

ASSOCIATION OF STATE FLOODPLAIN MANAGERS



2023
POCKET GUIDE

ASFPM 2023 Conference Team
May 7-11, 2023, Raleigh

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Jacob Jett, Research Librarian
Beth Klusinske, Research Analyst

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The Conference Program

17.....Sunday
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55.....Thursday
Center Spread..... Floor Plan

\$ Indicates a fee-based workshop or tour offered a la carte.

Local Host Team

North Carolina Association of Floodplain Managers
(NCAFPM)

Team Members: Laura Arnold, PE, CFM, Ken Ashe, PE, PMP, CFM, Melonee Brock, CFM, Scott Brookhart, PE, CFM, Susan Frady, CZO, CFM, Steve Garrett, CFM, John Gerber, PE, CFM, Dean Goodison, PE, Andrew Hadsell, PE, David Key, PE, CFM, Steve McGugan, Mike Robinson, CFM, Amit Sachan, PE, CFM, Virginia Spillman, PE, Stephen Smith, CFM, Bill Tingle, PG, CFM, Ken Vafier, AICP, CFM, Nancy Watford, CFM, Holly White, AICP, CFM, Berry Williams

Welcome!

Welcome to the 47th annual conference of the Association of State Floodplain Managers. We are glad that you could join us in Raleigh and are excited for a jam-packed week of learning and fun! This pocket guide will help you get the most of your week so be sure to keep it close at hand. **Your name badge is your admission and must be worn all week.** If you have questions, see ASFPF staff at the registration desk or ask one of the local host volunteers – they will be wearing volunteer shirts while on duty. Please enjoy your week as you dive into the most comprehensive floodplain management training & networking opportunity in the country!

Registration Desk

The registration desk is located in the Main Lobby (300 Level) of the Convention Center. It will be open to serve you 10-7 Sunday and 7-5 Monday-Thursday.

Speaker Prep Lounge

307

Conference Program Coordinator Steve McMaster, AV Coordinator Jason Schneeberger and their volunteers will be available to assist you with program and AV concerns throughout the week. Speakers may practice their presentations here and get them queued up for their session. The Speaker Prep Lounge will be open 7:30am to 5:00pm, Monday through Thursday.

Local Host / Volunteer HQ

The local host team, consisting of NCAFPF members and floodplain managers from throughout North Carolina will take residence near registration. This is also where you can purchase your conference merch and sign up for the 5K race.

First Timers Orientation will be held Sunday at 3:00pm and 5:00pm, Monday at 10:00am and 3:00pm and Tuesday at 10:00am. New attendees should plan to attend one of these 15-minute sessions to help you get the most out of the week. Meets near registration desk.

Meeting Room Assignments

Most conference activities will take place at the Raleigh Convention Center. The location of each session is listed to the right of the event name.

Technical Tour Departure Point

Bus

Bus loading area is outside of the Main Entrance (300 Level) on S. Salisbury Street.

Mobile App

Download our mobile app to see all session abstracts, build your own schedule, view convention center maps & more!

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JUNE 24-27, 2024

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Know floodwater impacts before they happen.

Prepare for extreme weather events by understanding your catchment under varying conditions.

Simulate with live data and forecasted rainfall to predict flooding and reduce the impact on communities and the environment through strongly informed mitigation strategies.



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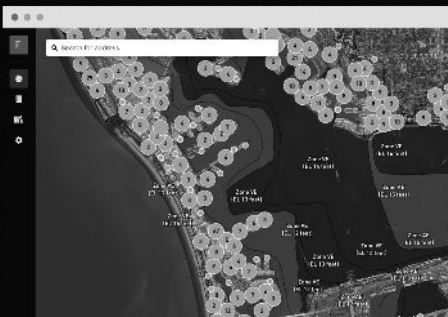
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ASFPM FOUNDATION WELCOMES YOU TO ASFPM 2023

Where flood risk managers come to meet

Visit the ASFPM Foundation Booth (Space No. 201) to learn more about what we have planned for you this year:

- **Attend the ASFPM Foundation Luncheon** on May 9, when we will announce the new Future Leaders Scholarship recipient.
- **Attend the Student Paper Competition** on May 9 when our finalists will present their papers on important flood risk management topics.
- **Attend the ASFPM Foundation Donor Recognition Reception and Live Auction** on May 10 to celebrate Foundation successes. The reception is invitation only by making a \$125 donation (tickets available at the Foundation Booth).
- **Buy your 50/50 Tickets** at the Booth or see one of our 50/50 Champions. The more tickets you buy, the more you might just win!



Promoting Sustainable
Floodplain Management



Cape Fear River, North Carolina

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VISION
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Sunday, May 7

10:00-7:00	Registration Desk Hours	<u>Reg</u>
10:00-1:00	ASFPM Board Meeting (Invitation Only)	<u>304</u>
1:00-2:30	ASFPM Board & Committee Co-Chairs Luncheon (Invitation Only)	<u>303</u>
2:30-5:30	ASFPM Committee Chairs Mtg. (Invitation Only)	<u>304</u>
9:00-5:00	TRAINING WORKSHOP (\$) Floodplain Mgmt. 101 (\$90) <i>Instructors: Shanna Michael, GISP, CFM, ABS and Michelle Gilbert, CFM, Atkins</i>	<u>305 A</u>
1:00-	TRAINING WORKSHOPS (\$)	
1:00-4:30	Cooperating Technical Partners Bootcamp: How to Partner with FEMA to Reduce Risk (\$45) <i>Instructor: Laura Algeo, PE, FEMA</i>	<u>306 A</u>
1:00-4:30	Elevation Certificates: The proper way to complete and review FEMA's Elevation Certificate for floodplain management and for CRS (\$45) <i>Instructor: Becca Fricke-Croft, CFM, Atkins</i>	<u>306 C</u>
3:00-3:15	First Timers Orientation	<u>Reg</u>
5:00-5:15	First Timers Orientation	<u>Reg</u>

5:00-6:00 **State Floodplain Mgrs./Hazard Mitigation Officers, & ASFPM Board of Directors Meet & Greet** *(Invitation Only)* 303

6:00-9:00 **Welcome Fest** Ballroom ABC
Hosted by: NCAFPM and Local / Chapter Sponsors.

Start off the conference by reconnecting with friends at the Welcome Fest. Live music, food and beverages will be provided.

North Carolina Association of Floodplain Managers is proud to sponsor this year's Welcome Fest and we hope it will provide attendees with a glimpse of what 'Old North State' has to offer from the majestic Blue Ridge mountains in the west, across the rolling hills of the dynamic bustling piedmont, to the sand, surf, and relaxing beaches along the Atlantic coast. Experience local music offerings for each region while enjoying a taste of our state with a selection of North Carolina influenced heavy hors d'oeuvres. Also, don't be alarmed if you spot Blackbeard the pirate roaming through the crowd, still searching for lost treasure from ships that perished in the "Graveyard of the Atlantic" along the North Carolina coast.

Attendees will be able to experience, hands-on, a variety of what our state has to offer including experiencing the thrill of NASCAR racing, testing golfing skills, or braving a ride on a surfboard. You can also show off your skills at basketball shooting, corn hole, frisbee toss and a variety of other games sure to entertain both participants and spectators.

ATTENDEE & GUEST NAME BADGES MUST BE PRESENTED FOR ADMISSION.

Day 1: Monday, May 8

7:00-5:00 **Registration Desk Hours** Reg

7:30-5:00 **Speaker Prep Lounge Hours** 307

8:00- TRAINING WORKSHOPS (\$)

8:00-10:00 **Building Coastal Flood Resilience: Evolving NOAA's Inundation Services** (\$45) 306 A
Instructors: Brenna Sweetman, NOAA and Marian Hansiko, NOAA

8:00-Noon **How FEMA's Hazard Mitigation Assistance Grants Build a Climate Resilient Nation** (\$45) 306 C
Instructors: Jennie Orenstein, FEMA, Howard Stronach, FEMA, Shabbar Saifee, FEMA and Brandon Sweezea, FEMA

8:00-Noon **Hands-On HEC-RAS 2D Workshop (for Intermediate HEC-RAS 1D Users)** (\$45) 306 B
Instructor: Jeremy Dixon, CFM, Freese and Nichols and Mark Pauls, CFM, Freese and Nichols

National Policy Discussions and Regional Discussion Sessions are included in your registration.

8:00-9:00 **NATIONAL POLICY DISCUSSIONS**
General Policy Issues 305 AB
Overview& Legislative Update

9:00-9:30 **BREAK** Main Lobby

9:30-11:30	<u>NATIONAL POLICY DISCUSSIONS</u>	
	International Policy	<u>301 A</u>
	Floodplain Regulations	<u>301 B</u>
	Mapping & Engineering Standards	<u>302 A</u>
	Mitigation	<u>302 B</u>
	Professional Development	<u>302 C</u>
	Coastal Issues	<u>303</u>

10:00-Noon	CFM Bootcamp: A Guide to Becoming a CFM (Free, pre-registration required) <i>Instructor:</i> Louie Greenwell, GISP, CFM, ASFPM	<u>304</u>
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10:00-10:15	First Timers Orientation	<u>Reg</u>
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Noon-1:00	Lunch on your own (<i>on-site concessions will be available in the Main Lobby</i>)	
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Noon-1:00	<u>REGIONAL DISCUSSION SESSIONS</u> Hosted by your elected Regional Directors (based on FEMA regions).	
	Region 1	<u>301 A</u>
	Region 2	<u>301 B</u>
	Region 3	<u>302 A</u>
	Region 4	<u>302 B</u>
	Region 5	<u>302 C</u>
	Region 6	<u>303</u>
	Region 7	<u>304</u>
	Region 8	<u>305 AB</u>
	Region 9	<u>306 A</u>
	Region 10	<u>306 B</u>

12:30-5:00	<u>TOUR (\$)</u> City of Raleigh Flood Education, Awareness and Preparedness (\$50)	<u>Bus</u>
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1:00-	<u>TRAINING WORKSHOPS (\$)</u>	
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1:00-3:00	Basic GIS Training for Mapping Repetitive Flood Risk (\$45) <u>203</u> <i>Instructors:</i> Eleanor Rappolee, ASFPM, Jason Hochschild, ASFPM and Jeff Stone, CFM, ASFPM	
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1:00-3:00	2D or not 2D: The Makings of a Successful 2D LOMC Submittal (\$45) <i>Instructors:</i> Lauren Sester, EI, CFM, Marie Benavides, CFM, Atkins and Arslan Khalid, CFM, Atkins	<u>306 A</u>
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1:00-5:00	USGS flood tools including StreamStats, Flood Event Viewer, Flood Inundation Mapper and FloodWIDE (\$45) <i>Instructors:</i> Peter McCarthy, USGS, Athena Clark, USGS, Julia Prokopec, USGS, and Andrea Medenblik, USGS	<u>306 B</u>
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1:30-3:30	<u>NATIONAL POLICY DISCUSSIONS</u> Risk Communication & Social Justice Task Force..... Flood Insurance..... Legal Issues, Higher Education & No Adverse Impact..... Stormwater Mgmt. & Natural & Beneficial Functions..... Nonstructural Floodproofing..... Arid Regions.....	<u>301 A</u> <u>301 B</u> <u>302 A</u> <u>302 B</u> <u>302 C</u> <u>303</u>
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2:00-5:00	CFM Exam (pre-registration required)	<u>304</u>
3:00-5:00	CTP Conversation	<u>306 C</u>
3:00-3:15	First Timers Orientation	<u>Reg</u>
3:30-4:00	BREAK	<u>Main Lobby</u>
4:00-5:00	ASFPM Members Meeting	<u>305 AB</u>
5:00-7:00	Exhibits Grand Opening/ Social <i>Sponsored by: Stantec</i>	<u>Exhibit Hall A</u>
7:00....	Dinner on your own, enjoy Raleigh!	

Day 2: Tuesday, May 9

7:00a-7:00p	Exhibit Hall Hours	<u>Exhibit Hall A</u>
7:00-5:00	Registration Desk	<u>Reg</u>
7:30-5:00	Speaker Prep Lounge	<u>307</u>
7:45-8:30	Light Breakfast	<u>Exh</u>
8:30-10:00	PLENARY SESSION	<u>Ballroom ABC</u>
Theme: Reframing Retreat: Buyouts & Other Proactive Approaches for Moving People and Property Out of Harm's Way <i>Sponsored by: Michael Baker International</i>		
Welcome Address: Chad Berginnis , CFM, ASFPM and Ken Ashe , CFM, NCAFPM		
1. Gavin Smith , Professor, Department of Landscape Architecture and Environmental Planning, NC State University		
2. Robert S. Young , Director, Program for the Study of Developed Shorelines, Western Carolina University		
3. Lydia Olander , Director of Nature-based Resilience, White House Council on Environmental Quality		
Moderator: Glenn Heistand P.E., CFM, Illinois State Water Survey, Chair, ASFPM Board of Directors		
10:00-10:15	First Timers Orientation	<u>Reg</u>
10:00-10:30	Break & Exhibits	<u>Exh</u>

10:30-Noon **CONCURRENT SESSION A****A1 National FPM Policy 301 A**

Track: NFIP/Floodplain Management
Moderator: Lauren Sester El, CFM, Atkins
Climate Change and the NFIP: How FEMA will Update the NFIP's Floodplain Management Standards through Rulemaking. Joel Scata, NRDC
Updates on the National Flood Insurance Program (NFIP) Endangered Species Act (ESA) Compliance Planning and Request for Information. Zane Hadzick, FEMA
FEMA Earmarks for Coastal Zone Resilience. Grace Morris, Atkins North America

A2 State Mitigation Initiatives 301 B

Track: Mitigation
Moderator: Jana N. Henderson, CFM, Mississippi Emerg. Mgmt. Agency
Resilient NC: 25+ Years of Mitigation Planning & Implementation. Nathan Slaughter, AICP, CFM, ESP Associates
First Comes Fire-Then Comes Floods & More, (State Post Wildfire Mitigation Team), State Floodplain Manager & SHMO Partnerships Are Key. Kathy Holder, CFM, Utah Division of Emergency Management
Big Floods, but No Big Media Presence – Minnesota's Flood Risk Reduction Successes. Ceil Strauss, CFM, MnDNR

A3 A3: Modeling Unique Features & Problems 302 A

Track: Modeling
Moderator: Ken Hunu, PE, D.WRE, PMP, CFM, Atkins

How to model the moon: A novel approach to analyzing the hydrology and hydraulics of landscape featuring Carolina Bays. Steve Marks, PE, CFM, WithersRavenel
Rapidly Characterizing Risk from Post-Fire Debris Flows. Jamie Prochno, PE, FEMA Region 8
Split-Flows & Over-Flows: A US Highway Design to Keep Traffic Flowing. Kyle Miller, PE, CFM, Meshek & Associates, LLC

A4 Modeling to Mapping Case Studies 302 B

Track: Mapping
Moderator: Richard Crowder, BSc (Eng), PhD, FICE, FCIWEM, CEng, C.WEM, Jacobs
Teton River: 2D Modeling Complexities and Floodways. Brandon Gonzalez, EIT, Atkins
Joint Probability Method in Guam and CNMI: Optimal Storms and Optimization Schemes. Kun Yang, PhD, Stantec
Tanana River PMR: Floodplain & Floodway 2D Modeling and Mapping on a Large Braided River System. Keith Weaver, PE, HDR Engineering

A5 Setting Up Communities for Success 302 C

Track: Risk Communication
Moderator: Brock Remus, PMP, CFM, Atkins
From Traditional Training and Technical Assistance to Capacity Building: Using a Flexible Framework to Achieve Sustainability. Susannah Numa, Booz Allen Hamilton
A Goal Without a Plan Is Just a Wish: Using Multi-Year Strategic Planning to

Support Risk Reduction in Communities.

Peter Herrick, Jr., FEMA

Mapping the Story of Nebraska's Flood**Mitigation.** Jamie Reinke, PE, CFM,
Nebraska Department of Natural Resources**A6 A6: Understanding Inequality in 303
Flood Risk**

Track: Equity

*Moderator: Adam Lucas, Guidehouse***Equity Considerations for Floodplain
Management: Existing Federal Efforts to
Address Needs of Historically****Underserved Communities.** Ummekulsoom

Lalani, Atkins North America

Who are risk models leaving behind?

Carlos Genatios, PhD, Miami Dade College

Developing Improved Benefit Cost**Analysis (BCA) Guidance: Equitable****Alternatives to Traditional BCA.** Anne

Watkins, MBA, AECOM

**A7 Substantial Damage Planning 305 A
and Operations**

Track: Post-Disaster

*Moderator: Holly Miller, PE, CPESC, CFM**Tetra Tech***Managing Effective Substantial Damage
Operations.** Molly Kaput, FEMA**Substantial Damage Response Planning:****Striving for the Ideal State.** Rob Flaner,

CFM, Tetra Tech, Inc

There's No Place Like Home: How**Substantial Damage Determinations****Provide a Gateway to Rebuilding after****Disaster Strikes.** David Rubenstein, PMP,

CFM, AECOM

A8**Local Stormwater and Master
Planning**305 B

Track: Stormwater

*Moderator: Thomas Morey, R.S., CFM,
Stantec***Assessing Flood Resiliency in Bladen****County, North Carolina.** Chris Stanley, PE,
CFM, McAdams**A Stormwater Management Evolution:****Lessons From Consolidating Two****Decades of Watershed Master Planning.**

Dan Fricke, PE, CFM, JEO Consulting Group

Cloquet's Stormwater Resilience**Assessment & Action Plan: Prioritizing****Flood Resilience Projects based on****Damage Potential & Vulnerability****Assessments.** Riley Mondloch, PE, CFM,

SEH

A9**Moffatt & Nichol Showcase:**306 A**Enough with the mumbo-jumbo:
translating technical information to
actionable policy and projects**

Track: Showcase

*Moderator: Lynette Cardoch, PhD, Director,
Resilience & Adaptation, Moffatt & Nichol*

- Andy Sternad, Architect & Urban Designer/Business Unit Leader, Waggonner and Ball
- Christian Kamrath, CFM, Resilience Program Manager Adaptation, Miami-Dade County, Miami, FL
- Dale Morris, Chief Resilience Officer, City of Charleston, SC

- Kyle Spencer, CFM, City of Norfolk, VA (invited)
- Julia Kumari Drapkin, CEO and Founder, ISeeChange

Noon-1:30 **ASFPM Foundation Luncheon** Ballroom ABC

ASFPM Foundation Update
Moderator: Dale Lehman, PE, CFM, ASFPM Foundation President, AECOM

1:00-5:00 **TOUR (\$)** Bus
Town of Cary's Internet of Things (IOT) Stream Sensor and Rain Gauge Network (\$50)

1:45-3:15 **ASFPM Chapter Meeting** 204

1:45-3:15 CONCURRENT SESSION B

B1 **CRS: You Can Do It! 301 A**

Track: NFIP/Floodplain Management
Moderator: David Stroud, CFM, WSP
CRS Next: How CRS is Evolving & Simplifying. Rachel Sears, FEMA
CRS: Is your community living up to its full potential? Christina Groves, CFM, Tetra Tech
The Little Village That Could: A Roadmap for Under-Resourced Communities Seeking Climate Adaptation. Julie Nucci, PhD, Village of Owego resident, NHMA Fellow

B2

Hazard Mitigation Assistance Programs and Guidance 301 B

Track: Mitigation
Moderator: Veronica Villalobos-Pogue, CTCM, CFM, Texas Water Dev. Board
Hazard Mitigation Assistance (HMA) MythBusting: Debunking Common HMA Program Misconceptions. Ryan Janda, FIMA-FEMA
FMA Localized Flood Risk Reduction Projects & FY22 FMA Swift Current Initiative: Outcomes, Lessons Learned, and What's Next. Brandon Sweezee, FIMA-FEMA
How To Write A Winning BRIC or FMA Grant Without Hiring A Consultant. Kaine Riggan, North Carolina Department of Public Safety

B3

Updates in Modeling Policies & Standards 302 A

Track: Modeling
Moderator: Jeff Butler, CFM, Atkins
Updates and Advancements in 2-Dimensional Modeling Processes: FEMA's 2D IPT. Laura Algeo, PE, FEMA HQ
HEC-RAS Junction, What's Your Function. Kevin Donnelly, PE, PMP, GISP, CFM, Stantec
Exploring Mesh Considerations for Basin Scale 2D Hydrologic Modeling with HEC-RAS 6.3.1. Mark Forest, PE, CFM, HDR

B4

BLE Mapping 302 B

Track: Mapping
Moderator: Aaron Carranza, PE, CFM, North Dakota Dept. of Water Resources

Using Multiple FEMA Regional Branches to Carry the Base Level Engineering Message. Diane Howe, CFM, FEMA Region 6

Adapting to New Standards, Delivering 2D BLE Mapping in South Dakota. James Johnston, GISP, PMP, CFM, AECOM
Improving the BLE workflow: Leveraging ArcGIS Pro Capabilities. David Smith, GISP, CFM, CDM Smith

B5 Whole-Community Approaches to Risk Communication 302 C

Track: Risk Communication

Moderator: Richard S. Flood, CFM, FEMA TBD.

Insights From the Community: Partnership and Trust Through Equity-Focused Community Engagement. Alyx Colgan, Guidehouse

Real World Experience Bringing Equity into a Flood Management Plan Update Process. Chrys Bertolotto, King County Washington

B6 Risk Assessments for Dams 303

Track: Dams & Levees

Moderator: Jen Marcy, PMP, CFM, Atkins
Managing North Carolina's Flood Risk by Monitoring and Managing the State's Aging Dams. Tasnuva Mahjabin, PhD, Atkins

Recognizing Risk – The Prioritization of High Hazard Potential Dams. Barrett Slate, EI, Freese and Nichols
Following the Advice of Albert Einstein for a Dam Break Study. Christine Suhonen, PE, GZA

B7 Nature-Based Solutions in Action 305 A
 Track: NBF

Moderator: Jeff Keenum, PG, CFM, FEMA
Developing watershed resilience with nature-based solutions. Garrett Altmann M.Sc., Department of Forestry at Santa Clara Pueblo

Nature-based Solutions to Reduce Flood Risk: Comparing France and the United States. Anna Serra-Llobet PhD, University of California, Berkeley

Stream Restoration: Nature-Based Solution for Flood Risk Mitigation and Watershed Resiliency. Josh Allen, PE, SWCA, CFM, Environmental Consultants

B8 Climate Change and Impacts to Policy 305 B

Track: Climate Change

Moderator: Sue Baker, CFM, Maine Dept. Agriculture, Conserv. & Forestry

A Community Flood Resilience Tool to Accelerate Equitable Adaptation Across the US. Frederique de Groen, Deltares

The climate crisis demands a national climate resilience and adaptation strategy to equitably and wisely invest in transformative adaptation measures nationwide. Shana Udvardy, CFM, Union of Concerned Citizens

Rolling Conservation Easements: One Tool for Nature Based Retreat. Mary-Carson Stiff, JD, CFM, Wetlands Watch

B9

Building Resiliency: A unique, comprehensive, data-driven watershed program for Fayetteville, NC 306 A

Track: Showcase

Introduction. Alicia Lanier, PE; Public Services Department, City of Fayetteville, NC
Prioritizing City-Wide Stormwater Needs to Deliver Strategic Flooding Solutions.

Morgan McIlwain, PE, PMP; FNI

Developing datasets in real time! Collecting Dynamic Inventory Data while Modeling. David Key, PE, CFM; ESP

Associates, Inc

Evaluating Flooding Throughout Diverse City Watersheds.

Matthew Jones, PhD, PE; Hazen and Sawyer

Lessons Learned from Integrating 1D and 2D Riverine and Collection System

Models. Scott Brookhart, PE, CFM, Arcadis and Mark Van Auken, PE, Arcadis

HEC-RAS 2D model of the Little Cross Creek and Cross Creek Confluence.

Jeffery Crump, PE, Moffatt & Nichol

Model Validation and Use of the Representative Storm.

Ken Trefzger, PE; HDR; Raleigh, NC

Summary.

Sheila Thomas-Ambat, PE, CFM, City of Fayetteville, NC

2:30-4:30

2:30-4:30

3:15-3:45

3:45-5:15

2:30-4:30

2:30-4:30

TRAINING WORKSHOPS (\$)

State FPM Program Authority and Structure and Coordination 304

of the NFIP (for state employees only) (Free)
Instructor: Bill Nechamen, CFM, Nechamen Consulting, LLC

Dry Floodproofing Workshop— It's Not as Cut and Dry as You Think. Using Technical Bulletin 3 and 6 for a Comprehensive Design (\$45) 306 C

Instructors: Dan Bass, RA, CFM, FEMA and Adam Reeder, PE, CFM, CDM Smith

The History of Hazard Mitigation in North Carolina (\$45) 206

Instructors: Chris Crew, CFM, State of NC, Dept. of Public Safety and Nathan Slaughter, AICP, CFM, ESP Associates

Break & Exhibits Exh

13th Annual ASFPM Foundation Student Paper Competition 204

Judges: ASFPM Foundation Trustees
Survey of Federal, State, Local, and Community-Led Approaches to Flooding at Brownfields, Superfund Sites, and Other Contaminated Sites Left Behind.

Emma Zhner, Yale School of the Environment

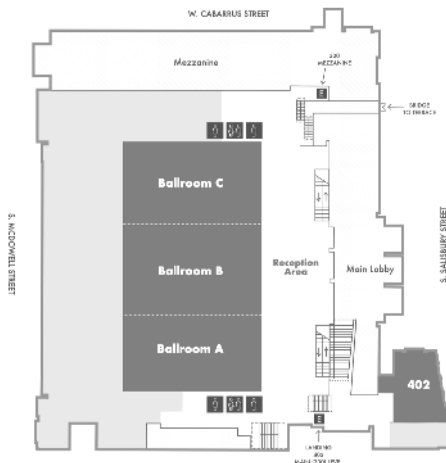
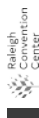
Predicting Flood Risk using Machine Learning and Sentinel Satellite Images: A Novel and Cost-Effective Approach.

Héctor Leopoldo Venegas Quiñones, University of Arizona

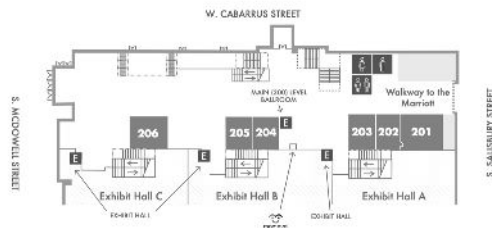
Integrating Causal Discovery and Machine Learning for Dynamic Assessment of Flash Flood Susceptibility. Rohan Singh Wilkho, Texas A&M University

Raleigh Convention Center Map

BALLROOM (400) LEVEL



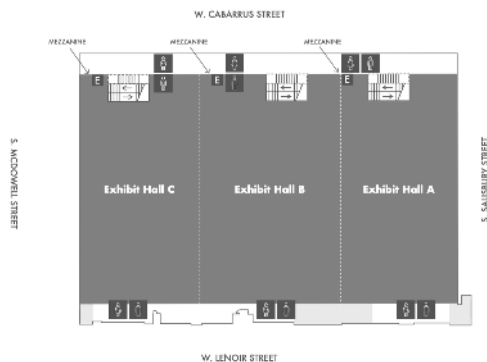
MEZZANINE LEVEL



MAIN (300) LEVEL



EXHIBIT HALL (100) LEVEL



3:45-5:15

CONCURRENT SESSION C

C1

Advice for Local Floodplain Administrators301 A

Track: NFIP/Floodplain Management

*Moderator: Valerie Anderson, CFM, FEMA, Region IV****Keeping Pace With Development in******Riverine Floodplains.*** Marc Gold, PE, CFM, ATM, a Geosyntec Company***Respect the hazard – tools for floodplain managers in uncertain times.*** Dennis

Dixon, CFM, Pierce County Planning & Public Works

How a regional authority ensures effective floodplain management in Metro-Atlanta.

Kevin Osbey, CFM, Clayton County Water Authority

C2

Mitigating Risk to Infrastructure301 B

Track: Mitigation

*Moderator: Kristen M. Martinenza, PE, CFM, FEMA, Region IV****Major Infrastructure in Major Cities: Challenges and Lessons Learned******Navigating Flood Control Projects Funded through HMA.*** Jamelyn Austin Trucks, CFM,

PMP, CGM, Atkins

Using BRIC for Utility Protection & System-Based Mitigation in North***Carolina.*** Edward Fernandez, CFM, ICF***Southerly WWTP: A look at protection of critical infrastructure for the future.*** Chad

Boyer, PE, CFM, ms consultants, inc.

C3

Modeling for Mitigation302 A

Track: Modeling

*Moderator: Tara Lanzrath, CFM, Kansas Dept. Agriculture****Florida flood hazard modeling and vulnerability assessments – an innovative climate change focused approach.*** Justin*Gregory, PE, Jones Edmunds & Associates*
Traveling to the Next Dimension of Flood Mitigation using 2-D HEC-RAS. Chris

Shultz, PE, JEO Consulting Group

Urban Area Considerations for Flood Protection and Phased Implementation
Apple Branch Watershed Danville VA.

Chris Rogers, PE, CFM, Timmons Group

C4

State Mapping Initiatives302 B

Track: Mapping

*Moderator: Scott Edelman, PE, AECOM****FEMA's CNMS Database as a Project Planning Tool – An Illinois Case Study.***

Tripp Spear, GISP, WSP USA Environment & Infrastructure Inc.

An Easy-Button for Statewide Future***Precipitation Scenarios.*** Geoff Uhlemann, PE, PMP, CFM, Michael Baker***Investigating the Fluvial Hazard Zone as a New Standard for Flood Risk.*** Laura Keys, Lynker

C5

Innovative Risk Communications302 C

Track: Risk Communication

*Moderator: Jarred Overbey, PE, CFM, Half Associates****Risk Communication: A Campaign for Coastal New Jersey.*** Devon Blair, NJDEP***Alluvial Decoder: An Immersive Educational Floodplain Installation.*** Wayne Miles, PE, City of Raleigh

Love Your Levee – A Social Media Campaign to Celebrate Successful Partnering to Address Flooding. Brooke Magary, US Army Corps of Engineers

C6 Advancing Equity through Federal Programs 303

Track: Equity

Moderator: Thomas S. Hughes, Pennsylvania Emerg. Mgmt. Agency
Advancing the Role of Equity in FEMA's Risk MAP Program. Johanna Greenspan-Johnston, Dewberry
Mitigation in Action Strike Team – A New Approach to Equity. Cindy Wirz, FEMA R6 Mitigation

Shelter from the storm: flood resilience with and for unsheltered communities. Jessica Ludy, CFM, San Francisco District, US Army Corps of Engineers

C7 Nature Based Solutions in Stormwater Management 305 A

Track: Stormwater

Moderator: Isabella Gandara, EIT, CFM
Using Nature Based Solutions to Improve Transportation System Resiliency. Hunter Freeman, PE, McAdams
Climate Adaptation - Integrating Solutions into a Coastal Community for the Future. John Millsbaugh, PE, PMP, Arcadis
Alternative Procurement Strategies to Accelerate the Implementation of Green Infrastructure. Jennifer Hatchett, PE, RES, LLC

C8 Watershed-Based State Initiatives 305 B

Track: Watershed Management

Moderator: Swamy Pati, PhD, PE, CFM, Jacobs

Approaches to Driving Watershed Management Decisions for Decades: Lessons from the Louisiana Watershed Initiative. Sarada Kalikivaya, PE, PMP, CFM, Atkins North America

A Texas Sized Planning Effort to Reduce the Risk and Impact of Existing and Future Condition Flooding. Reem Zoun, PE, CFM, ENV SP, Texas Water Development Board

Before the Flood: A state policy framework to reduce flooding and flood risks. Will McDow, Environmental Defense Fund

C9 Streamline Technologies Showcase: 306 A Real-Time Flood Forecasting

Track: Showcase

Hurricane Ian: Real-Time Flood Forecasting Pinpoints Flooding 1 to 3 days in Advance. Pete Singhofen, Streamline Technologies

Flood Risk Point Development: Automated Tools for Real-Time Flood Forecasting. Warren McKinnie, CFM, Streamline Technologies

Elevation Derived Hydrography: A Starting Point for Large-Scale Real-Time Flood Forecasting. Mark Topping, WGI Geospatial

5:15-7:00

Exhibits Social
Sponsored by: FM Approvals

Exhibit
Hall A

7:00-

Dinner on your own – enjoy Raleigh!

May 3: Wednesday, May 10

7:00-10:00 **9th Annual Running of the Chapters 5K Run/Walk** Bus

Bus will run at 6:00am and again at 6:30am from the Convention Center.

7:00-3:30 **Exhibit Hall** Exhibit Hall A

7:00-5:00 **Registration Desk** Reg

7:30-5:00 **Speaker Prep Lounge** 307

7:45-8:30 **Light Breakfast** Exh

8:30-10:00 **PLENARY SESSION** Ballroom ABC

Theme: Spotlight on Federal and NGO Initiatives

Sponsored by: AECOM

1. **Jaime A. Pinkham**, Principal Deputy Assistant Secretary of the Army for Civil Works, Army
2. **David Applegate**, Director, U.S. Geological Survey
3. **Tom Kiernan**, Executive Director, American Rivers

Moderator: Aaron Carranza PE, CFM, North Dakota Dept. of Water Resources, Treasurer, ASFPM Board of Directors

10:00-10:30 **Break & Exhibits** Exh

10:30-Noon CONCURRENT SESSION D

D1 Floodplain Management Compliance 301 A

Track: NFIP/Floodplain Management

Moderator: Karen McHugh, CFM, Missouri

Emerg. Mgmt. Agency

NFIP Compliance Audit Update. Sarah

Owen, FEMA

Preparing for Your Next Compliance Audit: Best Practices from an Expert Auditor.

Wade Weisman, PMP, CSP, Booz Allen Hamilton

Floodplain Management Compliance After a Disaster.

Claire Jubb, AICP, CFM, Charlotte County, FL

D2 Building Codes and Standards 301 B
as Hazard Mitigation

Track: Mitigation

Moderator: Benjamin B. Pylant, PE, CFM, Halff Associates

The Future of Building Codes – Federal Perspectives and the NIABC. Ed Laatsch, PE, FEMA

The Envision Sustainability and Resilience Rating System. Karen Kabbes, PE, D.WRE, CFM, Kabbes Engineering, Inc **TBD.**

D3 2D Floodway Modeling 302 A

Track: Modeling

Moderator: Vikram Shrivastava PE, PMP, D.WRE, CFM, Atkins

The Saga of Gould Wash: A Challenging 2D Floodway Case Study. Matt Chaney, PE, CFM, AECOM

FEMA 2D Modeling with Floodways: A case study - City of Ithaca, New York.

Inger Sarappo, GISP, CFM, Stantec
Going Regulatory with 2D Modeling in Kansas. Joanna Rohlf, GISP, CFM, Kansas Department of Agriculture, Division of Water Resources

D4 **Transportation Risk Assessments and Inundation Mapping** 302 B
 Track: Mapping
Moderator: Laura E. Kelliher, PMP, CFM, CDM Smith
Leading Trends in Real Time Flood Mapping by Harris County. Ataul Hannan, PE, CFM, HCFCD
Risk and Vulnerability Assessment Using VAST for North Carolina's US70 Transportation Corridor. Shane Parson, PhD, PE, CFM, AECOM
T-SAPP: Predictive Coastal Inundation Mapping for Road Networks during Hurricane Ian. Kurt Golembesky, PE, CFM, North Carolina Department of Transportation

D5 **New Tools & Engagement**
 Track: Risk Communication 302 C
Moderator: Brian A. Caulfield, PE, D.CE, PMP, CFM, CDM Smith
New Tools for Assessing and Communicating Sea Level and Coastal Flood Risk. Dan Rizza, Climate Central
Designing Approachable, Accessible, and Adaptable Risk Communications: Updating the Community Officials Toolkit. Lisa Messano, CFM, Ogilvy
Coastal Community Resiliency through Water Level Monitoring: "Old School" versus "New School". Daniel Tomczak, CFM, Jacobs Engineering Group

D6 **National Levee Safety Program** 303
 Track: Dams & Levees
 Moderator: Will Zung, PMP, CFM, Stantec

National Levee Safety Program: Framework for a State Model Levee Safety Program. Michael Bachand, PE, U.S. Army Corps of Engineers
National Levee Safety Guidelines: A Resource for Achieving Nationwide Consistency. Michael Bachand, PE, U.S. Army Corps of Engineers
National Levee Database & Data Collection: Supporting Levee Management Decisions. Brian Vanbockern, U.S. Army Corps of Engineers

D7 **Nature-Based Solutions and a New Era of Floodplain Management** 305 A
 Track: NBF
Moderator: Rebecca J. Pfeiffer, CFM, Vermont Agency of Nat. Resources
Reimagining a Unified National Program for Floodplain Management: A federal framework to reduce flood losses and protect and restore floodplains. Eileen Shader, CFM, American Rivers
Advancing the Integration of Clean Water Act Programs with Natural Hazard Mitigation Planning and Implementation. Ian Grosfelt, National Association of Wetland Managers
Policy Watch: Understanding Recent and Pending Federal Actions Impacting Floodplain Resilience. Jessie Ritter, National Wildlife Federation

D8 **Using Technology to Innovate FPM Solutions** 305 B
 Track: Tech & Tools

Moderator: Michael J. Grasso, PMP, CFM, CDM Smith
Satellite Data & Artificial Intelligence for Assessing Natural Disaster Impacts. Amy Kopale, CDM Smith
Applying Technology Solutions to Evaluate Flood Risk, Grants, and Program Compliance. Patrick Heck, CSM, SP, Guidehouse
AI-Enabled Coastal Field Reconnaissance for Coastal Hazard Studies. Arslaan Khalid, PhD, Michael Baker International

D9 **International Session on Flood Modeling (sponsored by the ASFPM International Committee)** 306 A
 Track: Modeling
Moderator: Alejandro Riano, PE, CFM, AECOM
Do recent advancements in 2D capabilities make 1D models obsolete?
 Bo Juza, PhD, CFM, TUFLOW
Inland to Coastal Flooding and Everything in Between: A Perspective from Caribbean Islands. Felix Santiago Collazo, PE, University of Georgia
A Fast and Flexible Framework for Flood Damage Assessments. Frederique de Groen, Deltares

Noon-1:30 **Open lunch** (on-site concessions available for purchase in the Exhibit Hall)

Noon-1:30 **FEMA State Roundtable** Ballroom ABC

Celebrating the successes of the CAP-SSSE Transformation over the last 5 years and looking to a future "Steady State" and what that will look like. In addition, interactive discussion about floodplain management trainings of the future for stakeholders of floodplain management. This sessions is by invitation only and limited to NFIP State Coordinators and their staff.

1:00-4:00 **TECHNICAL FIELD TOUR (\$)** Bu
Division of Mitigation Services (DMS) Smith-Austin and Richland Creeks Stream Restoration Projects (\$50)

CONCURRENT SESSION E

E1 **Hurricane Ian - Stories from the Epicenter** 301 A
 Track: NFIP/Floodplain Management
Moderator: Lauren Dozier, CFM, Hagerty Consulting
Hurricane Ian - Stories from the Epicenter.
 Claire Jubb, AICP, CFM, Charlotte County, FL
 Billie Jacoby, Lee County, FL
 Wendy Then, Town of Lady Lake, FL

E2 **Hazard Mitigation and Resilience Planning** 301 B
 Track: Mitigation
Moderator: Deepa Srinivasan, AICP, CFM, Vision Planning & Consulting, LLC
Desert to Coast and In Between: Tailoring Flood Planning Approaches Across Texas. Tressa Olsen, Texas Water Development Board

Flood Risk in Nature's Wonderland: A Strategy for a Resilience in Buchanan County, VA. Christina Hurley, AICP, Stantec
Planning for Progress: Developing Regional Resilience Portfolios for North Carolina's Eastern Counties. JaLeesa Tate, CFM, Tetra Tech

- E3 Modeling Waves & Surge** 302 A
 Track: Modeling
 Moderator: Amanda Banks, PE, AECOM
Application of a two-dimensional hydraulic model in a highway expansion design in Grand Cayman Island. Mostafa Razzaghmanesh, PhD, PE, CFM, Remington and Vernick Engineering Inc.
Storm surge and wave modeling of Guam/CNMI with evaluation of offshore swells. Aaron Chen, PE, Stantec
Simulating Hurricanes Irma and Ian with a 2-D Coastal Flood Model. Noemi Gonzalez Ramirez, PE, PhD, FLO-2D Software Inc / Riada Engineering Corp

- E4 New Approaches in Risk Communication** 302 B
 Track: Risk Communication
 Moderator: Jeanne M. Ruefer PMP, CFM, HWC, Inc.
Flood Risk Communications on a Shoestring Budget: A Grassroots Approach to Community Engagement. Patrick Varga, CFM, Carroll County Government
Building Equitable Resiliency and Risk Communication Tools in Georgia with Online-Mapping Technology. Nick Jones, EADA, GISP, CFM, Dewberry

From Translational to Transformational Flood Risk Communication: How USACE is Shifting its Communication About Dams, Levees, and Flooding. Katelyn Noland, U.S. Army Corps of Engineers

- E5 Nature-Based Project Success Stories** 302 C
 Track: NBF
 Moderator: Daniel M. Tomczak, CFM, Jacobs
Naturalization of Fassinight Creek, An Urban Success Story. Eric Dove, PE, HDR
Progressive Design-Build Delivery is Saving Salmon and Reducing Flood Impacts. Alexander Keil, EI, Kiewit
Geomorphic Approach to Addressing Flood Risk, Natural System Functions and Infrastructure Resilience at River-Road Crossings. Salam Murtada, PE, PH, CFM, MN DNR

- E6 State Lessons Learned Responding to Recent Disasters** 303
 Track: Post-Disaster
 Moderator: Celinda Adair, CFM, Atkins
Kentucky Division of Water's Eastern Kentucky Flood Response. Carey Johnson CFM, Kentucky Division of Water
Simplifying Substantial Damage Estimates (SDEs) for Rapid Deployment. Traci Sears, CFM, MT DNRC
Making New York State more resilient to flooding and ice jamming. Mark Carabetta, PWS, CFM, SLR

- E7 Climate Change Models** 305 A
 Track: Climate Change

Moderator: Sarah Hamm, CFM, Moffatt & Nichol

Building a Web App for Future Climate Precipitation-Frequency Analysis. Thomas Williams, PE, WSP

Climate Mapping for Resilience and Adaptation Assessment Portal: Informing Communities How Climate Change Impacts Our Nation. Jon Ordog, PMP, ABS Group

Evaluating Impacts of Sea Level Rise at SR 30 Bridge over St Joe Bay Inlet. Rosemary Cyriac, PE, Atkins

E8

Stormwater Asset Management and Data-driven Decision Making 305 B

Track: Stormwater

Moderator: Kiersten Hines, PE, CFM, Jacobs
Going with the Flow: Developing Enhanced GIS Datasets to Support NPDES Compliance and Stormwater Initiatives. Neal Banerjee, PE, CFM, ESP Associates

Resilient infrastructure. Great idea. Where do I start? Joe Waln, PE, CFM, Barr Engineering Co.

Playing Favorites: City of Fort Worth's Channel Rehabilitation Project Development Program (CRPDP). Mio Matsumura, PE, CFM, Walter P. Moore

1:30-3:00

3:00-3:30

3:30-5:00

F1

E9

Equity Considerations in Mitigation 306 A

Track: Mitigation

Moderator: Jen Davis, Minnesota Dept. Emerg. Mgmt.

Mining Equitable Hazard Mitigation Projects in Ohio's Socially and Flood

Vulnerable Communities. Dan Blanchard, Ohio EMA

Planning for Resilience Investments: Prioritizing Areas of DC By Equity and Risk. Andrea Limauro, District of Columbia Department of Energy & Environment
The BRIC Wall: Capacity Gaps and FEMA Hazard Mitigation Grants. Anna Weber, Natural Resources Defense Council

ASFPM Mentoring Program Office Hours 205

Are you a state floodplain manager? Do you have new responsibilities and questions about an issue in your state or about the responsibilities of your job? Or have you been a state floodplain manager for some time and are willing to share some of your wisdom and experience with newer state floodplain staff? Come visit us at the ASFPM Mentoring Program Office hours!

Break & Final Exhibits Viewing Exh

CONCURRENT SESSION F

State FPM Initiatives 301 A

Track: NFIP/Floodplain Management
Moderator: Steve Garrett, CFM, North Carolina Floodplain Mapping Program
Best Practices for Floodplain Management Program Reviews: A State's Perspective. Yi Chan, CFM, Atkins
Benefits of NCDOT's partnership with NCDPS: NFIP compliance, Mapping, Flood Monitoring and beyond. Brian Radakovic, PE, CFM, NCDOT
Florida Pilot Program to Advance Floodplain Management Compliance Among Communities. Conn Cole, MBA/PA,

CFM, Florida Division of Emergency Management

- F2 Mitigation Case Studies and Technique Spotlight** 301 B
Track: Mitigation

Moderator: Kathy C. Hopkins, CTCM, CTCD, CFM, Texas Water Development Board
Elevation Implementation Q&A. Michelle Gonzales, CFM, Jefferson Parish
U.S. Army Corps of Engineers Nonstructural Case Studies. Danielle Tommaso, CFM, U.S. Army Corps of Engineers National Nonstructural Committee
Mitigation and Resiliency Strategies for Coastal Communities. Kelly Simpson, AC Disaster Consulting, LLC.

- F3 Large Scale Modeling** 302 A
Track: Modeling

Moderator: Chris Siverd, PhD, PE, Moffatt & Nichol
Evaluating Canada-wide Flood Hazard Model Performance: Supporting Flood Insurance Options Analysis. Robin Bourke, P. Eng, Public Safety Canada
The Intersection of Green Energy and Flood Risk. Byron Hinchey, PE, CFM, EVS, Inc.
Out with the Old River: A New Approach to Statewide Modeling in Louisiana. Jim Keith, PE, CFM, Freese and Nichols, Inc.

- F4 Predictive Inundation Mapping** 302 B
Track: Mapping
Moderator: Paul Robinson, Jacobs

Planning for the Future: Probabilistic Pluvial Flooding Predictions. Susan Marlow, GISP, Stantec
Implementation of Forecast Flood Inundation Mapping for the Nation. Mark Glaudemans, PE, National Weather Service
Evaluating and operationalizing flood risk equity. Haley Selsor, student, University of Georgia

- F5 Data for Engagement and Decisions** 302 C
Track: Risk Communication

Moderator: Vikram Shrivastava PE, PMP, D.WRE, CFM, Atkins
Data-driven Resident Flood Communication & Outreach. Susanna Pho, CFM, Forerunner
Data-Driven Community Engagement: Rethinking and Rebuilding the Community Engagement Prioritization Tool to Meet Floodplain Manager Needs. Jennifer Tylander, FEMA
Communicating Flood Risk Using Enhanced Data Management Tools. Greg Bowser, Booz Allen Hamilton

- F6 Social Justice in Floodplain Management: How do we get there?** 303
Part 1

Track: Equity
Moderator: Bruce A. Bender, CFM, Bender Consulting Svcs., Inc.
Good Intentions and Unintended Consequences: Improve Climate Equity without Added Harms. Kristin Murphy, Fors Marsh
Designing Equitable Partnerships. JaQuisha Hudson, APR, Ogilvy

Mobilizing the Power of Women and Youth for Climate-Resilient Communities.

Pamela Roach, Ogilvy

F7

Warning Systems 305 A

Track: Warning Systems

Moderator: Daryle L Fontenot PE, CFM, AECOM

Deploying the Power of Machine Learning for Near Real-Time Stream Stage

Forecasting. Steve Godfrey, PE, CFM, Woolpert

SC Flood IMPACT – Leader in Flood Warning Systems for South Carolina.

Maria Cox Lamm, CFM, South Carolina Department of Natural Resources

Flood Early Warning System and Active Flood Management – City of Raleigh,

North Carolina. Kelly Daniel, City of Raleigh

F8

Watershed Management in North Carolina 305 B

Track: Watershed Management

Moderator: Jason O. Hunter, CFM, FEMA, Region IV

Providing Holistic Flooding Solutions in Urban Areas: the Fayetteville NC Story.

Mark Van Auken, PE, Arcadis

Fayetteville NC City-Wide Watershed Program – Challenges and Solutions.

Alicia Lanier, PE, City of Fayetteville

Watershed Planning: Using Data Driven Modeling to Prioritize Protection and

Mitigation. Jenny Fleming, PE, VHB

F9

Rainfall & Runoff Modeling 306 A

Track: Modeling

Moderator: Robert L Davies Jr., PE, CFM, WSP

NOAA Atlas 15: An Update to the National Precipitation Frequency Standard. Sandra

Pavlovic, PE, NOAA

Bulletin 17B: Updated but not Outdated.

Megan O'Donnell, PE, CDM Smith

High Resolution Land Cover Classification for Improved Hydraulics and Hydrology

Modeling. Daniel Gwartney, CFM, GISP, WSP

5:25-6:30

FEMA PLENARY SESSION Ballroom ABC

Theme: Working Together to Achieve Equitable Climate Resilience

1. **David Maurstad**, Assistant Administrator, Federal Insurance Directorate, Senior Executive of the National Flood Insurance Program
2. **David Bascom**, Risk Management Directorate
3. **Eric Letvin**, Esq., PE, CFM Acting Assistant Administrator, Mitigation Directorate
4. **Jeff Jackson**, Acting Assistant Administrator, Federal Insurance Directorate

Moderator: Chad Berginnis, CFM, Executive Director, ASFPM

6:30-8:30 **ASFPM Foundation Donor Appreciation Reception & Live Auction** 306 BC
(Ticket required)
Foundation donors have received invitations with tickets to this event. Tickets for this event are available for purchase at \$125 each at the ASFPM Foundation booth in the Exhibit Hall.

6:30.... Dinner on your own, enjoy Raleigh!

Day 4: Thursday, May 11

7:00-5:00 **Registration Desk Hours** Reg

7:15-8:15 **Earlybird Session: Risk Rating 2.0 – 305 A Questions Still Remain**

Come hear the latest update from ASFPM's RR 2.0 Workgroup and FEMA, and the areas they are jointly discussing, such as mitigation credits, CRS discounts, elevations, and more. If you have questions about RR 2.0, then grab that cup of coffee and kick your morning off by joining us for this interactive hour of discussion.

7:30-5:00 **Speaker Prep Lounge Hours** 307

7:45-8:30 **Light Breakfast** Main Lobby

8:30-10:00 **PLENARY SESSION** Ballroom ABC

Theme: Excellence in Local Floodplain Management: Local Success Stories
1. Brooke Seymour, Planning and Floodplain Management Director, Mile High Flood District, CO and **Laura Kroeger**, Executive Director, Mile High Flood District
2. Tim Trautman, PE, CFM, Program Manager, Mecklenburg Cnty., NC
3. Ataul Hannan, PF, CFM, Director, Planning Division Harris County Flood Control District

Moderator: Kristabel Moore, CFM, Florida Div. Emergency Mgmt., Vice Chair, ASFPM Board of Directors

10:00-10:30 **Break** Main Lobby

10:30-Noon **CONCURRENT SESSION G**

- G1** **Tools for Floodplain Management** 301 A
 Track: NFIP/Floodplain Management
Moderator: Corey Garyotis, PE, CFM, Alabama Dept. Econ. & Community Affairs
Substantial Damage Tracking Post-Hurricane Ida. Maggie Talley, CFM, Jefferson Parish
Major Changes to FEMA's New Elevation Certificate. Shilpa Mulik, CFM, FEMA
Elevation Certificate Missteps: Connecting Guidance to the Real World. Del Schwallis, PE, CFM, Schwallis Consulting LLC
- G2** **Floodproofing and Building Performance** 301 B
 Track: Mitigation
Moderator: Timothy P. Russo CFM, FEMA, Region IV
Floodproofing for the Future - Challenges and Solutions. Aditya Bhagath, PE, CFM, PMP, Thornton Tomasetti
Innovations in Flood Mitigation. Tom Little, LIA, CFM, Floodproofing.com
Building Flood Resistant Communities One Home at a Time. Matt Lyttle, PMP, Guidehouse
- G3** **New Approaches & Techniques in Modeling** 302 A
 Track: Modeling
Moderator: Elise Ibendahl, PE, PMP®, F.ASCE, CFM, Jacobs
A Seismic Shift in Model Maintenance - Incorporating Terrain Updates in RAS-2D

Models. Todd Ward, PE, CFM, Harris County Flood Control District
Integrated Pluvial and Fluvial Flooding Assessment of an Urban Watershed in Fayetteville, NC. Matthew Jones, PhD, PE, Hazen and Sawyer
Easy as HEC: Case Studies in Maximizing New HEC-RAS Capabilities. Andrew Swynenberg, Freese and Nichols, Inc.

- G4** **International Flood Mapping** 302 B
 Track: Mapping
Moderator: Vikram Shrivastava, PE, PMP, D.WRE, CFM, Atkins
Scalability of flood mapping from street-level to state-level enables situational awareness ahead of, during, and after flood events. Kelsey McDonough, PhD, FloodMapp
Case study: National-level multi-criteria analysis and prioritization for flood hazard mapping in Canada. Maxim Fortin, P.Eng., Natural Resources Canada
Increasing Canada's resilience to flooding: Introducing the Flood Hazard Identification and Mapping Program (FHIMP). Brian Perry, EIT, MASc, Natural Resources Canada
- G5** **State Planning, Communication, and Mitigation Tools** 302 C
 Track: Risk Communication
Moderator: Marla Waters, CTCM, CTCD
Managing Colorado's Flood Risk Using Enhanced Technology/Datasets for Outreach and Mitigation. Marta Blanco Castaño, GISP, CFM, Colorado Water Conservation Board

Delaware's Flood Planning Tool: A flood and coastal hazards reference tool.

Jennifer Pongratz, CFM, DE Dept. of Natural Resources and Environmental Control

Outreach and Governance Best Practices Across Four Regions in Texas. Shonda Mace, Texas General Land Office

G6

Dam Safety and Planning [303](#)

Track: Dams & Levees

Moderator: Sabu Paul, Freese and Nichols

Dam Risks in Disasters: A Puerto Rico Case Study for Hurricane Fiona. Molly Finster, PhD, Argonne National Laboratory

The FM Area Diversion Project: Dam Operation to Minimize Project-Induced Floodplain Impacts. Joel Paulsen, PE, CFM, Metro Flood Diversion Authority

Dam Safety is a Shared Responsibility & The Nation's Infrastructure Depends On It. Kayed Lakhia, AIA, NCARB, LEED AP, CFM, FEMA

G7

Accomplishing Natural and Beneficial Functions [305 A](#)

Track: NBF

Moderator: Lori Ann Laster, PE, CFM, Papio Missouri River NRD, NE

The Olympics of Levee Setbacks: Qualifying Times, Hurdles, and Relays. Randall Behm, PE, CFM, BEHM Hazard Mitigation, LLC

Greenways in the Floodway: Design Solutions for Flooding Trails in Urban Areas. Andrew Martin, PE, CFM, ESP Associates

The Multiple Benefits of Floodplain Easements: An Assessment of Demand

G8

for Floodplain Easements in the Upper Mississippi River Basin. Olivia Dorothy, CFM, American Rivers

Local Stormwater Projects and Design Standards [305 B](#)

Track: Stormwater

Moderator: Terry Medley, P.E., Kansas Department of Agriculture

Wilmette Neighborhood Storage Project - The Largest Capital Project in the Village's History. Darren Olson, PE, CFM, D.WRE, Christopher B. Burke Engineering, Ltd.

Digging Deep for Long-term Flood Relief: Phase 2 Tunnel Feasibility Study. Jason Becker, PE, CFM, Halff Associates

No Stranger to the Rain: Economically Sizing Storm Structures in a Changing Midwest. Patrick Hartman, PE, JEO Consulting Group

G9

State Mitigation Funding Programs [306 A](#)

Track: Mitigation

Moderator: Tim Griffin, Hagerty Consulting
Vermont's Flood Resilient Communities Fund Mitigation Program. Rebecca Pfeiffer, CFM, State of Vermont Rivers Program
Proactive Mitigation: Funding Flood Protection Planning Projects in Texas.

Malcolm Hamilton, PE, Texas Water Development Board

State Resilience Revolving Loan Programs - The New Frontier of Flood Hazard Mitigation. Roderick Scott, CFM, Flood Mitigation Industry Association

Noon-1:45 **ASFP National Awards Luncheon** Ballroom ABC
Sponsored by: Hagerty Consulting
an invitation to the ASFP 2024
 Conference in Salt Lake City, Utah hosted by
 the Utah Floodplain and Stormwater
 Management Association (UFSMA).

2:00-4:30 **TECHNICAL TOUR (\$)** Bus
**SAS & The Town of Cary: Flood Prediction
 & Preparedness (\$50)**

2:30- **TRAINING WORKSHOPS (\$)**

2:30-4:30 **Coordinate Your Floodplain
 Management Ordinance with
 Building Codes (\$45)** 306 B
*Instructors: John Ingargiola, EI, CBO, CFM,
 FEMA, Adrienne Sheldon, PE, CFM, FEMA,
 and Rebecca Quinn, CFM, RCQuinn
 Consulting, Inc.*

2:30-4:30 **A Legal Examination of No
 Adverse Impact Flood Risk
 Management and Floodplain
 Stewardship (\$45)** 306 C
*Instructors: Jerry Murphy, JD, AICP, CFM,
 Univ. Florida, Thomas Ruppert, Esq., Florida
 Sea Grant, Terri Turner, AICP, CFM, Janet
 Thigpen, Southern Tier Central Regional
 Planning & Development Board*

2:00-3:30 **CONCURRENT SESSION H**

H1 **CRS: Improve Your Rating** 301 A
Track: NFIP/Floodplain Management
Moderator: Susanna Pho, Forerunner

**Efficiencies in Linking Resiliency
 Planning with the CRS Program.** Erin
 Deady, AICP, Esq., Erin L. Deady, PA
**Applying the Business Acumen of Return
 on Investment to improve CRS
 participation and success.** Thomas
 McGroarty, CFM
**A Floodplain Species Plan -
 Implementation Challenges and Solutions.**
 Seamus Riley, CFM, Jefferson Parish

H2 **Prioritizing Mitigation Actions** 301 B

Track: Mitigation
*Moderator: Darrin Punchard, FAICP, CFM,
 Punchard Consulting*
**How to Find the Biggest Bang for Your
 Mitigation Buck: Mitigation Project
 Designer Update.** Lawrence Frank, AICP,
 PMP, CFM, Atkins
**Predicting Interior Flooding: Building an
 Integrated Flood Model for Washington,
 DC.** Christine Estes, PE, PMP, CFM,
 AECOM
**Using Annualized Losses To Create A
 Flood Mitigation Capital Improvement
 Plan.** Adam Reeder, PE, CFM, CDM Smith

H3 **Modeling Coastal & Inland** 302 A

Interaction
Track: Modeling
*Moderator: Isabella Gandara, EIT, CFM,
 AECOM*
**Over the Top: Technology to Model Wave
 Overtopping Improves Coastal Resiliency.**
 Kevin Trainor, PE, Woodard & Curran
**Flood Analysis Improvements from a
 Rain-on-Mesh Surge and Rainfall**

- H4** **Compound Flood Model.** Michael B. Kabling, PE, CFM, Taylor Engineering, Inc.
Resilient Stormwater Modeling and Planning for Highly Urbanized Coastal City Watersheds. Swamy Pati, PhD, PE, CFM, Jacobs
Mapping and Risk Communication 302 B
Track: Mapping
Moderator: Michelle McIntire, J & M Global Solutions
Advancing Usability and Impact through the Future of Flood Risk Data. David Bascom, FEMA
National Water Prediction Service (NWPS) – An Upgrade to the National Weather Service (NWS) Hydrologic Web Presence. Megan Terry, CFM, National Weather Service
USGS Real-time Flood Impact Map (Pilot). Athena Clark, PE, US Geological Survey
- H5** **What Does the Research Say about Risk Communication?** 302 C
Track: Risk Communication
Moderator: Guillermo Simon, PE, CFM, Half
Converting Market Research and Metrics to Flood Insurance Policies. Butch Kinerney, FEMA
Worldwide Lessons and Insights from Flood Risk and Mitigation Communication. Christine Gralher, PE, CFM, Jacobs
Understanding Behavioral Science and its Opportunities in Building Resilience. Griffin Smith, MCP, Resilience Action Partners

- H6** **Social Justice in Floodplain Management: How do we get there?** 303
Part 2
Track: Equity
Moderator: Pier Janrhett, FEMA, Region IV
Balancing Multi-Benefit Criteria in a Capital Project. Dan Brubaker, PE, CFM, King County
Index Overload: Making Sense of Vulnerability Indexes for Floodplain Management. Aaron Henderson, CFM, Arcadis Inc.
Place-Based Inequity: Case Studies from Hurricanes Ian and Ida. Heather Hilliard, CEM, CFM, R Roan Enterprises
- H7** **Disaster Recovery Lessons Learned** 305 A
Track: Post-Disaster
Moderator: Karen McHugh, CFM, Missouri Emerg. Mgmt. Agency
Building Holistic Housing Recovery: Learnings from the Hampton Roads Regional Post Disaster Housing Recovery Project. Kelli Reddick, CFM, ICF
Lessons in Land-use Planning & Disasters from the Pacific Northwest. Mitch Paine, CFM, FEMA
New Orleans' Comprehensive Disaster Recovery Framework. Austin Feldbaum, CFM, City of New Orleans
- H8** **Local and State Responses to Climate Change** 305 C
Track: Climate Change
Moderator: Alec Rodriguez, EIT, CFM, Jacobs

Planning at Sea: Nantucket's Coastal Resilience Plan Paves the Way for Action.

Devon McKaye, CFM, Arcadis

Creating a call for action for Virginia's

Coastal Resilience Master Plan. Brian

Batten, PhD, CFM, Dewberry Engineers, Inc

NJPACT REAL - Strategies and

Challenges of Adopting Flood Hazard

Regulations Addressing Climate Change.

Vincent Mazzei, PE, New Jersey Department of Environmental Protection

H9

Modeling, Mapping & Planning

306 A

Track: Modeling

Moderator: Michael DePue, Atkins

Goldilocks and the Three Urban Flood

Models: How to size it Just Right! Elise

Ibendahl, PE, PMP, F.ASCE, CFM, Jacobs

Clearing Hurdles After Harvey: HCFCD

Tool Adapts FEMA Profiles for Unsteady

Models. Mat Leclair, PE, CFM, CPESC,

Freese and Nichols

Grays Creek Watetuesdayrshed

Masterplan with HEC-RAS 2-D Models.

Yangbin Tong, PE, CFM, Quality Engineering & Surveying

2:00-3:30

NFFA Meeting

206

3:30-4:00

Break

Main Lobby

4:00-5:30

CONCURRENT SESSION J

J1

Floodplain Management Regulations

301 A

Track: NFIP/Floodplain Management

Moderator: Pier Janrhett, FEMA Region IV

J2

Manufactured Homes: New York State Perspective. Brad Wenskoski, CFM,

NYSDEC

A Flood Resilient Future: Developing the

Data to Support the Federal Flood Risk

Management Standard (FFRMS). Andrew

Martin, FEMA

A State-of-the-Science Update for

Projecting Future Riverine and Coastal

Flood Hazards to Support the Federal

Flood Risk Management Standard. Doug

Marcy, NOAA Office for Coastal Management

Risk Assessments

301 B

Track: Mitigation

Moderator: Abby Moore, AICP, CFM, WSP

Enhancing the National Risk Index Inland

Flood Hazard with FEMA Risk Rating 2.0

Data. Casey Zuzak, GISP, FEMA

Leveraging Building-level Data to Improve

Flood Risk Modeling in FEMA's Hazus.

Doug Bausch, Niyam IT

Methods for Natural Hazard Risk

Assessments in Oregon: Flood Hazard

Risk Assessments and Beyond. Matt

Williams, Oregon Dept. of Geology

J3

Probabilistic & Statistical Analysis in Modeling

302 A

Track: Modeling

Moderator: Michael DePue, Atkins

Coastal Storm Surge Study Innovations –

Statistical processing for FEMA Region II.

Christopher Bender, PhD, PE, D.CE, Taylor

Engineering

Distributed Flood Frequency Analysis

Using Stochastic Storm Transposition and

- J4** **2D HEC-HMS.** Gregory Karlovits, PE, PH, CFM, US Army Corps of Engineers
National Scale Risk Modeling Foundational Data and Frameworks. Will Lehman, USACE
- J4** **Mapping Process Showcase** 302 B
Track: Mapping
Moderator: Jim Kilnoski, GISP, CFM
Quality Reviews of SOMA Reports and Revalidation Letters. Jamie Hughes, GISP, CDM Smith
eLOMA – A Collaborative Tool for Licensed Professionals, Communities, and FEMA. David Mummert, Michael Baker International
New Datums in 2025: What changes to expect and how to get prepared. Gary Thompson, PLS, NC Emergency Management
- J5** **Practical Messaging and Tips for Risk Communications** 302 C
Track: Risk Communication
Moderator: Stephanie Griffin, PE, F.ASCE, CFM, Halff
Disaster Risk Tolerance and the Resilience Paradox. Ronda Nowak, CEM, CFM, Michael Baker International
Right Brain Storytelling for Left Brain Thinkers. Skye King, MS, MPH, EQCC, Ogilvy
You're Only as Good as Your Words. Booz Allen Hamilton
- J6** **Nature Based Solutions in Action, Part 2** 303
Track: NBF
Moderator: Richard S. Flood, CFM, FEMA
Case Studies for Creating High Functioning, Lower Maintenance Stream Corridors. Drew Beck, PE, PMP, CFM, Matrix Design Group
Changing what we mean by infrastructure: Natural and nature-based features to address 21st century challenges. Ben Carswell, University of Georgia
Quantifying the performance of Natural and Nature-Based Features. Matt Chambers, University of Georgia
- J7** **Water Quality Considerations in Stormwater Management** 305
A Track: Stormwater
Moderator: Daryle L Fontenot, PE, CFM, AECOM
A Better Rainy Day - Find Flooding and Funding with Maps. Anisa Pjetrovic, SMU
Cornell Lift Station and Storm Water Quality Retrofitting. Colton Smith, PE, CFM, J-U-B Engineers, Inc.
An Ugly Index for Stormwater Fees. Warren Campbell, PhD, PE, CFM, Western Kentucky University
- J8** **Watershed Management Case Studies** 305 B
Track: Watershed Management
Moderator: Aaron Carranza, PE, CFM, North Dakota Dept. of Water Resources
Impacts of Watershed Specific Release Rates on Disproportionately Impacted Communities in the Greater Chicago area. Nikhil Sangwan, CFM, ISWS

Opportunities of the NRCS Watershed and Flood Prevention Operations Program.

Matt Pillard, AICP, HDR, Inc.

Adaptive optimisation: Making robust decisions in the face of uncertainty.

Richard Crowder, FICE FCIWEM CEng
C.WEM, Jacobs

J9

ASFPM Showcase 2023: From Your Membership to Training to Research and Beyond

306 A

The ASFPM showcase is your opportunity to learn about all the membership programs and services ASFPM has to offer. Join us to learn about your ASFPM Membership, ASFPM's new member portal MemberSuite, our certification and training programs, and other projects and technical assistance opportunities on offer from the Flood Science Center over the coming year. ASFPM's staff will be on hand to provide an overview and answer any questions you may have.

6:30-10:30

NETWORKING RECEPTION

Off-site

North Carolina Museum of Natural Sciences

Sponsored by: WSP

Celebrate the end of a great conference week at the closing reception!

Location is walkable downtown, but for those who need transportation, there will be a bus running on loop from the hotels. Pre-registration required. Food and beverages included.

**ATTENDEE/GUEST NAME BADGE OR TICKET
MUST BE PRESENTED FOR ADMISSION**

SAVE THE DATE

JUNE 24-27, 2024

SALT LAKE CITY, UTAH



**ASFPM Annual National
Conference 2024**