

# Flooding Knows No Borders

November 3-5, 2021 La Crosse Center, La Crosse, WI

# 2021 WAFSCM & MNAFPM Joint Conference









## **Conference Overview**

This 2021 in-person conference is co-hosted by the Wisconsin Association for Floodplain, Stormwater, & Coastal Management (WAFSCM) and the Minnesota Association of Floodplain Managers (MnAFPM) on November 3-5, 2021 at the La Crosse Center in downtown La Crosse, WI. The last time our two states co-hosted a conference was in 2009 in Superior, WI. The conference will consist of presentations on all things floodplain and stormwater management - the National Flood Insurance Program, planning and preparedness, mitigation, recovery, zoning administration, hydrologic and hydraulic modeling, dams and levees, case studies, and mapping. There will also be discussion of FEMA's new Risk Rating 2.0.

Wednesday, November 3rd: Workshops, Bus Tour, Welcome Plenary, and Exhibitor Reception
Thursday, November 4th: Main Conference Day –
Plenary and Breakout Sessions
Friday, November 5th: Opportunity to take exam to become a Certified Floodplain Manager (CFM)

Similar to previous years, CECs will be available for attending the conference, participation in training events/workshops and the field tour. This conference is also a great way to earn Professional Development Hour (PDH) credits for your professional registrations. PDH and CEC forms will be available at the conference to assist with your record keeping needs. However, consult your professional association for its specific rules and requirements.

# **Certified Floodplain Managers Examination**

Those interested in taking the examination to become a Certified Floodplain Manager (CFM) will be given an opportunity to do so the morning of Friday, November 5th. A National Floodplain Basics Review will be offered earlier on Wednesday, November 3rd to prepare. For those that cannot make the in-person test, it was recently announced that test takers may also take their tests online through Scantron, starting September 1, 2021. Test takers are also encouraged to prepare by reviewing REMA publication 480: Floodplain Management Requirements and take the FEMA interactive course IS-273: How to Read a Flood Insurance Rate Map.

## **COVID-19 Considerations**

This is scheduled to be a fully in-person conference. Logistics and masking requirements will follow local, state, and/or federal guidelines. We thank you for wearing a mask for everyone's safety and comfort.

# **Cancellation Policy**

The registration link will be open at the early bird rate until October 15th. The link will remain open after October 15th at a higher rate. No refunds will be given after October 29th. Avoid the cancellation service charge of \$20 by sending a substitute from your organization. Should weather, pandemic, or other circumstances beyond our control necessitate full cancellation, notification will be sent via email to those registered, information will be posted on the MnAFPM Conference web page, and refunds will be disbursed.



# ~Workshop Descriptions~

#### **National Floodplain Basics Training**

Cecil Strauss, MNDNR

This workshop provides a broad and comprehensive overview of floodplain management and the National Flood Insurance Program. This course is geared towards those just getting into the field, looking for a refresher. This class will focus on the federal minimum standards, however, will identify areas where state standards are more restrictive.

#### **Ethics Training**

Ginny Plumeau, Ruekert & Mielke, Inc.

This workshop will cover a review of key provisions of the Wisconsin Administrative Code for Engineering Conduct and the NSPE Code of Ethics. We will cover the basics (conflicts of interest, confidentiality, plan stamping, purchasing and gifting policies, claiming credit, public safety, outside employment, etc.) and more. We will spend time on some of the "gray" areas that are not so uncommon (i.e., does truthfulness have a sliding scale?). Not just a lecture, it will feature problem-solving through interactive discussion. Relevant examples of applicable ethical challenges will be discussed, along with tips for anticipating issues to prevent major problems.

Who should attend: stormwater engineers solving drainage and flooding problems, civil engineers heading up design and permitting projects, municipal engineers overseeing capital improvement projects and other technical professionals who need to spearhead solutions to avoid or mitigate potential conflicts.

#### FEMA Flood Mapping Using 2D Modeling

Scott Hogan, Federal Highway Administration Resource Ctr

The Federal Highway Administration (FHWA) has been actively promoting the use of two-dimensional hydraulic modeling (2D modeling) for bridge hydraulics, floodplain analyses, and scour evaluations. Over the past few years, the use of 2D modeling for transportation related hydraulics has grown significantly and is now used by most State Departments of Transportation (DOTs). However, one-dimensional models (1D models) are still required for the Federal Emergency Management Agency (FEMA) related floodplain and floodway submittals, since acceptable methods for delineating and evaluating floodways have not been identified and approved by

FEMA. It has become common for both 2D models (for design) and 1D models (for floodplain submittals) to be developed for projects, resulting in unnecessary duplication of effort.

To help eliminate the need for this additional effort and move forward with 2D modeling technology, FHWA has been participating on a FEMA Interagency Project Team (IPT) to assist in evaluating the changes to the standards that are needed to accommodate 2D modeling. FHWA has contributed to IPT discussions on multiple approaches that may be used to delineate floodways in a 2D model as well as methods for evaluating the surcharge. FHWA has also been actively developing tools to implement these approaches and test them on several case studies. This presentation will provide an overview of two delineation methods, including the unit discharge (depth times velocity) and equal conveyance reduction methods, and will present an approach for computing surcharge using base flood elevation (BFE) contours as evaluation lines for reference. The differences between these methods will be discussed and compared to the 1D model floodway using several case studies.

FEMA recently provided guidance for floodway delineation and surcharge assessment in 2D modeling. This recent guidance will be noted and briefly discussed.



#### Conference Tour Wednesday, November 3 from 12:00 pm - 4:00 pm

Tour attendees should plan to meet at the main registration station ready for a noon departure.

Anticipated Stops:

- 1. Pammel Creek USACE Project
- 2. Ward Ave. Pervious Pavement
- 3. Flood Mitigation in Coon Valley
- 4. Jersey Valley Dam/Levee failure
- 5. Structure relocations in Chasebura
- 6. River Island USACE Restoration



Wednesday, November 3		
9:00 am - 4:00 pm	Room 1: National Floodplain Basics Training (lunch on your own) – Ceil Strauss, MNDNR & others	
9:30 am - 11:30 am	Room 2: Ethics Training – Ginny Plumeau, Ruekert & Mielke, Inc.	
9:30 am - 11:30 am	Room 3: FEMA Flood Mapping using 2D Modeling – Scott Hogan, US Department of Transportation	
11:30 am - 12:00 pm	BREAK	
12:00 pm - 4:00 pm	Tour (with boxed lunch)	
4:00 pm – 5:00 pm	Main Ballroom: Exhibitors Reception and Social Event - Hors d'oeuvres and cash bar	
5:00 pm - 6:00 pm	Main Ballroom: Opening Plenary Welcome, What's New with Floodplain Management in MN & WI – Ceil Strauss, MNDNR & Brian Cunningham, WDNR	
6:00 pm – 7:30 pm	Main Ballroom: Exhibitors Reception and Social Event - Hors d'oeuvres and cash bar	

Thursday, November 4		
7:00 am – 8:30 am	Main Ballroom: Coffee & Snacks with Exhibitors	
7:30 am – 8:00 am	Rooms 1 & 2: MNAFPM and WAFSCM Business Meetings – open to all MNAFPM in Room 1; WAFSCM in Room 2	
8:00 am – 8:30 am	BREAK	
8:30 am – 9:30 am	Main Ballroom: Welcome, Opening Plenary NFIP in 2021 – Chad Berginnis, Executive Director - ASFPM	
9:30 am - 9:45 pm	BREAK	
9:45am – 11:15am	Rooms 1, 2 & 3: Breakout Session 1 Room 1: 2D for Me, Volume 1 - Projects Implementing 2D modeling and mapping Impacts of Higher Resolution Surfaces on 2D Models – Jordan Thole, SEH Inc Hydraulic Modeling of the North Fork Zumbro River Channel Restoration Project Using HEC-RAS 2D – Amy Anderson, WSB Engineering Streamflow Trends in Wisconsin: Stream Discharge for Federally Declared Disasters in LaCrosse County – Guenevere Drewes, WI Emergency Management Room 2: Planning for Mitigation Guidance on Mitigating Repetitive Loss Properties – Eleanor Rappolee, ASFPM Nonstructural Flood Risk Assessment for La Crosse, Wisconsin - Terry Zien, US Army Corps of Engineers Community Rating System (CRS) 2021 Addendum CRS Class 8 Prerequesites – Lou Ann Patellaro, FEMA Region V ISO/CRS Specialist Room 3: Project Spotlights Slope Stabilization in Unprecedented Wet Times – Eric Roerish, SRF Consulting Flood and Stormwater Quality Control in Monona's Tight Spaces – Jon Lindert, Strand Associates Heritage Park: Regional Drainage Improvements in Homer Glen, IL – Logan Gilbertsen, HR Green	
11:15 am - 11:30 am	BREAK	



11:30 pm - 1:00 pm Main Ballroom: Lunch, Awards Chapter Awards - NNAFPM & WAFSCM Board Chairs NFIP'S New Raing Methodology: What Floodplain Managers Need to Know – James Sink, FEMA Region V  1:00 pm - 2:30 pm  Rooms 1, 2 & 3: Breakout Session 2 Room 1: Varled Approaches: How three different agencies are reducing risk Collaboration to help miligate flooding effects along the Wisconsin River: A Success Story – Mike Welvaert, National Weather Service Developing Recurrence Intervel Hydrographs to Use as Unsteady RAS Boundary Conditions – Suzanne Jiwani, MNDNR Coastal Flood Hazard Mitigation in the Great Lakes: Basic Training for Great Lakes Stokeholders – Frank Shockey, FEMA Region V Room 2: Focused on Flow – Projects featuring a focus on hydrology The cose for thoughtful selection of precipitation distributions in rainfall-runoff modelling – Isaac Schrock, HR Green Development and Modelling of the Redpath Impoundment; A Flood Risk Reduction Project in the Red River Valley – James Guler, Moore Engineering Leveraging Models from Twin Cities Watershed Districts to Update FEMA Flood Maps – Jeff Weiss, MNDNR Room 3: Project Spatilish Trosh Talk: Urban Trosh Study – Phillip Taylor, Hydro International Private/Public Pathnership Solutions for Flood Management – Chris Meehan, Stantec Flood Mitigation Industry Trends for 2022 – Bryan Christopherson, Floodproofing.com  BREAK  2:30 pm - 2:45 pm  BREAK  Rooms 1, 2 & 3: Breakout Session 3 Room 1: 2D for Me – Volume 2: Projects Implementing 2D Why haven't I flooded # The maps say I should have! The Ebner Coulee LOMR Story – Riley Mondloch, Stell Inc. Modeling Rush to Resiliency: A Minnesota 2D CLOMR Story – Rachel Pichelmann, SEH Inc. Loc. 2D Floodplain Analysis Sauk River Realignment – Earth Evans, WSB Engineering Room 2: Urban Project Spotlights - Minnesota Morningside Flood Infrastructure Project – Jessica Wilson, City of Edina Permitting Challenges of Pumping to Manage High-Water Levels on Land-locked Waterbodies. A Case Study in Crystal and Robbinscide – Ross Mullen, Stant	Thursday, November 4 - continued		
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Friday, November 5		
7:30 am – 12:00 pm	Room 1: CFM Exam 7:30 am - Continental breakfast for exam-takers 8:00 am - Exam begins	

# ~Plenary Presenter Bios~

Ceil Strauss is the Minnesota State Floodplain Manager.
Ceil has been in the Floodplain Unit at the Minnesota
Department of Natural Resources since 2002, and worked with the MnDNR an additional 14 years, mainly as an Area Hydrologist in the western Twin Cities area. She has a BA in Biology from Lawrence University (Wisconsin) and an MS in Water Resources Manage-ment from the University of Michigan. Ceil is the former Chair of the National Association of State Floodplain Managers.

Brian Cunningham is the Wisconsin State NFIP Coordinator. Before migrating to the DNR, he worked for Sauk County's Land Resources and Environment Department for over 20 years as a Land Use/Sanitation Specialist, Assistant Zoning Administrator, and Deputy Director. Prior to that, he worked in Middleton for Resource Engineering Associates (REA, Inc.) as a hydrogeologist. Brian received a B.S. degree in Water Resources-Hydrogeology at UW Stevens Point. I currently live in Sauk County and enjoy spending most of my time backpacking, hiking, fishing, and hunting with my wonderful family.

**James G. Sink** is the Regional Flood Insurance Liaison for FEMA Region 5. James works with NFIP partners and stakeholders to build resilient communities by increasing understanding of the NFIP, conducting insurance outreach and education, and assisting NFIP partners and stakeholders. Previously, James was a FEMA reservist in the Planning Cadre where he served as the Customer Care Group Supervisor in the Hurricane Sandy [NFIP] Claims Review Division. James has conducted continuity of operations and emergency operations planning for a large rural healthcare provider, as well as a large agricultural producer. He was a co-researcher of "The New Normal: The Direct and Indirect Impacts of Oil Drilling and Production on the Emergency Management Function in North Dakota." James holds a Bachelor of Science degree in Emergency Management from North Dakota State University.

**Chad Berginnis** is the executive director for the Association of State Floodplain Managers (ASFPM), a national non-profit organization promoting education, policies, and activities that mitigate current and future losses, costs, and human suffering caused by flooding in order to protect the natural and beneficial functions of floodplains without causing adverse impacts.

Berginnis has more than 28 years of experience in various aspects of natural hazards management, flood loss reduction, and land use planning and programs at the state, local and private-sector levels. As a state official, Berginnis worked in the Ohio Floodplain Management Program and was Ohio's state hazard mitigation officer. He has been involved in creating and administering the Appalachian Flood Risk Reduction Initiative, administered the FEMA's Community Assistance Program, revised model state floodplain management regulations, oversaw state hazard mitigation operations after three federally declared flood disasters, and authored the 2008 update of Ohio's mitigation plan. As a local official, Berginnis administered land use, economic development, and floodplain management programs in Perry County, Ohio. In the private sector, Berginnis was the national practice leader in hazard mitigation for Michael Baker Jr. Inc. Berginnis holds a bachelor's in natural resources from Ohio State University and is a certified floodplain manager.



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