



Fall Floodplain Institute

NORTH CAROLINA ASSOCIATION OF FLOOD PLAIN MANAGERS

PROGRAM

19th Annual Fall Floodplain Institute
September 10-12, 2025
Cherokee, NC

Tuesday, September 9	
6:30 PM – 9:00 PM	NCAFP Board Meeting (<i>Birch</i>)
9:00 PM – 11:00 PM	Hospitality Suite Open (<i>Room 220</i>)
Wednesday, September 10	
9:00 AM – 1:00 PM	Vendor Exhibit Setup (<i>Oak</i>)
9:00 AM – 1:00 PM	John Fullerton Golf Outing (<i>Sequoia National Golf Club, 79 Cahons Road, Whittier, NC</i>) Sponsored by INSIGHT Coordinator: <i>Bill Tingle (NCAFP Executive Director)</i>
12:30 – 1:45 PM	Registration (<i>Council Fire Ballroom Prefunction Area</i>)
1:45 – 3:15 PM	PLENARY SESSION 1: OPENING (<i>Locust/Hickory</i>) Welcome to FFI: <i>Laura Arnold, PE, CFM (NCAFP Chair)</i> [10] Welcome to Cherokee [10] ASFP/CFM/Chapter Updates: <i>Bill Tingle, CFM (NCAFP Executive Director)</i> [20] NCAFP Scholarship Program Updates: <i>Dan Tomczak, CFM (Scholarship Committee Chair/Region B Rep.)</i> [10] NCAFP Student Chapter Updates: <i>Amit Sachan, PE, CFM (AtkinsRéalis)</i> [10] North Carolina State Climate Office: <i>Jared Bowden, PhD, Interim Director (NC State Climate Office)</i> <i>Factors Contributing to Helene Damage</i> [30]
3:15 – 3:45 PM	BREAK Refreshments – Sponsored by Dewberry (<i>Oak</i>)
3:45 – 5:15 PM	PLENARY SESSION 2: STATEWIDE UPDATES (<i>Locust/Hickory</i>) Moderator: <i>Mike Robinson, CFM (NCAFP Vice-Chair)</i> North Carolina Emergency Management (NCEM) Update: <i>Steve McGugan, State Hazard Mitigation Officer; Gary Thompson, PLS, NC Geodetic Survey Chief; Carl Baker, CFM, Mitigation Plans Manager; and Steve Garrett, CFM, State NFIP Coordinator</i> [45] North Carolina Department of Environmental Quality Panel Discussion (NCDEQ): <i>Marlena Byrne, Acting Chief Resilience Officer, Toby Vinson, PE, CFM, Director Division of Energy, Mineral, and Land Resources, Melanie Lander, French Broad Blueprint Lead, Shadi Eskaf, Division Director Water Infrastructure</i> [45]
5:15 – 5:45 PM	Registration (<i>Council Fire Ballroom Prefunction Area</i>)
5:30 – 7:00 PM	Exhibitors' Social – Refreshments (<i>Oak</i>)
7:00 – 9:00 PM	Dinner on your own
9:00 – 11:00 PM	Hospitality Suite Open (<i>Suite 220</i>)

Thursday, September 11

7:00 – 10:30 AM	Registration (<i>Council Fire Ballroom Prefunction Area</i>)		
7:00 – 8:30 AM	Morning Meet and Greet – Sponsored by Freese and Nichols (<i>Oak</i>)		
8:30 – 10:00 AM Note: Duration of individual presentations is in brackets [].	PLENARY SESSION 3: STATEWIDE UPDATES (<i>Locust/Hickory</i>) <i>Moderator: Steve Garrett, CFM</i> North Carolina Department of Transportation (NCDOT) Resiliency Update: <i>Matt Lauffer, PE, CPM [30]</i> North Carolina Geological Survey (NCGS) Geologic Hazards: <i>Dr. David Korte, PhD, PG [30]</i> National Environmental Mapping and Applications Center (NEMAC): <i>Greg Dobson, GISP, Director of GIS and Engagement, UNC-Asheville's NEMAC [30]</i>		
10:00 – 10:30 AM	BREAK Refreshments – Sponsored by McGill (<i>Oak</i>)		
10:30 AM – 12:00 PM Note: Duration of individual presentations is in brackets [].	1-A General Session <i>(Locust)</i> <i>Moderator: Stephen Smith, CFM</i> One [45] <i>What in the Helene Happened in Buncombe County? – Nathan Pennington, CFM (Buncombe County)</i> Two [15] <i>EOC Calling, Are you Ready? – Nathan Pennington, CFM, Thana Alley, AICP, CFM, Angela Lee, CFM (Buncombe County).</i> Three [30] <i>Repairing the Damage Caused by Helene – Angela Lee, CFM Thana Alley, AICP, CFM (Buncombe County); John Gerber, PE, CFM</i>	1-B Technical Session <i>(Hickory)</i> <i>Moderator: Ryan Cox, CFM</i> One [30] <i>Adapting 2D Base Level Engineering HEC-RAS Models for Wildfire Burn Scars – Matthew Dudley, PE, CFM (ESP Associates, Inc.)</i> Two [30] <i>NC Statewide Lidar – AI/ML Derivative GIS Products for Cities, Towns and Counties – Michael Baranowski, CMT-Lidar, GISP (SAM Inc.)</i> Three [30] <i>Solving the Resiliency Puzzle: Construction of Flood Gate for City of Lumberton, North Carolina – Amit Sachan, PE, CFM (AtkinsRéalis) and Rob Armstrong, PE (City of Lumberton)</i>	1-C Special Session <i>(Ash and Beach Combination)</i> <i>Moderator: Melonee Brock, CFM</i> One [30] <i>Boggy Barriers: Evaluating Charlotte's Wetland Mitigation Banking – Ryan Carter (UNC Charlotte ASPRS)</i> Two [30] <i>Modeling the Hurricane Matthew Flooding in Eastern North Carolina Using HEC-RAS 2D Rain-on-Grid Approach – Manoj K. Jha, PhD, D.WRE, PE (NC A&T), Yared Michael Gebregziabher, MSc (NC A&T)</i> Three [30] <i>Evaluating Survey Needs for Fairfax Co, VA Hydraulic Modeling – Brennan Pitts, EI (AtkinsRéalis)</i>
12:00 – 1:15 PM	LUNCH BUFFET INCLUDED (<i>Oak</i>)		
1:30 – 3:00 PM Note: Duration of individual presentations is in brackets [].	2-A Technical Session <i>(Locust)</i> <i>Moderator: Melonee Brock, CFM</i> One [30] <i>Collaboration in Restoring Emergency Water and Sewer and Temporary Bridge and Culvert Replacement to the Town of Banner Elk, NC in the Wake of Hurricane Helene – Robert Rizzuto, EI, and Dean Goodison, PE (AtkinsRéalis)</i> Two [30] <i>Area Subject to Flooding: NCDOT/NCEM Flood Warning Tools Update and Helene Response – Kurt Golembesky, PE, CFM (NCDOT) and Abhijit Patil, PhD (NCEM)</i> Three [30] <i>Middle Fork Greenway at Tweetsie Railroad: The Four-Year CLOMR – Robert Billings, PE, PH, CFM (New River Engineering, PLLC)</i>	2-B General Session <i>(Hickory)</i> <i>Moderator: Hope Morgan, CFM, NCPLS, GISP, CTBME</i> One [30] <i>National Floodplains Assessment: What do we have? What do we need? Creating the System to Protect and Restore North Carolina's Floodplains – Peter Raabe, (American Rivers)</i> Two [30] <i>Engaging Your Public in the Flood Map Open House Meeting – Stacey Fuller, CFM (NCEM)</i> Three [30] <i>Common Ground: Bridging the Data Gap through Collaborative Efforts – Jason R. Caldwell, PhD, PE, CCM, PH (Weather and Water, Inc.)</i>	2-C CFM Review <i>(Ash and Beach Combined)</i> <i>Facilitator: Steve Garrett, CFM, State NFIP Coordinator and Terry Foxx, CFM, Western NFIP Planner (NCEM)</i>

Thursday, September 11, Continued

3:00 – 3:30 PM

BREAK Refreshments – Sponsored by [Freese and Nichols](#) (Oak)

3:30 – 5:00 PM

Note: Duration of individual presentations is in brackets [].

3-A Technical Session

(Locust)

Moderator: James Scanlon, CFM

One [30]

Designing for Resilience – Ken Ashe, PE, CFM, PMP (Summit Design and Engineering)

Two [30]

Building Resilience through Recovery – Holly B. White, AICP, CFM and Nicole Goddard, MSC (State Resilience Office)

Three [30]

From Resilience to Recovery: Leveraging FEMA Programs for Flood Mitigation in North Carolina – Jennifer Davis and Josephine Justin (ICF)

3-B General Session

(Hickory)

Moderator: Kurt Golembesky, PE, CFM

One [30]

NCDOT/Emergency Management FINMAN Gage Installation process – Crystal Moore (KCI)

Two [30]

Flood Warning Stations and Networks: Safe-guarding Lives, Property, and Infrastructure with Effective Water Data Management – Chuck Kozora and Bradley Simms (OTT Hydromet)

Three [30]

Texas Water Development Board High Water Mark Project – Hope Morgan, PLS, GISP, CFM (AECOM)

3-C CFM Review

(Ash and Beech Combined)

Facilitator:

Steve Garrett, CFM, State NFIP Coordinator and Terry Foxx, CFM, Western NFIP Planner (NCEM)

5:00 PM

Dinner on your own

7:30 – 11:00 PM

Hospitality Suite Open (Suite 220)

Friday, September 12

7:30 – 8:30 AM

Morning Meet and Greet - (Oak)

8:30 – 10:00 AM

Note: Duration of individual presentations are in brackets [].

4-A Western NC

(Locust)

Moderator: Scott Brookhart, PE, CFM

One [30]

Response, Recovery, and Regulation: Helene's Impacts in Mecklenburg County – Mathew Hornack, PE, CFM, CTP and James Scanlon, GISP, CFM (Mecklenburg County)

Two [30]

Racing the Runoff 2.0: Application of Near-Realtime Rainfall Rasters for Flood Forecasting in NC for Hurricane Helene – Ed Dickson, PE, CFM (Freese and Nichols, Inc)

Three [30]

French Broad River Basin Action Strategy under the NC Flood Resiliency Blueprint Program – Stu Brown (NCDEQ DMS)

4-B General

(Hickory)

Moderator: Holly White AICP, CFM

One [30]

Making North Carolina Resilient with Partnerships in One Basin at a Time – Rebecca Purvis PhD, PE, CCM, PH (AtkinsRéalis), Shana Shapiro, MEM (NCDEQ), Chris Dreps (NCDEQ)

Two [30]

From Policy to Practice: Advancing Flood Resilience in North Carolina through Storm water Planning and Nature Based Solutions in the NC Blueprint Tool – Peyton Campbell and Kelsey Peterson, CFM (AECOM)

Three [30]

Higher Standards: Methods Supporting the North Carolina Flood Resiliency Blueprint Online Decision Support Tool's Policy Actions – Kelsey Peterson, CFM and Peyton Campbell (AECOM)

4-C CFM Exam

(Ash and Beech Combined)

8:30 – 11:30 AM
[3 hr]

Proctors:

Bill Tingle, CFM Melonee Brock, CFM

Friday, September 12 Continued

10:00 – 10:15 AM	BREAK Refreshments – Sponsored by McAdams (Oak)
10:15 – 12:00 PM	PLENARY SESSION 4: CLOSING PLENARY (Locust/Hickory) <i>Moderator: Laura Arnold, PE, CFM (AECOM)</i>
Note: Duration of individual presentations are in brackets [].	WNC Recovery & Resilience Partnership: <i>Tony McEwen, Jack Krolkowski (American Flood Coalition) [45]</i>
	Helene's Deadly Debris Flows: What Have We Learned and How Will We Apply It?: <i>Philip Prince, PhD (Appalachian Landslide Consultants) [45]</i>
	Conference Close-out, Spring Conference 2026, and Prize Giveaways (Must be Present to Win!): <i>Laura Arnold, PE, CFM (NCAFPD Chair), Susan Frady, CFM (NCAFPD Treasurer/Conference Chair) [15]</i>

Thank you to our 2025 Fall Floodplain Institute Presenters

Thana Alley, AICP, CFM (Buncombe County)	Mathew Hornack PE, CFM (Mecklenburg County)
Rob Armstrong, PE (AtkinsRéalis)	Manoj Jha, PhD, D.WRE, PE (NC A&T State University)
Tara Arnette (Cape Fear Public Utility Authority)	Josephine Justin (ICF)
Laura Arnold, PE, CFM (AECOM)	David Korte, PhD, PG (NCDEQ)
Ken Ashe PE, CFM, PMP (Summit Design and Engineering Services)	Chuck Kozora (OTT Hydromet)
Carl Baker, CFM (NCEM)	Melanie Lander (NCDEQ French Broad Blueprint Lead)
Michael Baranowski, CMT-Lidar, GISP (Sam INC)	Matt Lauffer, PE, CPM (NCDOT)
Robert Billings, PE, PH, CFM (New River Engineering PLLC)	Angela Lee, CFM (Buncombe County)
Jared Bowden, PhD (State Climate Office of NC)	Tony McEwen (American Flood Coalition)
Melanie Brock, CFM (Mecklenburg County)	Steve McGugan (NCEM)
Marlena Byrne (NCDEQ State Resilience Office)	Crystal Moore (KCI Associates of North Carolina)
Jason R. Caldwell, PhD, PE, CCM, PH (Weather and Water)	Hope Morgan, PLS, GISP, CFM (AECOM)
Peyton Campbell (AECOM)	Abhijit Patil, PhD (NCEM)
Ryan Carter (UNC Charlotte ASPRS)	Nathan Pennington, CFM (Buncombe County)
Ryan Cox, CFM (Insight Consulting Group)	Kelsey Peterson, CFM (AECOM)
Jennifer Davis (ICF)	Brennan Pitts, EI (AtkinsRéalis)
Greg Dobson, GISP (NEMAC)	Philip Prince, PhD (Appalachian Landslide Consultants)
Chris Dreps (NCDEQ)	Rebecca Purvis, PhD, PE, CCM, PH (AtkinsRéalis)
Ed Dickson, PE, CFM (Freese and Nichols, Inc)	Peter Raabe (American Rivers)
Matt Dudley, PE, CFM (ESP Associates Inc)	Robert Rizzuto, EI (AtkinsRéalis)
Shadi Eskaf (NCDEQ Division of Water Infrastructure)	Amit Sachan, PE, CFM (AtkinsRéalis)
Terry Foxx, CFM (NCEM)	James Scanlon, GISP, CFM (Mecklenburg County)
Susan Frady, CFM (Conference Chair)	Shana Shapiro, MEM (NCDEQ)
Stacey Fuller, CFM (NCEM - FPM)	Bradley Simms, (OTT Hydromet)
Steve Garrett, CFM (NCEM)	Stephen Smith, CFM (Town of Ayden)
Yared Gebregziabher, MSc (NC A&T State University)	Gary Thompson, PLS, GISP, CFM (NCEM)
John Gerber, PE, CFM (Living Legend)	Bill Tingle, CFM (NCAFPD Executive Director)
Nichole Goddard, MSc (NC Resilience Team)	Dan Tomczak, CFM (Jacobs)
Kurt Golembesky, PE, CFM (NCDOT)	Toby Vinson, PE, CPM (NCDEQ Division of Energy, Mineral, and Land Resources)
Dean Goodison, PE (AtkinsRéalis)	Holly White, AICP, CFM (NCDEQ)

Thank you to our exhibiting sponsors:



Thank you to our break sponsors:



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Council Fire Ballroom Floor Plan



NC Floodplain Managers
September 2025

Council Fire Ballroom

