# ASFPM 2023 Conference Team

**May 7-11, 2023, Raleigh**

**Program Chair**
Steve McMaster, CFM, Ideation, Inc.

**Conference Team**
Sarah Magdanz, Conference & Event Manager
Anita Larson, Certification Coordinator & Registration
Louie Greenwell, GISP, CFM, Certification, Training & Technology Director
Kevin Currie, Training & E-Learning Coordinator
Jason Schneeberger, IT & Facilities Manager

**ASFPM Staff**
Chad Berginnis, CFM, Executive Director
Jeff Davis, Director of Operations
Meg Galloway, PE, Senior Policy Advisor
Larry Larson, PE, CFM-retired, Director Emeritus
Mary Bart, Communications Manager
Cate Secora, Member and Chapter Services Manager
Sharon Morgan, Certification Assistant
Mary Beaty, Financial Manager
Jennifer Niles, Front-end Web Developer

**ASFPM Flood Science Center**
Jeff Stone, GISP, CFM, Center Co-Director and Research & Development Manager
Genevieve Moran, Center Co-Director and Portfolio Manager
Bill Brown, PE, Senior Project Manager
Alan Lulloff, PE, CFM, Senior Project Manager
Jason Hochschild, GIS Research Analyst
Eleanor Rappolee, GIS Research Analyst
Elizabeth Zinecker, Project Manager
Jacob Jett, Research Librarian
Beth Klusinske, Research Analyst

**Conference Sponsors**

4. ............................................................................ Our Sponsors

**The Conference Program**
17.................................................................Sunday
19.................................................................Monday
23.................................................................Tuesday
40.................................................................Wednesday
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 ASFPM 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
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 NCAFPM 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!

Scan below to download the mobile app.
Passcode: ASFPM2023

WiFi
Sponsored by: Jacobs
Network: ASFPM
Passord: Jacobs2023
Real challenges require real solutions.

WE DELIVER.

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.
FLEX SEAL REMOVABLE RUBBER SEALANT COATING
FLOOD PROTECTION
HELP STOP FLOODWATER
BOOTH 206/208
FLEXSEALPRODUCTS.COM/FLOOD

FloodMapp
Operational Flood Intelligence
for Emergency Managers
to improve safety, prevent damage,
fast track recovery


www.floodmapp.com
FORERUNNER

Your Community’s Flood Resilience Platform.

Forerunner equips governments with dynamic tools to better manage flood risk and increase resilience.

Learn more at: www.withforerunner.com

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!

Cape Fear River, North Carolina
WE HELP OUR COMMUNITIES THRIVE

Question the predictable
Stand for innovation
Change the landscape

Find out what we can do for you.

FRESE.COM

wsp.com
Sunday, May 7

10:00-7:00  Registration Desk Hours  Reg

10:00-1:00  ASFPM Board Meeting  304
            (Invitation Only)

1:00-2:30  ASFPM Board & Committee  303
            Co-Chairs Luncheon  (Invitation Only)

2:30-5:30  ASFPM Committee Chairs Mtg.  304
            (Invitation Only)

9:00-5:00  TRAINING WORKSHOP ($)  305 A
            Floodplain Mgmt. 101 ($90)
            Instructors: Shanna Michael, GISP, CFM,
            ABS and Michelle Gilbert, CFM, Atkins

1:00-

1:00-4:30  TRAINING WORKSHOPS ($)  306 A
            Cooperating Technical
            Partners Bootcamp: How to Partner
            with FEMA to Reduce Risk ($45)
            Instructor: Laura Algeo, PE, FEMA

1:00-4:30  Elevation Certificates:  306 C
            The proper way to complete
            and review FEMA’s Elevation
            Certificate for floodplain management
            and for CRS ($45)
            Instructor: Becca Fricke-Croft, CFM, Atkins

3:00-3:15  First Timers Orientation  Reg

5:00-5:15  First Timers Orientation  Reg
Sunday, May 7

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 ($)  306 A

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

8:00-Noon  How FEMA’s Hazard Mitigation Assistance Grants Build a Climate Resilient Nation ($45)
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)
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
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<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>9:30-11:30</td>
<td><strong>NATIONAL POLICY DISCUSSIONS</strong></td>
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<td>International Policy</td>
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<td>Floodplain Regulations</td>
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<td>Mapping &amp; Engineering Standards</td>
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<td>Mitigation</td>
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<td>Professional Development</td>
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<td>Coastal Issues</td>
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<td>10:00-Noon</td>
<td><strong>CFM Bootcamp: A Guide to Becoming a CFM</strong></td>
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<td></td>
<td>(Free, pre-registration required)</td>
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<td><em>Instructor:</em> Louie Greenwell, GISP, CFM, ASFPM</td>
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<td>10:00-10:15</td>
<td><strong>First Timers Orientation</strong></td>
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<td>Noon-1:00</td>
<td><strong>Lunch on your own</strong></td>
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<td><em>(on-site concessions will be available in the Main Lobby)</em></td>
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<td>Noon-1:00</td>
<td><strong>REGIONAL DISCUSSION SESSIONS</strong></td>
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<td>Hosted by your elected Regional Directors (based on FEMA regions).</td>
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<td>Region 10</td>
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<td>12:30-5:00</td>
<td><strong>TOUR ($)</strong></td>
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<td>City of Raleigh Flood Education, Awareness and Preparedness ($50)</td>
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<td>1:00-3:00</td>
<td><strong>TRAINING WORKSHOPS ($)</strong></td>
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<td>Basic GIS Training for</td>
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<td>Mapping Repetitive Flood Risk ($45)</td>
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<td><em>Instructors:</em> Eleanor Rappolee, ASFPM, Jason Hochschild, ASFPM and Jeff Stone, CFM, ASFPM</td>
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<td>1:00-3:00</td>
<td><strong>2D or not 2D: The Makings of a Successful 2D LOMC Submittal ($45)</strong></td>
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<td><em>Instructors:</em> Lauren Sester, EI, CFM, Marie Benavides, CFM, Atkins and Arslan Khalid, CFM, Atkins</td>
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<td>1:00-5:00</td>
<td><strong>USGS flood tools including</strong></td>
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<td>StreamStats, Flood Event Viewer, Flood Inundation Mapper and FloodWIDE ($45)</td>
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<td><em>Instructors:</em> Peter McCarthy, USGS, Athena Clark, USGS, Julia Prokopec, USGS, and Andrea Medenblik, USGS</td>
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<td>Risk Communication &amp; Social</td>
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<td>Justice Task Force</td>
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<td>Flood Insurance</td>
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<td>Legal Issues, Higher Education &amp; No Adverse Impact</td>
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<td>Stormwater Mgmt. &amp; Natural &amp; Beneficial Functions</td>
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<td>Nonstructural Floodproofing</td>
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<td>Arid Regions</td>
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<td>2:00-5:00</td>
<td>CFM Exam (pre-registration required)</td>
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<td>3:00-5:00</td>
<td>CTP Conversation</td>
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<td>3:00-3:15</td>
<td>First Timers Orientation</td>
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<td>3:30-4:00</td>
<td>BREAK</td>
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<td>Main Lobby</td>
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<td>4:00-5:00</td>
<td>ASFPM Members Meeting</td>
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<td>5:00-7:00</td>
<td>Exhibits Grand Opening/Social</td>
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<td>Exhibit Hall A</td>
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<td>Sponsored by: Stantec</td>
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<td>7:00….</td>
<td>Dinner on your own, enjoy Raleigh!</td>
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**Day 2: Tuesday, May 9**

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

A1 National FPM Policy  301 A
Track: NFIP/Floodplain Management
Moderator: Lauren Sester EI, 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

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 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 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
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:
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, Waggoner and Ball
- Christian Kamrath, CFM, Resilience Program Manager Adaptation, Miami-Dade County, Miami, FL
- Dale Morris, Chief Resilience Officer, City of Charleston, SC
Tuesday, May 9

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

Noon-1:30
**ASFPM Foundation Luncheon**
ASFPM Foundation Update
**Moderator:** Dale Lehman, PE, CFM, ASFPM Foundation President, AECOM

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

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

1:45-3:15 **CONCURRENT SESSION B**

**B1**
**CRS: You Can Do It!**
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**
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 Sweezea, 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**
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**
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

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

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

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


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

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

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

TRAINING WORKSHOPS ($)

State FPM Program Authority and Structure and Coordination

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)

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

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

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

Break & Exhibits

13th Annual ASFPM Foundation Student Paper Competition

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

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
3:45-5:15 CONCURRENT SESSION C

C1 Advice for Local Floodplain Administrators
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 Infrastructure
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 Mitigation
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 Initiatives
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 Communications
Track: Risk Communication
Moderator: Jarred Overbey, PE, CFM, Halff 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

Advancing Equity through Federal Programs

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

Nature Based Solutions in Stormwater Management

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 Millspaugh, PE, PMP, Arcadis

Alternative Procurement Strategies to Accelerate the Implementation of Green Infrastructure. Jennifer Hatchett, PE, RES, LLC

Watershed-Based State Initiatives

Track: Watershed Management

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


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

Streamline Technologies Showcase: Real-Time Flood Forecasting

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


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

Exhibits Social

Sponsored by: FM Approvals

Exhibit Hall A

Dinner on your own – enjoy Raleigh!
### May 3: Wednesday, May 10

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>7:00-10:00</td>
<td>9th Annual Running of the Chapters 5K Run/Walk</td>
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<td>Bus will run at 6:00am and again at 6:30am from the Convention Center.</td>
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<td>7:00-3:30</td>
<td>Exhibit Hall</td>
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<td>7:00-5:00</td>
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<td>7:30-5:00</td>
<td>Speaker Prep Lounge</td>
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<td>7:45-8:30</td>
<td>Light Breakfast</td>
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<td>8:30-10:00</td>
<td><strong>PLENARY SESSION</strong></td>
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<td>Theme: Spotlight on Federal and NGO Initiatives</td>
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<td>1. Jaime A. Pinkham, Principal Deputy</td>
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<td>Assistant Secretary of the Army for Civil Works, Army</td>
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<td>2. David Applegate, Director, U.S. Geological Survey</td>
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<td>3. Tom Kiernan, Executive Director, American Rivers</td>
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<td><strong>Moderator:</strong> Aaron Carranza PE, CFM, North Dakota Dept. of Water Resources, Treasurer, ASFPM Board of Directors</td>
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<td>10:00-10:30</td>
<td>Break &amp; Exhibits</td>
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<td>10:30-Noon</td>
<td><strong>CONCURRENT SESSION D</strong></td>
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<td>D1</td>
<td>Floodplain Management Compliance</td>
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<td>Track: NFIP/Floodplain Management</td>
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<td><strong>Moderator:</strong> Karen McHugh, CFM, Missouri</td>
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<td><strong>NFIP Compliance Audit Update.</strong> Sarah Owen, FEMA</td>
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<td>Preparing for Your Next Compliance Audit:</td>
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<td>Best Practices from an Expert Auditor. Wade Weisman, PMP, CSP, Booz Allen Hamilton</td>
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<td>Floodplain Management Compliance After a Disaster. Claire Jubb, AICP, CFM, Charlotte County, FL</td>
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<td>Building Codes and Standards</td>
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<td><strong>Moderator:</strong> Benjamin B. Pylant, PE, CFM, Halff Associates</td>
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<td>The Future of Building Codes – Federal Perspectives and the NIABC.</td>
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<td>Ed Laatsch, PE, FEMA</td>
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<td>The Envision Sustainability and Resilience Rating System. Karen Kabbes, PE, D.WRE, CFM, Kabbes Engineering, Inc TBD.</td>
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<td>2D Floodway Modeling</td>
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<td><strong>Moderator:</strong> Vikram Shrivastava PE, PMP, D.WRE, CFM, Atkins</td>
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<td>The Saga of Gould Wash: A Challenging 2D Floodway Case Study. Matt Chaney, PE, CFM, AECOM</td>
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<td>FEMA 2D Modeling with Floodways: A case study - City of Ithaca, New York. Joanna Rohlf, GISP, CFM, Kansas</td>
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<td>Going Regulatory with 2D Modeling in Kansas. Inger Sarappo, GISP, CFM, Stantec</td>
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<td>FEMA 2D Modeling with Floodways: A case study - City of Ithaca, New York. Joanna Rohlf, GISP, CFM, Kansas Department of Agriculture, Division of Water Resources</td>
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D4 Transportation Risk Assessments and Inundation Mapping
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 US 70 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
Moderator: Brian A. Caufield, 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
Track: Dams & Levees
Moderator: Will Zung, PMP, CFM, Stantec

D7 Nature-Based Solutions and a New Era of Floodplain Management
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

D8 Using Technology to Innovate FPM Solutions
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

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International Session on Flood Modeling (sponsored by the ASFPM International Committee)

**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

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**Noon-1:30**

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

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**Noon-1:30**

*FEMA State Roundtable* Ballroom ABC

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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 session is by invitation only and limited to NFIP State Coordinators and their staff.

**TECHNICAL FIELD TOUR ($)** Bus

Division of Mitigation Services (DMS) Smith-Austin and Richland Creeks Stream Restoration Projects ($50)

**CONCURRENT SESSION E**

**E1 Hurricane Ian - Stories from the Epicenter**

**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

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**E2 Hazard Mitigation and Resilience Planning**

**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

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

New Approaches in Risk 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

Nature-Based Project Success Stories 302 C
Track: NBF
Moderator: Daniel M. Tomczak, CFM, Jacobs
Naturalization of Fassnight 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

State Lessons Learned 303
Responding to Recent Disasters
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

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
Track: Stormwater
Moderator: Kiersten Hines, PE, CFM, Jacobs
Playing Favorites: City of Fort Worth’s Channel Rehabilitation Project Development Program (CRPDP). Mio Matsumura, PE, CFM, Walter P. Moore

E9
Equity Considerations in Mitigation
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

ASFPM Mentoring Program Office Hours
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

CONCURRENT SESSION F
State FPM Initiatives
Track: NFIP/Floodplain Management
Moderator: Steve Garrett, CFM, North Carolina Floodplain Mapping Program
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
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 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

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

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

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
Day 4: Thursday, May 11

7:00-5:00 Registration Desk Hours

7:15-8:15 Earlybird Session: Risk Rating 2.0 – 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

7:45-8:30 Light Breakfast

PLENARY SESSION

8:30-10:00

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

Wednesday, May 10

6:30-8:30 ASFPM Foundation Donor Appreciation Reception & Live Auction

(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!
Thursday, May 11

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

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

G4  Models  302 A
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
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
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
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

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

G8
Local Stormwater Projects and Design Standards
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


G9
State Mitigation Funding Programs
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
<table>
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<tr>
<th>Time</th>
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<tr>
<td>Noon-1:45</td>
<td>ASFPM National Awards Luncheon</td>
<td>Ballroom ABC</td>
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<td><em>Sponsored by: Hagerty Consulting</em></td>
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<td>…an invitation to the ASFPM 2024 Conference in Salt Lake City, Utah hosted by the Utah Floodplain and Stormwater Management Association (UFSMA).</td>
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<td>2:00-4:30</td>
<td>TECHNICAL TOUR ($)</td>
<td>Bus SAS &amp; The Town of Cary: Flood Prediction &amp; Preparedness ($50)</td>
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<td>TRAINING WORKSHOPS ($)</td>
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<td>2:30-4:30</td>
<td><strong>Coordinate Your Floodplain Management Ordinance with Building Codes ($45)</strong></td>
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<td><em>Instructors:</em> John Ingargiola, EI, CBO, CFM, FEMA, Adrienne Sheldon, PE, CFM, FEMA, and Rebecca Quinn, CFM, RCQuinn Consulting, Inc.</td>
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<td>2:30-4:30</td>
<td><strong>A Legal Examination of No Adverse Impact Flood Risk Management and Floodplain Stewardship ($45)</strong></td>
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<td><em>Instructors:</em> Jerry Murphy, JD, AICP, CFM, Univ. Florida, Thomas Ruppert, Esq., Florida Sea Grant, Terri Turner, AICP, CFM, Janet Thigpen, Southern Tier Central Regional Planning &amp; Development Board</td>
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<td><strong>CRS: Improve Your Rating</strong></td>
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<td><em>Track: NFIP/Floodplain Management</em></td>
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<td><em>Moderator: Susanna Pho, Forerunner</em></td>
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<td><strong>Efficiencies in Linking Resiliency Planning with the CRS Program.</strong></td>
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<td>Erin Deady, AICP, Esq., Erin L. Deady, PA</td>
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<td><strong>Applying the Business Acumen of Return on Investment to improve CRS participation and success.</strong></td>
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<td>Thomas McGroarty, CFM</td>
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<td><strong>A Floodplain Species Plan - Implementation Challenges and Solutions.</strong></td>
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<td>Seamus Riley, CFM, Jefferson Parish</td>
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<td><strong>Prioritizing Mitigation Actions</strong></td>
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<td><em>Track: Mitigation</em></td>
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<td><em>Moderator: Darrin Punchard, FAICP, CFM, Punchard Consulting</em></td>
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<td><strong>How to Find the Biggest Bang for Your Mitigation Buck: Mitigation Project Designer Update.</strong></td>
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<td>Lawrence Frank, AICP, PMP, CFM, Atkins</td>
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<td><strong>Predicting Interior Flooding: Building an Integrated Flood Model for Washington, DC.</strong></td>
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<td>Christine Estes, PE, PMP, CFM, AECOM</td>
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<td><strong>Using Annualized Losses To Create A Flood Mitigation Capital Improvement Plan.</strong></td>
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<td>Adam Reeder, PE, CFM, CDM Smith</td>
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<td><strong>Modeling Coastal &amp; Inland Interaction</strong></td>
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<td><em>Track: Modeling</em></td>
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<td><em>Moderator: Isabella Gandara, EIT, CFM, AECOM</em></td>
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<td><strong>Over the Top: Technology to Model Wave Overtopping Improves Coastal Resiliency.</strong></td>
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<td>Kevin Trainor, PE, Woodard &amp; Curran</td>
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<td><strong>Flood Analysis Improvements from a Rain-on-Mesh Surge and Rainfall</strong></td>
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**Compound Flood Model.** Michael B. Kabiling, PE, CFM, Taylor Engineering, Inc.

**Resilient Stormwater Modeling and Planning for Highly Urbanized Coastal City Watersheds.** Swamy Pati, PhD, PE, CFM, Jacobs

H4 Mapping and Risk Communication

**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?

**Track:** Risk Communication

**Moderator:** Guillermo Simon, PE, CFM, Halff

**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? 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

**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

**Track:** Climate Change

**Moderator:** Alec Rodriguez, EIT, CFM, Jacobs
Planning at Sea: Nantucket’s Coastal Resilience Plan Paves the Way for Action. Devon McKay, CFM, Arcadis

Creating a call for action for Virginia’s Coastal Resilience Master Plan. Brian Batten, PhD, CFM, Dewberry Engineers, Inc

Challenges of Adopting Flood Hazard Regulations Addressing Climate Change. Vincent Mazzei, PE, New Jersey Department of Environmental Protection

Modeling, Mapping & Planning

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 Watershed Masterplan with HEC-RAS 2-D Models. Yangbin Tong, PE, CFM, Quality Engineering & Surveying

2:00-3:30 NFFA Meeting

3:30-4:00 Break

4:00-5:30 CONCURRENT SESSION J

Floodplain Management Regulations

Moderator: Pier Janhett, FEMA Region IV

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


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

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

Probabilistic & Statistical Analysis

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
**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**

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**

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**

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**

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**

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

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

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