Storm Water Program
Update for 2nd Ward Residents

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Director of Public Works
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Issues for Information and Discussion

- NPDES Phase II permit update
- Storm water activities in Bettendorf
- Storm water projects
Received permit from the Iowa Dept. of Natural Resources in March, 2004. Part of an unfunded mandate from the EPA to each state and passed to 44 communities and 2 universities in Iowa. Permit valid for 5 years. Renewal application has been submitted to IDNR and a draft permit has been issued.

6 minimum control measures---timeline and activities for each.

Report due at the end of March for each year. The City has been audited by the IDNR and given a report showing no issues of concern.
NPDES Renewal Permit Changes

- The General Storm Water Education Brochure shall be distributed at least once every two calendar years. Original permit required distribution at least once every calendar year.

- The Post-Construction Runoff BMP manual shall be provided on the website and updated as necessary. Original permit required the manual to be provided on computer diskette and on the website and to be updated at least twice each calendar year.
Debris from ditches, storm sewers, culverts, catch basins, detention basins and retention basins shall be removed as complaints are received and any time unusually large accumulations of debris occur. Original permit required measurable BMP's of 4.33 miles/yr open ditches, 10 miles/yr storm sewers, 50/yr catch basins, 75/yr detention basins, and 5/yr retention basins.
Control Measure 1---Public Education and Outreach
Earth Week Fair
Public Works Day
Storm Water
Education
Brochure
Storm Water Education Videos

- Educational videos are produced by the Public Information Officer during the year. The videos feature the PW Director discussing various aspects of storm water management and water quality. Videos are aired at least quarterly on the City’s cable channel, “Bettendorf Now” and are available on the city’s website.
There is a sub-category “Storm Water Management” located on the City’s main website at www.bettendorf.org.

A link to “Request Partner” is available at the site for reporting storm water issues.
Control Measure 2--Public Involvement and Participation
Xstream Cleanup - Lower Crow Creek Site
Stafford Creek Xstream Cleanup Team

Help us clean up Quad City streams!

www.xstreamcleanup.org
Xstream Cleanup - Native Seed Balls at Field Sike Park
Xstream Cleanup – Invasive/Noxious Weed Removal
Establish Stakeholders Group

- The City is required to have an oversight committee, composed of representatives of businesses, homeowners, and the public at large, provide periodic review of the permit.

- The group meets semi-annually to receive a briefing from the Director of PW on all actions related to the permit and the utility.
Control Measure 3—Illicit Discharge Detection and Elimination
Control Measure 4—Construction Site Storm Water Runoff Control
Control Measure 5---Post-Construction SW Management

- Post-construction runoff control ordinance.
- Inspection program for runoff control measures.
- Watershed assessment program.
- Site plan review of post-construction runoff controls.
Post-construction Runoff Control Ordinance

- The City has had an ordinance in place for this issue since 1993.

- It addresses controls for storm water to ensure post-development runoff quantities are no more than pre-development rates.

- Storm water controls help improve water quality values.
Watershed Assessment Program

- The City hired a consultant in 2000 to look at all 14 watersheds. A report followed that outlined measures needed to reduce flooding, reduce erosion and improve water quality on each watershed.

- Regional storm water detention is being used for new developments as an option to on-site detention.
Site Plan Review of Post Construction Runoff Controls

- This requirement is in concert with the new Construction Site Erosion and Sediment Control (COSEESCO) permit process.

- No person will be allowed to disturb ground for construction activities without the approval of the City thru this permit process. No building permit will be issued without first obtaining the COSEESCO permit. Site plan reviews are part of this process.
Control Measure 6---Pollution Prevention/Good Housekeeping
Inspection of Runoff Control Devices

- Storm water detention facilities are inspected on a periodic basis to ensure the integrity of the facility. This is done at least once a year and whenever large rain events occur.

- The City is in the process of assuming responsibility for maintenance of all storm water detention facilities, regardless of location within the City boundaries. This is a very large task.
Pesticide and Fertilizer Management

- The issue is under the direct responsibility of the Parks and Recreation Dept.

- A plan for the application of both pesticides and fertilizers has been prepared and implemented. This includes the Palmer Hills Golf Course.
Training Program for Municipal Employees

- The City has created and implemented a training program for all municipal employees.

- This training is designed to increase awareness of storm water issues and practices and reduce the amount of pollutants entering the area receiving streams from City operations.
Storm Water Utility Update

- The utility was established to create revenue for the NPDES permit requirements.

- The utility generates approximately $600K per year with the money being used for both operational and capital issues.
Storm Water Calculation Example

1315 Broadlawn Avenue
Parcel Number 8429202D11
Lot area: 15,645 SF (0.36 Acres)

Calculations
15,645 sf x 30% = 4693.5 sf
4693.5/2500 = 1.8774
1.8774 = 1.88 ERU's
1.88 ERU's X $2.00 = $3.76/mo
$3.76 X 3 mo = $11.28/quarter (Billing Cycle)
$11.28 x 4 quarters = $45.12
Morning Star Academy
Storm Water Management Project
Watershed Areas
FOR:  
City of Bettendorf  
4403 Devils Glen Road  
Bettendorf, Iowa 52722

High Water Elev. = 650'

EASEMENT EXHIBIT  
Bettendorf, Iowa

Greenway Creek
Storm Water Activities

- Palmer Hills Golf Course infiltration
- Field Sike Creek improvements
- Wessel Park detention
- 31st Street detention
"Bio-retention cell"

- Overland flow
- Rock filled trench
- Engineered soil
- Berm
- Crushed rock
- Under drain pipe
Example of what can be done to restore a stream bank system and the eco-system associated with the area.
Wessel Park

- Storm water detention structures to control water moving from Oak Street to Duck Creek.

- Four cells have been constructed and planted with native plants.
31\textsuperscript{St} Street

- Underground storm water detention structure being used for the first time in Bettendorf.
Questions????