WAFSCM
Wisconsin Association for Floodplain, Stormwater, and Coastal Management

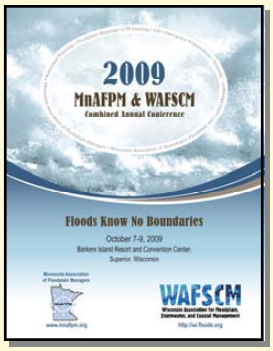
August, 2009

*A newsletter for people concerned with water management issues.*

# Index



*Red River flood in mid-May. In the picture window, a resident in Moorhead, Minnesota, walks through the same flood in late March.*




*For the first time, we are partnering with the Minnesota ASFPM chapter for a joint conference in Superior, Wisconsin October 7-9, 2009.*

## Message from the Editor

The WAFSCM newsletter is published twice a year to update members on chapter activities and to provide information on publications, seminars, etc. that may be beneficial to our water community. If you have articles, announcements, or other information that you would like us to include in future newsletters, please forward it to me at cindi.debruine@rasmithnational.com.

We want to thank Rhonda Janos of R.A. Smith National for donating the preparation of the newsletter.

Cindi DeBruine
Newsletter Editor

## Message from the Chair

In early August, I had the pleasure of spending ten days touring East Coast universities with my son, who will be graduating from high school in 2010. In addition to the college tours, we visited the National Aquarium in Baltimore, the National Mall in Washington D.C., and Gettysburg National Military Park. The trip was a terrific bonding experience with my son, except for the extensive amount of time he spent texting friends back home. I found it odd that my son was often communicating so much better with individuals located hundreds of miles away, as compared to the guy standing next to him; and wondered if face-to-face verbal communication will soon join cursive writing as a rare personal skill. Perhaps a future exhibit in a Smithsonian Museum will address extinct forms of communication between a father and son, and there will be a statue of me yelling at my son to put his @$#&% phone away. That being said, the trip was still 95% positive. The highlight of my trip however, was when I was carded by an apparently sight impaired beer vendor at a Baltimore Orioles baseball game.

Upon my return, I was reminded by Cindi DeBruine (Newsletter Editor) that I needed to produce this "Message from the Chair," which will be my last, given that I am about to complete my second and final year as WAFSCM Chair (next position: Immediate Past-Chair). For your information, the WAFSCM Board consists of the following officer positions: Chair, Vice Chair, Treasurer, Secretary and Immediate Past Chair, which are currently held by me, Minal Hahm, Karen Sands, Charlene Johnson, and Dan Cook respectively. Each of these officers, with the exception of Immediate Past Chair, is elected to a one year term at our annual conference, with the added requirement that a person cannot hold the same officer position for more than two consecutive years. Given this rule, Minal is the only officer eligible to remain in her current position. Therefore, the upcoming annual conference will be a good time to express your interest in taking a leadership role within WAFSCM. You may also want to consider a role on one of our many committees (please check out our web-site at http://wi.floods.org/). Bottom line: we are always looking for fresh new faces and eager participation.

I want to thank our current officers, committee chairs, and other participants who have contributed so much to this organization over the past two years, which has certainly made my WAFSCM assignment a relatively easy one. I especially want to thank Dave Fowler (Annual Conference Committee Chair) and Cindi DeBruine (Newsletter Editor), who always seem to do more than their share of the work. I hope to see you all at our upcoming annual conference, which will be held jointly with the Minnesota Association of Floodplain Managers (MnAFPM) in Superior Wisconsin, October 7-9, 2009. It will be a wonderful opportunity to practice your face-to-face verbal communication skills (you were probably wondering how I was going to tie in that first paragraph). Oh, and please turn off your @$#&% phone during the sessions.

Respectfully Submitted (one last time)

Thomas R. Sear, PE, CFM
Chairperson

## Mitigation Through Buyouts

### By Roxanne Gray, Wisconsin Emergency Management

Many communities are still recovering from last year's devastating floods. The 2008 floods was the worst disaster since 1993 and included 31 counties. Estimated damages to homes, businesses, agriculture and public infrastructure exceeded $763 million. Nearly 41,000 households applied for FEMA Individual Assistance for home repair, rental assistance, and other needs assistance with $56.3 million disbursed. Nearly 2,000 Small Business Administration low-interest disaster loans were approved for $48 million. 858 state and local governments and eligible private, non-profit organizations were eligible for the Public Assistance Program to reimburse for eligible disaster-related expenses. The Program is estimated at $87 million as communities continue to rebuild.

As part of the federal disaster declaration the State received $30.8 million through FEMA's Hazard Mitigation Grant Program (HMGP) to fund projects that mitigate future disaster losses. Based on the priorities identified in the State of Wisconsin Hazard Mitigation Plan, acquisition and demolition of substantially damaged structures with priority given to primary residential structures was the highest priority for funding under the program. (Substantially damaged structures are those structures in the floodplain that have damages 50% or greater of the equalized value.) Wisconsin Emergency management reached out to communities where substantially damaged properties were identified. Based on state and local floodplain regulations, floodplain structures that are substantially damaged have to be brought into compliance with local floodplain zoning regulations. For the floodway, the only options are demolition or relocation of the structure. For those structures in the flood fringe options are elevation to 2 feet above the 100 year base flood elevation, demolition, or relocation. Initial estimates were that there was potential for 340 substantially damaged structures in the impacted counties. Early in the process 24 communities indicated that they were interested in acquisition and demolition totaling more than $50 million.

Wisconsin Emergency Management is working with 19 communities in the acquisition and demolition of 201 flood damaged properties totaling $29.8 million. To date 17 applications have been submitted to FEMA for approval. To date, grants have been approved for the Town of Spring Green, City of Reedsburg, City of Janesville, Town of Excelsior, and the Village of LaFarge totaling $10.8 million. WEM continues to administer the HMGP program and coordinate with communities who are responsible for implementing the buyout programs once funding is approved.

In order for communities to be eligible for HMGP funding they must have a FEMA approved all hazard mitigation plan, and the plan must be updated and reapproved every five years. Many of the counties within the declared area were looking at updating their initial plans. Therefore, planning grants were awarded to 6 counties for either creating an initial all hazard mitigation plan or updating an existing plan to meet the five-year update requirement.
In addition to applications for acquisition and demolition and mitigation planning, the state received another 117 pre-applications for HMGP funding totaling over $40 million for mitigation projects other than acquisition/demolition. Unfortunately, these projects cannot be funded through the HMGP due to lack of funds. However, WEM shared the pre-applications with other federal and state agencies on the Wisconsin Hazard Mitigation Team for possible funding. As a result, some of the proposed projects are being funded through other funding sources.

Wisconsin Emergency Management administers the FEMA Hazard Mitigation Assistance Program that includes the Hazard Mitigation Grant Program, Pre-Disaster Mitigation Program, Flood Mitigation Assistance Program, Repetitive Flood Claims Program and the Severe Repetitive Loss Program. To find out more about Wisconsin's Hazard Mitigation Program, visit http://emergencymanagement.wi.gov

Roxanne Gray
Wisconsin Emergency Management
roxanne.gray@dma.state.wi.us

## Seventh Annual WAFSCM Conference

### Joint Conference of Minnesota and Wisconsin ASFPM Chapters

**October 7th, 8th and 9th, 2009**
**Barkers Island Inn Resort and Conference Center, Superior, Wisconsin**

I am very excited about the annual conference of the Wisconsin Association of State Floodplain, Stormwater and Coastal Managers. For the first time, we are partnering with the Minnesota ASFPM chapter for a joint conference. It can be hoped that not only will we have the opportunity for professional growth but we might get a chance to enjoy the north woods of Superior, Wisconsin in their brilliant fall splendor. As I have stated in the past this is YOUR invitation to join a broad range of professionals to address the many problems and issues associated with reducing flood damages, preserving valuable floodplain resources, managing stormwater, and making communities more sustainable.

The conference will provide an outstanding program on water resource management right here in the state of Wisconsin. Local, state and federal government officials, engineers, consultants, planners, involved citizens, non-profit organizations and educators from both Wisconsin and Minnesota will gather to consider lessons learned from past flood events.

The WAFSCM organization is fast becoming the leading voice for sound floodplain, stormwater and coastal management in the state. If these are areas of interest to you please come to the conference.

Full Conference Registration includes 2010 membership to WAFSCM, attendance at all plenary and concurrent sessions, training workshops, entry to exhibits, lunch and hors d' oeuvres reception on Wednesday, breakfast and lunch on Thursday, and all refreshment breaks. The Field Tour is not included in the Full Conference Registration due to additional food and transportation costs ($25 per person). Participants are responsible for their own lodging and travel. Register at www.mngts.org

The single rate for lodging at the Barker Island Inn Resort is only $89 per night for Wednesday and Thursday nights! Make your reservation right now by calling 800-344-7515 and saying you're with the flood manager's conference. www.barkersislandinn.com

The conference will also give you an opportunity to become a Certified Floodplain Manager (CFM). An 8-hour exam review session is offered on Wednesday and the CFM exam will be offered on Friday morning. Registration and payment for the exam are through ASFPM at www.floods.org under "Certification". The exam application process should be started at least three weeks prior to the exam date.

For the Certified Floodplain Manager (CFM®) program, ASFPM requires submittal of proof of 16 Continuing Education Credits (CECs) within the previous 24 months, with a maximum of 12 CECs earned in any one year. CECs available during the conference include 6.5 CECs for CFM Review; 6.5 CECs for No Adverse Impact Training Session; 4 CECs for Field Tour; and 7 CECs for conference attendance on Thursday.

This conference is also a great way to earn Professional Development Hour (PDH) credits for your professional registration. A PDH form will be available at the conference to assist with your record-keeping needs. However, consult your professional association for its specific rules and requirements.

If you have questions call Conference Co-Chair David Fowler at (414) 277-6368 or E-mail at DFowler@mmsd.com. The conference brochure is available on the following pages of this newsletter. To register visit www.mngts.org.

WAFSCM

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# Floodplain Management

## More Than Flood Loss Reduction

*The substantial Midwest floods in 2008 were a reminder that our approach to floodplain management does not adequately consider their ecological functions—to replenish and renew vital biological processes that provide tremendous benefits to society. This article draws from a longer paper published in 2008 by the Association of State Floodplain Managers as Natural and Beneficial Floodplain Functions: Floodplain Management—More than Flood Loss Reduction.*

For more than a century, the techniques we have used in the United States to manage our diverse floodprone areas have centered on protecting human development—existing or potential—from flood damage and on optimizing commercial benefits. The typical strategy has been to alter or confine a stream, river, lake, or coastline to a pre-defined size or capacity or shape that would maximize the extent of developable or agricultural land and also keep the flood water away from people and their property. Likewise, low-lying areas have been viewed as places to be dried out and filled, in order to facilitate urbanization. An ancillary, more recent approach has been to ensure that residences and other structures built in floodprone places are elevated above some minimal flood level, so they are considered "safe," and also to make insurance policies available to cover potential damage. In coastal areas, we typically have placed development, especially houses, as close to the water as possible and then, if necessary, used structural measures to prevent the beach from migrating away.

Under this framework, floodprone areas have served only human-centered roles as water conveyance networks or as aesthetic or recreational conveniences, with no consideration given to their ecological function; the potential damage that human use might cause to other property owners within a watershed; or the cultural, economic, or environmental effects of that strategy.

After many decades of this, we are still experiencing continually rising flood losses. At the same time, environmental degradation of water-related resources has increased, and anticipated changes in climate may bring significant alteration of coastal areas, flood regimes, and already-fragile ecosystems.

As we move into the new century, we face hard choices about the management of our riverine and coastal floodplains. In the next 20 years the U.S. population is predicted to increase by 80-90 million people, a huge increase over the current 300 million. The added population will increase pressure to continue to allow development adjacent to the nation's water resources.

Paradoxically, that population will still expect the nation's flood risk to be minimized and will demand access to additional open spaces and natural areas. Relatively unfettered economic development, with only a token allowance made for floodplain functions and resources, cannot continue as the status quo.

### Flooding as a Natural Process

Understood in their proper role, floodplains provide society with tremendous benefits. Periodic flows of water that overtop the banks of a river and that encroach upon coastal areas are the lifeblood of our riparian corridors, marshes, beaches, and other natural areas. This flooding is a natural process that forms and maintains floodplains and coastal zones, their landforms, their vegetative characteristics, and their role in broader ecosystems. The main processes and attributes of floodprone areas can be categorized as (1) hydrologic and hydraulic processes, (2) geomorphic processes, and (3)

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biologic processes. All of these have interrelated functions that, when operating in their natural state, provide such tangible benefits as increased soil fertility, wetland creation, rejuvenation of spawning gravel, creation of barrier islands, promotion of aquatic habitat, transportation of large woody material that provides fish habitat and bank stability, promotion of plant establishment, and the evolution of channels and shoreline features such as dunes.

### Hydrologic and Hydraulic Processes

Both river and coastal ecosystems are shaped and nurtured by the characteristics of the water. The seasonal and storm-generated variations in water flow, including periodic flooding, are part of the normal function of the floodplain zone. These variations mold streambanks, keep erosion and accretion in equilibrium, replenish soils, recharge groundwater, and filter impurities. In coastal areas, water differences are based on tides, currents, wave action, and storm surges—all of which form shorelines, coastal wetlands, dunes, barrier islands, and estuaries. High flows in both areas are critical to maintaining vegetation because they transport sediment and nutrients from the river, ocean, or lake to the connecting floodplain.

### Geomorphic Processes

The dimensions and configuration of a stream channel or coastline are determined by ongoing geomorphic processes. For example, the natural transport of sand and sediment dictates the migration of channels, shorelines, dunes, and barriers. This process, in turn, is influenced by the geological composition of the landforms; the caliber, rate, and volume of sediment movement; and the presence or absence of vegetation. Although the geomorphology of waterways and shorelines is constantly changing, in their unaltered state they exist in dynamic equilibrium, which cannot be disturbed without consequences.

### Biologic Processes

Floodplain and coastal vegetation helps to stabilize the shoreline and river banks, provide habitat for terrestrial and aquatic wildlife, control erosion and sedimentation, and improve water quality by filtering pollutants. Healthy riparian corridors often provide the highest concentrations of plant and animal communities in a watershed, providing a stable source of biodiversity. The variable flows of water in riparian and coastal areas have resulted in uniquely adapted species of aquatic and terrestrial organisms—they depend on the variation in water conditions for spawning, seed dispersal, elimination of competing vegetation, and nursery areas for their young.

### Interruption of Natural Processes

Human activity disrupts the tightly interconnected functions of natural riparian and coastal areas described above and thus undermines the overall health of the ecosystem. This is especially true of urbanization and also of our attempts control water.

A stark example of the long-term effect of such interruption can be found in the tragedy that Hurricane Katrina brought to New Orleans. The complex interaction between the coastal wetlands and the Mississippi River had not been understood in earlier decades. Long-term projects to increase flood protection and navigation efficiency along the Mississippi River employed an extensive levee system. These levees cut off the supply of sediment to the coastal wetlands, which then began to shrink. The shrinkage was exacerbated by extensive dredging of the wetlands for a range of development and navigation purposes. Without their energy-absorbing capacity, the impact of storm surges and hurricanes to New Orleans and the Gulf Coast increased. Damage from Katrina was much more severe because these natural buffers had been lost.

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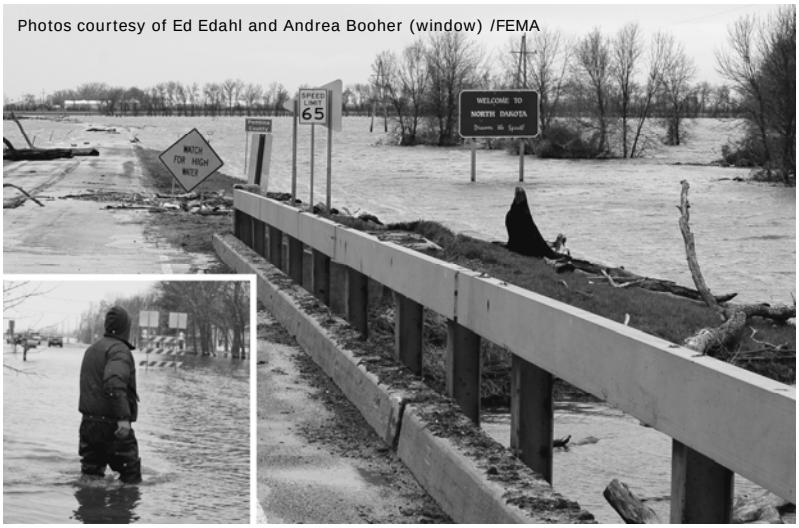
Less obviously, in our attempts to transport runoff and flood waters efficiently through our watersheds, we have used structural interventions (concrete lining, revetments, floodwalls, jetties, diversions, and dams and reservoirs) that interrupt or modify natural hydrologic, hydraulic, geomorphic, and biologic processes. The ground surface and natural vegetation are disturbed during construction. The structures change the natural movement of water by altering its speed, restricting movement across the floodplain, or changing sediment loads. Floodwalls and levees increase flow discharge and elevation when they constrict high flows into a narrow path. Land use policies that allow encroachment into the floodplain can cause dramatic channel migration downstream. Changing the frequency of floodplain inundation can encourage invasive species to supplant the native vegetation.

Activities in pursuit of development, urbanization, and flood protection have yielded specific—usually localized—economic and social benefits, but the long-term impacts have placed both humans and nature at higher risk. Further, they have proved counterproductive, resulting in a system of "reactive" engineering through which the symptoms of the problem are treated at great expense while the underlying causes are not addressed. Decades of this approach have destroyed a large proportion of our wetlands, deprived our river deltas of sediments needed to maintain marshes, prevented nutrient-rich flood water from reaching adjacent lands to replenish the soils, interrupted the protective functions of coastal barriers, and contributed to declines in water quality. Flood losses continue to rise, and we are witnessing the gradual destabilization of watersheds and coastal areas and loss of natural function—death by a thousand tiny impacts.

Photos courtesy of Ed Edahl and Andrea Booher (window) /FEMA




*Thirty-five days after the Red River flooded, in mid-May, the view at the Minnesota-North Dakota border shows how much of the area's floodplain remains under water. In the picture window, a resident in Moorhead, Minnesota, walks through the same flood in late March.*

### A Call for Renewed Direction

Pressures to make use of floodplains and coastal areas for human development will continue to mount, and the techniques we are using today are allowing that development to interrupt the natural functions of those areas and result in environmental degradation. To counteract this, we must alter two long-standing attitudes.

The first is the widespread view of floods as destructive forces of nature. Floods do not cause damage or suffering. Our decisions about where to live, work, and play are the cause. Instead of controlling the water, we should control how and where we allow human activities to adversely affect it and the land areas to which it is naturally linked.

Second, it must become inacceptable to obtain short-term reductions in flood risk and/or short-term economic gains by shifting the costs of those benefits onto the environment and onto future generations. Instead, we need to work toward ensuring the long-term environmental and economic sustainability of our floodplain ecosystems.

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**National Policy Needed**

Today the nation's floodprone lands and its waters are subject to an impressive array of laws, policies, programs, and activities at all levels of government and within the private sector. These include federal environmental protection laws such as the Clean Water Act, the Endangered Species Act, and the National Environmental Policy Act (along with some state-level counterparts); federal laws that have other, varying purposes such as the Water Resources Development Act, the National Flood Insurance Program, and the Disaster Relief and Emergency Assistance Act (along with some state-level counterparts); state programs for dam safety, highway and bridge construction, and parks; and local laws and programs for comprehensive planning, stormwater management, and building code enforcement—all of these to name just a few.

None of these, however, has the comprehensive goal of protecting floodprone areas in recognition of their natural values and functions—indeed, many operate at cross-purposes. Further, there is no over-arching vision or statement of the nation's policy, nor is there any mechanism by while all the laws, guidelines, policies, programs, and projects can be coordinated so that a sustainable future can be achieved. Congress should enact a national policy that establishes unequivocally the inherent value of the natural functions and resources of floodplains and coastal zones and their role in minimizing flood losses. This policy should set clear priorities for protecting the natural functions of our waterways, coastlines, and adjacent land areas and also for restoring those that have already been degraded, with the goal being long-term sustainability of those systems, in order to benefit society.

In line with this new vision, many existing procedures will need to be adjusted. A few examples are listed below.

- Existing regulatory programs that give higher priority to damage reduction than to floodplain protection should be revamped. Such regulations assume that floodplain and coastal development is going to occur and then proceed to guide the design and construction of it—the opposite of the preferred approach.
- New guidance should foster a reduced need for—and expectation of—federal flood control measures in communities in or near floodplains and coastal zones.
- The plans and designs of any future levees should take into account the impacts the levee would have on the hydraulic, biologic, and geomorphic processes of the watershed.
- Environmental mitigation should be required as a condition of receiving federal financial assistance after a flood, instead of reconstruction to pre-flood conditions without considering mitigation or environmental restoration.
- The rules for reviewing proposed flood-related projects must be revised to account for the environmental benefits of a project, just as environmental compliance is included as a cost. Projects whose aim is to restore the natural and beneficial functions of floodplains, for example, must be allowed to compete fairly with other proposed projects.

**Voluntary Retreat from Floodprone Areas**

Wherever it can be done—at the individual, neighborhood, community, state, or national level—we need to begin to gradually relocate existing residences and businesses away from the high-hazard and ecologically sensitive areas along our coasts and rivers. State and local governments can guide future development completely away from these areas by applying land use planning and management techniques. This is the most effective way to minimize cumulative flood-related losses and to halt the degradation of our water-related resources.

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**Restoration of Floodplain and Coastal Resources**
Rehabilitating the riparian and coastal resources and the natural buffers that we have lost needs to become a national priority. We should work toward widespread understanding of the short-term and long-term environmental impacts of human-made flood and coastal protection measures and how those impacts can be mitigated.

**Recognition of Natural Functions and Resources**
To effectively incorporate the protection of floodplain and coastal functions in our management strategies, we need to adopt a multidisciplinary approach that integrates land use planning, hydrology, hydraulics, geomorphology, biology, botany, stream ecology, and other fields. Specific multi-objective criteria are needed that balance social, economic, and environmental issues with an eye on long-term social and environmental sustainability is promoted. There is a need to quantify the actual short-term and long-term economic and other benefits of naturally functioning coastal areas and riverine floodplains, so that they can be properly accounted for in cost-benefit analyses and other decision-making tools.

**References**

ASFPM Foundation, 2008. *Floodplain Management 2050: A Report of the Second Assembly of the Gilbert F. White National Flood Policy Forum.* Madison, WI: ASFPM Foundation.

Association of State Floodplain Managers, 2007. *National Flood Programs and Policies in Review 2007*. Madison, WI: ASFPM
Association of State Floodplain Managers, 2003. *No Adverse Impact: A Toolkit for Common Sense Floodplain Management*. Madison, WI: ASFPM.

Federal Interagency Floodplain Management Task Force, 1994. *A Unified National Program for Floodplain Management*. Washington, D.C.: Federal Emergency Management Agency.

Task Force on the Natural and Beneficial Functions of the Floodplain, 2002. *The Natural &Beneficial Functions of Floodplains: Reducing Flood Losses by Protecting and Restoring the Floodplain Environment*. A Report for Congress. FEMA 409. Washington, D.C.: Federal Emergency Management Agency.

**Resources**
The natural functions and resources of floodplains are described in detail in numerous documents, notably *A Unified National Program for Floodplain Management* (Federal Interagency Floodplain Management Task Force, 1994) and *The Natural & Beneficial Functions of Floodplains* (Task Force on the Natural and Beneficial Functions of the Floodplain, 2002).

*Natural and Beneficial Floodplain Functions: Floodplain Management—More Than Flood Loss Reduction* contains numerous recommendations for revisions to national policy that would operate to protect and restore the nation's floodprone lands. Access it and other ASFPM White Papers on the ASFPM website at www.floods.org/NewUrgent/Other.asp.

FEMA announced at the Association of State Floodplain Managers Annual Conference in Orlando, Florida, that it will study the effects of global warming on inland floodplains and coastland, as well as the risks that sea level rise presents to the National Flood Insurance Program. FEMA expects to release the results in March 2010.

Watershed Planning • Floodplain Mapping • CTP Funding • GIS • Emergency Preparedness • Training • Minnesota Association of Floodplain Managers • Wisconsin Association of Stormwater, Floodplain and Coastal Managers

# 2009

# MnAFPM & WAFSCM

## Combined Annual Conference

## Floods Know No Boundaries

October 7-9, 2009

Barkers Island Resort and Convention Center,
Superior, Wisconsin

Minnesota Association of Floodplain Managers

www.mnafpm.org

WAFSCM

Wisconsin Association for Floodplain, Stormwater, and Coastal Management

http://wi.floods.org

# Field Tour

## Stormwater Controls in Two Different Types of Urban Streams

The field tour on Wednesday afternoon will highlight a variety of flood control and stormwater management practices that are used around the Cities of Superior and Duluth. Each community has topographic features that are unique and require different solutions. Superior features a flatter topography and streams with large floodplains. Duluth differs as it has high velocity streams with small floodplains, but with streambank erosion and flooding problems caused by debris jams. Another tour highlight will be a short drive along Lake Superior to enjoy the scenery with stops at local points-of-interest. Box lunches will be provided to all tour participants.

# General Information

Full Conference Registration includes 2010 membership to MnAFPM or WAFSCM, attendance at all plenary and concurrent sessions, training workshops, entry to exhibits, Wednesday's lunch, an hors d'oeuvres reception, Thursday's breakfast and lunch, and all refreshment breaks. The Field Tour is not included in the Full Conference Registration due to additional food and transportation costs ($25/person). Participants are responsible for their own lodging and travel.

Training workshop registration only on Wednesday includes lunch and an hors d'oeuvres reception.

For the Certified Floodplain Manager (CFM®) Program, ASFPM requires submittal of proof of 16 Continuing Education Credits (CECs) within the previous 24 months, with a maximum of 12 CECs earned in any one year. CECs available during the conference include 6.5 CECs for CFM Review; 6.5 CECs for NAI Training Session; 4 CECs for Field Tour; and 7 CECs for conference attendance on Thursday.

This conference is also a great way to earn Professional Development Hour (PDH) credits for your professional registration. A PDH form will be available at the conference to assist with your record keeping needs. However, consult your professional association for its specific rules and requirements.

**Cancellation policy:** Written notice must be provided to GTS via fax or e-mail. GTS will confirm the cancellation by e-mail. Avoid the cancellation service charge by sending a substitute from your organization. Otherwise, cancellations received after 10/1/09 will be assessed a $20 service charge. No refunds will be made after 10/7/09.




# Accommodations

The conference will be held at the Barkers Island Inn Resort and Conference Center. The conference has secured a room rate of $89/per night (single or double occupancy). Reservation rates are guaranteed until September 6, 2009.

When calling to make your reservation, indicate that you are a MnAFPM/WAFSCM Conference attendee. Additional rooms are available at the Holiday Inn Express: 715-395-3444.

**Barkers Island Inn Resort and Conference Center**
300 Marina Drive, Superior, WI 54880
Phone: 715-392-7152, Fax: 715-392-1180
Email: info@barkersisland.com
Web: www.barkersislandinn.com

***Reservations for the group rate cannot be made on their website.***

BARKERS ISLAND INN
Resort & Conference Center
Pool - Lounge - Restaurant

# Directions

**Driving Directions from Minnesota:**

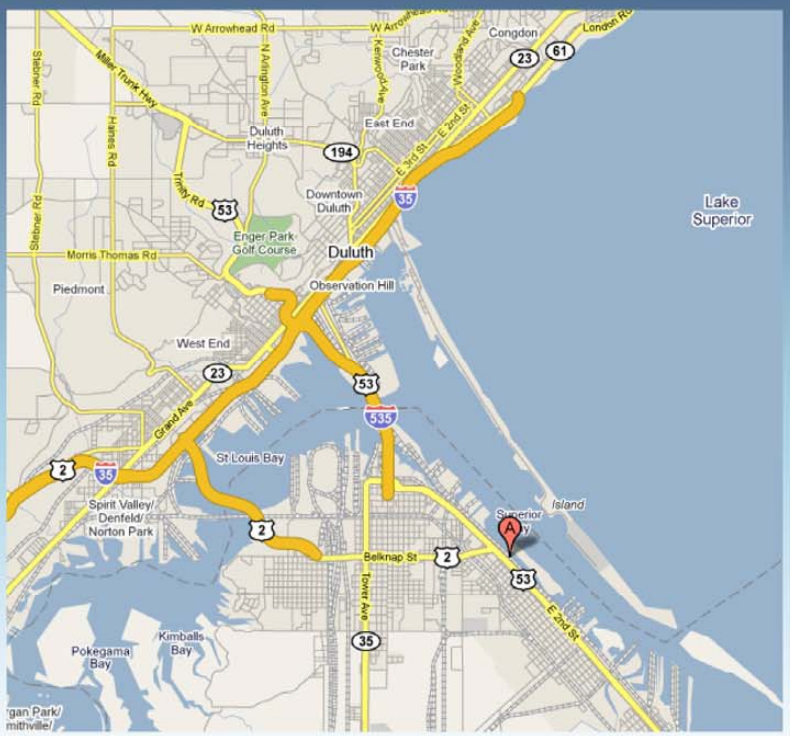
From the North: Hwy 61 South to I-35 South; exit on 53/535 East (Cross Bridge). Stay on 53/2nd Street. Turn left on Marina Drive.

From the South: I-35W North to Hwy 2 (Cross Bridge); Turn right on 53/2nd Street. Turn left on Marina Drive.

**Driving Directions from Wisconsin:**

From the South: I-94 West to Hwy 53, Hwy 53 to Hwy 2/53; take Hwy 2/53 into Superior and turn right on Marina Drive.

From the East: Hwy 2 to Superior, take Hwy 2/53 into Superior and turn right on Marina Drive.



# Preliminary Program

## Wednesday, October 7: Training/Events

**7:00 - 8:00 am** **Registration**

**7:00 - 4:30 pm** **Exhibitor Setup**

**8:00 - 4:30 pm** **Review Session for Certified Floodplain Manager Exam** **Instructor: Jen Marcy, PBS&J**

The Association of State Floodplain Managers (ASFPM) offers a national certification exam for those with extensive floodplain management knowledge. This exam, offered at this conference from 9:00 - Noon on Friday, October 9, covers the history and regulations of the National Flood Insurance Program (NFIP), natural and beneficial value of floodplains, mitigation, flood map interpretation, Elevation Certificates, and floodplain ordinance administration.

**To apply to take the exam you must: 1) Fill out the eight-page exam application found on the ASFPM website at www.floods.org under "Certification," and 2) Pay to ASFPM the exam registration fee. It is strongly recommended you start the exam application process at least three weeks in advance of the exam date. It is also recommended that those taking the exam attend this one-day review course. Go to www.floods.org for more information and to download the application and FEMA's 10-unit (500-page) manual "Managing Floodplain Development through the NFIP" for advance review.**

**8:00 - 4:30 pm** **ASFPM No Adverse Impact Floodplain Management Training Session** **Instructor: Dave Carlton, PBS&J**

This 8-hour offering is an overview of the ASFPM "No Adverse Impact Floodplain Management." In essence, No Adverse Impact (NAI) Floodplain Management takes place when the actions of one property owner are not allowed to adversely affect the rights of other property owners. The adverse effects or impacts can be measured in terms of increased flood peaks, increased flood stages, higher flood velocities, increased erosion and sedimentation, or other impacts the community considers important. The NAI philosophy can shape the default management criteria: a community develops and adopts a comprehensive plan to manage development that identifies acceptable levels of impact, specifies appropriate measures to mitigate those adverse impacts, and establishes a plan for implementation. NAI criteria can be extended to entire watersheds as a means to promote the use of regional retention/detention or other stormwater techniques to mitigate damage from increased runoff from urban areas. The NAI course is designed to help educate seasoned floodplain managers, local officials and others on ways to incorporate an "NAI" approach to managing watersheds and flood risk. NAI is a methodology.

**11:30 - 1:00 pm** **Registration**

**11:45 - 1:00 pm** **Lunch (provided)**

**12:00 - 4:30 pm** **Field Tour: Stormwater Controls in Two Different Types of Urban Streams** **Led by: Nancy Dent, Barr Engineering**

The field tour will highlight a variety of flood control and stormwater management practices used around the Cities of Superior and Duluth. Each community has topographic features that are unique and require different solutions. Superior features a flatter topography and streams with large floodplains. Duluth differs as it has high velocity streams with small floodplains, but with streambank erosion and flooding problems caused by debris jams. Another tour highlight will be a short drive along Lake Superior to enjoy the scenery with stops at local points-of-interest. Box lunches will be provided to all tour participants. Cost for Field Tour: $25

**4:30 - 6:00 pm** **Registration**

**4:30 - 6:30 pm** **Exhibitor Reception: Exhibit opening with hot hors d'oeuvres and cash bar**

## Thursday, October 8: Conference Sessions/Events

**7:00 - 8:00 am** **Breakfast Buffet**

**7:00 - 8:00 am** **Registration**

**7:30 - 8:00 am** **MnAFPM and WAFSCM Business Meetings** — **Aaron Buesing, MnAFPM Chair**, **Tom Sear, WAFSCM Chair**

**8:00 - 4:45 pm** **Exhibits Open**

**8:00 - 8:15 am** **Opening Remarks** — **Aaron Buesing, MnAFPM Chair**, **Tom Sear WAFSCM Chair**, **Dave Ross, Mayor, City of Superior**

**8:15 - 9:45 am** **Plenary Session A - "Dam and Levee Safety"** — **Moderator: David Fowler, Conference Co-Chair**
Speakers: Bill Sturtevant, WDNR; Terry Zien, COE

**9:45 - 10:15 am** **Break at Exhibit Area**

**10:15 - 11:45am** **Concurrent Session A**

Session A1 Ontario Room
Session A2 Michigan Room

**11:45 - 1:15 pm** **Luncheon Session - "ASFPM Update"** — **Guest Speaker: Greg Main, ASFPM Chairperson**, **Introduced by: David Fowler, Conference Co-Chair**
Greg will provide an update on the National Organization, including the new web site, projects and other exciting news on activities of the board, executive staff, and members.

**1:15 - 2:45 pm** **Concurrent Session B**

Session B1 Ontario Room
Session B2 Michigan Room

**2:45 - 3:00 pm** **Break at Exhibit Area**

**3:00 - 4:30 pm** **Plenary Session B "State and Federal Agency Update"** — **Moderator: Jeremy Walgrave, SEH**
Speakers: Pat Glithero (Region V,FEMA), Gary Heinrichs (Wisconsin Department of Natural Resources), Ceil Strauss (Minnesota Department of Natural Resources)

**4:30 - 4:45 pm** **Closing Remarks and Prize Drawing** — **Jeremy Walgrave, Conference Co-Chair**

**4:45 - 5:45 pm** **Display Breakdown by Exhibitors**

## Friday, October 9: CFM Exam

**9:00 – 12 noon** **Certified Floodplain Manager Exam*** — **Proctor: Dave Fowler**

***You must have pre-registered with ASFPM in order to take this exam. To register for the exam you must: 1) fill out the eight-page exam application found on the ASFPM website at www.floods.org under "Certification," and 2) pay to ASFPM the exam registration fee. It is strongly recommended you start the exam application process at least three weeks in advance of the exam date.**

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# Conference Registration Form

**REGISTRATION OPTIONS:**
**Register Online at:** www.mngts.org
**Complete this form and mail to:**
Government Training Services (GTS)
2233 University Ave W., #150, St. Paul, MN 55114
**Complete this form and fax to:** (651) 223-5307

**REGISTRATION DEADLINE:** **October 1, 2009**
After October 1, registrations can only be handled on-site
**Program Questions?** Contact Dave Fowler,
(414) 277-6368 or dfowler@mmsd.com
**Registration Questions?** Contact GTS,
(651) 222-7409 ext. 200 or cdubbe@mngts.org

| | | |
|---|---|---|
| First Name (as it should appear on badge): | | |
| Last Name: | | |
| Title: | | |
| Organization/School: | | |
| Office Address: | | |
| City: | State: | Zip: |
| Phone: | Fax: | |
| Email (required): | | |

☐ Please do not include me on the list of attendees that is shared at the conference.

☐ I prefer the vegetarian option for Wednesday lunch.

☐ I prefer the vegetarian option for Thursday lunch.

| FULL CONFERENCE REGISTRATION | By Oct 1 | On-Site | Amount |
|---|---|---|---|
| ☐ MnAFPM or ☐ WAFSCM Member | $90 | $110 | |
| ☐ Non-Member | $100 | $120 | |
| ☐ Student (ID# _____) | $10 | $20 | |
| ☐ FOOD ONLY (for guests) | $50 | $50 | |

| WEDNESDAY TRAINING OPPORTUNITIES | With Full Conf. Registration | Training Only Members | Training Only Non-Member | Amount |
|---|---|---|---|---|
| ☐ Review for CFM Exam (full day) | $0 | $40 | $60 | |
| ☐ NAI Workshop (full day) | $0 | $40 | $60 | |

**FIELD TOUR**

| | |
|---|---|
| ☐ I plan on attending the Field Tour: Stormwater Controls in Two Different Types of Streams (Wed. 12:00-4:30 PM).....$25 | |
| **TOTAL AMOUNT DUE** | |

**FRIDAY**

☐ I am planning to take the CFM Exam (Please see the CFM Exam details on page 3 for more information on how to register for the exam.)

**PAYMENT OPTIONS (CHOOSE ONE)**

☐ Enclosed is check # _____ in the amount of $ _____ payable to GTS.

☐ Bill Me, Purchase order #, if applicable ($20 billing fee will be added to outstanding invoices after Oct. 7)_____

☐ Credit card (MasterCard, VISA, Am Ex, Discover) Card # _____

Exp Date _____ Security Code (3 or 4 digit number on back) _____

Email (required for credit card receipt) _____

Name on Credit Card _____

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**Wisconsin Association for Floodplain, Stormwater, and Coastal Management**

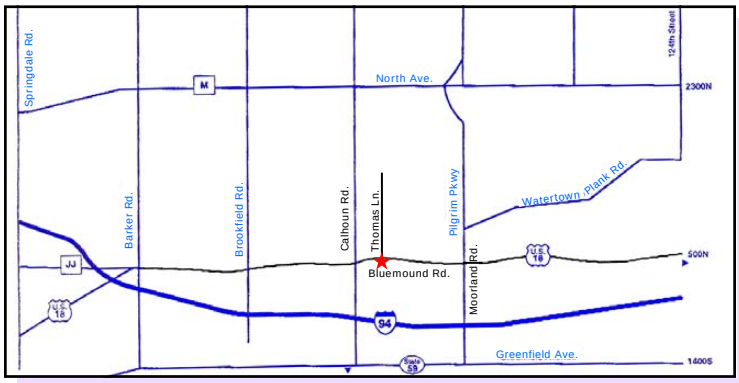
# *Latest Developments in Stormwater Treatment—Educational Seminar*

## Educational Seminar

Learn about the current state of the practice in stormwater treatment including recent research findings, modeling developments, devices offered by several manufacturers, and a local approach to stormwater quality improvement.

**When:** September 10, 2009, 12:00 noon to 4:30 p.m. (Lunch and registration at 12 noon)

**Where:** R.A. Smith National, Inc.
16745 W. Bluemound Road
Brookfield, WI 53005




**Registration:** $10 (includes lunch)

**Certification:** 3.5 PDH, 3 CEC

**Contact:** Gary Raasch, PE, CFM
(262) 317-3369 (direct)

## Agenda

| Time | Preliminary Presentation Topic | Speaker |
|---|---|---|
| 12:00 noon | *Registration and Lunch* | - |
| 12:45 p.m. | Latest research on treatment practices | Roger Bannerman - WDNR |
| 1:30 p.m. | WinSLAMM analysis of treatment practices | Caroline Burger - PV & Associates |
| 2:15 p.m. | Milwaukee Rain Gardens | Emad Nadi - City of Milwaukee |
| *2:45 p.m.* | *Break* | - |
| 3:00 p.m. | Up-Flo Filter / Stormbloc | Phillip Taylor - Hydro International |
| 3:30 p.m. | StormFilter / MFS / BioFilter | Jim Lenhart - CONTECH |
| 4:00 p.m. | BayFilter / Water Quality Units | Dan Figola - ADS |
| 4:30 p.m. | Recap *and Close* | - |

**Space is Limited—Register by Friday September 4, 2009 Cost $10 (Includes Lunch)**

**WAFSCM Educational Seminar:** *Latest Developments in Stormwater Treatment*

Mail this registration form along with $10 payment to:

**R.A. Smith National**
Attn: Gary Raasch
16745 W. Bluemound Road
Brookfield WI 53005
or
Fax to Gary Raasch at 262-781-8466 and bring $10 payment the day of the seminar. If you register but do not attend you will be billed. No refunds after registration deadline.

Name: _____

Company Name: _____

Phone: _____

Email: _____

Payment Enclosed ☐ Will pay day of seminar ☐

For questions and to register contact Gary Raasch at 262-317-3369 or gary.raasch@rasmithnational.com

## CHAPTER AWARD NOMINATIONS

There is still time to nominate someone deserving for a Chapter Award, with nominations accepted through **September 25, 2009.**

The **Chapter Service Award** is intended to recognize individuals who, through significant accomplishments and/or long-term efforts, have clearly influenced the work of the Association to improve floodplain, stormwater, or coastal management in Wisconsin.

The **Local Award for Excellence** is intended to recognize an individual, organization, program, governmental unit, or the like, which has contributed outstanding or essential work toward implementing sound floodplain, stormwater, or coastal management.

A **Lifetime Achievement Award** will be entertained for distinguished and extensive service, normally over the course of a career, toward advancing the cause and/or ideals of best practical floodplain, stormwater, or coastal management. This prestigious award may be given annually as warranted.

**Excellence in Project Design or Implementation** will be considered for an award for the first time in 2009. This category is a means to provide recognition focusing on particularly meritorious project efforts more so than individuals. Thereby, teams, firms, agency divisions, etc., may find a recognition niche.

Please summarize and forward the credentials of deserving candidates now! The Association is again striving to make award nominations a fairly easy and straightforward process. Basic information on the nominee(s) with respect to merit, and the relationship or perspective of the nominator generally are all that will be needed. Brief supporting materials are acceptable, but please refrain from extensive documentation. If appropriate, the Awards Committee may contact persons submitting nominations for additional information.

**Send materials electronically by September 25, 2009,** and please feel free to direct any questions or suggestions, to:

Gary Korb, WAFSCM Awards Chair
UW-Extension/SEWRPC
Phone: 262-547-6721
gkorb@sewrpc.org

Thank you in advance for consideration on behalf of deserving individuals, groups, and efforts.

*Gary Korb*