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Flooded With Storm Water Information?

Answers To The Most Frequently Asked Storm Water Questions

If the recent rains haven't gotten your attention, the new storm water regulations certainly will. Storm water management is becoming a high priority for municipalities. This is being driven by localized flooding, new development and new EPA regulations. Although complex, storm water management programs can flow smoothly and be very beneficial. The following information is intended to simplify the new regulations and identify what communities should do to implement a successful program.

New Storm Water Regulations

On December 8, 1999, the United States Environmental Protection Agency (EPA) published the final rule for the regulation of Storm Water Phase II, under the Clean Water Act.

Affected government entities are required to obtain National Pollution Discharge Elimination System (NPDES) Phase II permits by March 9, 2002, and fully implement their storm water management programs within five years of obtaining a permit.

Preliminarily, the EPA has identified over 5,000 government entities across the country who are affected. This includes approximately 170 in Wisconsin and 55 in Iowa. A preliminary list of local government entities can be found on the EPA's web site http://www.epa.gov/owm/sw/phase2/final.htm.

Storm Water Discharge Permit Requirements

A regulated municipality is required to develop, implement and enforce a storm water management program designed to reduce the discharge of pollutants to the maximum extent practicable, protect water quality and satisfy requirements of the Clean Water Act. A municipality's storm water management program must include:

- Public education & outreach
- Public involvement & participation
- Illicit discharge detection & elimination
- Construction site erosion control
- Post construction storm water management
- Pollution prevention/good house keeping for municipal operations.

All Municipalities Benefit From Storm Water Management

Many communities not affected by storm water regulations are opting to implement storm water management programs voluntarily. They are doing so to address local flooding and/or water quality problems, effectively manage new development as required by Smart Growth, and to develop new funding sources for storm water projects.

In addition, it will most likely be just a matter of time before smaller and more rural communities will be required to comply. Beginning to address storm water issues now will aleviate your current storm water problems, plus make it easier to comply in the future.

Storm Water Survey Results

A recent survey, conducted by Vierbicher Associates, showed that over 50% of communities are proposing to implement storm water management activities in the next two years. Specific activities (in order of frequency proposed) include:

1. Storm Water Management Plans
2. Storm Water Ordinance
3. Storm Water Utilities
4. Erosion Control Ordinance
5. Detention Basins
6. Adopt Impact Fees
7. Water Quality Monitoring
8. State & Federal Grants
9. Public Education Program

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Required Work Elements

To obtain a NPDES Phase II permit, regulated municipalities must complete the following work elements:

1. **Demonstrate adequate legal authority.** Demonstrate their legal authority to control discharge to the municipal-owned seperate storm sewer system.
2. **Prepare a storm sewer system map.** The system map shall be sufficiently sized, detailed, and scaled to show the required information clearly.
3. **Review existing management programs.** Identify all existing management programs to control pollutants entering their storm sewer system.
4. **Identify existing industrial facilities.** Identify all existing industrial facilities that may discharge pollutants to their storm sewer system.
5. **Characterize storm water quality & quantity.** Identify the affects of storm water discharge to the receiving waters.
6. **Schedule a pollutant loading assessment.** Provide a schedule to assess estimated annual pollutant loading to the receiving waters.
7. **Design a monitoring program.** Provide a proposed monitoring program.
8. **Describe a storm water management program.** Prepare a proposed storm water management plan.
9. **Analyze estimated fiscal requirements, provide a fiscal analysis of the estimated capital, operation, and maintenance expenditures necessary to implement the proposed storm water management program.** This analysis shall include a description of the source of the funds.

What Should Municipalities Do?

Where do you get started? Following is a discussion of the priority activities municipalities should undertake to plan and implement a storm water management program.

Storm Sewer System Map

Mapping is considered one of the higher priority work elements because it can take a long time to complete.

Storm Water Management Plan

The second most time consuming and the next highest priority work element is preparation of a Storm Water Management Plan. This plan includes the following general elements:

- Reviews current municipal storm water and pollution control regulations.
- Evaluates the performance of existing storm water system.
- Analyzes the storm sewer system under existing and future (20 year) land use.
- Recommends Best Management Practices (BMP's) that will improve the storm sewer system or control runoff and pollution. This shall include both structural and non-structural BMP's.
- Provides cost estimates and funding sources for implementation.
- Describes an implementation Plan, including identification of responsible parties and schedule.

Policy and Ordinance Adoption

Develop and adopt storm water policies and ordinances to effectively manage storm water issues. Ordinances include "Storm Water Runoff" and "Construction Site Erosion Control".

Funding Is Available!

Numerous funding programs are available to assist with planning and implementation of storm water management programs.

Many of these programs are new! If your community will be undertaking a storm water project, you should investigate the availability of public funding. Please feel free to contact Vierbicher Associates for more information on funding programs.

Vierbicher Can Help!

Vierbicher Associates, Inc., offers substantial Storm Water Management experience. Our in-house capability includes water resource engineers, water resource planners, hydrogeologists, GIS specialists, surveyors, grant writers, and Tax Incremental Financing. This wide range of expertise allows us to develop creative solutions for complex storm water issues.

For more information on Storm Water Management contact:

Joseph M. Dorava, PE,
800-261-6468, jdor@vierbicher.com
Kurt R. Muchow,
800-261-6468, kmuc@vierbicher.com

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ASSOCIATES
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Engineering, Architecture, Environmental, Surveying, GIS, Community Development, Planning

400 Viking Drive
P.O. Box 379
Reedsburg, WI 53959
(608) 524-6468

6200 Mineral Point Road
Madison, WI 53705-4504
(608) 233-5800

1521 Metro Drive, Suite 205
P.O. Box 650
Scofield, WI 54476-0650
(715) 359-2003

P.O. Box 542
Prairie du Chien, WI 53821-0542
(608) 326-1051

www.vierbicher.com