ASSOCIATION OF STATE FLOODPLAIN MANAGERS
2018 POCKET GUIDE

ASFPM ANNUAL CONFERENCE

PHOENIX, AZ
June 17-21, 2018

Managing Floods Where Mountains Meet the Desert
ASFPM 2018 Conference Team

Program Chair
Steve McMaster, CFM, Ideation, Inc.

Conference Team
Ingrid Wadsworth, CFM, Deputy Director
Jenny Seffrood Maurer, Event Planner
Diane Brown, Outreach Specialist
Suzanne Gillingham, Accountant
Anita Larson, Certification & Registration
Michele Mihalovich, Public Information Officer
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Nancy Dunham, Certification Assistant
Gigi Trebatoski, Chapter & Foundation

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Haley Briel, Research Scientist
Melissa Haig, MLS, Research Librarian
Jason Hochschild, GIS & Research Analyst
Alan Lulloff, PE, CFM, Chief Scientist
Jeff Stone, GISP, CFM, Senior Project Manager
Robyn Wiseman, CFM, Research Scientist

ASFPM Executive Office
575 D’Onofrio Drive, Suite 200, Madison, WI 53719
608-828-3000 | www.floods.org

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Welcome and General Information
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Our Sponsors
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$ Indicates a fee-based workshop or tour offered a la carte.

Local Host Team
Rebecca Timmer, CBD, Team Leader
Dan Cherry, PE, CFM, Asst. Team Leader

Additional Team Members: Geoff Brownell, PE, CFM; Jennifer Christelman, CFM; Lonnie Frost, CFM; Myesha Harris, CFM; Dave Jensen, PE, CFM; Jack Moody, PE, CFM; Elise Moore, PE, CFM; Suzie Sarpong, PE, CFM; Brian Schalk, PE, CFM; Kelli Sertich, AICP, CFM; Marcia Sorensen, CFM; Joe Tram, PE, CFM
**WELCOME!**

Welcome to the 42nd annual conference of the Association of State Floodplain Managers. We are glad that you could join us in Phoenix. This pocket guide will help you get the most of out 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 delve into the most comprehensive floodplain management training & networking opportunity in the country!

**Registration Desk**  
Ballroom Lobby  
The registration desk is located in the north building of the Phoenix Convention Center outside of the Ballroom. It will be open to serve you 10-5:30 Sunday, 7-5 Monday-Thursday.  

**Speaker Prep Lounge**  
123  
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 and get them queued up for their session.  

**Local Host / Volunteer HQ**  
Ballroom Lobby  
The local host team, consisting of AFMA members and floodplain managers from throughout Arizona will take residence near registration. This is also where you can purchase your memorabilia 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 Phoenix Convention Center. The location of each session is listed to the right of the event name.  

#.....Track..............................................Room  
1.....Modeling..............................................124AB  
2.....Mitigation............................................122BC  
3.....NFIP....................................................121BC  
4.....Events in Review / Post Disaster / Arid........126AB  
5.....Dams & Levees / NBF..............................129A  
6.....Risk Communication / Warning / Coastal......125AB  
7.....Mapping..............................................127BC  
8.....Showcase / Stormwater............................128AB  
9.....States Day (Wednesday only)....................129B  

**Technical Tour Departure Point**  
Bus loading area: Third Street between Washington Street and Monroe Street.
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Our unique capabilities in disaster preparedness, disaster response, and flood infrastructure design establish Tetra Tech as a unique provider of emergency management and community resilience services.

tetratech.com
SUNDAY, June 17

10:00-5:30  Registration Desk Hours  

7:00-8:00  ASFPM Board Member Breakfast (Invitation Only)  Sheraton

8:00-12:30  ASFPM Board Meeting  Sheraton

12:30-2:00  ASFPM Board & Committee Co-Chairs Luncheon (Invitation Only)  Sheraton

2:00-5:30  ASFPM Committee Chairs Mtg. (Invitation Only)  Sheraton

9:00-5:00  TRAINING WORKSHOP ($) 
Floodplain Mgmt. 101 ($80)  121A  
Instructors: Shanna Michael, GISP, CFM, Hedii Carlin, CFM, AECOM; Jennifer Marcy, CFM, Atkins North America, Inc.

1:00-3:00  TRAINING WORKSHOPS ($) 
Why Am I Flooding When I Am Nowhere Near a Floodplain? ($45)  131B  
Instructors: Janet Meshek, PE, CFM, Meshek & Associates, PLC; Rebecca Quinn, CFM, RCQuinn Consulting

Local Agency Sponsors
Arizona Floodplain Management Association

dk carlton & associates
### Sunday, June 17

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<td>1:00-5:00</td>
<td><strong>Elevation Certificates and LOMAS:</strong> 122A The Proper Way to Complete FEMA’s Elevation Certificate, MT-1 and MT-EZ forms, and how these are used in FPM ($45)</td>
<td>Brock Remus, Atkins North America, Inc.; Corey Garyotis, PE, CFM, Alabama Office of Water Resources</td>
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<td>1:00-5:00</td>
<td><strong>PCSWMM/EPA SWMM5 Floodplain Modeling</strong> 131C</td>
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<td>3:00-3:15</td>
<td>First Timers Orientation</td>
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<tr>
<td>5:00-5:15</td>
<td>First Timers Orientation</td>
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<td>5:30-7:00</td>
<td><strong>State Floodplain Mgrs./Hazard Mitigation Officers, &amp; ASFPM Board Directors Meet &amp; Greet (Invitation Only)</strong></td>
<td>Sheraton</td>
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<td>7:00-10:00</td>
<td><strong>Welcome Fest</strong> Hosted by: AzFMA and Local / Chapter Sponsors. See old friends &amp; meet new ones at this state fair inspired event where games will be played! Attire is casual and sips and bites are provided. ATTENDEE &amp; GUEST NAME BADGES MUST BE PRESENTED FOR ADMISSION.</td>
<td>Sheraton</td>
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### Monday, June 18

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<td>7:00-11:30</td>
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<td>8:00-Noon</td>
<td>TRAINING WORKSHOPS ($)</td>
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<td>8:00-Noon</td>
<td>The ‘411’ on Activity 420</td>
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<td>8:00-Noon</td>
<td>The Natural Way to Get Community Rating System Credit ($45)</td>
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<td>8:00-Noon</td>
<td>Help Wanted: Support Base Level Engineering as a BLE Ambassador ($45)</td>
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<td>8:00-Noon</td>
<td>Flood Insurance for Floodplain Managers ($45)</td>
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<td>10:00-Noon</td>
<td>Determining the Critical Path of a Hydrologic and Hydraulic (H&amp;H) Modeling Project ($45)</td>
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Instructors:
- Becca Frick-Croft, CFM, Brock Remus, Atkins North America, Inc.; Corey Garyotis, PE, CFM, Alabama Office of Water Resources
- John Covey, PE, CFM, Wood; Michael Gregory, PE, CFM, Computational Hydraulics International
- Lori Cary-Kothera, NOAA - Office for Coastal Mgmt.; Dave Carlton, PE, D.WRE, CFM, dkcarlton & associates PLLC; Jeff Stone, GISP, CFM, ASFPM Flood Science Center; Laura Flessner, GIS, The Nature Conservancy
- Diane Howe, CFM, FEMA, Region VI; Elizabeth Savage, PE, H2O Partners, Inc.; Jessica Baker, PE, PMP, CFM, Compass JV
- Bruce Bender, CFM, Bender Consulting Svcs., Inc.
- Aaron Thomas, PE, CFM, Illinois State Water Survey
Monday, June 18

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

9:00-9:30  BREAK

9:30-12:00  NATIONAL POLICY DISCUSSIONS
Floodplain Regulations....................... 121BC
International Issues......................... 126AB
Map. & Eng. Standards....................... 122BC
Mitigation............................................. 125AB
Professional Devel./CFM Prog........... 127BC
Risk Communication & Outreach.... 128AB

10:00-10:15  First Timers Orientation

Noon-1:00  Lunch on your own (on-site concessions)

1:00-  TRAINING WORKSHOPS ($)

1:00-3:00  From A Reviewer's Standpoint 131C
Letter of Map Revisions and Physical Map
Revisions Data Review ($45)
Instructors: Alex Haptemariam, PE, CFM,
Stantec, Inc; Thomas Schweitzer, PE, PMP,
GISP, CFM, Atkins North America, Inc.

1:00-5:00  Local Land Use Strategies for
Reducing Flood Risk ($45)
Instructors: Janet Thigpen, CFM, STC
Regional Planning Board; Jayme
Breschard Thomann, AICP, CFM,
Genesee/Finger Lakes Reg. Planning
Council

1:00-5:00  SRH-2D Hydraulic Model Review
for Floodplain Managers ($45)
Instructors: Scott Hogan, PE, Federal
Highway Administration; Brian Varrella,
PE, CFM, Colorado DOT

1:00-5:00  Flood Inundation Mapping Methods: 131B
Why we need to care! ($45)
Instructor: Marie Peppler, USGS

1:00-5:00  From A Reviewer's Standpoint
Letter of Map Revisions and Physical Map
Revisions Data Review ($45)
Instructors: Alex Haptemariam, PE, CFM,
Stantec, Inc; Thomas Schweitzer, PE, PMP,
GISP, CFM, Atkins North America, Inc.

1:00-3:30  NATIONAL POLICY DISCUSSIONS
Arid Regions ......................................... 121BC
Coastal Issues....................................... 126AB
Flood Insurance................................... 122BC
Higher Education .............................. 125AB
Nonstructural Floodproofing.......... 127BC
Stormwater Mgmt., No Adverse Impact,
Natural & Beneficial Functions........ 128AB

3:00-3:15  First Timers Orientation

3:00-5:00  CTP Conversation 129A

4:00-5:00  ASFPM Members Meeting 124AB

4:00-7:00  CFM Exam 129B

5:00-7:00  Exhibits Grand Opening/Social
Sponsored by: AECOM

5:00-7:00  Silent Auction
16th Annual FUNDraising activity for the
ASFPM Foundation

7:00…. Dinner on your own, enjoy Phoenix!
Tuesday, June 19

7:00a-7:15p  Exhibit Hall Hours  Exh
7:00-5:00  Registration Desk  Reg
7:30-5:00  Speaker Prep Lounge  123
7:45-8:30  Continental Breakfast  Exh

8:30-10:00  PLENARY SESSION 1  BR
Welcome Address: Chad Berginnis, CFM, ASFPM Executive Director; Maria Lamm, CFM, ASFPM Chair, SC DNR

Rebuilding 2017 – The Year of Disasters
1. Harvey Hammered Harris County!
   Rebuilding Texas: Honorable Edward M. Emmett, Judge and presiding officer of Harris County Commissioners Court, TX
2. 2017 in CA: A Year for Floods, Fires and Other Disasters: Christy Jones, PE, Deputy Director, Security and Emergency Management Program, California DWR

Moderator: Chad Berginnis, CFM, ASFPM Executive Director

10:00-10:15  First Timers Orientation  Reg
10:00-10:30  Break, Exhibits, Silent Auction  Exh

10:30-Noon  CONCURRENT SESSION A  A2
A1  Real Time Modeling  124AB
Moderator: Gerald L. Robinson, PE, CFM, Christopher B. Burke Engineering, Ltd.

Improving the Flood Intelligence for the Sacramento River System Using the California-Nevada/National Weather Service Flood Forecast Data. Chris Ferrari, PE, CFM, GEI Consultants
Real-Time Flood Forecasting in Nashville, TN Using HEC-RTS. Brantley Thames, PE, USACE

A2  Large Scale Assessments of Mitigation Options  122BC
Moderator: Rob Flaner, CFM, Tetra Tech, Inc.
Go, Collaborate, and Mitigate! Coordinated Solutions Floodplain Management and Risk Reduction. Caroline Cunningham, AICP, ABCP, CFM, Stantec, Inc.
Hazus - More Than a Loss Estimator - Using Hazus as a Tool for Drainage Master Planning. Geoff Brownell, PE, CFM, Michael Baker International
Linking Flood Risk to Resilience: A Decision Support Tool for Risk-based Resilience Investment. Ellie Graeden, PhD, Talus Analytics

A3  Community Rating System: State and Local Initiatives  121BC
Moderator: David A. Stroud, CFM, Wood
Developing a CRS Strategy for the State of Louisiana. Monica Farris, PhD, CFM, Univ. New Orleans, CHART

Community Rating System:
Tuesday, June 19

Rapitive Loss Area Planning - The Tulsa Model. Ronald Flanagan, CFM, Flanagan & Assoc. LLC
The Florida CRS Initiative: Providing State Support of Municipal CRS Programs. Josh Overmyer, CFM, Charlotte County, FL

A4 2017 Hurricanes in Review 126AB
Moderator: Joanna Wagschal, PMP, Ideation, Inc.
NWS Synopsis of 2017 Hurricanes Harvey, Irma, and Maria. Victor Hom, BSCE, MSEE, PE, NOAA NWS
The Storm Surges Impacts of the 2017 Hurricane Season. Jeff Gangai, CFM, Dewberry
Still Standing?: Building Performance in the 2017 Hurricane Season. Jonathan Westcott, PE, FEMA

A5 Factors Affecting Levee Performance 129A
Moderator: Alex Haptemariam, PE, CFM, Stantec, Inc.
Risk Analysis of Vegetation on Levees. Larry Roth, PE, GE, ENV SP, Arcadis
15 Years of Development of Fragility Curves for UK Levees: Lessons Learned for the US. Ben Gouldby, HR Wallingford, Ltd.
Sandy or Clayey Levees: What it Means for Levee Resiliency. Bryan Scholl, PhD, PE, WEST Consultants

A6 Web-based Tools for Risk Communication 125AB
Moderator: Jo Ann Howard, JD, H2O Partners, Inc.
Comprehensive Flood Information at Your Fingertips. Clay Campbell, PE, CFM, Wood

A7 Transforming the Flood Mapping Program 127BC
Moderator: Jamelyn A. Trucks, CGM, CFM, Atkins North America, Inc.
Risk MAP Exploratory Innovation Products, Part 2. Rick Sacbibit, PE, FEMA, HQ
One Stop Shop to Access FEMA’s Available Flood Hazard Information. Eliza Ledwell, CFM, IBM - Risk MAP CDS

A8 Dewberry Showcase: I’ve Got the Power: Using Data Analytics to Manage Risk and Promote Action 128AB
Moderator: Jean Huang, PE, CFM, Dewberry
Chasing the Rain: Data Analytics Applications for the National Flood Insurance Program. Mat Mampara, PE,
CFM, Dewberry; Kelly Williams, FEMA FIMA Communications Advisor

System-wide Approach to Flood Risk Management Using HEC-WAT: Amite River Watershed, Louisiana. Sam Crampton, PE, CFM, Dewberry

Climate Change and Credit – What Does the Future Hold? John Rollins, FCAS, MAAA, Milliman; Whitney McNamara, Virginia Beach

Noon-1:30 Keynote Luncheon

State of the ASFPM Foundation: Doug Plasencia, PE, CFM, ASFPM Foundation President, Moffatt & Nichol

The Australian Take on Flood Insurance, Climate Change & Mitigation: Ian Dinham, President Floodplain Management Australia

Moderator: Maria Lamm, CFM, ASFPM

Chair, SC DNR

1:45-3:15 CONCURRENT SESSION B

B1 Urban Stormwater Flooding Analysis

Moderator: Tyler Jantzen, PE
Jacobs Engineering Group, Inc.

The City of Austin Local Flood Risk Reduction: Prioritization, Challenges and 2D Modeling. Reem Zoun, PE, CFM, City of Austin, TX

Identifying Flood Risk in Unmapped Urban Environments. John Covey, PE, CFM, Amec Foster Wheeler

Upper East Fork Cave Creek ADMS: Urban Flooding Identification with 2D Modeling. Justin Beeler, PE, CFM, Atkins North America

Climate Adaptation in Resilience Planning

Moderator: Darrin Punchard, AICP, CFM, Punchard Consulting LLC


Integrating Adaptive Capacity Assessment into Mitigation Planning.

Kristen Gelino, AICP, CFM, Tetra Tech, Inc.

Rising Seas Hit Home for US Coastal Communities: Using Response Time Wisely. Shana Udvardy, CFM, Union of Concerned Scientists

International Approaches to Floodplain Management

Moderator: Jerry Murphy, AICP, CFM, University of Florida

The Case for Tolerable Risk Guidelines to Manage Flood Risk

Jessica Ludy, CFM, Environmental Science Assoc.

Flood Risk and the NFIP: International Perspectives and Opportunities for the US

Anna Serra-Llobet, PhD, Univ. of California-Berkeley

Applying Risk-informed Floodplain Management Lessons from Overseas in the USA

David Powers, PE, PH, D.WRE, CFM, CDM Smith
Tuesday, June 19

B4 Local Disaster Recovery 126AB
Case Studies
Moderator: Jamelyn A. Trucks, CGM, CFM, Atkins North America, Inc.
*Resilient St. Vrain Project! Planning, Design, and Construction to Reduce Future Flood Risk.* Josh Sherman, PE, City of Longmont, CO
*Lessons Learned From 2015 Colorado City, Arizona Flash Floods.* Kevin Barlow, Colorado City Fire Department
*Cedar Rapids Flood Risk Management: A Case Study in Flood Disaster Recovery.* Jeff Jacobs, PhD, USACE

B5 Natural and Beneficial Floodplain Functions in Holistic Floodplain Management
Moderator: Rebecca J. Pfeiffer, CFM, Vermont Agency of Nat. Resources
*Exploring Opportunities for Integrated Mapping and Functional Assessment of Riverine and Coastal Floodplains and Wetlands.* Marla Stelk, Association of State Wetland Managers
*Floodplain Restoration in the Upper Mississippi Basin: Connecting the Dots between Floodplain Management and Water Quality.* Eileen Shader, CFM, American Rivers
*State of Washington Floodplain Management and Natural Beneficial Functions.* David Radabaugh, AICP, CFM, Washington Dept. of Ecology

B6 Building Support for Floodplain Management 125AB
Moderator: Karen McHugh, CFM, Missouri Emerg. Mgmt. Agency
*Political Support for Local Floodplain Management Programs.* Steve Samuelson, CFM, Kansas Dept. of Agriculture
*State and Federal Policy Making: How to get Involved at a Local Level.* Claire Jubb, AICP, CFM, Charlotte Cnty., FL
*Putting the Storm in Your Media Strategy.* Mark Boone, CFM, Mecklenburg Cnty., NC

B7 CTP Initiatives 127BC
Moderator: Barrett Goodwin, GISP, CFM, Dewberry
*Performance Measures for the CTP Program: How to Make Them Work for Your Mapping Project.* Laura Algeo, PE, FEMA
*Colorado Hazard Mapping Program (CHAMP) - Lessons Learned.* Thuy Patton, MPA, CFM, Colorado Water Conservation Board
*Missouri PIR Counties with Risk MAP Infusion – Bootheel of Missouri.* Stephen Noe, PE, Wood Environment & Infrastructure Solutions, Inc.

B8 AECOM Showcase 128AB
Moderator: Krista Bethune Melnar, PE CFM, AECOM
AECOM invites you to join us as we explore lessons learned and best
practices discovered through successful collaboration and data integration preparing for, responding to and recovering from flood disasters. AECOM, along with our panel of speakers from the Harris County Flood Control District, FEMA Region VI and FEMA Headquarters, will discuss the types of data requested for areas impacted by the 2017 hurricane season, innovative approaches explored to support substantial damage estimates, products to promote holistic mitigation, and unique advisory product information developed to support higher standards. In addition, we will explore solutions developed at the local level following Hurricane Matthew in 2016 that aim to provide a more data driven long-term recovery operation.

TRAINING WORKSHOPS ($)

1:30-5:30  
State Floodplain Manager  
1 on 1 Mentoring Workshop  
Instructors: Al Goodman, CFM, AWG Consulting, LLC; Bill Nechamen, CFM, Nechamen Consulting, LLC

2:30-5:00  
FEMA’s Mapping Information  
Platform: Review of Redesigned Flood Study Tools, including Best Practices for Data Capture, Project Management, and Reporting ($45)  
Instructors: Brock Remus, CFM, Atkins; Rosemary Bolich David Hart, GISP, CFM, Stantec, Inc.

2:30-5:00  
Under the Weather: Communication Tools and Techniques for the Floodplain Management Professional ($45)  
Instructor: Henrietta Williams, CFM, FEMA

3:15-3:45  
Break, Exhibits, Silent Auction  
Exh

3:45-5:15  
9th Annual ASFPM Foundation Student Paper Competition  
Judges: ASFPM Foundation Trustees  
“Who Knows What Comes Tomorrow?” A Case Study of Disaster Resilience in Boulder County, CO. Simone Domingue, PhD Student, Dept. of Sociology, Univ. of Colorado-Boulder  
The Case for a Floodplain Enhancement Rating System: Has the time come for an ASFPM accreditation program? Pamela Reber, University of Washington - Seattle

CONCURRENT SESSION C

C1 Coastal Modeling and Analysis  
Moderator: Bo Juza, PhD, CFM, Aquatrend, LLC  
Hydrodynamic 2D Coastal Circulation Modeling for Cell 5AB of Poplar Island, MD. Tanveer Chowdhury, PE, CPESC, CFM, USACE, Baltimore, Dist.  
Let it Rain on Your Mesh: Integrating Hydrologic and Hydraulic Modeling to Simulate Hurricane Flooding in Coastal Areas. Reinaldo Garcia, PhD, Hydronia, LLC.
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<td>Strategy to Implement a Flood Risk Reduction System in an Urban Environment - Rebuild by Design - Hudson River Project in Hoboken, Jersey City and Weehawken. Rahul Parab, PE, D.WRE, CFM, Dewberry</td>
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<td>The NYC Residential Technical Assistance Pilot Program (RTAPP): Increasing Resilience - Lowering Flood Insurance. Scott Choquette, CFM, Dewberry</td>
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<td>No-Rise, No Problem: Managing Infrastructure in FEMA Floodways. Brian Varrella, PE, CFM, Colorado DOT</td>
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<td>Win-Win Scenario: Floodplain Management for Oil and Gas Driven Development Using Base Level Engineering Data. Alan Johnson, PE, CFM, FEMA Region VI</td>
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<td>Moderator: Jeanne Ruefer, PMP, CFM, Tetra Tech, Inc.</td>
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<td>Green Stormwater Infrastructure Case Studies in the Southwest for Flood Mitigation. Kieran Sikdar, CFM, Watershed Management Group</td>
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<td>Evaluation of GI/LID Benefits in the Desert Environment. John Wise, PE, EnvSP, CFM, Wise Engineering LLC</td>
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<td>A New Perspective in Stormwater Management. Ricardo Aguirre, PE, WHC, AP, ENV SP, CFM, Holistic Engineering and Land Mgmt.</td>
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<td>Moderator: Rocky Keehn, PE, DWRE, ENV SP, CFM, Common Sense Water Resources Engineering, LLC</td>
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<td>Omaha Regional Flood Risk Reduction System - A Comparison and Contrast of Scale and Function. Vicki Twerdochlib, ENV SP, PE, CFM, HDR Engineering, Inc.</td>
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<td>FEMA and USACE Collaboration on Levee Risk Communication – City of Clarkson, Nebraska. Starr Terrell, Resilience Action Partners</td>
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<td>The FCDMC has Levees? A Flood Control District’s Perspective on Levee Safety. Frank Brown, PE, CFM, Flood Control Dist. of Maricopa Cnty., AZ</td>
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C6 Engaging Communities in New Ways
Moderator: Maggie Mathis, CFM, Dewberry
Evolving to Communicate Risk. Dennis Dixon, CFM, Pierce Cnty., WA
FEMA’s Customer Experience Initiative: New Tools to Enhance How Flood Risk Information is Shared. Priscilla Scruggs, FEMA/FIMA
Using Technology to Increase Flood Risk Awareness. Carey Johnson, Kentucky Div. of Water

C7 Fostering Stakeholder Relationships & Ownership
Moderator: Jacob Tysz, CFM, Atkins North America, Inc.
Leveraging Local Leadership Through a Timely Map Review Process. Dane Bailey, CFM, Kansas Dept. of Agriculture
Transparency into FEMA’s Appeal Process for the California Coastal Analysis and Mapping Project. Vince Geronimo, PE, CFM, AECOM
Stakeholder Outreach and Engagement for the California Coastal Analysis and Mapping Project. Laura Adleman, AECOM

C8 Michael Baker International Showcase: Preparing a Nation for Catastrophic Flooding At the City, County, and State Level
Moderator: Jeffrey L. Sparrow, PE, CFM
Michael Baker invites you to join us as we explore how local cities, counties, and States are taking steps to increase their resiliency and be better prepared for catastrophic flooding. It requires overcoming potential political and economic hurdles and follow through to take the actions that build a prepared nation. You also need data that reflects the complete flood hazard beyond those mapped by FEMA in order to create a holistic plan of action. We will review three case studies, one at each level of government.

5:15-7:15 Exhibits Social, Silent Auction
7:15- Dinner on your own – enjoy Phoenix!
**Wednesday, June 20**

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<td>6:45-8:30</td>
<td>Continental Breakfast</td>
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**EARLY BIRD DISCUSSIONS**

**Urban Flooding Best Management Practices**

*Moderator: ASFPM Stormwater Management Committee*

Local floodplain and stormwater managers in highly urbanized areas understand that there is additional unmapped flood risk beyond the boundaries of the currently established FEMA SFHAs. Over the past decade, and in particular over the last five years, local government agencies and floodplain management professionals have taken a strong interest in identifying and mapping these urban flood risk zones. The Stormwater Management Committee is currently developing a discussion paper with the goal of providing an overview of urban flooding best practices for local floodplain and stormwater managers and to provide a framework to identify these areas and manage them to reduce future flood damage. This interactive session will be an opportunity to discuss the draft paper, supporting case studies, and provide input regarding best management practices for urban flooding.

**AG Structures in the Floodplain-**

**Discussing Potential Recommendations**

*Moderator: ASFPM Insurance Committee*

At last year’s Insurance Committee’s Early Bird, FEMA participated in a roundtable discussion about the challenges of building, maintaining, and insuring agriculture structures in the floodplain. We had floodplain representatives from eastern and western US as well as the heartland of America share experiences and discuss possible solutions along with great input from the audience. FEMA utilized this valuable input, along with interviews during the conference (and then in different states), in their research project. FEMA has completed the research project resulting in internal recommendations on actions FEMA (or others) could take. The Insurance Committee has offered FEMA the opportunity to share these learnings at the Early Bird and get feedback on recommendations and possible options. We will then have a similar panel address each recommendation/option as well as look for the same level of audience participation as last year. Therefore, if you have Ag structures in your community don’t oversleep and miss this session! We (and FEMA) want to hear from you.
Best Practices for Elevation Grant Programs
Moderator: ASFPM Non-Structural Committee
With an increase in FEMA hazard mitigation annual funding this year and HUD funding from the 2017 disasters, along with a large pool of residences susceptible to flooding, many communities are looking to capitalize on the opportunity to reduce their flood risk. This early bird session will highlight lessons learned related to implementing mitigation projects including the perspective from a community that has completed several hundred projects. Come join us in a discussion to share ideas about how we can make communities elevation ready to successfully implement residential elevation projects.

Incorporating Nature-based Solutions and Design in Silver Jackets Projects
Moderator: ASFPM Natural & Beneficial Functions Committee
Please join us for a session that explores ways that Silver Jackets projects can be designed around and incorporate natural floodplain functions and nature-based designs. We will have USACE Silver Jackets staff and others to discuss past projects, and how to be successful in developing future projects.

Acquisition Properties: Grants, Re-use & Monitoring
Moderator: ASFPM Flood Mitigation Committee
FEMA proposal to provide acquisition grants directly to property owners; challenges to re-use of acquired properties; monitoring practices—the topic of acquisition projects will be discussed with Kayed Lakhia, Director, FEMA Hazard Mitigation HQ.

PLENARY SESSION 2
NFIP Issues and Implementation Strategies. Panel Members:
1. JoAnn Jay Howard, JD, President, H2O Partners, former Federal Insurance Administrator
2. Cheryl Small, Executive Director, National Flood Association (NFDA)
3. Laura Lightbody, Project Director, Flood Prepared Communities, The PEW Charitable Trusts
4. Carolyn Kousky, PhD, Director of Policy Research and Engagement, Risk Management and Decision Processes Center, Wharton School, Univ. of Pennsylvania
5. David Maurstad, Deputy Associate Administrator for Insurance and Mitigation, FEMA
Wednesday, June 20

**Moderator:** Larry A. Larson, PE, CFM, ASFPM Sr. Policy Advisor, Director Emeritus

**10:00-10:30** Break, Exhibits, Silent Auction

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

**D1** Modeling Infrastructure in a Changing Climate
- **Moderator:** Mark E. Forest, PE, CFM, HDR Engineering, Inc.
- *Regulate, Litigate or Capitulate.* Bryan Martindale, PE, CFM, Knight Engineers & Architects
- *Advancements in Two-Dimensional Floodplain Modeling with SRH-2D.* Scott Hogan, PE, Federal Highway Administration
- *Comparing Three 2D Software Packages for Modeling and Designing Highway Drainage Structures.* Alex Coronel, PE, CFM, Wood

**D2** Proving Mitigation Effectiveness
- **Moderator:** Mitch Paine, CFM, King Cnty., WA
- *Flood Reduction Lessons Learned after Major Disasters: Mitigation Project Performance Post-Harvey and Irma.* Lawrence Frank, CFM, Atkins North America, Inc.
- *Mitigation Effectiveness Study – Beatrice, Nebraska.* Laurie Bestgen, CFM, FEMA Region VII

**D3** Higher Floodplain Management Standards
- **Moderator:** Claire Jubb, AICP, CFM, Charlotte Cnty., FL
- *The Costs and Benefits of the CRS Program in Virginia.* Mary-Carson Stiff, JD, CFM, Wetlands Watch
- *Providing Credible Flood Risk Data to Help Communities Implement Higher Floodplain Management Standards.* Nick Shufro, FEMA/FIMA

**D4** Post-disaster Rapid Assessments
- **Moderator:** Kristen Gelino, AICP, CFM, Tetra Tech, Inc.
- *Substantial Damage Estimation: Using Hazus-MH as a Screening Tool After Hurricane Harvey.* Stephen Veith, Tetra Tech, Inc.
- *Fast and Furious: Use of Remote Damage Assessment during Harvey, Irma and Maria.* Jane Frantz, AICP, PMP, CFM, Dewberry

**Tearing Down Homes to Build Community Resilience – An Evaluation of the Benefits of the Nashville Home Buyout Program.**
Janey Camp, PhD, PE, GISP, CFM, Vanderbilt Univ.
**Reducing Time and Cost of Substantial Damage Estimates After a Disaster: Lessons from the Hurricane Harvey Substantial Damage Task Force Analytics Cell.** James Johnston, GISP, CFM, AECOM

**D5**

**Holistic Floodplain Management Case Studies**
Moderator: Eileen Shader, CFM, American Rivers

**Utilizing Ecosystem Services and Nature-based Solutions in Reducing Flood Risks in Central Europe.** Ranko Pudar, PE, PMP, CFM, Pudar Mitigation Consulting, Inc.

**“Win-Win” Decision-Making: Using Holistic Benefit-Cost Analysis to Evaluate Floodplain Management Projects.** Matt Van Deren, Earth Economics

**Linking Policy and Practice: Models for State Natural Infrastructure Policy.** Cat Bowler, The Nature Conservancy

**D6**

**Flood Warning Systems**
Moderator: Ginger Evans, CFM, Stantec, Inc.

**Building a RAFT: Advanced Methods for Linking Forecasts and Stream Gages for Rapid Flood Assessment.** Becca Fricke-Croft, CFM, Atkins North America, Inc.

**Integration of Advanced Flood Warning Technologies.** Peter Acton, PE, JE Fuller

**Floodfeed: You Won’t Believe These 3 Nomographs That Predict Your Flood Elevation!** Jim Keith, PE, CFM, Walter P. Moore & Assoc.

**10:30 Noon**

**State & Federal Panel Roundtable**
This FEMA/state roundtable discussion will focus on the transformation of the CAP-SSSSE grant program. This event is only for state floodplain managers and their staff.

**Noon-1:30**

**Lunch on your own (on-site concessions)**

**Noon-1:30**

**Region 4 Discussion**

**12:20-1:30**

**States Networking Lunch with CRS**
NFIP State Coordinators, CRS State Coordinators, CRS User Group Leaders, Community CRS Coordinators, and Floodplain Managers are invited to gather with FEMA, ISO, and the CRS Consultant team for a networking (bring your own lunch) discussion.

**1:00-3:00**

**Natural Floodplain Functions Alliance Meeting**
The Natural Floodplain Functions Alliance (NFFA) is an affiliation of nonprofit and private organizations, government agencies, and individuals dedicated to the protection and preservation of the natural functions of floodplains, including coastal areas. To support its mission to share information and promote collaboration, the NFFA is hosting a discussion session open to members and other interested parties. Topics will include short updates on key Federal policies (e.g., WOTUS) and budget outlook, and a report on the recent

1:00-5:00  TECHNICAL TOUR (S)  
Bus  
Flood Warning ($45)

1:30-3:30  ASFPM Chapters Meeting  
131A  
(Chapter Board & Committee Leaders)

1:30-3:00  CONCURRENT SESSION E

E1  Innovations in Analyzing H&H  
124AB  
Moderator: Mike DePue, PE, PMP, CFM, Atkins North America, Inc.  
MATS-TC: Automating Time of Concentration through Multidisciplinary Collaboration. Andrew Reicks, CFM, CDM Smith  
Not Your Father’s Manning’s n: Adjusting Manning’s n Values for 2D Modeling. Andrew Friend, PE, Michael Baker International  
Structure-level Risk Assessment Using Monte Carlo Method Coupled with 2D Hydraulic Modeling. Siamak Esfandiary, PhD, PE, FEMA

E2  Mitigation Techniques and Case Studies  
122BC  
Moderator: Jerri Daniels, CFM, Dewberry  
Steps to Elevation - International Association of Structural Movers Flood Hazard Mitigation Program. Roderick Scott, CFM, L & R Resources, LLC

Solving a Repeated Flooding Problem Several Structures at a Time. Tim Murphy, PE, CFM, Flood Control Dist. of Maricopa Cnty., AZ  
Repairing the Homes that “Weren’t Supposed to Flood”: Flood-hardy Restoration for Code Compliant Structures. Shandy Heil, CFM, LSU AgCenter  
Flood Insurance: Policy and Process  
121BC  
Moderator: Ceil Strauss, CFM, Minnesota Dept. of Natural Resources  
The Office of the Flood Insurance Advocate 2017 Annual Report. David Stearrett, CFM, FEMA  
Seriously, Why is My Flood Zone Determination Wrong!? Answers from Insiders. Josh Price, GISP, CFM, MassiveCert, Inc.  
Private vs. Federal Flood Insurance - What to Know. What to Ask. Bruce Bender, CFM, Bender Consulting Svcs., Inc.

E4  Modeling and Mapping  
126AB  
Re-delineations of Alluvial Fans  
Moderator: Mark Pearson, GISP, CFM, Stantec, Inc.  
Neffs Creek – Assessing the Flooding Hazards on an Urbanized Alluvial Fan. Mike Kellogg, PG, GISP, CFM, JE Fuller Hydrology & Geomorphology, Inc.
Re-delineation for Two Alluvial Fans in Scottsdale and Phoenix, Maricopa County, Arizona. Shimin Li, PE, PhD, Flood Control Dist. of Maricopa Cnty., AZ

Desert Mountain Flood Modeling Showdown. Seungho Song, PE, CFM, CDM Smith

E5 USACE & FEMA Working Together with Your Help to Address the Nation’s Levee Challenges
Moderator: Jessica Baker, PE, PMP, CFM, Halff Assoc., Inc.

E6 GIS Tools, Data, and Floods
Moderator: Cece McKiernan, CFM, Florida Floodplain Managers Assn.
StreamStats: A Web-based Application for Retrieving Basin Characteristics and Streamflow Statistics (such as the 1-percent flood) for Gaged and Ungaged Streams. Peter McCarthy, Hydrologist, USGS
The Workmap Geoportal: A Tall Drink of Water in a Digital Desert. Chris Doscher, GISP, CDM Smith
Using GIS to Increase Outreach and Data Accuracy for the Risk MAP Program currently in the State of Missouri. Joanna Rohlf, GISP, CFM, Wood

E7 Advances with Survey Data
Moderator: David Key PE, CFM, ESP Associates
Innovative Survey Solutions to Limited Survey Budgets. Mark Seidelmann, PE, GISP, CFM, Stantec, Inc.
Knowledge (Data) is Power – Innovative Applications of Data to Increase Your Watershed Management Intelligence. Neal Banerjee, PE, CFM, ESP Associates

E8 Stormwater Management Integration Case Studies
Moderator: Joy Duperault, CFM, Massachusetts Dept. Conserv. & Rec.
Resilient Mitigation Planning Leads to Jefferson Parish Green Infrastructure Implementation. Maggie Olivier, CFM, Jefferson Parish
E9 New State Floodplain Management Initiatives  
Moderator: Nathan Shields, CFM, Tetra Tech, Inc.  
**Florida’s CRS/CAV Pilot Program – A Pathway to Flood Resiliency.** Steven Martin, CPM, CFM, Florida Div. of Emerg. Mgmt.  
**Grid-Based Zone A BFEs: Now Streaming on a Portal Near You.** Tara Lanzrath, CFM, Kansas Dept. Agriculture  
**The North Carolina Certified Floodplain Surveyor (CFS) Pilot Program.** John Brubaker, PE, CFM, North Carolina Floodplain Mapping

3:00-3:30 Break, Final Exhibits Viewing.  
FINAL Silent Auction Bids at 3:30pm!

3:30-5:00 CONCURRENT SESSION F

F1 Reviewing and Understanding 2D Models for Local Officials  
Moderator: Tom Schweitzer, PE, PMP, GISP, CFM, Atkins North America, Inc.  
**Empowering Floodplain Administrators on 2D Hydraulic Modeling using HEC-RAS Case Study.** Sravan Krovidi, PE, CFM, Amec Foster Wheeler  
**Who is Responsible for Checking Flood Models?** Rudy VanDrie, PEng, Wollongong City Council  
**How to Review 2D Models and What to Submit in Client Submittals.** Cameron Jenkins, PE, Atkins North America, Inc.

F2 FEMA Mitigation Grants: Process and Considerations  
Moderator: Necolle Maccherone, CFM, Michael Baker International  
**Lessons Learned from 2017 FMA and PDM Grant Reviews – Best Practices for Application Development.** Eric Kenney, PE, CFM, CDM Smith  
**Lessons Learned: Mitigation Project Benefit-Cost Analyses in Riverside County, California.** Hilary Kendro, AICP, CFM, Atkins North America, Inc.  
**FEMA Mitigation and Disaster Grants – Facts, Myths and Legends.** Michael Herman, MA, JD, Ernst & Young LLC

F3 FPM Tech  
Moderator: Karen McHugh, CFM, Missouri Emerg. Mgmt. Agency  
**See How We Can Predict US Disaster Activity Using Real-time Weather Alerts.** Suman Biswas, Niyam IT Inc.  
**Training Tomorrow’s Disaster Mitigation and Flood Insurance Workforce with Virtual Reality Technology.** Patrick Heck, CSM, PwC  
**Drones for Flood Insurance: Can’t Keep My Drone From Getting To You.** Jeremias Alvarez, PMP, CSM, PwC Public Sector LLP

F4 Post Disaster Assistance Resource Initiatives  
Moderator: Brian Caufield, PE, DCE, CFM, CDM Smith
Lessons Learned for Local Floodplain Managers and State NFIP Coordinators in Hurricane Harvey. Julie Grauer, CFM, FEMA, HQ

The NASA Earth Science Disasters Program: Sizing up Floods from Space. Carver Struve, AEM, ABCP, CFM, NASA

Mobile GIS for Disaster Response. Mike Schultz, GISP, CFM, CDM Smith

F5  Dam and Levee Failure: Risk Communication and Planning
Moderator: Will Zung, PMP, CFM, Stantec, Inc.

Have You Exercised Lately? Stephanie Gerlach, PE, Maricopa Cnty., AZ
Evacuation Planning for Extreme Events: Failure of the Cherry Creek Dam. Jeffrey Brislawn, CFM, Wood

F6  Science Behind Communicating Risk
Moderator: Bruce Bender, CFM, Bender Consulting Services, Inc
Major Risks, Uncertain Outcomes: Making Ensemble Forecasts Work for Multiple Audiences. Burrell Montz, PhD, East Carolina University

Behavioral Science A-Z: Explore the Myriad Ingredients that Influence How We See the World and the Risks in It. Meg Bartow, Resilience Action Partners

Evolving Flood Risk—Community-Level Needs and Preferences for Depicting, Packaging, and Communicating Information for Adaptation. Peter Herrick, Jr., FEMA

F7  Coastal Mapping - Future Conditions & Sea Level Rise
Moderator: Gib Jones, PE, CFM, Dewberry
Summary of Accomplishments for FEMA Region IX Open Pacific Coast and Bay Area Coastal Studies. Ed Curtis, PE, CFM, FEMA Region IX
Relating Future-Conditions Coastal Flood Hazards to Existing-Conditions FEMA Maps. Alex Trahan, PE, ESA
Case Studies in the Limitations of Static Vertical Flood Datums. Nicole Kinsman, PhD, NOAA National Geodetic Survey

F8  Complex Stormwater Project Design
Moderator: Jerry Robinson, PE, CFM, Christopher B. Burke Engineering
Use of Linear Lakes in Amenitizing Floodplain Reclamation for Communities. Gabriel Novak, PE, CFM, Dowdey, Anderson & Associates
Green Infrastructure Resiliency and Computer Modeling. Rocky Keehn, PE, D.WRE, ENV SP, LEED AP, CFM, Common Sense Water Resources Engineering LLC
Hydromodification Design Solutions and Best Practices. Tom LaRue, PE, Advanced Drainage Systems

F9 State Floodplain Management Policies and Projects
Moderator: David Knipe, PE, CFM, Indiana Dept. Natural Resources
Communicating Technical Information to Laymen: A Kentucky Perspective. Alex VanPelt, CFM, Kentucky Div. Water

5:15-6:45 FEMA Resilience Forum
Panelists: David Maurstad, Deputy Associate Administrator of FIMA; Paul Huang, Assistant Administrator for the Federal Insurance Directorate; Nick Shufro, Assistant Administrator for the Risk Management Directorate; and Mike Grimm, CFM, Assistant Administrator for the Mitigation Directorate
The Federal Emergency Management Agency (FEMA), through its Federal Insurance and Mitigation Administration (FIMA), manages the National Flood Insurance Program (NFIP) and a range of programs designed to reduce loss of life and property from natural disasters. FIMA leadership is hosting an interactive forum to engage ASFPM members and conference attendees on the important role that state, local, and industry partners play in building a more resilient nation. All attendees are encouraged to visit the FEMA exhibit booths on Monday and Tuesday to offer ideas and learn more about how to participate in the session.

6:45-8:00 Foundation Donors Appreciation Reception & LIVE Auction (Invitation Only)
If you did not receive an invitation as a Foundation donor since July 2017, you can still buy your way in with a $125 donation! Just see Suzanne at the Silent Auction tables in the Exhibit Hall.

6:45… Dinner on your own, enjoy Phoenix!
### Thursday, June 21

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<td>Early morning coffee break</td>
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<td>8:00-5:00</td>
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#### REGIONAL DISCUSSION SESSIONS
- Region 1: 121A
- Region 2: 127A
- Region 3: 122A
- Region 4: met Wed.
- Region 5: 122BC
- Region 6: 124AB
- Region 7: 125AB
- Region 8: 126AB
- Region 9: 127BC
- Region 10: 128AB

#### TECHNICAL TOUR ($)
- Flood Control Infrastructure ($45)

#### PLENARY SESSION 3
- Making it Work: Flood Mitigation Best Practices and Success Stories
  1. Steve Martin, CPM, CFM, State NFIP Coordinator/State Floodplain Manager, Florida Bureau of Mitigation
  2. Kelli Sertich, AICP, CFM, Branch Manager for Policy, Planning & Coordination, Flood Control Dist. of Maricopa Cnty., AZ

#### 10:00-10:30 Break
- Lobby BR

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

**G1**
- Modeling for Complex Situations
  - Moderator: Brian Wahlin, PE, WEST Consultants, Inc.
  - Hurricane Harvey Rainfall and Streamflow Frequency Analysis. Benjamin Pope, PE, AECOM
  - Flood Velocity Data - Benefits, Examples, and 2D Floodway Uses. Andy Bonner, PE, CFM, AECOM

**G2**
- Social and Cultural Considerations of Mitigation
  - Moderator: Jennifer Marcy, CFM, Atkins North America, Inc.
  - Equitable Buy-Out Strategies for Mitigating Flood Risk in Houston. Earthea Nance, PhD, PE, CFM, Texas Southern University
**Flood Risk Reduction in Historic Neighborhoods: A Visually Unobtrusive Approach.** Elizabeth English, PhD, AM ASCE, University of Waterloo

**Floodplain Management**

**Theory & Research**

Moderator: Paul Robinson, Jacobs Engineering Group, Inc.

*50,000-Year Storm…Really?* Andy Yung, PE, CFM, Walter P. Moore & Assoc.

*What is Flood Safety Worth? Eliminate the Mystery of Financing Risk Reduction in New Building.* Jennifer Gerbasi, CFM, Terrebonne Parish, LA

**Post-Wildfire Modeling, Risk Communication, and Mitigation**

Moderator: Brian Varrella, PE, CFM, Colorado DOT

*After A Wildfire, Collaborating to Reduce Flood and Debris Flow Risks.* Ellen Berggren, PMP, USACE, Inst. For Water Resources

*Coconino County: Pre-Fire Assessment of Post-Fire Flood and Debris Flow Risk.* Joseph Loverich, PE, CFM, JE Fuller Hydrology & Geomorphology, Inc.

**Disaster Response for Dams and Levees**

Moderator: Mark Riebau, CFM, Riebau Consulting Services

*Harvey, Irma, Debbie, Maria, and Ophelia: The New Normal?* Bob Beduhn, PE, EnvSP, HDR Engineering, Inc.

*What is a Cubit?* Andre McDonald, FBC LID #2

*A Rapid Assessment of Dam Inventory – Lessons Learned from Two Category 4 Hurricanes Impacting Puerto Rico.* Curtis Smith, PE, CFM, Stantec, Inc.

**Coastal Flood Risk Management**

Moderator: Doug Marcy, NOAA, Office for Coastal Mgmt.

*Beyond Elevation: Exploring a Holistic Approach to Coastal Flood Risk Management.* Jake Thickman, ASFPM Flood Science Center

*Sea Grant Programs Creating a Network Vision for Community Response to Flooding.* Shannon Jarbeau, CFM, Barnstable Cnty., MA

*Future Flood Modeling and Dataset Development for Sea Grant’s Southeast Atlantic Regional Resilience Project.* Jason Evans, PhD, Stetson University

**Flood Mapping Behind the Scenes**

Moderator: Dianne Woods, CFM, Yakima Cnty., WA

*Take a Closer Look at the Water Surface TIN.* Yukun Xing, PHD, CFM, Wood Environment & Infrastructure Solutions
Thursday, June 21

**Guidance for Conducting Wave Runup and Overtopping in a Coastal Environment.** Rebecca Aiken, EIT, CFM, Stantec, Inc.

**Map Mod Alchemy: Turning Paper into Digital Gold.** Molly Cox, CFM, CDM Smith

**FEMA Showcase**

Moderator: Eric Letvin, Esq., PE, CFM, Deputy Assoc. Administrator for Mitigation, FEMA’s Federal Insurance & Mitigation Admin. (FIMA)

**FEMA HMA Grants & Updates.** Kayed Lakhia, AIA, LEED AD, CFM, Director, Hazard Mitigation Assist. Div., Mitigation Directorate

**FEMA Floodplain Management Updates.** Adrienne Sheldon, PE, Branch Chief, Floodplain Management Division, Mitigation Directorate

**FEMA Building Science Update.** Jonathan Westcott, PE, CFM, Engineer, Building Science Branch

**Noon-1:45**

**ASFPM National Awards Luncheon**

....and invitation to the ASFPM 2019 Conference in Cleveland, Ohio, May 19-23, hosted by the Ohio Floodplain Management Association

**2:00-3:30**

**CONCURRENT SESSION H**

**State Initiatives in Modeling**

Moderator: Amanda Flegel, PE, CFM, Illinois State Water Survey

**Collaborative Pilot Study to update Flood Flow Frequencies in Big Sky Country.**

Steve Story, PE, CFM, Montana Dept. of Natural Resources & Conservation

**Kansas 2D Modeling – “All You Have to Do” is Integrate Policy with Accuracy!**

Joe File, PE, CFM, Wood

**No Cell Left Behind: North Dakota Statewide 2D Modeling and Mapping.**

Brandon Banks, GISP, AECOM

**Resilience: Measuring, Quantifying, Funding**

Moderator: Caroline Cunningham, AICP, ABCP, CFM, Stantec, Inc.

**Pursuing Community Resilience Over Time.** Sally McConkey, PE, D. WRE, CFM, Illinois State Water Survey

**Maximizing the Value of Resilience.**

Stephen Bourne, PE, Atkins North America, Inc.

**Innovative Finance for Flood Resilience: Lessons from the Capital Markets.**

Samantha Medlock, CFM, Willis Towers Watson

**Community Rating System:**

**Guidance for Local Administration**

Moderator: Brian Trushinski, BES, CFM, FEMA

**Resources for Community CRS Coordinators - For the New and For the Old.** Bill Lesser, CFM, FEMA, FIMA
Thursday, June 21

More Bang for Your Buck: Coordinating CRS and Hazard Mitigation Planning Activities to Increase Impact. Amanda Shama, CFM, FEMA HQ
City of Phoenix 5-Year Cycle Verification with NFIP CRS. Mark Fountain, PE, ENV SP, CFM, HDR Engineering, Inc.

H4
State Post-Disaster Initiatives 126AB
Moderator: Jack Young, PE, CFM, Halff Assoc., Inc.
A Regional Watershed Approach to Disaster Recovery in Louisiana. Shona Gibson, PE, FEMA, Region VI
Building Resilience into Flood Recovery: Lessons Learned from the Colorado EWP Program. Jeffrey Sickles, PE, CFM, Enginuity Engineering Solutions, LLC.

H5
Levee Risk Analysis 129A
Moderator: Dan Brubaker, PE, CFM, NC Dept. of Public Safety
International Best Practice in Levee System Flood Risk Analysis. Ben Gouldby, Bsc, (Hons), HR Wallingford, Ltd.
Visualizing the Flood Risk from a Levee Breach. Will Zung, PMP, ENV SP, CFM, Stantec, Inc.

H6
Risk-Informed Decision Support 125AB
Moderator: Janet Thigpen, CFM, STC Regional Planning Board
The National Risk Index: A New Tool to Communicate and Interpret Community Risk. Nathan Montague, ABS Group
Relevant Targeted Flood Protective Actions for the Public. Jacqueline Snelling, FEMA HQ

H7
Guidance & Standards Highlights 127BC
Moderator: Gary Outlaw, GISP, Merrick
It Begins with Quality: Improving Trust in and Use of FEMA’s Flood Risk Products. Mary Jo Mullen, PE, PMP, Advantage Strategy Consulting, Inc.
Transformation Complete. Paul Rooney, FEMA
Mapping Fluvial Hazard Zones: Implementing a Statewide Program for Colorado. Katie Jagt, PE, CFM, Watershed Science and Design

H8
Forward Thinking Innovations for Risk Rating and Reduction – Atkins Showcase 128AB
Moderator: Thomas J Schwitzer, PE, PMP, GISP, CFM, Atkins North America, Inc.
Atkins invites you to join us to explore new ways to use ‘Data’ and ‘Technology’ in the National Flood Insurance Mapping Program in the years to come. Our
innovative tools and process provide a story map in Risk Identification, Flood and Fire - Disaster Recovery, Risk Communication and Flood Mitigation.

2:30-5:00  "TRAINING WORKSHOPS ($)"

Characterizing Flood Risk Using Bulletin 17C, the Updated Federal Guidelines for Flood Frequency Analysis ($45)
Instructors: Andrea Veilleux, Peter McCarthy, USGS

What's Your Strategic Communications Plan? ($45)
Instructor: Mark Boone, CFM, Monroe Cnty., FL

2:30-5:30  "CTP Best Practices from the Field"

2:30-5:30  "CFM Exam"

3:30-4:00  Break

4:00-5:30  "CONCURRENT SESSION J"

J1  New Tools and Methods for Modeling
Moderator: Victor Hom, BSCE, MSEE, PE, NOAA, NWS
Riding the Open Source Wave: Leveraging Innovations for Flood Risk Analysis. Seth Lawler, Dewberry

J2  Large Scale Simulation of Flood Flow Inundation Processes Using CHRE2D Model. Jennifer Duan, PE, University of Arizona

J2  Mitigation and Resilience Planning
Moderator: Tim Trautman, PE, CFM, Mecklenburg Cnty., NC
Building Community Resilience Through Integrated Risk Modeling and Community Planning. Mike Robinson, CFM, AECOM
Flood Hazard Mitigation Planning for FEMA Grants - Soboba Band of Luiseño Indians. Aric Torreyson, PE, Tetra Tech, Inc

J3  Mainstreaming Mitigation: Lessons Learned + Applied in Community Development Planning. Darrin Punchard, AICP, CFM, Punchard Consulting LLC

J3  Local FPM Challenges and Resources
Moderator: Elise Ibendahl, PE, ENV SP, CFM, Jacobs Engineering Group, Inc.
Clarifying Contradictions and Gaps in NFIP Regulations, Guidance Documents, and Community Policy. Del Schwalls, PE, CFM, Schwalls Consulting LLC
Local Choices and How They Can Impact the National Flood Insurance Program. Traci Sears, CFM, Montana Dept. of Natural Resources & Conservation.
Municipal Floodplain Ownership and Maintenance – How Much Can A Community Handle? Jeff Bigby, PE, CFM, City of Broken Arrow, OK
**J4 Challenges of Water Resources Along the Border**

*Moderator: Mitch Paine, CFM, King Cnty., WA*

*Nogales Wash - Potrero Creek Conceptual Drainage Masterplan.* John Hays, EIT, MOLO, CFM, Santa Cruz Cnty., AZ


*Border Mitigation - Flood Mitigation for Binational Flood Hazards.* Alejandro Riano, PE, CFM, Michael Baker International

**J5 Dam and Levee Breach Modeling**

*Moderator: Mark Riebau, CFM, Riebau Consulting Services*

*Is Detailed 2D Modelling of Dam Breach Inundation Worth the Expense?* Hussein Hussein, PE, CFM, Flood Control Dist. of Maricopa Cnty., AZ

*Real-Time Dam Fill Time and Outflow Prediction Software.* Carlos Carriaga, PhD, PE, CFM, Flood Control Dist. of Maricopa Cnty., AZ

*What Levee Risk? Simplified Levee Breach Analysis for Non-Accredited FEMA Levees.* Brent Travis, Ph.D, PE, WEST Consultants

**J6 Risk MAP**

*Moderator: Samara Ebinger, CFM, New Hampshire Office of Strategic Initiatives*

*Smart Scoping with Community Engagement and Base Level Engineering.* Ferrin Affleck, PE, CFM, Atkins North America, Inc.

*Leveraging FEMA’s Risk MAP Life Cycle as a Path to Mitigation Action.* Scott Schelling, PMP, MBA, Michael Baker International

*Innovations on Changes Since Last FIRM Toolset.* Vikram Shrivastava, PE, PMP, D.WRE, CFM, Atkins North America, Inc.

**J7 Mapping Toolbox Innovations and Applications**

*Moderator: Tom McDonald, CFM, City of Savannah, GA*

*FEMA’s CNMS Database – More Than Metrics: Hurricane Harvey Disaster Response.* Tammie Tucker, PE, CFM, AECOM

*Texas Water Development Board Cooperating Technical Partner – Statewide Prioritization Tool.* Cindy Engelhardt, PE, CFM, Halff Assoc., Inc.

*Leveraging Coastal Data: The Development of a Coastal MultiFrequency Geospatial Data Catalog.* Chris MacDougall, CFM, AECOM
Local Assessments for Prioritizing Stormwater Management Options
Moderator: Bill Nechamen, CFM, Nechamen Consulting, LLC

Too Many Projects, Not Enough Money: Practical Solutions to Optimize Limited Funding. Scott Hubley, PE, CFM, Freese and Nichols, Inc.

Flood Mitigation Plan: Supplemental Environmental Project (SEP) to Implementation. Greg Lubeck, PE, CFM, Lexington-Fayette Urban Cnty., KY

Developing a Comprehensive Stormwater Infrastructure Master Plan to Meet Multiple Objectives. Drew Beck, PE, CFM, Matrix Design Group, Inc.

6:00-10:00 NETWORKING RECEPTION Off-site
The Arizona Science Center has over 300 hands-on interactive exhibits that spans four levels. Designed by renowned architect Antoine Predock, this unique landmark is nestled in the picturesque setting of Heritage and Science Park directly across from the Phoenix Convention Center. Pre-registration is required. Food and beverages are included. ATTENDEE/GUEST NAME BADGE OR TICKET MUST BE PRESENTED FOR ADMISSION
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