

## Existing Stormwater Activities and Expenditures

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

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

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

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

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

3. **Operation, Maintenance, and Rehabilitation (City Crews).** Approximately \$694,000 is currently budgeted in the Stormwater Fund for this activity. The budgeted amount is for the cost of labor, material and equipment for City crews to perform OM&R for the storm sewer system. Storm

sewer related tasks completed by City crews generally include cleaning inlets, responding to street and viaduct flooding, and repairing storm sewer inlets and manhole frames/covers.

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

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

7. **Intergovernmental Maintenance Agreements**. Approximately, \$149,000 is currently budgeted annually in the Stormwater Fund for these activities. Activities included are:
  - JULIE Program. The City is required by State law to locate its utilities prior to the start of any construction activities in the City. JULIE charges the City approximately \$1.50 for each of the 10,000 locate requests the City receives from JULIE. All City utilities are located by a contractor. Annually, the JULIE and contractor locating costs are approximately \$141,000. The cost is split evenly between traffic and lighting, sanitary sewers, and storm sewers, or \$47,000 per year for each utility.
  - USGS Stream and Rain Gauges. The City has an agreement with the United States Geological Survey (USGS) to maintain two rain and two stream gauges. The USGS maintenance services cost the City approximately \$26,500 annually. The USGS maintains a rain gauge in both the Copper Slough and Boneyard watersheds, plus a stream gauge on both of the channels in these watersheds. The information collected by these gauges is used by the City to update computer models for the Copper Slough, Phinney Branch, Boneyard, and Beaver Lake watersheds. The gauge data is also used to analyze drainage problems and design drainage improvements in these watersheds.
  - Encephalitis Program. The Champaign-Urbana Public Health Department has an agreement with Champaign, Urbana, and Savoy to treat storm sewer inlets in the right-of-way with a larvicide to control mosquito populations that could carry encephalitis. Champaign's pro-rated share of the program based on population is \$24,500 per year.

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

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

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

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

The City is required to submit an annual NPDES report to IEPA. The report highlights City accomplishments in stormwater quality. Specifically, the annual report lists the stormwater quality activities the City planned to complete and it also lists the activities that were actually completed. The City's April 1, 2009 – March 31, 2010 NPDES annual report is posted on the City's website at: [www.ci.champaign.il.us/stormwater](http://www.ci.champaign.il.us/stormwater).

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

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

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

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

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

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

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

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