

City of Lexington

Stormwater Program update:

NPDES Phase II Storm Water Regulations

6/28/2008



Acronyms

- National Pollution Discharge Elimination System (**NPDES**)
- Storm Water Management Plan
- Storm Water Pollution Prevention Plan
- **sMS4** = small Municipal Separate Storm Sewer System
- Minimum Control Measure
- Best Management Practices
- Nebraska Deartment of Environmental Quality



Where did NPDES come from?

- National Pollutant Discharge Elimination System, established in 1987 under the Clean Water Act (1972)
- (1990) Phase I covered industrial sites, construction sites over 5 acres, and municipalities over 100,000 in population
- (2003) Phase II covered industrial sites, construction sites over 1 acre, and **ALL public entities** (municipalities and institutions) operating separate storm sewer systems AND contained within the U.S. Census Urbanized Area (over 10,000 in population)
- Nebraska Phase II communities became actively permitted January 1, 2006.
- Lexington, Beatrice, Columbus, Fremont, Grand Island, Hastings, Kearney, Norfolk, North Platte, Scottsbluff form the Nebraska Stormwater Cooperative.



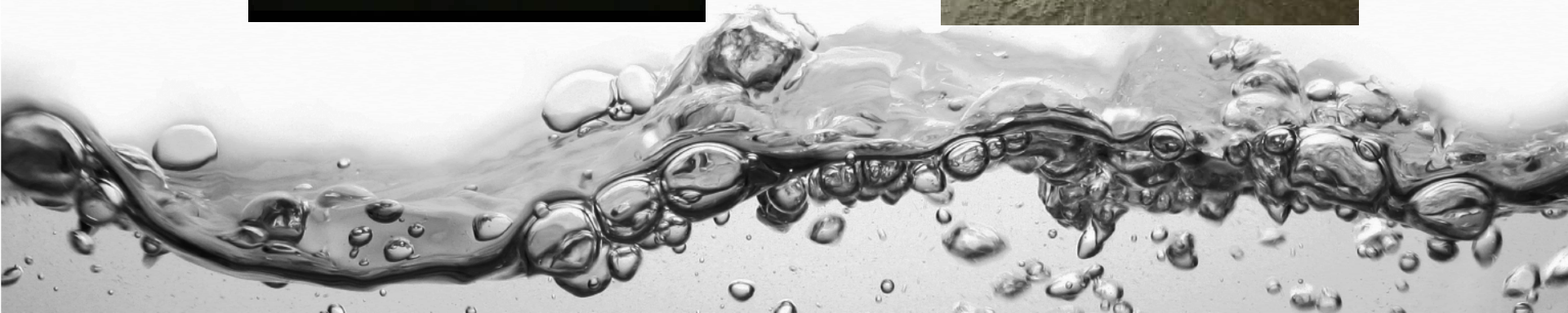
What does the Storm Water Management Plan Contain?

- 7 Minimum Control Measures
 - Public Education & Outreach
 - Public Participation/Involvement
 - Construction Site Runoff Control
 - Post-Construction Runoff Control
 - Illicit Discharge Detection and Elimination
 - Pollution Prevention/Good Housekeeping
 - Storm Water Monitoring
- A list of Best Management Practices
- Implementation Timelines
- Responsible Parties within the Cities



Where we stand

Public Education & Outreach



Where we stand

Public Education & Outreach





Where we stand Public Education & Outreach



Household Awareness Study

Is the water that goes down the Storm Sewer inlet treated before being released into our rivers?

YES 67.6% NO 32.4%

Are Household generated pollutants a significant contributor to water pollution?

YES 76.8% NO 23.2%

Have you previously received information related to Storm Water Pollutants?

YES 19.5% NO 80.5%

Does your Community have a Storm Water Management Plan?

YES 15.4% NO 1.1% Don't Know 83.5 %

How would you rank the importance of eliminating Pollutants in Storm Water Runoff?

A. Very Important 68.5% B. Somewhat Important 27.6% C. Not Important 3.9%



Where we stand
Public Participation/Involvement
Community Cleanup—Storm Drain Marking

- Boy Scouts
- Cosmos Club
- Lions Club
- Job's Daughters
- Methodist Youth
- Kiwanis
- Eagles Club
- St. Ann's Catholic Youth
- Trinity Lutheran Youth
- Community Service Participants





Where we stand

Construction Site Runoff Control

Post-Construction Runoff Controls



- Ordinance that creates a regulatory mechanism for erosion and sediment controls
- Erosion Control Permitting (by the Cities)
- Site Plan Review Process
- Site Inspection/Enforcement Procedures
- Sanctions to Ensure Compliance
- Ordinance requiring implementation on new development and re-developments
- Training (Engineers, Designers, Contractors, Inspector)



Where we stand

Illicit Discharge Detection & Elimination

- Storm water conveyance system with complete infrastructure & receiving water locations (GIS/GPS mapping)
- Ordinance to prohibit Illicit Discharge
- Program to detect and eliminate non-storm water discharge
- Train municipal employees, educate business and general public on adverse impacts



Where we stand

Illicit Discharge Detection & Elimination

- Storm Water Pollutants

- Sediment

- Trace Metals

- Nutrients

- Toxic Chemicals

- Bacteria

- Chlorides

- Oil and Grease

- Thermal Impacts



Where we stand

Pollution Prevention/Good Housekeeping

- Develop and implement an operation and maintenance program to reduce runoff pollutants from municipal operations
 - Equipment/materials storage, street sweeping, litter pickup, fleet maintenance areas, construction practice, parks maintenance, etc.
- Employee education and training programs
- Tracking and reporting of municipal efforts



Where we stand

Pollution Prevention/Good Housekeeping



Where we stand

Storm Water Monitoring

- 3 locations three times a year; spring, summer, fall
- Provides baseline data
- This will help determine what areas of the program are proving effective in reducing pollutants??



Funding

- Grant Funds for Years 1 & 2 of SWMP=
\$21,870.00 (LB 1226) + \$4,374.00 (City of Lexington Match) = \$26,244.00
 - Year One of funding must be spent June 30, 2008
 - Includes all costs to run program; promotional materials, educational materials, grab sampling equipment, computer software, labor.
 - Year Two of funding must be spent June 30, 2009
- Future costs include
 - Improvements to service building yard
 - Testing of grab samples
 - Ongoing program expenses

