

# North Carolina Association of Floodplain Managers

Annual Conference  
Wrightsville Beach, NC May 6 - 8, 2024

## PROGRAM

Sunday, May 5 (Pre-Conference Activities)	
Noon – 12:30	<b>Annual John Fullerton Memorial Golf Tournament</b> <i>Beverages Provided – Bill Tingle, CFM</i>
12:30 – 6:00 PM	<b>Annual John Fullerton Memorial Golf Tournament</b> <i>Wilmington Municipal Golf Course, Tee Time 12:30 PM – Bill Tingle, CFM</i>
4:30 – 6:30 PM	<b>Registration</b> (Event Space Foyer, Core Sound Room)
5:00 – 8:00 PM	<b>Exhibitor Set-Up</b> (Prefunction Concourse) <i>*Note: Exhibits must be removed before 6:00 PM on Tuesday.</i>
7:00 – until	<b>NCAFPM Board Meeting</b> (Solstice Private Dining Room)
8:00 – until	<b>NCAFPM Hospitality Suite</b> ( <i>Room Name/Number</i> )
Monday, May 6 “Big Visions from State Partners”	
7:00 – 10:00 AM	<b>Registration and CEC Check-in</b> (Event Space Foyer, Lobby Entry)
7:00 – 8:15	<b>Coffee, Juices, and Assorted Biscuits</b> (Prefunction Concourse)
8:15 AM – Noon	<b>PLENARY SESSION 1</b> (Lumina Ballroom)
8:15 – 8:30	<b>Welcome and Updates</b> <i>Laura Arnold, PE, CFM (NCAFPM Vice Chair)</i> <i>Mike Robinson, CFM (NCAFPM Program Chair)</i> <i>Bill Tingle, CFM (NCAFPM Executive Director)</i>
8:30 – 8:40	<b>Welcome</b> – Mayor of Wrightsville Beach [10]
8:40 – 9:40	<b>NCEM Hazard Mitigation, NCFMP, NFIP, and NCGS Updates</b> [60] <i>Steve McGugan (State Hazard Mitigation Officer); Steve Garrett, CFM (State NFIP Coordinator); Chris Crew (Mitigation Plans Manager); and Gary Thompson, PLS (Deputy Hazard Mitigation Chief, NC Geodetic Survey Chief)</i>
9:40 – 10:10	<b>FEMA Region IV Updates</b> [30] <i>Jason Hunter, CFM, Floodplain Management and Insurance Branch Chief, Mitigation Division, FEMA Region 4</i>
10:10 – 10:30	<b>Break and Silent Auction Open</b> – (Assorted Danishes, Yogurt, Fresh Fruit, and Soft Drinks) (Pre-function Concourse) [20]
10:30 – 11:15	<b>NCDOT’s Roadway to Resilience Update</b> [45] <i>Matt Lauffer, PE, CPM State Hydraulics Design Engineer, NC Department of Transportation, Hydraulics Unit</i>
11:15 – Noon	<b>NC Flood Resiliency Blueprint Update</b> [45] <i>Marc Recktenwald, NC Division of Mitigation Services, NC Department of Environmental Quality</i>
Noon – 1:15 PM	<b>Networking Luncheon</b> – “Flavors de Mexico Buffet” <b>Lunch Buffet</b> (Prefunction Concourse, Lumina Ballroom) <b>2024 NCAFPM Scholarship Update</b> – Daniel M. Tomczak, CFM, Jacobs

Monday, May 6 (continued)			
1:15 PM to 4:45	PLENARY SESSION 2		
1:15 – 1:45	<b>KEYNOTE ADDRESS: Development of a Resilient Route Identification Tool for NCDOT Using 2D Rain-on-Grid Modeling and SAS Institute's Data Analytics VIYA Platform [30]</b> <i>Barbara Doll, PhD, PE – NC Sea Grant and NC State University, Biological &amp; Agricultural Engineering Department</i>		
1:45 – 2:15	<b>North Carolina Geospatial Data Update [30]</b> <i>Colleen Kiley, GISP, CFM, NC Center for Geographic Information and Analysis</i>		
2:15 – 2:45	<b>Flood Resilience Updates from NCORR [30]</b> <i>Holly White, AICP, CFM and Jeff Royal, North Carolina Office of Recovery &amp; Resiliency</i>		
2:45 – 3:15	<b>Break and Silent Auction Open – Assorted Snacks and Soft Drinks (Prefunction Concourse) [30]</b>		
3:15 – 3:45	<b>NC Division of Coastal Management Updates [30]</b> <i>Kasen Wally, Coastal Resilience Specialist, NC Division of Coastal Management, NC Department of Environmental Quality</i>		
3:45 – 4:15	<b>State Construction Office Uniform Floodplain Management Policy Updates [30]</b> <i>Michael Ali, State Construction Office, NC Department of Administration</i>		
4:15 – 4:45	<b>FEMA Region IV Updates [30]</b> <i>Substantial Damage Administrative Procedures Program (SDAP): Things Every Community Needs to Know – Valerie Anderson, Floodplain Management Specialist, Floodplain Management and Insurance Branch, FEMA Region 4</i>		
5:00 – 7:00	<b>Exhibitors' Social – Hoes d'oeuvres, Full Bar (2 drink tickets provided w/Cash Bar after) (Prefunction Concourse)</b>		
All Day	<b>Silent Auction (Prefunction Concourse)</b>		
8:00 – until	<b>NCAFPM Hospitality Suite</b>		
Tuesday, May 7 “Step-by-Step in Local Communities”			
7:30 – 8:30 AM	<b>Registration and CEC Check-in (Event Space Foyer, Lobby Entry)</b>		
7:30 – 8:30	<b>Coffee, Bagels, Fresh Fruit and Assorted Juices (Prefunction Concourse)</b>		
8:30 – 10:00	<b>1-A Floodplain Management Technical Session</b> <i>(Masonboro)</i> <b>Moderator: TBD</b>  <b>One [30]</b> <i>Updates to the Elevation Certificate (EC) – Steve Garrett, CFM and Eryn Futral, AICP, CFM, CZO (NCEM)</i>  <b>Two [30]</b> <i>Letters of Map Change (LOMC) in North Carolina – Scott Gentry, PE, CFM (NCFMP)</i>  <b>Three [30]</b> <i>Louisiana's Odyssey Towards Higher Standards: Statewide Freeboard Requirement – Gary O'Neal, CFM (Tetra Tech)</i>	<b>1-B Community Planning and GIS Session</b> <i>(Airlie)</i> <b>Moderator: Holly White, AICP, CFM (NCORR)</b>  <b>One [30]</b> <i>City of New Bern: Using GIS for Resiliency – Alice Wilson, AICP, GISP (City of New Bern)</i>  <b>Two [30]</b> <i>City of Fayetteville Watershed Master Plan – Ali Shallal, PhD and Alicia Lanier, PE, CFM (City of Fayetteville)</i>  <b>Three [30]</b> <i>Technologies, Techniques and Tips for Conducting Post-Flood Response in Mecklenburg County, NC – James Scanlon, CFM, GISP (Mecklenburg County, NC)</i>	<b>1-C Mapping and Modeling Session (TBD)</b> <b>Moderator: TBD</b>  <b>One [30]</b> <i>Modeling a Receiving Watershed Based on FEMA New Protocol: Decoupled VS Coupled Approaches – Khaled Pordel, PE, CFM (AtkinsRealis)</i>  <b>Two [30]</b> <i>Watershed Modeling: Isn't Hydrology Supposed to be the Simple Task? – Steve Godfrey, PE, CFM (Woolpert)</i>  <b>Three [30]</b> <i>Uses of Topobathymetric LIDAR and Teledyne Optech CZMIL Sensor – Ryan Ligon (Dewberry)</i>
<b>1-D Field Tour A</b> <b>Battleship North Carolina Flood Resiliency Project</b> <b>Host: Dawn York (Moffatt &amp; Nichol)</b>		<b>1-E Hazard Mitigation Grant “Office Hours”</b> <i>(Soundwatch)</i> <b>Host: NCEM</b>	
10:00 – 10:30	<b>BREAK – Cinnamon Buns, Assorted Fruit, Yogurt, Soft Drinks, Coffee (Prefunction Concourse)</b>		

<p><b>10:30 – Noon</b></p> <p><b>Note:</b> Duration of individual presentations is in brackets [ ].</p>	<p><b>2-A Mapping and Modeling Session</b> (Masonboro) <b>Moderator:</b> Kurt Golembesky, PE, CFM (NCDOT)</p> <p><b>One [30]</b> <i>2D Diffusion Wave Transform Method for HEC-HMS – Barnard Mondal, PE and Ken Trefzger, PE (HDR)</i></p> <p><b>Two [30]</b> <i>Data-Driven Floodplain Management and Regulation in Clearwater, FL: Using Models and Maps to Take Future Conditions Into Account – Susanna Pho (Forerunner)</i></p> <p><b>Three [30]</b> <i>Approach and Challenges in Calibrating Rain-on-Grid 2D BLE Hydraulic Models, Case Study – Paniz Mohammadpour (AtkinsRealis)</i></p>	<p><b>2-B Nature-Based Solutions Session</b> (Airlie) <b>Moderator:</b> Jason Hetrick, PE, CFM (McCormick Taylor)</p> <p><b>One [30]</b> <i>What Do Nature-Based Solutions Look Like in Practice, and How Are They Vital to Flood Mitigation and Resiliency – Phillip Todd (Freese &amp; Nichols)</i></p> <p><b>Two [30]</b> <i>What Nature-Based Solutions Are (and What They Are Not!) and How They Can Work with Gray Structural Flood Mitigation Practices – Crystal Moore and Kirsten Ullman (KCI)</i></p> <p><b>Three [30]</b> <i>Evaluating the Effectiveness of Woody Debris Removal for Mitigating Flooding – Jack Kurki-Fox, PhD, PE, NC State University, Biological &amp; Agricultural Engineering Department)</i></p>	<p><b>2-C Innovative Technologies and Activities Session</b> (TBD) <b>Moderator:</b> Stephen Smith, CFM (Town of Ayden)</p> <p><b>One [30]</b> TBD</p> <p><b>Two [30]</b> <i>Business Case and Goals Attained from Completing the Downtown Cramerton Parking &amp; Stormwater Management Project – Danny Lee Watson, PE, CFM, PMP (LaBella Associates)</i></p> <p><b>Three [30]</b> <i>Floodplain Design, Construction &amp; Impacts on Flood Insurance – Drew Gerling (Floodproofing.com)</i></p>
<p><b>2-D Field Tour A (Continued)</b> <b>Battleship North Carolina Flood Resiliency Project</b> <b>Host:</b> Dawn York (Moffatt &amp; Nichol)</p>		<p><b>1-E Hazard Mitigation Grant “Office Hours” (Continued)</b> (Soundwatch) <b>Host:</b> NCEM</p>	

## Tuesday, May 7

<p><b>Noon – 1:30 PM</b></p>	<p><b>Networking Luncheon</b> – Create your own Deli Buffett (<i>Prefunction Concourse, Lumina Ballroom</i>)  <b>NFIP State Coordinator’s Corner</b> – Steve Garrett, CFM, NC NFIP State Coordinator  <b>Special Recognition</b> – Ken Ashe, CFM, PE, NCAFPM Chair  <b>NCAFPM Chapter Meeting</b> – Bill Tingle, CFM, NCAFPM Executive Director</p> <ul style="list-style-type: none"> <li>• Changes to Bylaws</li> <li>• Chapter Renewal</li> <li>• NCAFPM Board Elections</li> </ul>		
<p><b>1:30 – 3:00</b></p>	<p><b>3-A Community Rating System (CRS) Session</b>  <i>(Masonboro)</i>  <b>Moderator:</b> Ken Vafier, CFM</p> <p><b>One [30]</b>  <i>CRS Repetitive Loss (RL) Area Analysis (AA): You’re Closer Than You May Think</i> – Melissa Mitchell, CFM (Tetra Tech)</p> <p><b>Two [30]</b>  <i>Improve Multiple CRS Classes with Low-Hanging Fruit and Proper Documentation</i> – Daryl Norris, PE, CFM (City of Greenville)</p> <p><b>Three [30]</b>  <i>CRS: Is Your Community Living Up to Its Full Potential?</i> – Melissa Mitchell, CFM (Tetra Tech)</p>	<p><b>3-B Equity Session</b>  <i>(Airlie)</i>  <b>Moderator:</b> Holly White, AICP, CFM (NCORR)</p> <p><b>One [45]</b>  <i>Advancing Equity in North Carolina: An Engineer’s Handbook</i> – Ummekulsoom Lalani, MPP, PMP and Lauren Sester, EI, CFM (AtkinsRealis)</p> <p><b>Two [45]</b>  <i>Integrating Equity into Planning</i> – JaLeesa Tate, CFM (Tetra Tech)</p>	<p><b>3-C Nature-Based Solutions Session</b>  <i>(TBD)</i>  <b>Moderator:</b> James Scanlon, CFM (Mecklenburg County)</p> <p><b>One [30]</b>  <i>Nature-based Design for Resiliency Purposes – Case Study: Using Bivalves to Decrease Scour in Place of Traditional Means</i> – Joanna Quiah, PE (Burns &amp; McDonnell)</p> <p><b>Two [30]</b>  TBD</p> <p><b>Three [30]</b>  TBD</p>
<p><b>3-D Field Tour B</b>  <b>Clear Run Stream Restoration Project</b>  <b>Host:</b> Fred Royal (City of Wilmington) and Jeff Crump (Moffatt &amp; Nichol)</p>		<p><b>3-E Certified Floodplain Manager (CFM) Exam Refresher</b>  <i>(Soundwatch)</i>  <b>Moderator:</b> Steve Garrett, CFM (NCEM)</p>	
<p><b>3:00 – 3:15</b></p>	<p><b>BREAK</b> – Assorted Snacks and Soft Drinks (<i>Prefunction Concourse</i>)</p>		

<p><b>3:15 – 4:30</b></p>	<p><b>4-A Mapping and Modeling Session</b> (Masonboro) <b>Moderator:</b> Laura Arnold, PE, CFM (AECOM)</p> <p><b>One [15]</b> 2025 Datum Changes: Updates and Reminders – Gary Thompson, PLS (NCGS)</p> <p><b>Two [30]</b> Finding Solutions to Flooding Using Modeling and Community Engagement in the City of Raleigh – Elizabeth Karivelil (Brown &amp; Caldwell)</p> <p><b>Three [30]</b> Beneath the Surface: Unveiling Hidden Depths of Flood Resilience with USGS 3DNTM – Tyson James PE, CFM (AECOM)</p>	<p><b>4-B Stormwater Session</b> (Airlie) <b>Moderator:</b> Todd Kennedy (HDR)</p> <p><b>One [15]</b> Flood Modeling for a Changing Coast – Ross Perry, PE, CFM (WithersRavenel)</p> <p><b>Two [30]</b> Win-Win! Partnerships for Flood Warning – Alicia Lanier, PE, CFM, HSDP (City of Fayetteville), Scott Brookhart, PE, CFM (Arcadis), and David Key, PE, CFM (ESP Associates)</p> <p><b>Three [30]</b> City of Aiken, SC CMAC Sand River Stormwater Project: Performance Evaluations and Observations After One-Year of Operation – Jason Hetrick (McCormick Taylor)</p>	<p><b>4-C Overflow (Tentative)</b> (TBD) <b>Moderator:</b> TBD</p>
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<p><b>4-D Field Tour B (Continued)</b> <b>Clear Run Stream Restoration Project</b> <b>Host:</b> Fred Royal (City of Wilmington) and Jeff Crump (Moffatt &amp; Nichol)</p>	<p><b>4-E Certified Floodplain Manager (CFM) Exam Refresher (Continued)</b> (Soundwatch) <b>Moderator:</b> Steve Garrett, CFM (NCEM)</p>
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<p><b>4:30 – 5:00</b></p>	<p><b>Close Out Silent Auction</b> (Prefunction Concourse)</p>
<p><b>6:30 – 9:00</b></p>	<p>Conference Social – Outdoor Palms of Lumina near pool: <i>Low Country Boil, Games, Full Bar (2 drink tickets provided w/Cash Bar after). In the event of bad weather, the social will be held in the Lumina Ballroom.</i></p>
<p><b>9:00 – Until</b></p>	<p><b>NCAFPM Hospitality Room</b></p>

**Wednesday, May 8: “Step-by-Step” Continued and Closing Plenary**

<p><b>7:30 – 9:00 AM</b></p>	<p><b>Registration – CEC Check-in</b> (Event Space Foyer, Lobby Entry)</p>
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<p><b>7:30 – 8:30</b></p>	<p>Coffee and Continental Breakfast, Juices, and Fresh Fruit (Prefunction Concourse)</p>
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<p><b>8:30 – 10:00</b></p>	<p><b>5-A Dam Safety Session</b> (Masonboro) <b>Moderator:</b> Virginia Spillman, CFM (City of Greensboro)</p> <p><b>One [30]</b> NCDEQ Dam Safety Program Updates – Toby Vincent and/or Josh Colley (NCDEQ) (TBD-Invited)</p> <p><b>Two [30]</b> City of Dunn Dam Repair Planning and Design – Rick Savage (Carolina Wetlands)</p> <p><b>Three [30]</b> Lewis Dam Failure: Dam Safety in a Changing Climate and Lessons Learned – Holly Miller, PE, CFM, CPESC (Tetra Tech)</p>	<p><b>5-B Stream Restoration and Design Session</b> (Airlie) <b>Moderator:</b> Alicia Lanier, PE, CFM, HSDP (City of Fayetteville)</p> <p><b>One [30]</b> City of Wilmington Clear Run Branch Stream Restoration Project – Fred Royal, CFM (City of Wilmington) and Jeff Crump (Moffatt &amp; Nichol)</p> <p><b>Two [30]</b> Bang for your Buck! How Flood Risk was Reduced, a Stream was Restored, and Habitat for a Listed Species and Trout was Improved – Ian Jewell (Freese &amp; Nichols)</p> <p><b>Three [30]</b></p>	<p><b>5-C Certified Floodplain Manager (CFM) Exam</b> (Soundwatch) <b>Moderators:</b> Bill Tingle, PG, CFM and Melonee Brock, CFM (NCAFPM)</p>
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		<i>NC State Coastal Dynamics Design Lab – Travis Klondike (NC State College of Design)</i>	
<b>10:00 – 10:30</b>	<b>BREAK – Homemade Gourmet Cookies and Soft Drinks (Prefunction Concourse)</b>		
<b>10:30 – Noon</b>	<b>CLOSING PLENARY</b>		<b>5-C Certified Floodplain Manager CFM Exam (Continued) (Soundwatch)</b>  <b>Moderators:</b> <i>Bill Tingle, PG, CFM and Melonee Brock, CFM (NCAFPM)</i>
<b>10:30 – 11:00</b>	<b><i>Advancements in Floodplain Management: A Focus on Transportation Research Board's Past and Present Research in Floodplain Management, Mapping and Resiliency – Kurt Golembesky, PE, CFM (NCDOT) [30]</i></b>		
<b>11:00 – 11:30</b>	<b><i>NCORR North Carolina Resilience Exchange – Andrea Webster (NCORR) [30]</i></b>		
<b>11:30 – Noon</b>	<b><i>Conference Closing and Prize Giveaways [30] Ken Ashe, PE, CFM (Immediate Past Chair, NCAFPM)</i></b>		
<b>Noon</b>	<b>CONFERENCE ADJOURNS</b>		

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