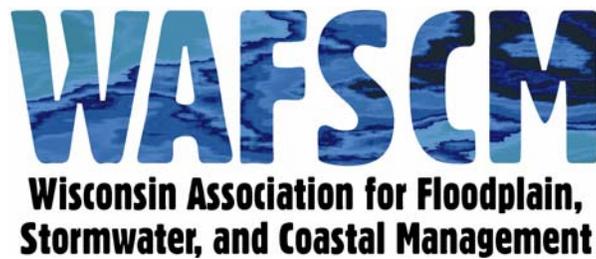


A newsletter for people concerned with water management issues



The Wisconsin Association for Floodplain, Stormwater, and Coastal Management promotes the common interest in floodplain, stormwater, and coastal management, to enhance cooperation between the various related private, local, regional, state, and federal agencies; and encourages and ensures effective, new and innovative approaches to managing the state's floodplain, stormwater, and coastal systems. The purpose of the Association is the following:

1. Promote public awareness of proper floodplain, stormwater, and coastal management;
2. Promote the professional status of individuals involved in floodplain stormwater, and coastal management and secure all benefits resulting therefrom;
3. Promote a liaison between individuals concerned with proper floodplain, stormwater, and coastal management and to encourage the exchange of ideas;
4. Keep individuals concerned with proper floodplain, stormwater, and coastal management well informed through educational and professional seminars and to provide a method for dissemination of information, both general and technical;
5. Inform concerned individuals of pending floodplain, stormwater, and coastal management legislation and other related floodplain, stormwater, and coastal management matters; and
6. Study and support legislation pertinent and necessary to the effective implementation of floodplain, stormwater, and coastal management matters.

The organization was formed as an association in 2000 and currently has approximately 201 members in 2005. In 2004, the Association applied and was granted Chapter status by the national organization, Association of State Floodplain Managers. In 2006 we would like to expand our membership and hope to become more active in the State through the Association's committees and workshops.

#### **WAFSCM MEMBERSHIP**

If this organization is one that you feel is worthy of support, we welcome your membership and help. Annual membership is \$20 and a membership application/renewal form has been included with this newsletter. **NOTE: If you attend one of the upcoming twilight workshops sponsored by WAFSCM, the 2006 membership will be included with the registration.**

If you have received this newsletter and are not interested in receiving future mailings, please let us know so we can remove you from our mailing list.

If you are not the correct contact person, please forward to the individual and provide us with the correct contact information. If you are interested in receiving future newsletters and other information electronically, provide your e-mail address.

Please forward the above information and your e-mail address to Gary Heinrichs, WT/2, Wisconsin Department of Natural Resources, P.O. Box 7921, Madison, WI 53707-7921 or e-mail at [Gary.Heinrichs@dnr.state.wi.us](mailto:Gary.Heinrichs@dnr.state.wi.us).

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### **WAFSCM ELECTION OF OFFICERS**

At the WAFSCM conference held in November 2004, Association officers for 2005 were elected during the business portion of the meeting. Elected Chair was Mustafa Emir, Co-Chair Frank Haseley, Secretary Dave Fowler, and Treasurer Jennifer Wright. Since the Association did not hold a conference last fall, it is now time to elect new officers. Below are individuals running for 2006 officers.

#### **CHAIR: Daniel R. Cook**

Dan has more than 27 years of watershed and municipal engineering experience to Graef, Anhalt, Schloemer & Associates, Inc. (GAS). His background ranges from public municipal engineering positions to consulting for a wide variety of clients. He is particularly well versed in stormwater management planning and design. Prior to joining GAS, Dan was a watershed engineer for the Lake County Stormwater Management Commission in Illinois. Dan is a Certified Floodplain Manager and has been active in the Illinois Association of Floodplain and Stormwater Management before moving to Wisconsin. Dan has been active in WAFSCM for several years and was the conference chair for the second annual state conference.

#### **VICE CHAIR: David C. Fowler**

David is a Senior Project Manager in the Watercourse Division of the Milwaukee Metropolitan Sewerage District. In 25 years at the District Dave has been actively involved with environmental issues impacting the Great Lakes area through his positions as an Aquatic Biologist and the Environmental Policy Coordinator. In his current position he is focusing on the flood management programs being initiated by the District. Current projects involve the Menomonee River, Lincoln Creek and the Root River. In his work Dave hopes to bring environmentally friendly engineering solutions to flood mitigation projects.

#### **TREASURER: Roxanne K. Gray**

Roxanne Gray has worked for the Wisconsin Emergency Management for 29 years where since 1994 she has been the State's Hazard Mitigation Officer. She has served in a variety of positions in the Division including the Assistant Natural Disaster Planner where she was the State's Public Assistance Officer, and an Assistant Radiological Emergency Response Planner. As the State's Hazard Mitigation Officer she is responsible for coordination of the State's hazard mitigation program and administration of the Hazard Mitigation Grant, Flood Mitigation Assistance, and the Pre-Disaster Mitigation Programs as well as development and updates to the State's Hazard Mitigation plan. She has been involved with WAFSCM since its inception.

#### **SECRETARY: Miriam Gradie Anderson**

Miriam Gradie Anderson is a Floodplain Management Specialist with the Wisconsin DNR – Madison. She has been involved in planning, zoning and floodplain management for over 20 years in various communities throughout the United States. Ms. Anderson assisted in the creation of the Missouri Floodplain and Stormwater Managers Association and was a member of the New England Floodplain and Stormwater Managers Association. She is a member of the Association of State Floodplain Managers and has held two positions on ASFPM's Executive Board including the position of Secretary.

Enclosed with this newsletter is an election ballot. We ask that you cast your vote and return the ballot no later than **April 18, 2006**. The results will be announced at the twilight workshop that will be held in Waukesha on April 18th.

WAFSCM is always looking for individuals that are interested in becoming active in the organization. Besides running for one of the officer positions, activities can include

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participating on one of the committees: Floodplain Management, Coastal Management, Stormwater Management, and Legislative Development. Other activities can include volunteering to help coordinate the annual conference, assisting with the publication of the newsletter, and serving on the nomination committee. If you are interested in becoming active in one of these areas, please contact Dave Fowler at 414-277-6368 or e-mail [dfowler@mmsd.com](mailto:dfowler@mmsd.com).

### **WAFSCM ANNUAL CONFERENCE**

WAFSCM normally has an annual conference in the November. However, as the local host for the 2005 ASFPM National Conference WAFSCM did not have an annual conference in 2005. We look forward to holding the annual conference this fall on November 9 and 10, in Stevens Point at the Holiday Inn. The theme for this year's conference will be Floodplain Management in a Post-Katrina World. Notice for abstracts will be mailed shortly. Mark your calendars.

### **TWILIGHT WORKSHOP**

WAFSCM is pleased to announce our first Twilight Workshop, to be held **April 18<sup>th</sup>** from 4:30 to 8:00 p.m. at the Country Springs Hotel in Pewaukee.

This inaugural workshop will focus on urban stormwater in Wisconsin and how local officials, state agencies and commercial interests are working collaboratively to manage the increased stormwater runoff rates in rapidly urbanizing areas, while still protecting and respecting other competing issues such as wetlands, floodplains, endangered species, open-space preservation, public trust concerns and environmental corridors.

Speakers will include a stormwater representative from the Department of Natural Resources's Southeast Regional office, several Milwaukee Metropolitan Sewerage District staff,

the state floodplain manager from DNR's Madison office, and several private-sector consultants who will provide interesting project-specific information on stormwater projects they are working on.

This workshop will immediately follow a DNR-sponsored workshop at the same location on Erosion Control. If you are planning to attend that workshop, please consider staying a bit longer and meeting some of your fellow WAFSCM members.

For more information, contact Gary Heinrichs at 608-266-3093, or Miriam Anderson, at 608-266-5228 (WDNR).

A second twilight workshop will be held on July 20<sup>th</sup> at the Northern Great Lakes Visitor Center in Ashland in partnership with UW Sea Grant Institute, UW Extension-Ashland, and the Wisconsin Coastal Management Program. The session will be a combination of demonstrations and presentations including a panel discussion on planning and zoning, research and innovative initiatives and tools related to coastal hazards. The session will begin at 5 p.m. and end at 8 p.m. Refreshments will be served. Additional information and details will be sent later this spring.

### ***Dates to Remember:***

- **April 18, Stormwater Twilight Workshop, Pewaukee**
- **July 20, Coastal Hazards Twilight Workshop, Ashland**
- **November 9-10, Annual WAFSCM Conference, Stevens Point**

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## **PREMIERE FLOODPLAIN MANAGERS CONFERENCE**

The Association of State Floodplain Managers (ASFPM) conducted their annual conference June 12-17, 2005, at the Frank Lloyd Wright-designed Monona Terrace Convention Center in Madison. Madison was the site of the ASFPM's very first national conference back in 1982 where 150 persons participated. This time nearly 950 participants from around the nation and world attended. As a State Chapter of the association, WAFSCM played host to the national conference where the theme was "No Adverse Impact: Partnering for Sustainable Floodplain Management". As a fairly new organization, having the national organization's headquartered in Madison greatly assisted WAFSCM in hosting the conference. The week overflowed with expert technical presentations, small-group discussions, training sessions, technical field trips, and exhibits. One of the responsibilities as serving as host, WAFSCM coordinated the technical field trips.



Darlington Technical Field Trip

This included examining stormwater projects and rain gardens in the City of Madison; management measures in the Menomonee River watershed; and the flood mitigation efforts in historic downtown Darlington.

To provide an opportunity for WAFSCM members to attend the conference, WAFSCM received a grant from the Wisconsin Department of Natural Resources to provide scholarships for members to attend the conference. Over \$3,000 was provided in scholarships to 45 members who volunteered at the conference, and provided funding for 10 full conference registrations and 35 partial registrations.

Local corporate sponsors supported WAFSCM and the national conference through sponsoring two events, the Sunday golf tournament and Welcome Fest as well as donating items to the Silent Auction Fundraiser. Funds raised through the auction benefit the ASFPM Foundation that supports research and education that promotes wise floodplain and land use management.

WAFSCM wants to thank our corporate partners for their continued interest and support. Their generous support greatly enhances our capabilities to continue to protect the natural and beneficial functions of floodplains and mitigate the losses, costs and human suffering caused by flooding.

We would also like to thank the many volunteers, too many to name here, that assisted at the conference in the various activities during the week. Without their help, WAFSCM would not have been able to be the local host for this great conference.

## **COASTAL HAZARDS WORKGROUP: MANAGING HAZARDS ON WISCONSIN'S GREAT LAKES**

Wisconsin's Great Lakes shorelines are complex places. Protection of sensitive ecosystems, along with interests in development, historic preservation, and recreation, can lead to pressures on the

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coasts. These pressures are compounded by the threats posed by natural hazards.

Coastal hazards have been a concern of the Wisconsin Coastal Management Program (WCMP) since it formed in 1978. To address coastal hazards, the WCMP and partner agencies formed the Coastal Hazards Work Group.

Representatives from the WCMP, the Wisconsin Department of Natural Resources, Wisconsin Emergency Management, the University of Wisconsin Sea Grant Institute and State Cartographer's Office currently participate in the Coastal Hazards Work Group. The Work Group allows for information sharing between organizations. It provides a forum for discussion of coastal hazards. Additionally, the Work Group provides technical assistance to other partners and individuals.

The Coastal Hazards Work Group developed a work plan for 2002-2006. Three general goals guide the work plan: (1) Expand the technical tools and methodologies for information handling in coastal areas beyond pilot counties, (2) Develop an educational and outreach component, and (3) Develop a statewide policy and regulatory framework to deal with coastal erosion. Over the past few years, the Work Group has implemented elements of the work plan to meet the three goals. Updated recession rates, oblique photos, and GIS and web-based tools for coastal erosion on Lake Michigan, as well as stability characterization and updates on recession rates on Lake Superior, addressed the technical tools goal. Workshops, web-based education and data, and a DVD production made up the educational and outreach efforts. Guidelines to incorporate coastal hazards into Smart Growth, and model ordinances dealt with policy and regulatory aspects of coastal hazards.

The Coastal Hazards Work Group will soon begin to develop a work plan for 2007-2011. The goals that the Work Group defines will direct the WCMP's efforts to address flooding and erosion on Wisconsin's shoreline. Through cooperation between agencies, and by building on the partnerships that have been developed through shared projects, the Coastal Hazards Work Group will continue to provide technical expertise and guidance for addressing Wisconsin's coastal hazards.

*Kate Angel is the Hazard Coordinator for the Wisconsin Coastal Management Program. She can be reached at (608) 267-7988 or Kathleen.Angel@doa.state.wi.us.*

### **RAIN GARDENS: AN EXCITING NEW IDEA FOR YOUR HOME OR BUSINESS**

Rain gardens are a way we all can help protect one of our most important resources, water.

You know, as the children's song goes... "Rain, rain go away." But the question is "Where does it go?"

Well here it does go away, soaking into this beautiful garden to become part of our groundwater. Groundwater is important because it replenishes our streams, rivers, lakes and wetlands, and most of us get our drinking water from wells that tap into groundwater.

For instance, groundwater bubbling up from a spring, with great volume is the headwaters of Token Creek, which is the most significant source of clean water to Dane County's Lake Mendota. Groundwater is also critical to rare communities such as wet prairies and fens.

However, in most of our urban environments, rain falls on roofs, roads, and parking lots – areas where it can't soak in. Gradually these impervious surfaces cause problems — as our urban areas increase, so do the problems.

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With a parking lot, water moves quickly off paved areas into storm drains ... with it carrying a smorgasbord of leaves, grass, soil, oils, fertilizer - all of which end up in our lakes and streams. Urban runoff — along with runoff from rural sources — causes major problems for our water resources.

The health of our waterways depends on clean water and places for animals to hide and find food. When too much soil or fertilizer gets into our rivers and lakes, it firsts covers the bottom with a blanket of sediment smothering the insects and fish eggs, destroying the home or habitat of many animals. Next the rich source of nutrients causes tremendous growth of nuisance weeds. Finally as the weeds die, bacteria, feeding on the dead matter, use up the oxygen in the water, which can lead to fish kills.

Besides the pollution, an even bigger problem for our rivers and lakes is the tremendous volume of water that rushes off of our roofs, roads, driveways and parking lots. Streams that once caused no problems now flood more and more often. Not only is that a problem for folks in the city — in agricultural areas near cities, farm fields that in the past only flooded occasionally and only in early spring, are now flooding every year and with every heavy rain.

Streams impacted by runoff change dramatically in depth and force. These are called 'flashy'. Amazing amounts of water rush down the channel with incredible destructive power. Our response in the past was to 'control' these streams. The result is ugly and dangerous, kids have drowned in the fast water — and its no picnic to be a river critter trying to live here with too much water one minute and not enough the next.

The impact of poor water quality is felt not only by the animals that live in the streams and lakes, but also by our economy. Water-based tourism brings in \$12-\$15 billion every year to Wisconsin's economy. But when our

waterways become choked with algae, it impacts boating, fishing, swimming...all those things that our tourist economy depends on.

### ***And what about you and me?***

Poor water quality affects our quality of life, our sense of who we are and where we live, our community gathering places and our enjoyment of the local resource.

Here's one reason why we have this problem: When people build houses they design them to get rid of water as quickly as possible. Builders and developers use the principal of collecting water, concentrating the flow, and conveying it quickly off the property. While this protects the home, it ends up sending the problem downstream.

We've tried to address this by building detention ponds to collect the water and send it downstream more slowly. But these engineered practices are expensive, frequently look ugly and can become full of algae if not properly maintained.

Here's one solution that you can do — it's elegant in its simplicity. A slightly depressed garden full of native plants where rainwater can soak into the ground, replenishing groundwater and protecting our surface water.

They are rain gardens!

\* And they do help protect and restore natural hydrology,

\* allowing rainwater to soak in instead of running off.

\* They also help trap pollutants that might be in the runoff.

Rain gardens aren't only for city folks. A rain garden can go between two sheds on a farm — they can be used anywhere the amount of water running across the ground is a problem. There are also other benefits to rain gardens — the native plants attract birds and butterflies. They are attractive additions to property, enhancing the beauty of the neighborhood, not only in summer but in winter too. The winter

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seed heads can be an appreciated food source for our winter songbirds.

They're a great project for kids – teaching important lessons. Here they are installing a rain garden at Edgewood College in Madison.

And also in Madison, Centro Hispano teens are involved in a service project installing a rain garden at a local church. (*Centro Hispano is a Hispanic support center, the students are involved in an after school program.*)

### **So what exactly is a rain garden?**

It's a sunken garden,

Typically 4-6 inches deep with a flat bottom.

While any size does some good, they normally are about 1/3 of the size of what is draining to it – usually a roof, yard or driveway.

It can be wild or formal looking depending on the plants selected and the desires of the home owner.



### **Use native plants**

- The roots of native wildflowers and prairie grasses typically go twice as deep into the ground as they are tall, while turf grass roots are the same depth as the grass is kept. Therefore natives absorb much more water. Uses no fertilizer
  - Uses little or no pesticides
  - Maintenance similar to perennial gardens

- After establishment does not need watering
- Native plants are also beautiful individually, and as a community.

*More help, including a how-to build a rain garden manual, is available at your UWEX or DNR office or on the web at*

<http://dnr.wi.gov/org/water/wm/nps/rg/index.htm>

## **SEPTIC SYSTEMS-WHAT TO DO AFTER THE FLOOD**

The Environmental Protection Agency (EPA) has developed a brief two page brochure on what to do when a septic system is affected by flooding. The brochure can be downloaded from the EPA website

[www.epa.gov/ogwdw000/faq/emerg\\_septic.html](http://www.epa.gov/ogwdw000/faq/emerg_septic.html).

The brochure focuses on the water quality issues related to flooded septic systems. For floodplain managers in Wisconsin, other factors must be taken into consideration when responding to questions regarding flooded septic systems.

Consideration must be given to the kind of septic system being applied for and where the proposed system is to be located. Also, a floodplain development permit is required if any soil is disturbed.

- **Floodways.** New septic systems or additions to existing septic systems are prohibited in floodways under Section NR 116.12(1)(e) and Sec. NR 116.15(2)(b), Wisconsin Administrative Code. Any permit requests for new or additions to existing systems in the floodway must be denied. Replacement or repair of failing septic systems are allowed if it has been required by a government agency to correct a public health hazard and must meet the requirements of COMM 83, Wis. Admin. Code.

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- **Floodfringe.** New, addition to and replacement of septic systems are permitted in the floodfringe. Such systems must be floodproofed to the flood protection elevation and meet the requirements of any local ordinance as well as the requirements found in Chapter Commerce 83, Wis. Admin. Code.
- **General Floodplain.** A determination of the appropriate flood zone must be conducted in order to ensure the appropriate regulations are applied.

If questions arise during the permitting process, contact should be made with the DNR Regional staff person.

### **HAZARD MITIGATION PLANNING**

The State of Wisconsin Hazard Mitigation Plan has been approved by the Federal Emergency Management Agency, and meets the planning criteria for a "standard" and "enhanced" plan per 44 CFR Section 106. Approval of the plan ensures that Wisconsin will retain its eligibility for disaster assistance programs through the Stafford Act. By having an plan that meets the "enhanced" planning criteria, the state will be eligible to receive up to 20% (instead of 7.5%) of the estimated federal assistance in the next federal disaster declaration for the Hazard Mitigation Grant Program to implement mitigation projects identified in the State and local all hazard mitigation plans. The plan is available on the Division's website at <http://emergencymanagement.wi.gov>.

Under the federal guidelines, local governments and tribal organizations are also required to have an all hazard mitigation plan that has been approved by the Federal Emergency Management Agency in order to be eligible for mitigation funding. Over the past four years, more than \$2.5 million has been provided through the Pre-Disaster Mitigation (PDM) Program to assist local governments and tribal organizations in development of the

mitigation plans. Along with the PDM funds another \$592,973 in Hazard Mitigation Grant Program (HMGP) funds was provided. Wisconsin currently has 27 all hazard mitigation plans approved by FEMA (19 countywide plans, 7 single jurisdictions, and one 1 tribal organization.) Another 41 plans are under development. This includes 32 countywide plans, 4 single jurisdictional plans, and 5 tribal plans. Funds to support mitigation planning will continue to be made available.

*For more information regarding the State's hazard mitigation program, contact Roxanne Gray, State Hazard Mitigation Officer, at 608-242-3211 or e-mail [Roxanne.gray@dma.state.wi.us](mailto:Roxanne.gray@dma.state.wi.us).*