

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

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*NASECA field seminar information and registration form, see pages 26-28*

## 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](mailto:cindi.debruine@rasmithnational.com).

Thank you to all the newsletter contributors and to Rhonda Janos for the newsletter preparation.

*Cindi DeBruine*  
Newsletter Editor

# Water Matters

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

## Message from the Chair

**August 2013**

Probably the biggest news within FEMA and the NFIP is the implementation to true flood risk insurance rates through the Biggert-Waters Flood Insurance Reform Act of 2012 (BW-12). The flood insurance rates started being adjusted in 2013 for non-primary residences, housing that pre-dates the original FIRM mapping, businesses and any new mortgages. These rate increases will be spread over 4 years to get to true actuarial rates. The WDNR had a great BW-12 synopsis in their latest Floodplain and Shoreland Management Notes found at <http://dnr.wi.gov/topic/floodplains/communities.html>. FEMA information is included in this newsletter and on their website <http://www.fema.gov/flood-insurance-reform-act-2012>.

Many good things are happening within WAFSCM and your board has been hard at work. We are currently planning our 2013 Annual Conference which will be October 30<sup>th</sup> through November 1<sup>st</sup> in Neenah, WI. Please note that we will be offering two full ride scholarships to the fall conference and more details can be found in this newsletter.

WAFSCM has a floodplain model available for any member to borrow to take to an educational event. Feel free to contact me as it is stored at my office at the Southeastern Wisconsin Regional Planning Commission in Waukesha, WI.

We have also been renovating our website to more easily keep it up to date and have a more modern look. Check it out and please make sure to change your internet bookmark to <http://www.wafscm.org/>.



And finally, at the annual conference we will be voting for our 2014 officers. Positions currently open include Vice Chair, Secretary, and Treasurer. Information on the duties of each office can be found in our bylaws at the bottom of our WAFSCM home page. We have quarterly board meetings and our main effort is the annual conference. Board meetings can be attended by conference call, so we welcome members from across the state to serve. Any questions can be directed to me or any of our current board members. See you in Neenah!

Laura Kletti, P.E., CFM  
WAFSCM Chair  
[lkletti@sewrpc.org](mailto:lkletti@sewrpc.org)



*Root River flooding adjacent to 5 Mile Road from April, 2013.*



## Water Matters

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

### **ASFPM 37th Annual Conference 2013**

*By David Fowler*



It was my privilege to attend the 37<sup>th</sup> annual ASFPM conference June 9 - 14, 2013 at the Connecticut Convention Center in Hartford, CT. The ASFPM National Conference remains the world's premier flood conference. I was there with about 1000 government officials, planners, engineers, consultants, watershed managers, flood protection product vendors, educators, and others for the most comprehensive floodplain management conference in the world. There were representatives from all 50 states, Washington D.C., and Puerto Rico, as well as 11 international representatives from 5 foreign nations. It was a great opportunity to exchange ideas, make contacts, form partnerships, and prepare for a more sustainable future for flood damage reduction.

The conference was hosted by the Rhode Island Floodplain Mitigation Association and the state of Connecticut. Overall it was a great experience. The conference theme "Remembering the Past, Insuring the Future" was derived from New England's rich history and its vibrant future. The play on words with "insuring" is a tribute to Hartford's status as "the birthplace of insurance." Connecticut is New England's second smallest and southernmost state. The scenic Connecticut River cuts through the center of Hartford and ran right outside the conference center. True to the organization's mission, the river did reach flood stage twice during the conference and caused a reroute of the first annual 3.5 K "Running of the Chapters, Flood Run" Wednesday morning. With the rising river it really was a flood run with the running route crossing over the Connecticut River Levee twice to avoid high water. Yours truly was up at the crack of dawn to run and did a respectable 29:43. Not bad for almost 60.

Throughout the week, there were more than 250 presentations by the industry's leading experts on a wide variety of topics on flood management. These experts shared state-of-the-art techniques, programs, and resources to accomplish flood mitigation, watershed management, and a host other community goals to reduce flood risk. A three-day comprehensive exposition featured the materials, equipment, accessories, and services vital to get the job done. Supplementary technical field tours and training workshops provide in-depth training. Numerous networking activities offer additional opportunities to learn from each other to better reduce flood risk.

#### **For me there were three highlights:**

First, was the one-day workshop "Using Ecosystem Services to Support Floodplain Management Decision Making" hosted by the Natural Floodplain Function Alliance and Ecosystem Services Working Group. The workshop was composed of individuals from the private, public and nonprofit sectors interested in exploring opportunities to integrate ecosystem services into strategies to prevent and mitigate flood and hurricane damages. Floodplain management has long focused on using built infrastructure to control rivers and protect people and property from floods. Yet time and again built infrastructure fails, often with catastrophic costs to communities and the economy. The workshop had an

Conference Summary continued on next page →

## Water Matters

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

### *ASFPM 37th Annual Conference 2013 (Cont.)*

open discussion of the need for a new approach to floodplain management that considers multiple objectives and strives to reduce flood risk while preserving and enhancing ecosystem services.

Second was the Tuesday plenary presentation “THE SUPERSTORM SANDY STORY” by Bill Nechamen, CFM, Chief of FPM Section, NY State Dept. of Environmental Conservation and ASFPM Vice Chair Mark Mauriello, Director of Environmental Affairs and Planning at Edgewood Properties, and former Commissioner of NJ Dept. of Environmental Protection. Both did an excellent job of summing up the disaster, current problems and the future opportunities to do mitigation that will help prevent future disasters.

Third was the Plenary Session entitled “MANAGING COASTAL AND RIVERINE FLOOD RISK” with three presenters: **Doug Plasencia**, P.E., CFM, ASFPM Foundation Events Committee Chair and Vice President, Michael Baker Jr., Inc.; **Howard Kunreuther**, James G. Dinan Professor, Wharton School and Co-Director, Wharton Risk Management and Decision Process Center; and **Gerald E. Galloway**, P.E., Ph.D., Glenn L. Martin Institute Professor of Engineering and Affiliate Professor of Public Policy, University of Maryland. The discussion focused on human adjustments in riverine and coastal flood zones that have increased risk and how governments and individuals are using adaptive management of these changing hazards, risks, and ecosystems to mitigate these risk.

And of course there was time in the evening to relax with friends and Hartford was great a city to relax in after the daily conference activities came to an end. As always I will repeat what I have said in the past. The ASFPM conference is the premier flood management conference in the world and I encourage you to attend in the future. The 2014 conference is scheduled for Seattle and I anticipate a great time in a great city. Don't miss it.

Dave Fowler, MS, CFM  
Milwaukee Metro Sewerage District  
Phone 414-277-6368; Fax 221-6801  
Email: [dfowler@mmsd.com](mailto:dfowler@mmsd.com)

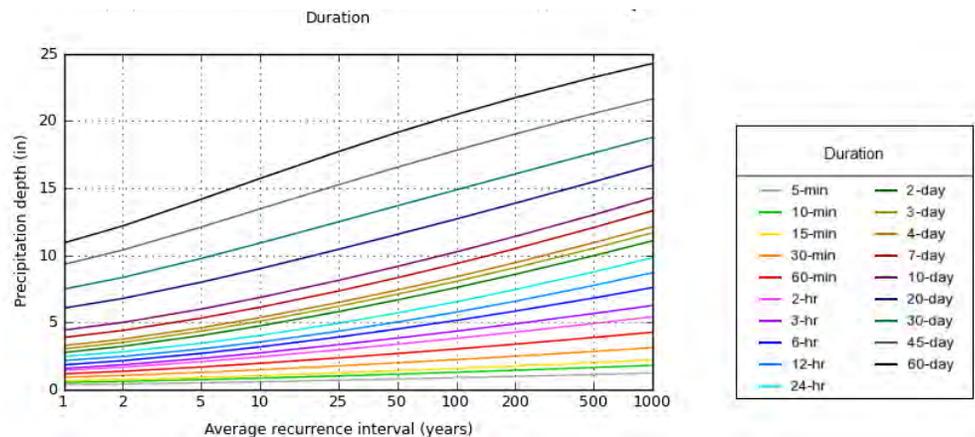


## Rainfall Recurrence Intervals enters the 21st Century

Unlike classic cars that get better with age, rainfall recurrence data just gets dustier and dustier with age. And so it was with Technical Paper 40, which was published before the audio cassette was invented. Fortunately in Wisconsin, the Illinois State Water Survey (ISWS) and SEWRPC published separate updates that used data through the 1990's. Unfortunately, it seemed like many municipalities and government agencies preferred to take an old school approach to flood risk management and stuck with TP-40 even though the amount of data the rainfall recurrence intervals were based on was dwarfed by the SEWRPC and ISWS studies.

After many years of work, the National Weather Service has finally published Atlas 14, which is an online database where rainfall recurrence intervals can be extracted for any location in Wisconsin as well as most other states in the nation. The recurrence intervals available are the 1- through 1000-year events, and the durations are 5 minutes

through 60 days. The database can be found [here](#). What's even more fascinating for statistics geeks is that Atlas 14 also publishes the 90% confidence interval for each value, which provides an indication of the uncertainty in the values. For example, in Madison, the 100-year, 24-hour rainfall depth is listed as approximately 6.6 inches with a 90% interval ranging from 5.1 to over 8.2 inches!



Despite the uncertainty which most certainly was worse in the TP-40 publication, in general, 100-year rainfall depths are higher in Atlas 14 than in TP-40. Near Superior, the TP-40 100-year, 24-hour rainfall depth was 5.5 inches. The Atlas 14 rainfall depth is now 6.85 inches! In Milwaukee, the 100-year rainfall used to be 5.5 inches, and now it is 6.0 inches.

A brief comparison of Atlas 14 to the SEWRPC study indicates that the extreme rainfall depths are similar. In Milwaukee, the SEWRPC 100-year rainfall depth was 5.9 inches, which is only 0.1 inches less than Atlas 14.

Comparisons to the ISWS report, however, are less straightforward. In the northern and westerns part of the state, 100-year rainfall depths have increased, whereas in the central and eastern part of the state, 100-year rainfall depths have stayed the same or decreased.

In summary, Atlas 14 is a long awaited update to extreme rainfall depths. The NRCS, WDNR, and SEWRPC are currently devising a plan to implement Atlas 14 in Wisconsin. Look for details to come and attend the fall conference for a plenary session on this topic.

Jon Lefers, P.E., Floodplains Committee Chair



# 11th ANNUAL WAFSCM CONFERENCE

## *“Changing Climate - Changing Attitudes”*

October 30 – November 1, 2013

Holiday Inn Neenah Riverwalk, Neenah, WI

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The Wisconsin Association for Floodplain, Stormwater, and Coastal Management (WAFSCM) is holding its **11<sup>th</sup> Annual Conference** on October 30 – November 1, 2013, at the Holiday Inn Neenah Riverwalk Hotel, Neenah, Wisconsin. We're excited about this year's fine lineup of workshops, speakers, and field tours. Professional Development Hours (PDHs) and Continuing Education Credits (CECs) can be achieved for the workshops, main conference, and tours. Details can be found in the conference information on the WAFSCM website.

This year we travel to Neenah in the Fox Valley. The first day of the conference includes three workshops and a reception. The first workshop is the Wisconsin Department of Natural Resources educating us on the intricacies of WDNR permits. We will again be offering the Certified Floodplain Manager (CFM) Refresher on Wednesday and the [CFM exam](#) on Friday morning. In addition, the U.S. Army Corps of Engineers (USACE) will hold a full day workshop on Nonstructural Flood proofing. Since the Game Night was so successful last year with cards and casual networking, we are doing it again after the reception. Thursday, our main conference day will bring plenary and concurrent sessions throughout the day. Our lunchtime speaker will be diving into the topic of ethics which will provide not only food for thought but half of the ethics PDH hours needed to maintain a Wisconsin PE. Friday will bring field tours and the [CFM Exam](#). What more could you ask for in a conference?

As always, we anticipate a large and dynamic group of professionals to share their experience in floodplain, stormwater, and coastal management issues and to address our target audience, which includes local government leaders, community administrators, planning agencies, public works departments, developers, consultants, environmental groups, and state and federal agencies.

Scholarship opportunities are available again this year – see details below.

## Schedule of Events

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### Wednesday, October 30, 2013:

#### *Workshops:*

- **Certified Floodplain Manager (CFM) Refresher** with speakers Dave Fowler (MMSD) and Jackie Monfils (Atkins). This workshop provides basic information that will be on the CFM exam. **Full day from 10AM to 4:30PM.**
- **WDNR Permits** presented by Bobbi Jo Fisher (WDNR). This workshop is geared toward municipalities, highway departments, and engineers involved in design and permitting with the WDNR. Additional details will be posted on our website soon. **Half day from 1PM to 4:30PM.**
- **USACE Nonstructural Approaches to Flood Proofing with Stakeholder Mitigation Opportunities Discussion.** Workshops provided by the USACE National Nonstructural Flood Proofing Committee (NFPC) provide an in-depth overview of nonstructural techniques such as elevation, wet flood proofing, dry flood proofing, acquisition and demolition, relocation, and nonstructural berms and floodwalls. This workshop will illustrate the general data requirements for conducting plan formulation, how to assess the information collected and how to conduct an economic analysis to develop a benefit-cost ratio. The workshop identifies the hydrologic and nonstructural plan formulation required to assist communities/states to, either individually or in conjunction with USACE or other Federal and State partners, develop potentially feasible nonstructural flood risk reduction measures which could lead to implementation and a reduction in damages due to future flood events.

After the instructional portion of the workshop, a group discussion will be facilitated to create dialogue within the state participants on how these techniques can be utilized for hazard mitigation and creating community resiliency. A post-workshop action plan will be drafted and communicated during the next state Silver Jackets/Hazard Mitigation Team meeting to further discuss and identify opportunities for implementing nonstructural flood proofing techniques and projects and reducing flood risk within the state. **Full Day – 8:00AM to 4:30PM.**

#### *Networking / Reception*

In the evening at the reception, you will have your first chance to meet and learn from the exhibitors and join us for a fun night of networking opportunities in an informal setting including light appetizers and a dinner spread served from 5:00PM to 7:00PM, cash bar

from 5:00PM to 10:00PM. Come prepared to participate in the informal game night/social event which will continue until 10:00 PM.

### **Thursday, October 31, 2013**

This is the main day of the conference. The event starts with a breakfast buffet, and continues with an early morning business meeting with the WAFSCM Board, welcome plenary session, breakout sessions, full formal lunch awards event with ethics speaker, closing plenary session, and door prize give-aways. Your registration includes a 2014 WAFSCM membership.

The detailed conference agenda with speakers, abstracts, and bios will be available in early September 2013 and will be online at that time.

### **Friday, November 1, 2013**

You can sit for the CFM exam (requires separate pre-registration with ASFPM) or we have set up a field trip to explore some stormwater/floodplain projects in the Neenah/Oshkosh area. A self-guided tour will also be available for those that want to stop at the Kaukauna Utility - Hydroelectric Power Plant which will be presented during our conference.

## **Fees**

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Fees of all events are summarized below. Early registration ends **Oct 22, 2013**.

### **Wednesday, October 30, 2013**

<b>Session</b>	<b>Time</b>	<b>Early/Late Fee</b>	<b>Comments</b>
WDNR Permit Workshop	1:00 PM – 4:30 PM	\$25 / \$35	Half Day
CFM Refresher Workshop	10:00AM – 4:30pm	\$35 / \$45	Box Lunch Provided
USACE Non Structural Flood Proofing	8:00pm – 4:30 pm	\$10 / \$15	Box Lunch Provided
Reception/Networking	5:00 pm – 7:00 pm	\$15 / \$25	

### Thursday, October 31, 2013

Conference from 7:30am – 5:00pm including breakfast buffet, plenary speakers, concurrent sessions, lunch, all breaks, and 2014 WAFSCM membership

Attendee Category	Early/Late Fee
Public Employee / Retired / Unemployed	\$50 / \$85
2013 WAFSCM Member	\$70 / \$105
Nonmember	\$90 / \$125
Student	\$20 / \$25
Lunch Only (Guests)	\$25 / \$30*

*\* Lunch availability cannot be guaranteed for late registrants.*

### Friday, November 1, 2013 [CFM Exam information online](#)

Session	Time	Early/Late Fee	Comments
CFM Exam	8:30 am – 11:30	-	MUST sign-up with ASFPM
Neenah / Oshkosh Area Stormwater Projects	8:00 am – 1:00 pm	\$20 / \$25	Fee includes bus, water, and snacks. Guests are welcome on the tour. Maximum 25 people.

## Conference Scholarships

WAFSCM is pleased to announce that they will be awarding scholarships for attendance at the 2013 Conference. The scholarships will include the registration and lodging for October 30 and 31. The scholarship recipients will be responsible for their own travel and per diem costs. **Any current member of WAFSCM or non-member local government official** is eligible to apply for a scholarship to attend the 2013 conference. This is a great opportunity to interact, exchange ideas, make contacts, form partnerships and prepare for an improved and sustainable future for flood damage reduction. Additional information provided in this newsletter and on the WAFSCM website.

## Sponsors and Exhibitors

Every great conference needs wonderful sponsors and exhibitors and we are no different. We have a range of opportunities to support the conference. Details are available in this newsletter or contact Cindi DeBruine at 262-317-3254 or [cindi.debruine@rasmithnational.com](mailto:cindi.debruine@rasmithnational.com).

## Registration

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Online credit card registration is available at

<https://www.regonline.com/builder/site/Default.aspx?EventID=1274441>

If you prefer to **pay by check**, please fill out the mail-in registration form on the WAFSCM website and mail with your check to the address on the form.

Registration questions should be directed to Cindi DeBruine at 262-317-3254 or [cindi.debruine@rasmithnational.com](mailto:cindi.debruine@rasmithnational.com).

## Lodging at the Holiday Inn Neenah Riverwalk Hotel

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A block of rooms has been reserved for WAFSCM at the Holiday Inn Neenah Riverwalk, 123 E. Wisconsin Avenue, Neenah, WI 53713. Rooms are available at a special rate of \$95 per night for single and double occupancy. In addition, 15 rooms are reserved at the State Employee Rate of \$70. The cut-off date for making reservations at the special rate (provided rooms are still available within the block) is **October 1, 2013**. To guarantee your reservation, call the Holiday Inn Neenah Riverwalk at (800) 725-6348. Be sure to mention you're with WAFSCM or give Code WAF when you call in order to receive the special rate.

- Check-in time is 3 p.m. and check-out is at noon.
- Advance deposit of one night stay is required when making individual overnight room reservation.
- All policies related to your hotel reservation should be discussed directly with the Holiday Inn Neenah Riverwalk.

Additional information for the Holiday Inn Neenah Riverwalk can be found at <http://www.hineenah.com/>.

## Contacts

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Sponsor/Exhibitor or Registration questions should be directed to Cindi DeBruine at 262-317-3254 or email [cindi.debruine@rasmithnational.com](mailto:cindi.debruine@rasmithnational.com).

Any other conference questions should be directed to Conference Chair Minal Hahm at [minal@msquaredengineering.com](mailto:minal@msquaredengineering.com).

# Water Matters

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

## **ATTENTION – We need you as a 2013 WAFSCM Conference Sponsor and/or Exhibitor!**

In the April newsletter, I thanked the Sponsors and Exhibitors from the 2012 conference and also the ones that have supported us through the past 10 years. As stated at that time, these companies are the sole reason that we can continue to provide a quality conference at a very reasonable cost.

As of the date of this newsletter, information has been sent to our past Sponsors and Exhibitors as well as many potential Sponsors and Exhibitors. The information is sent via email to one contact person at each company. If that person was not you, but you think your company should sponsor the 2013 conference or be an exhibitor, please check out the opportunities on our website or contact me for more information. It is easy to register as a Sponsor or Exhibitor at the 2013 Conference online registration.

We are looking forward to seeing many of our past Sponsors and Exhibitors at the 2013 Conference in Neenah, as well as some new faces.

<b>BENEFITS</b>	<b>GOLD Level \$750</b>	<b>SILVER Level \$500</b>	<b>BRONZE Level \$250</b>	<b>Exhibitor \$350</b>
<b>Conference Registration</b> (including Wednesday night reception and Thursday luncheon)	3	2	1	1
<b>2014 Membership</b> (1 year for each registration)	3	2	1	1
Recognition as a <b>Gold Level Sponsor</b> (Name at the top in larger font on all signs and printed materials)	X			
Recognition as a <b>Silver Level Sponsor</b> (Name in the middle in medium font on all signs and printed materials)		X		
Recognition as a <b>Bronze Level Sponsor</b> (Name on all signs and printed materials)			X	
<b>Sponsor Recognition</b> at Thursday luncheon	X	X	X	
<b>Exhibitor Recognition</b> at Wednesday evening reception				X
<b>Exhibit Booth</b> (8' x10' with skirted 6' table and 2 chairs; complimentary wireless internet and one electric outlet)				X
Acknowledgement in the <b>printed brochure</b> (if received by September 3, 2013) and in printed conference materials	X	X	X	X
Acknowledgement in the <b>WAFSCM newsletter</b>	X	X	X	X
Acknowledgement on the <b>WAFSCM website</b>	X	X	X	X
Prominent display of your organization's name as a valuable sponsor/exhibitor in the Conference Hall	X	X	X	X

**Contact Cindi DeBruine, P.E., CFM**  
[Cynthia.DeBruine@rasmithnational.com](mailto:Cynthia.DeBruine@rasmithnational.com)  
<http://www.wafscm.org/>  
<https://www.regonline.com/wafscmconference2013>



## Water Matters

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

### **WAFSCM Goes to Washington, D.C.**

*By David Fowler*

Over the years, the past ASFPM Executive Director Larry Larson and the current Executive Director Chad Berginnis have encouraged chapter leaders to go to Washington D.C. to visit with their respective state's congressional leaders. After many years of talking about this, I finally put words into action and arranged one day of congressional visits while on a previously scheduled trip for ASFPM.

It is hard to put into words the amazing experience that I had on this "D.C. trip", March 18th, 2013. Merrie Inderfurth, ASFPM Washington Liaison, and I met with the Wisconsin Senate offices (Johnson and Baldwin) and two Congressional offices (Moore and Ryan). While on paper it did not seem like much, it was quite the whirlwind one-day schedule when actually put into action. I found myself bouncing between Capitol Hill office buildings, through numerous passages, stepped through countless metal detectors and braved Washington D.C. traffic on foot. The congressional office buildings are very busy, and halls and passages are alive with activity and I would have gotten completely lost. Thankfully, Merrie knew exactly where and when to go, and made it all work smoothly.

My presentation started in each office with an introduction of the Wisconsin State Chapter (WAFSCM) with a brief history and outline of who we are as an organization. At the suggestion of Merrie, I had produced a flyer with the WAFSCM officers and mission statement to pass out to the staffers with whom we met. Once the introduction was completed we dove into national and state issues. This transition and my delivery got better with practice as I learned to make the best of our pitch time. While we had already scheduled this visit, it didn't hurt to have Hurricane Sandy fresh on everyone's mind. The

offices we visited had been working on or discussing flood related legislation prior to our arrival so we were warmly received and had many questions to answer from the staff. I believe we had the strongest impacts in the office of Senator Ron Johnson, Senator Tammy Baldwin and Congressperson Gwen Moore.

I must highlight the incredible guidance and invaluable input from Merrie and Sam Medlock, Policy and Partnership Manager. We could not have done the trip without Merrie, as she scheduled all the meetings with the Wisconsin congressional delegation. I had read her reports in the ASFPM News and Views newsletter, but never fully appreciated her knowledge of Capital Hill until this trip. I found out that there is plenty to know, even how to get from one building to the next underground. I was very impressed by her knowledge and extremely thankful that ASFPM has her as a resource in Washington D.C. I also want to thank Sam Medlock for providing valuable talking points on current legislative initiatives of interest to ASFPM and the floodplain community. Last but surely not least I would like to thank Roxanne Gray for providing a summary of Wisconsin concerns that I used to brief the Washington staff.

I want to thank WAFSCM and ASFPM for the honor of representing these organizations in Washington at these meetings. With our growing Wisconsin Chapter and ASFPM as a team, I won't hesitate to say that good things will continue to come of this trip. I especially want to thank Chad Berginnis and Larry Larson for mentioning the importance of a Washington trip and encouraging local chapters to make this trip. I am hopeful that additional WAFSCM members will be able to make a similar trip in the future to build on the foundation that we have started with this first trip.



# Water Matters

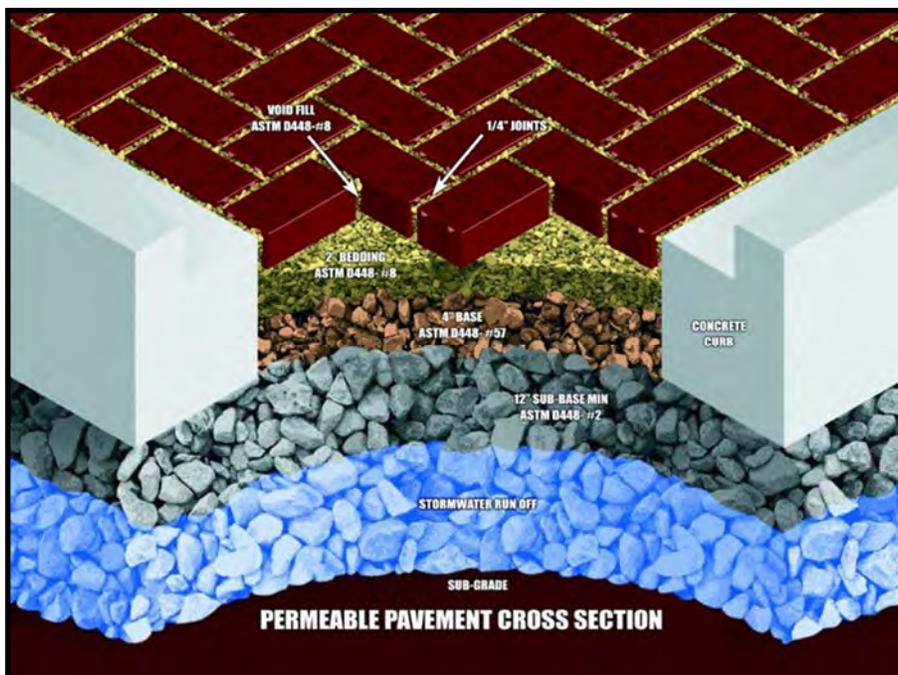
*A newsletter for people concerned with water management issues.*

## ***Pervious, Permeable, and Porous Pavers – Are they really the same?***

Far too often I find the three P's (Pervious, Permeable, and Porous) pavers talked about amongst most professionals as though they are all the same and share the same characteristics. This I assure you is not true. These three words have been used interchangeably without regard to their unique characteristics and for that reason, have somewhat confused the industry. For example, in geology is quartz rock the same as lava rock? Although they are both rocks, they are given different names based upon their characteristics. When we hear the name "Lava Rock" specified in a project, we know exactly what to look for. Why then should a permeable paver be specified as a pervious paver when in fact there is nothing pervious about a concrete paver? Please follow along as I define the three P's as they relate to the paver industry and their use for the purpose of storm water management.

The goal for a particular paver when used for storm water runoff control is to limit storm water runoff at the source, reduce downstream erosion, and improve water quality by filtering pollutants in the substrata layers. In the case of both Pervious and Porous pavers, this is partially achieved within the paver prior to the water's entrance into the layers below. With Permeable pavers, water is circumvented around the paver and the filtering process begins between the pavers in the void space filled with select aggregates. All three pavers require a similar compacted stone aggregate layering process beneath the surface for the purpose of accepting the storm water and creating a "reservoir" prior to the water percolating into the sub-grade or being piped off. This storm water conveyance process is referenced by some paver manufacturers as the "paver system".

While most rainfall events are less than 1 inch in depth, rainfall intensity must always be considered. 0.99" over 15 minutes could cause more issues than 3" over 8 hours; therefore variances for storm water runoff management are primarily for high-frequency, low-occurrence events. In a large storm event, the water table below any of these three types of pavers can rise to a higher level preventing the precipitation from being absorbed into the ground. Modifications of the paver system are generally considered when determining the infiltration capacity of the sub-grade native soil, and the depth of base rock for stormwater storage. Additionally, bioswales, rain gardens, and underdrain systems are generally considered during the design stages.



Courtesy of Pine Hall Brick Company, Inc.

# Water Matters

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

## *Pervious, Permeable, and Porous Pavers (Cont.)*

**Permeable pavers** are comprised of a layer of concrete or fired clay brick pavers separated by joints filled with crushed aggregate. Permeable pavers are different from pervious and porous pavers, as rainwater passes around the paver opposed to passing through the paver. **“Permeable”** is a term used to describe paving methods for roads, parking lots and walkways that allow the movement of water and air around the paving material. Water enters the joints between the solid impervious pavers and flows through the paver system. The aggregate in between the joints provide infiltration as long as it is not plugged. A periodic maintenance program is necessary for the three P’s to guarantee lasting stormwater conveyance past the paver layer. Permeable pavers (per square foot) offer the least amount of stormwater infiltration compared to porous and pervious pavers. Because of this you would normally need to specify more pavers for a project. Permeable pavers have an architectural appearance, and can bear both light and heavy traffic, particularly interlocking concrete pavers, excepting high-volume or high-speed roads.



Examples of Permeable Pavers / Pavement

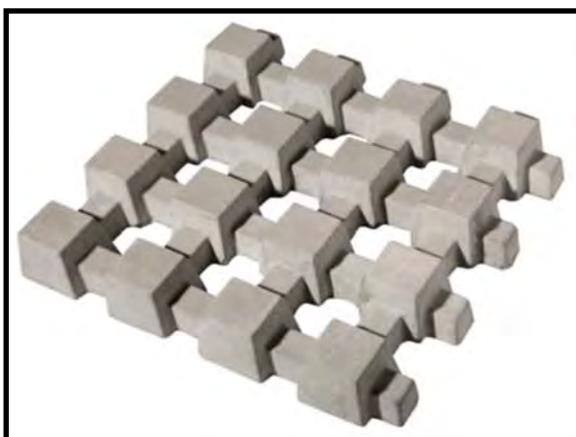
Courtesy of ReadingRock Building Materials and Services (with the exception of the asphalt pavement)

# Water Matters

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

## *Pervious, Permeable, and Porous Pavers (Cont.)*

**Porous pavers** are manufactured in a variety of designs and materials. Concrete turfblock for grass paving began in the mid-1940's and plastic versions were invented in the late 70's and early 80's. Porous pavers are generally a cellular grid system filled with dirt, sand, or gravel. This system provides grass reinforcement, ground stabilization and gravel retention. The grid structure reinforces infill and transfers vertical loads from the surface, distributing them over a wider area. Selection of the type of cellular grid depends on the surface material, traffic and loads. The surface layer may be a compacted gravel or topsoil seeded with grass and fertilizer. In addition to load support, the cellular grid reduces compaction of the soil to maintain permeability, while the roots improve water infiltration due to their root channels. Porous pavers, such as the reinforcement grids shown below, have also been utilized in agriculture. One example of this is illustrated using wood sawdust in the grid system.



Examples of Porous Pavers

Courtesy of ReadingRock Building Materials and Services, and Invisible Structures, Inc.

# Water Matters

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

## *Pervious, Permeable, and Porous Pavers (Cont.)*

**Pervious Pavers** allow storm water to percolate through the surface rather than runoff to surrounding areas or storm drains. As water runs through the pavers, it filters out gross urban pollutants. Like grass, it lets the ground below it breathe, and allows tree roots and their supporting microbes and fungus to interact. Pervious pavers are not to be confused with homogenous binders mixed with back-yard gravel or rubber compositions in a portable concrete mixer then poured on the ground. These pavers are manufactured from natural stone and bonded together within a controlled factory environment using the latest innovations in chemical non-voc polymers with UV inhibitors. These pavers feature the highest water infiltration rate, 10 times greater than pervious concrete and more than 90 times greater than permeable pavers. Typically only 12 to 18 percent of a project's total surface area in pervious pavers is required for optimal project drainage and storm water management. This applies to the storm water conveyance system beneath the pavers as well. When impervious surfaces like standard concrete or asphalt cover most of a project area, stormwater can be directed from the impervious surfaces to the pervious pavers providing a cost effective solution. Pervious pavers are currently code enforced within a number of municipalities in the western part of our country such as Reno, NV. These pavers are utilized as both a storm drainage filtration system that improves the quality of storm water by capturing sediment, debris and urban clutter. In addition to working as a filtration device, it contributes in aiding vector control solutions by helping in the prevention of viruses like West Nile. Installed in storm water catch basins, it reduces the amount of mosquitoes by eliminating access to standing, stagnant water normally stored beneath the road surface.



Examples of Pervious Pavers  
Courtesy of Xeripave Super Pervious Pavers

continued on next page →

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### *Pervious, Permeable, and Porous Pavers (Cont.)*

In summary, there is an obvious and distinct difference between pervious, permeable, and porous pavers. Each paver possesses certain physical, as well as aesthetic, qualities that need to be considered prior to project design and installation. Careful consideration of site characteristics and project objectives will enable the owner to minimize storm water runoff and maximize the water quality benefits that these products provide.

Additional information pertaining to the three P's is available including:

- Freeze-Thaw Data
- Base and sub-base comparisons between each surface
- SRI data
- Design Permeability
- Longevity
- Surface clogging data
- Traffic bearing capacity
- Colors / Textures
- Overflow capacities
- Overflow designs
- Temperature reduction
- Maintenance costs
- Installation costs
- Comparisons with the three P's, Pervious Concrete, and Pervious Asphalt



**Mark Walker** | Director, Business Development  
Office: (574) 232-9911 | Mobile: (574) 536-6113  
[Mark@Kuert.com](mailto:Mark@Kuert.com) | [www.Kuert.com](http://www.Kuert.com)

**Kuert Concrete, Inc.**

Corporate Office: 3402 Lincolnway West, South Bend, IN. 46628



## Water Matters

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

**WAFSCM SCHOLARSHIP PROGRAM  
2013 ANNUAL WAFSCM CONFERENCE  
"Changing Climate, Changing Attitudes"  
Holiday Inn Neenah Riverwalk Hotel  
123 E. Wisconsin Avenue, Neenah, WI  
October 30 – November 1, 2013**

The purpose of the Wisconsin Association for Floodplain, Stormwater and Coastal Management is to:

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 there from;
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.

WAFSCM is pleased to announce that they will be awarding scholarships for attendance at the 2013 Wisconsin Association for Floodplain, Stormwater and Coastal Management's 11th Annual Conference, October 30 – November 1, 2013, in Neenah. **Any current member of WAFSCM or non-member local government official** is eligible to apply for a scholarship to attend the 2013 conference. This is a great opportunity to interact, exchange ideas, make contacts, form partnerships and prepare for an improved and sustainable future for flood damage reduction.

The scholarships will include the registration (including a workshop, Wednesday reception, full-day Thursday conference, and Friday field tour) and lodging for October 30 and 31. The scholarship recipients will be responsible for their own travel and per diem costs, and any hotel costs in excess of the conference hotel rates.

Criteria that may be considered in selection of scholarship recipients include:

- Whether the applicant is a Certified Floodplain Manager
- Past participation in the Wisconsin Association for Floodplain, Stormwater and Coastal Management
- Commitment to participate in WAFSCM activities (committees, conference, workshops, etc.)
- Other criteria to be determined
- The attached WAFSCM Scholarship Application Form should be completed and submitted by Monday, September 16, 2013. If selected to receive a scholarship, you will be required to write an article for the next WAFSCM newsletter *Water Matters* about your experiences attending the conference, or another appropriate subject matter relating to floodplain, stormwater or coastal management. Local government officials or representatives are strongly encouraged to apply!





Wisconsin Association for Floodplain,  
Stormwater, & Coastal Management

**WAFSCM SCHOLARSHIP APPLICATION FORM  
FOR  
11TH ANNUAL WAFSCM CONFERENCE  
"Changing Climate, Changing Attitudes"  
Holiday Inn Neenah Riverwalk Hotel, Neenah, WI  
October 30 – November 1, 2013**

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Employer: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-Mail: \_\_\_\_\_

*Must be a current WAFSCM Member or non-member local government official.*

Indicate years a past WAFSCM Member: \_\_\_ 2002 \_\_\_ 2003 \_\_\_ 2004 \_\_\_  
2005 \_\_\_ 2006 \_\_\_ 2007 \_\_\_ 2008 \_\_\_ 2009 \_\_\_ 2010 \_\_\_ 2011 \_\_\_ 2012 \_\_\_ 2013 \_\_\_

Certified Floodplain Manager (CFM): \_\_\_ Yes \_\_\_ No

Check which WAFSCM activities you are willing to participate in and provide support to the association:

- \_\_\_\_\_ Participate on standing committee/s
- \_\_\_\_\_ Stormwater Management
- \_\_\_\_\_ Floodplain Management
- \_\_\_\_\_ Coastal Management
- \_\_\_\_\_ Membership
- \_\_\_\_\_ Conference
- \_\_\_\_\_ CFM (Certified Floodplain Managers)
- \_\_\_\_\_ Website
- \_\_\_\_\_ Newsletter
- \_\_\_\_\_ Awards/Scholarships
- \_\_\_\_\_ Provide support in workshops or other training events
- \_\_\_\_\_ Other (explain) \_\_\_\_\_

Describe any past involvement or participation you have had in WAFSCM

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How will attending this conference assist you in your present position?

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Why do you want to attend this conference and what do you hope to gain by attending?

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Scholarship recipients will be required to write an article for the next WAFSCM newsletter *Water Matters* about your experiences attending the conference, or another appropriate subject matter relating to floodplain, stormwater or coastal management.

Sign below to acknowledge that you have reviewed and agree to the above requirements.

\_\_\_\_\_  
Name Date

Please send this form no later than Monday, September 16, 2013 to:

Wisconsin Association for Floodplain, Stormwater, and Coastal Management  
Roxanne Gray  
c/o Wisconsin Emergency Management  
2400 Wright Street, P.O. Box 7865  
Madison, WI 53707-7865  
Phone: 608-242-2311  
E-Mail: [Roxanne.gray@wisconsin.gov](mailto:Roxanne.gray@wisconsin.gov)



Wisconsin Association for Floodplain,  
Stormwater, & Coastal Management

**Membership Application/Renewal Form**

For January – December 2013

Membership Fee: \$20.00

Name:		
Title:		
Organization:		
Address:		
City:	State:	Zip Code:
Phone:	Ext.:	Fax:
E-mail:		
Would you like to receive occasional announcements, newsletters and/or notices via E-mail:		
<input type="checkbox"/> Yes <input type="checkbox"/> No		
Other Affiliations:		
Primary Interest:	<input type="checkbox"/> Floodplain	<input type="checkbox"/> Stormwater
		<input type="checkbox"/> Coastal
Would you like to participate on a committee:		
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Stormwater	<input type="checkbox"/> Coastal
<input type="checkbox"/> Legislative	<input type="checkbox"/> Newsletter	<input type="checkbox"/> Website
		<input type="checkbox"/> Membership
		<input type="checkbox"/> None
<b>REFERRED BY:</b>		

**Please include a check for the annual Membership Fee of \$20.00 made payable to WAFSCM**

Return to: Carrie Bristoll-Groll, PE, CFM  
WAFSCM  
c/o Stormwater Solutions Engineering, LLC  
247 Freshwater Way, Suite 410  
Milwaukee, WI 53204

If you have questions, contact Carrie Bristoll-Groll at (414) 810-1245 or [cbg@stormwater-solutions-engineering.com](mailto:cbg@stormwater-solutions-engineering.com).



# FEMA

# Flood Insurance Reform Act of 2012

## Impact of changes to the NFIP

**Note: This Fact Sheet deals specifically with Sections 205 and 207 of the Act.**

In 2012, the U.S. Congress passed the Flood Insurance Reform Act of 2012 which calls on the Federal Emergency Management Agency (FEMA), and other agencies, to make a number of changes to the way the NFIP is run. As the law is implemented, some of these changes have already occurred, and others will be implemented in the coming months. Key provisions of the legislation will require the NFIP to raise rates to reflect true flood risk, make the program more financially stable, and change how Flood Insurance Rate Map (FIRM) updates impact policyholders. The changes will mean premium rate increases for some – but not all -- policyholders over time.

### Background:

In 1968, Congress created the National Flood Insurance Program (NFIP). Since most homeowners' insurance policies did not cover flood, property owners who experienced a flood often found themselves financially devastated and unable to rebuild. The NFIP was formed to fill that gap. To ensure the program did not take on unnecessary risks, one of the key requirements to participate in the program was that communities had to adopt standards for new construction and development.

Pre-existing homes and businesses, though, could remain as they were. Owners of many of these older properties could obtain insurance at lower, subsidized, rates that did not reflect the property's real risk. In addition, as the initial flood risk identified by the NFIP has been updated over the years, many homes and businesses in areas where the revised risk was determined to be higher have also received discounted rates. This "Grandfathering" approach prevented rate increases for existing properties when the flood risk in their area increased.

Fast forward 45 years, flood risks continue and the costs and consequences of flooding are increasing dramatically. In 2012, Congress passed legislation to make the National Flood Insurance Program more sustainable and financially sound over the long term.

### What this means:

The new law eliminates some artificially low rates and discounts which are no longer sustainable. Most flood insurance rates will reflect full risk, and flood insurance rates will rise on some policies.

Actions such as buying or selling a property, or allowing a policy to lapse, can trigger rate changes. You should talk to your insurance agent about how changes may affect your property and flood insurance policy. There are investments you and your community can make to reduce the impact of rate changes. And FEMA can help communities lower flood risk and flood insurance premiums.

### What is Changing Now?

Most rates for most properties will more accurately reflect risk. Subsidized rates for non-primary/secondary residences are being phased out now. Subsidized rates for other classes of properties will be eliminated over time, beginning in late 2013. There are several actions which can

trigger a rate change, and not everyone will be affected. It's important to know the distinctions and actions to avoid, or to take, to lessen the impacts.

Not everyone will be affected immediately by the new law – only 20 percent of NFIP policies receive subsidies. Talk to your agent about how rate changes could affect your policy.

- Owners of **non-primary/secondary** residences in a Special Flood Hazard Area (SFHA) will see 25 percent increase annually until rates reflect true risk – began January 1, 2013.
- Owners of **property which has experienced severe or repeated flooding** will see 25 percent rate increase annually until rates reflect true risk – beginning October 1, 2013.
- Owners of **business properties in a Special Flood Hazard Area** will see 25 percent rate increase annually until rates reflect true risk -- beginning October 1, 2013.

Owners of **primary residences** in SFHAs **will be able to keep their subsidized rates** unless or until:

- You sell your property;
- You allow your policy to lapse;
- You suffer severe, repeated, flood losses; or
- You purchase a new policy.

### Grandfathering Changes Expected in 2014

The Act calls for a phase-out of discounts, including grandfathered rates, and a move to risk-based rates for most properties when the community adopts a new Flood Insurance Rate Map. So if you live in a community that adopts a new, updated Flood Insurance Rate Map (FIRM), discounts – including grandfathered rates -- will be phased out. This will happen gradually, with new rates increasing by 20% per year for five years. Implementation is anticipated in 2014.

### What Can Be Done to Lower Costs?

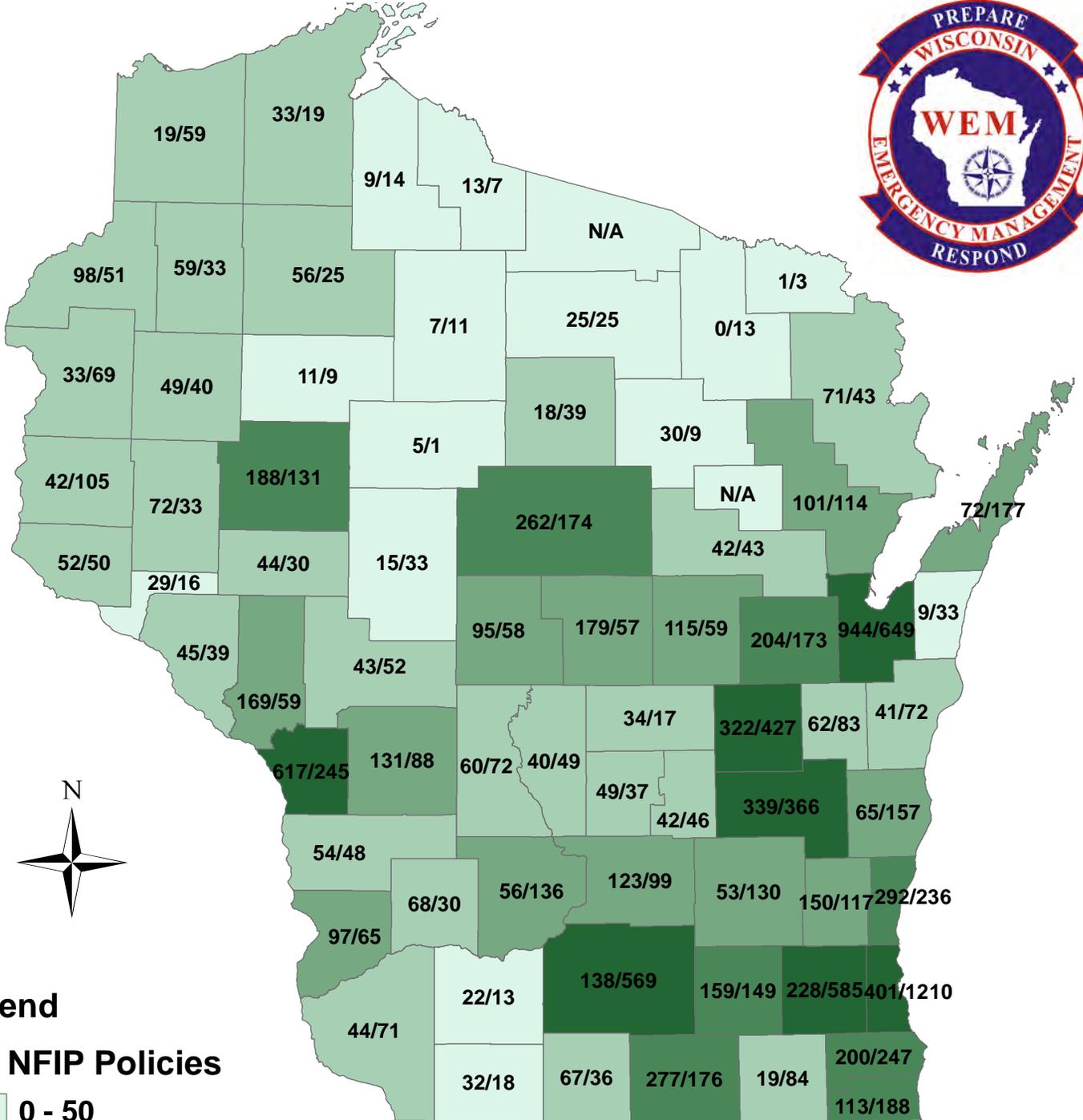
For home owners and business owners:

- Talk to your insurance agent about your insurance options.
- You'll probably need an Elevation Certificate to determine your correct rate.
- Higher deductibles might lower your premium.
- Consider remodeling or rebuilding.
- Building or rebuilding higher will lower your risk and could reduce your premium.
- Consider adding vents to your foundation or using breakaway walls.
- Talk with local officials about community-wide mitigation steps.

For community officials:

- Consider joining the Community Rating System (CRS) or increasing your CRS activities to lower premiums for residents.
- Talk to your state about grants. FEMA issues grants to states which can distribute the funds to communities to help with mitigation and rebuilding.

# NFIP Policies in Wisconsin by County

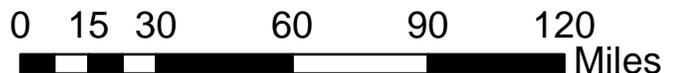


## Legend

### # of NFIP Policies

- 0 - 50
- 51 - 150
- 151 - 300
- 301 - 600
- 601 - 1611

# Affected / # Unaffected



## Water Matters

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

### ***NASECA-WI is gearing up to present "Innovation: Are Your Stormwater and Erosion Control Specs up to the Task?"***

The following is forwarded to the WAFSCM membership on behalf of the NASECA.

NASECA-WI is gearing up to present "Innovation: Are Your Stormwater and Erosion Control Specs up to the Task? *The Challenge of Understanding Products and Techniques*" on Thursday, September 26 in Rice Lake, WI.

This popular annual classroom/field day is a great opportunity for engineers, consultants, state/municipal employees, inspectors, contractors, suppliers, developers/builders, landscapers, researchers, and educators to earn 6 CE credits/PDHs. Attendees will learn from classroom and field presentations such as:

- Development of Wisconsin Lakeshore Restoration Training and Certification
- WisDOT Projects, Utilization of Existing and New Products
- Innovation North of 49- Case Studies on a Biotic Approach to Erosion Control & Re-vegetation and Winnipeg Floodway Project
- Celebrating 125 Years of Innovation
- Hydro carbon filters and silt fence materials, what works and how to inspect for state approval
- Perimeter control products, see how they perform in action, side by side comparison of various options
- Wood verses straw erosion mat – performance under rainfall simulation
- Do you know how to visually tell the proper application rate for mulch? We'll show various rates.
- Using polymers, performance of bare soil, mulch, erosion mat, and polymer under rainfall simulator and measured by NTU
- New ditch check products

Registration is \$130 and includes breakfast, lunch, event host celebration, hotel discounts, and six CE credits/PDHs. For more information and to register online, visit [www.nasecawi.org](http://www.nasecawi.org) or use the [printable flyer](#), [location map](#), and [registration form](#) on the following pages.

If you have any questions contact Kristie Kasbohm, Executive Director, NASECA-WI at Phone: [608-347-7110](tel:608-347-7110) or visit online at: [www.nasecawi.org](http://www.nasecawi.org).



## Innovation: Are Your Stormwater and Erosion Control Specs up to the Task? *The Challenge of Understanding Products and Techniques*

**Thursday, September 26, 2013**

8:30 am – 4:15 pm (Registration 8:00 am)

**NOTE: New (2<sup>nd</sup> year) morning location**  
Wisconsin Indianhead Technical College &  
American Excelsior Company ErosionLab  
**Rice Lake, WI**

Earn 6 CE Credits/PDH

SPECIAL NOTE: These credits will apply for the PE education requirements effective August 1, 2012

Register online at [www.nasecawi.org](http://www.nasecawi.org)



### Start your northern Wisconsin Fall color tour with us!

The last 2 weeks of September are *the* best time in northern Wisconsin to see the vivid reds, warm oranges, and bright yellows of the Fall season. Come early or stay late and take advantage of discounted hotel rates.

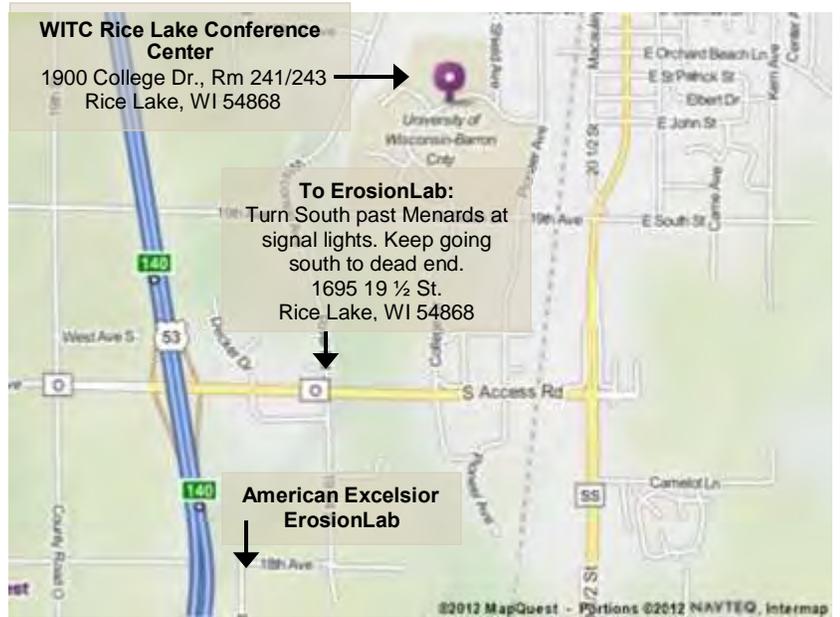
### Morning Sessions: Classroom Presentations

8:00-8:30	Registration
8:30-8:40	Welcome
8:40-9:25	Development of Wisconsin Lakeshore Restoration Training and Certification, <i>Patrick Goggin, Lake Specialist, WI Lakes Partnership/UW-Extension Lakes at the College of Natural Resources, UW-Stevens Point</i>
9:25-10:00	WisDOT Projects, Utilization of Existing and New Products, <i>Michelle Reynolds, WisDOT Erosion Control Specialist</i>
10:00-10:15	BREAK
10:15-10:45	WisDOT Projects (continued)
10:45-11:30	Innovation North of 49- Case Studies on a Biotic Approach to Erosion Control & Re-vegetation and Winnipeg Floodway Project, <i>Mark Myrowich, CPESC, CISEC, CEO, ErosionControlblanket.com</i>
11:30-12:00 pm	Celebrating 125 Years of Innovation, <i>Terry Sadowski, President, American Excelsior Company</i>
12:00-1:00 pm	Lunch Provided

### Afternoon Sessions: Field Demonstrations

- Celebration of American Excelsior Company's 125<sup>th</sup> Anniversary- cake for all!
- Hydro carbon filters and silt fence materials, what works and how to inspect for state approval.
- Perimeter control products, see how they perform in action, side by side comparison of various options
- Wood verses straw erosion mat – performance under rainfall simulation
- Do you know how to visually tell the proper application rate for mulch? We'll show various rates.
- Using polymers, performance of bare soil, mulch, erosion mat, and polymer under rainfall simulator and measured by NTU
- New ditch check products
- THE AMAZING RUBBER DUCK EXTRAVAGANZA – See the incredible rubber ducks race at speeds of 7 feet per second over a turbulent course including the tough as nails TRM lined vegetated channel. The winning duck's coach gets first pick of the door prizes! Visit [www.nasecawi.org](http://www.nasecawi.org) to view last year's race video.

### Seminar Location and Map



**Event Host:**

**American Excelsior Company ErosionLab**  
Web: [www.curlex.com](http://www.curlex.com)

**Nearby Hotel Accommodations:**

AmericInn Hotel & Suites Rice Lake  
2906 Pioneer Ave Rice Lake, WI 54868  
Tel: (715) 234-9060  
Mention "NASECA" to receive discounted room rates.

Best Western Inn  
2835 S. Main Street, Rice Lake, WI 54868  
Tel: (715) 234-7017  
Mention "NASECA" to receive discounted room rates.

# Field Seminar Registration Form

*Save Time - Register Online*

**First Name:** \_\_\_\_\_ **Last Name:** \_\_\_\_\_ **Suffix/Degrees (Jr., PE):** \_\_\_\_\_

**Primary Professional Field (Choose One):**     Academic     Consultant     Contractor     Developer     Engineer  
 Erosion Control Inspector     Government Agency     Landscape Architect     Manufacturer     Non-Profit     Publisher/Media  
 Supplier     Utility Company     Waste Management

**Employer:** \_\_\_\_\_

**Address:** \_\_\_\_\_ **City:** \_\_\_\_\_ **State:** \_\_\_\_\_ **Zip:** \_\_\_\_\_

**Phone:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

**Emergency Contact Person:** \_\_\_\_\_ **Daytime Phone:** \_\_\_\_\_

**Special Needs:**

*Please use this space to list any physical limitations, dietary restrictions, food or drug allergies, special needs, and/or any additional information that may be of use to emergency medical personnel in the event that they must care for you. This will be kept strictly confidential*

**How did you hear about this event?**     NASECA email     Other email (not NASECA)     NASECA Website  
 Other Website (not NASECA)     Friend/Colleague     Employer     Other (please specify) \_\_\_\_\_

<p><b>NASECA-WI September Field Seminar</b></p> <p><b>September 26, 2013 – Rice Lake, WI</b></p> <p><b>Registration</b>                    <input type="checkbox"/> \$130</p> <p><b>Event Sponsorship</b>        <input type="checkbox"/> \$225  (includes 1 registration)</p> <p><i>Registration Deadline Sept. 19, 2013</i></p> <p><b>Product Demonstrations:</b> If you are interested in demonstrating a product, email NASECA-WI President, Jay Settersten, at <a href="mailto:jay.settersten@nasecawi.org">jay.settersten@nasecawi.org</a></p> <p><b>Register online at <a href="http://www.nasecawi.org">www.nasecawi.org</a></b></p>	<p><b>Payment:</b>    <i>(refunds are granted up to 72 hours in advance, less a \$10 processing fee)</i></p> <p>Total Amount: \$ _____    Paid by:    <input type="checkbox"/> Check    <input type="checkbox"/> Visa    <input type="checkbox"/> MC    <input type="checkbox"/> AMEX</p> <p><b>Credit Card Payment Authorization:</b></p> <p>Credit Card #: _____</p> <p>3-Digit Code (on back): _____    Billing Zip Code: _____</p> <p>Expiration Date: _____    Name on Card: _____</p> <p>Signature: _____</p> <p><b>Caution on Mailed Registrations:</b>  Due to the limited class size and the delay on mailed registrations, priority will be given to online registrations.</p>
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**Standard Release:** By registering for this NASECA Wisconsin Event, I agree and acknowledge that I am participating on my own accord. I give this acknowledgement freely and knowingly and I represent and warrant that I am physically and mentally fit and that, as a result, able to participate, and I do hereby assume responsibility for my own well-being. I am fully aware that possible physical injury might occur to me as a result of my participation, and I agree to assume the full risk, including risk which is not specifically foreseeable, of any injuries, including death, damages or loss regardless of severity, which I may sustain as a result of participating in any and all activities connected with or associated with the Event. In consideration of the right to participate in the Event, I hereby waive any and all rights or claims I may have as a result of participation in the Event against NASECA Wisconsin and its respective directors, officers, employees, members, staff, and all individuals assisting in instructing and conducting these activities, and I hereby fully release and discharge them from any and all claims resulting from injuries, including death, damages or loss, which may accrue to me or my heirs arising out of or in any way connected with my participation in the Event. I further agree to indemnify, defend, and hold harmless NASECA Wisconsin and its respective directors, officers, employees, members, staff, and all individuals assisting in instructing and conducting these activities, from any and all claims resulting from injuries, including death, damages, or loss, which may accrue to me or my heirs arising out of or in any way connected with my participation.

**Save Time: Register Online [www.naseca.org/wisconsin](http://www.naseca.org/wisconsin)**

Or, mail your check and registration form to:

NASECA-Wisconsin, P.O. Box 70714, Madison, WI 53707-0714

Questions? E-mail us at [education@nasecawi.org](mailto:education@nasecawi.org)

## *Water Matters*

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

### **GET A FREE WAFSCM SHIRT!**

Here is your opportunity to earn a free WAFSCM shirt!

All you have to do is:

- Get three (3) of your peers, co-workers or friends to join the Wisconsin Association for Floodplain, Stormwater and Coastal Management by October 1, 2013
- Have them fill out the membership form with your name as “referred by:”
- Have them send in their form with the \$20 fee
- You’ll be contacted by WAFSCM for your size and color selection and
- You’ll *get a free shirt!* (\$35 value)

Membership benefits include:

- WAFSCM newsletter ***Water Matters*** twice a year
- Important water-related updates, emails and information about training and seminars
- Great networking with both agency employees and consultants working toward a common cause
- Discount at the WAFSCM annual conference held each fall. By attending the conference you are then automatically a member for the following year.
- The annual membership is still only \$20.

Share the membership form included in this edition of *Water Matters* now with others that may be interested in joining our group and earn your free shirt! If you have any questions, please contact Roxanne Gray, Membership Chair at 608-242-3211 or e-mail [Roxanne.gray@wisconsin.gov](mailto:Roxanne.gray@wisconsin.gov), or Carrie Bristoll-Groll, Treasurer, at 414-810-1245 or [cbg@stormwater-solutions-engineering.com](mailto:cbg@stormwater-solutions-engineering.com).



WAFSCM Logo will be embroidered on the upper left corner of the shirt



**WAFSCM logowear!** Available in two colors in both women's and men's styles.



Women's cut

(Background is color of shirt, white lettering on navy blue shirt, black lettering on sand dune shirt)



Men's cut

- Classic polo styling
- Solid body
- Matching flat knit collar with welt edge
- Hemmed sleeves
- Three-button placket
- Easy care
- 53% combed cotton/47% polyester interlock

**Complete shirt/logo price of \$30!**  
Add \$5 for shipping.

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

**Men's sizes S through 5XL      Women's sizes XS through 3XL**

Color	Size	Men's or Women's	Price	Shipping	Total
(Navy or Sand)		Women's	\$30	(add \$5)	
Total					

Send completed order form along with check for total including shipping fee to:

WAFSCM  
c/o Stormwater Solutions Engineering, LLC  
247 Freshwater Way, Suite 410  
Milwaukee, WI 53204

# Water Matters

A newsletter for people concerned with water management issues.

## WAFSCM Board Members



Board members left to right are: Ryan Kloth, Carrie Bristoll-Groll, Laura Kletti, Minal Hahm, Jon Lefers, JoEllen Donovan, and Cindi DeBruine. Missing members are Roxanne Gray and Peter Shedivy

<p><i>Chair</i> Laura Kletti Southeastern Wisconsin Regional Planning Commission <a href="mailto:lkletti@sewrpc.org">lkletti@sewrpc.org</a> 262-547-6722 x224</p>	<p><i>Membership</i> Roxanne Gray Wisconsin Emergency Management <a href="mailto:roxanne.gray@wisconsin.gov">roxanne.gray@wisconsin.gov</a> 608-242-3211</p>
<p><i>Vice Chair/Legislative Committee</i> Ryan Kloth GRAEF <a href="mailto:ryan.kloth@graef-usa.com">ryan.kloth@graef-usa.com</a> 414-266-9063</p>	<p><i>Newsletter</i> Cindi DeBruine R.A. Smith National, Inc. <a href="mailto:cindi.debruine@rasmithnational.com">cindi.debruine@rasmithnational.com</a> 262-317-3254</p>
<p><i>Secretary</i> JoEllen Donovan Stantec <a href="mailto:joellen.donovan@stantec.com">joellen.donovan@stantec.com</a> 262-643-9014</p>	<p><i>Floodplains Committee Chair</i> Jon Lefers AE2S <a href="mailto:jon.lefers@AE2S.com">jon.lefers@AE2S.com</a> 608-225-5787</p>
<p><i>Treasurer</i> Carrie Bristoll-Groll Stormwater Solutions Engineering <a href="mailto:cbg@stormwater-solutions-engineering.com">cbg@stormwater-solutions-engineering.com</a> 414-810-1245</p>	<p><i>Stormwater Committee Chair</i> Peter Shedivy HNTB <a href="mailto:pshedivy@HNTB.com">pshedivy@HNTB.com</a> 414-410-6862</p>
<p><i>Webmaster</i> Minal Hahm M Squared Engineering <a href="mailto:minal@msquaredengineering.com">minal@msquaredengineering.com</a> 262-376-4246</p>	<p><i>Awards</i> Dave Fowler MMSD <a href="mailto:dfowler@mmsd.com">dfowler@mmsd.com</a> 414-277-6368</p>
<p><i>Coastal Committee Chair</i> OPEN</p>	

