil, and plants. Runoff passes first over or through a sand bed, which slows the runoff's velocity and distributes it evenly along the length of the ponding area. Water is ponded to a depth of approximately 6 inches and gradually infiltrates into the bioretention area or is evapotranspired. Stored water in the bioretention area planting soil exfiltrates over a period of days into the underlying soils. Rain gardens are a bioretention technique.*

Exhibit B.5. Credit and Incentive Program Recommendations – Part 2, continued

Follow-Up Credits and Incentives Recommendations

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- F. Peak Flow Reduction Best Management Practices are the use of physical stormwater management controls, such as detention ponds, to reduce the post-development peak runoff rates. The use of low impact development techniques, such as impervious footprint reduction and the use of green infrastructure, may also reduce peak runoff rates from developed properties.*
- G. Total Volume Reduction Best Management Practices are the use of infiltration techniques to reduce post-development runoff volumes. The use of low impact development techniques, such as impervious footprint reduction and the use of green volumes from developed properties.*
- H. Water Quality Best Management Practices, as used in this context, would be for projects that target the removal of specific pollutants from stormwater runoff and that provide general stormwater pollution prevention awareness through educational activities, such as drain marking events.*

ATTACHMENT C
PUBLIC EDUCATION AND OUTREACH PLAN

City of Urbana
Stormwater Utility Feasibility Study
Public Education and Outreach Plan

Prepared by AMEC

July 27, 2011

City of Urbana

Stormwater Utility Feasibility Study

Public Education and Outreach Plan

Overview

As is the case in many communities across the nation, the City of Urbana is having issues with the funding of its stormwater management program. The City has instances of recurring nuisance flooding and maintenance problems that result from aging and in some cases under-designed drainage systems. The stormwater problems are rarely life threatening, but they do impact the quality of life, create potential dangers, and at times cause residents and businesses irritating and costly damages and disruptions. In addition, the City has a National Pollutant Discharge Elimination System (NPDES) stormwater permit for its municipal separate storm sewer system (MS4) that requires the execution of upwards of forty tasks annually, an unfunded mandate that results in additional expenses that must be covered.

In June 2010 the City of Urbana began a stormwater utility feasibility study that included in its scope a stakeholder process. This stakeholder group, the Stormwater Advisory Committee (SWAC) was charged with learning about the city's stormwater management program and funding options and to make recommendations regarding the needs and priorities of the program itself and how a dedicated funding program for an improved stormwater management program might be configured. The advisory committee was constituted so as to represent the diverse community of the City of Urbana. Over a nine month period the SWAC focused on a number of key policy issues: the program priorities, the cost of service, the funding strategy, and the mechanics of a stormwater utility, including the most appropriate basis for billing properties and how the rate can be made as equitable as possible by including a program of incentives and credits. The recommendations of the SWAC included:

- The City should increase the frequency of inspections and maintenance
- The City should update the stormwater master plan and pursue sustainable solutions
- If a stormwater utility is adopted make it equitable and simple for ratepayers to understand
- If a utility is adopted base the fees on the impervious area on each property
- If a utility is adopted implement a single flat rate for single family residential properties, and a fee based on the measured imperviousness for all other properties
- If a utility is adopted include both an incentive and a credit program to increase the equity of the program and to promote good stewardship of local receiving waters

A public education program should be carried out to help build understanding of the community's stormwater program, its needs, the proposed enhanced program, the costs and fees associated with the increased services, and the utility fee funding approach.

Public Education and Outreach Plan

A Public Education and Outreach Plan has been developed that will assist the City of Urbana in the process of increasing awareness of the stormwater management program and its needs, particularly for adequate, sustainable, equitable funding. The following sections of the plan identify the goals and objectives of the Public Education and Outreach Plan and the recommended short and long-term strategies for accomplishing the goals and objectives.

Goals and Objectives

The goals and objectives of the Public Education and Outreach Plan are based on the experience of staff working with individual citizens and businesses, and on comments made by the SWAC members. The Public Education and Outreach Plan includes the following:

1. Build greater community-wide understanding of the scope and causes of the community's drainage problems and needs, and the impact of the program on:
 - The protection of property and the safety of citizens
 - The quality of life
 - The future economic health of the community
 - The water quality of local streams, creeks, and lakes
2. Achieve on-going input and consensus among key stakeholders and citizens about stormwater problems, the need for increased services and funding, and future needs.
3. Build understanding that all stormwater problems and issues will not be resolved immediately. Rather, emphasize that the program and annual budgets to be considered are an equitable and affordable way to better address a basic city service.
4. Transparency and simplicity; the overall goal of the design of the utility is for it to be simple in design and easily comprehended by the citizens. The Public Education and Outreach Plan should further this fundamental goal.

Approach

The approach for implementation of the Public Education and Outreach Plan includes implementation tactics which are based on the following guidelines:

1. Increase the understanding among City of Urbana residents, both commercial and homeowner, of the need for improved stormwater management planning, compliance, and operations and maintenance, and benefit of an equitable and stable funding approach for the program.
2. Build support for the stormwater management recommendations made by City staff and the SWAC.

3. Effectively inform the community of the enhanced services to be provided and the resulting impact on reducing the severity and frequency of stormwater infrastructure problems.

Recommended Implementation Tactics

The City should focus education information and outreach on neighborhoods in the community as well as key rate payers.. The implementation tactics should include some combination of the following activities:

1. Offer to make presentations regarding the proposed stormwater utility fee to local community groups and neighborhood associations.
2. Expand and continue Key Rate Payer meetings as necessary to insure that larger and otherwise significant ratepayers are familiar with the stormwater utility concept and its potential financial impact.
3. Utilize the Urbana Business Association (UBA) to provide information regarding the proposed storm water utility fee to local businesses. Offer to make a presentation regarding the proposed fee at UBA sponsored meeting.
4. Utilize City website to post information regarding the proposed stormwater utility fee for public access.
5. Utilize annual Boneyard Creek Community Day event to focus attention on stormwater needs. Activities such as stenciling drains, clearing debris from drains and ditches, and other “field” activities are included in the Boneyard Creek Community Day event.