

Arizona Floodplain Management Association Fall 2017 Conference



Quick Look: Conference Abstract

- ❖ Go to www.azfma.org to register
- ❖ You must be an AFMA member to register for the conference or classes
- ❖ Free Wednesday Training Classes
- ❖ Plenary, Technical, and Programs & Policies presentations
- ❖ Field tour of Picture Canyon Restoration
- ❖ CFM/Continuing Education Credits

November 1-3, 2017
Flagstaff, Arizona
Little America Hotel

Conference Cost: \$300, Includes Thursday Dinner (Additional Dinner Guests: \$35)
2515 E Butler Ave, Flagstaff, AZ 86004



Photo courtesy of Jack Moody

**Note: Room rate of \$101 (plus taxes and fees) available at Little America Hotel in Flagstaff, AZ.
Reserve your room by calling (800)-352-4386.**

**Identify yourself as part of the *Arizona Floodplain Management Association* Conference
Cutoff for guest room registration to receive the rate is October 10, 2017.**

Attention CFMs! Conference has been pre-approved for CECs by ASFPM (Thursday conference 6 CECs, Friday conference 3 CECs) Workshop and field trip CECs – see descriptions for pre-approved CECs

Arizona Floodplain Management Association

Fall 2017 Conference

Wednesday November 1st

Wednesday, November 1st Training Classes – Schedule of Events (See Descriptions of Classes for more information)

Room	Ponderosa	Grand Ballroom A	Spruce	Aspen	Multipurpose Room
8:00 AM		Scour Analysis Workshop	Technical & Administrative Factors of Floodplain Management	Office Hours with FEMA & ADWR: Mapping (By Advance Appointment Only, See Page 5 for Additional Information)	Office Hours with FEMA and ADWR: Floodplain Management (By Advance Appointment Only, See Page 5 for Additional Information)
8:30 AM					
9:00 AM	It is raining – Now is not the time to ask, “What should I do?”				
9:30 AM					
10:00 AM					
10:30 AM					
11:00 AM					
11:30 AM					
Noon	Lunch –Provided by AFMA (Ballroom B)				
12:30 PM					
1:00 PM	Risk Assessment with FEMA's Hazus: What is it and How to use it	Introduction to Python and It’s Applications to Geoprocessing Data	CFM Exam (Must pre-register with ASFPM)	Office Hours with FEMA & ADWR: Mapping (By Advance Appointment Only, See Page 5 for Additional Information)	Office Hours with FEMA and ISO: Community Rating System (By Advance Appointment Only, See Page 5 for Additional Information)
1:30 PM					
2:00 PM					
2:30 PM					
3:00 PM					
3:30 PM					
4:00 PM					
4:30 PM					
5:00 PM					
5:30 PM	Evening Reception and Registration in Flagstaff Room (Appetizers and Cash Bar, Dinner on your own)				
6:00 PM					
6:30 PM					
7:00 PM					
1:00 to 4:00 PM, CFM Exam (Located in Spruce Room)					



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Description of Classes – Wednesday, November 1st

It is raining – Now is not the time to ask, “What should I do?” (9:00 am - 11:00 am, 2 CECs)

Stephanie Gerlach, Hussein Hussein, Flood Control District of Maricopa County

Flooding has caused more damage than any other hazard in Maricopa County. Maricopa County has been part of 18 presidential disaster declarations for flooding and there have been at least 80 other significant flooding incidents. Each year the Flood Control District of Maricopa County (FCDMC) in partnership with Maricopa County Department of Emergency Management (MCDEM) and other agencies prepares for flood events through various types of workshops, seminars, and exercises. The exercises test not only emergency action plans, but also standard operating procedures, reading gages, identification and description of flooding problems, etc. This class will focus on the following:

- Why should training and exercises be conducted?
- Types of training and when should they be used
- Development of Standard Operating Procedures (SOP) and Standard Operating Guides (SOG)
- Determining who should be involved in the training
- Planning process
- Conduct a Short Table Top Exercise

Risk Assessment with FEMA's Hazus: What is it and How to use it (1:00 pm - 5:00 pm, 4 CECs)

Valerie Swick, Flood Control District of Maricopa County, Stephanie Routh, Dewberry

FEMA's Hazus software can be used for economic loss analysis for flood hazards. This workshop will provide a basic background about the software, data inputs, and the results that you can leverage for your projects. As with all models, there are limits, so we will explore some of the Arizona local uses of Hazus so you can see what the results look like.

A half-day workshop was hosted by FCDMC which focused on the integration of Hazus with FLO-2D analysis. A summary of that meeting will be presented and FCDMC's vision for how to socialize the use of Hazus when planning projects and data maintenance ideas. The workshop will be planned with:

- 0hr-1hr – What are the Hazus tools and what can they do?
- 1hr-2hr – Local use and applications of Hazus in Arizona, socializing Hazus to your workflows
- 2hr-3hr – Summary from our ½ day FCDMC working session on best practices for FLO-2D and Hazus for drainage master plans and other potential uses like LID/Green infrastructure/Emergency Response/Mitigation plans
- 3hr-4hr – Q&A and open discussion on future uses of Hazus in the Southwestern U.S.

This workshop is ideal for project managers, engineers, or emergency managers who want to determine if Hazus is beneficial to their analyses. Experienced risk assessment users are also welcome to join in the discussion and offer their own best practices and experiences.



Photo courtesy of Jack Moody



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Scour Analysis Workshop (8:00 am - 12:00 pm, 4 CECs)

Dennis L. Richards, Premier Engineering

This workshop will concentrate on general/contraction scour, a component for all alluvial channels. In particular, the different published forms of the regime equations will be examined. The regime equations published in design manuals have a different form than found in original research reports. This workshop will also cover local scour at culverts, grade-control structures, and drop structures.

Introduction to Python and It's Applications to Geoprocessing Data (1:00 pm – 5:00 pm, 4 CECs)

Ed Kern, PE, CFM, Helm Consultants

Python is a programming language that is easy to learn and has a vast array of applications in water resources engineering. This course is to introduce the basic building blocks of Python and show some of its numerous applications in GIS. This class consists of two distinct segments. The first is an introduction to programming in Python, demonstrating some of its most basic components such as variables, if statements, lists, loops and functions. The second is an overview of its applications in GIS focusing on the use of ArcPy, which provides Python access to ArcGIS geoprocessing tools.

Technical and Administrative Factors of Floodplain Management (8:00 am – 12:00 pm, 4 CECs)

Gregory Rodzenko, Rivers 'n Rain

This is a review class of the technical and administrative factors of floodplain management. The target audience are those who are new to floodplain management whether having an administrative role (floodplain permits) or a technical role (generating floodplain maps). The course could be used as an introduction to, or as a refresher for, floodplain management.



Photo courtesy of Jack Moody



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Wednesday, November 1st Events

CFM Exam (1:00 pm to 4:00 pm, must pre-register with ASFPM) Located in the Spruce Room.

The ASFPM Certified Floodplain Manager (CFM) exam will be proctored. To take the exam, you must pre-register through ASFPM; see <http://www.floods.org/pdf/certapp.pdf> for more information.

Office Hours with FEMA and ADWR: Mapping (8:00 am to 5:00 pm, advance appointment only)

Schedule a time to meet with Ed Curtis from FEMA Region IX and Mike Shelton from ADWR to discuss Risk MAP, current or future engineering studies, levees, or other mapping issues in your community. Contact Mike Shelton at ADWR to schedule an appointment. meshelton@azwater.gov or 602-771-8428.

Office Hours with FEMA and ADWR: Floodplain Management (8:00 am to 12:00 pm, advance appointment only)

Meet with Patricia Rippe and Brian Trushinski from FEMA Region IX and Suzie Sarpong from ADWR to discuss open CAV items, current or anticipated projects that will have an insurance impact, or other floodplain management issues in your community. Contact Lynn Whitman of YCFCD to schedule an appointment lynn.whitman@yavapai.us or 928-771-3197.

Office Hours with FEMA and ISO: Community Rating System (1:00 pm to 5:00 pm, advance appointment only)

Meet with Patricia Rippe and Brian Trushinski from FEMA Region IX and Bill Trakimas from ISO to discuss the CRS program. Contact Lynn Whitman of YCFCD to schedule an appointment lynn.whitman@yavapai.us or 928-771-3197

Evening Reception and Registration (5:30 pm to 7:30 pm) In the Flagstaff Ballroom

Come register for the conference and join your fellow floodplain managers for an evening reception. Appetizers will be served and a cash bar will be available.

Wednesday Dinner – On your own.

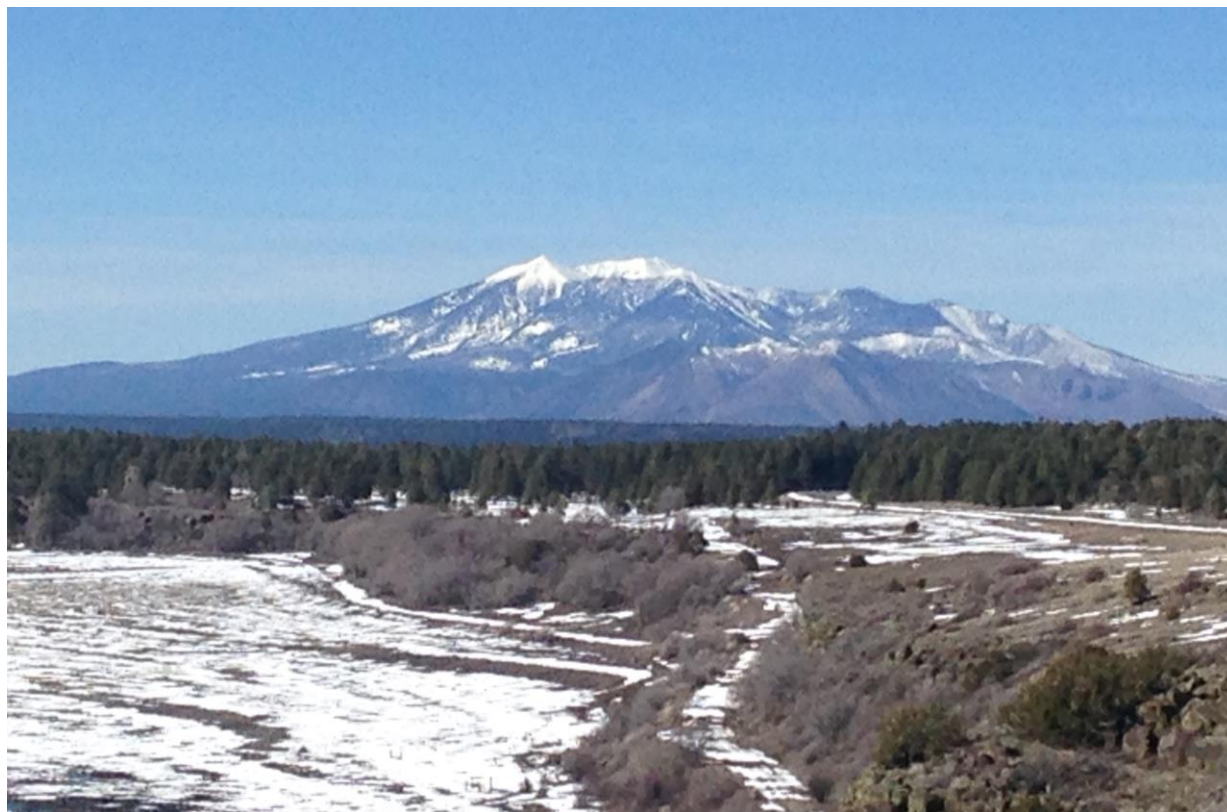


Photo courtesy of Jack Moody



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Fall 2017 Conference

Thursday, November 2nd

Plenary Session (Grand Ballroom)	7:00 to 8:00	Breakfast in the Grand Ballroom	
	8:00 to 8:05	Call to Order and Announcements	
	8:05 to 8:15	Local Welcome by Coral Evans, City of Flagstaff Mayor	
	8:15 to 9:00	Goodwin Wildfire and Post-Fire Flooding, Yavapai County, AZ Dan Cherry, YCFD District; Linda Potter, Atkins; Kevin Horton, Lyon Engineering	
	9:00 to 9:30	The National Weather Service Flagstaff Highline Fire Scar Support Service Jonathan Suk, Tony Merriman, Andy Taylor, National Weather Service	
	9:30 to 10:00	Coconino County Post-Fire Flood and Debris-Flow Analysis Joe Loverich, JE Fuller Hydrology & Geomorphology, Inc.	
	10:00 to 10:30	Break	
	10:30 to 11:30	Lessons learned from the 2015 Colorado City Flash-Floods Kevin J. Barlow, Colorado City Fire Department	
	11:30 to 11:45	FEMA Update – NFIP Reauthorization/Reform	
	11:45 to Noon	Business Meeting	
Noon to 1:30 Lunch - Provided by AFMA in the Grand Ballroom			
Afternoon Concurrent Sessions	1:30 to 2:00	Technical Track Flagstaff Room	A Case Study Examining Agriculture Impacts on Alluvial Plain Sediment Yield in Arid Environments David A. Jaffe, Psomas
	2:00 to 2:30		Looking Beyond the Cross Section-Arizona Reach-Scale Monitoring Network Update Brandon T. Forbes, U.S. Geological Survey
	2:30 to 3:00		Modeling Complex Storm Drain Systems with FLO-2D/SWMM Integration Jeff Holzmeister, Daniel Selk, J2 Engineering and Environmental Design
	3:00 to 3:30		Break
	3:30 to 4:00		Cost Effective 2D Solutions for Cost Conscious Agencies Scott Altherr, CMG Drainage Engineering
	4:00 to 4:30		Meeting FEMA Requirements and Optimizing Design of the Jellys Ferry Road Bridge using RiverFlow2D, Jason K. Kelley, CVL Consultants
	4:30 to 5:15		Real-Time Dam Flow Prediction Software Carlos C. Carriaga, Bing Zhao, Flood Control District of Maricopa County
	1:30 to 2:00	Programs and Policies Track Ponderosa Room	Reverse Engineering your project using the FEMA Elevation Certificate Form Thomas A. Liuzzo, Granite Basin Engineering, Inc.
	2:00 to 2:30		Flood Mitigation for Binational Flood Hazards Alejandro Riano, Michael Baker International
	2:30 to 3:00		Charles Duhigg's <i>The Power of Habit</i> , a book review Skyler Christensen, Atkins
	3:00 to 3:30		Break
	3:30 to 4:00		Using Hazus as a tool for Area Drainage Master Plans Geoff Brownell, Andrew Chill, Michael Baker International
	4:00 to 4:30		FEMA’s Community Rating System in AZ Brian Trushinski, FEMA Region IX; Bill Trakimas, ISO
	4:30 to 5:15		FEMA’s Risk Assessment for Flagstaff, a Focus on Building Science Data and Resulting Actions Stephanie Routh, STARR II Dewberry; Michael Bishop, FEMA Region 9, Risk Analysis Division; Jim Janecek, City of Flagstaff, Utilities Division
Dinner 6:00 to 9:00		Dinner and Activities in the Grand Ballroom Reception beginning at 6:00, no host bar, Dinner at 7:00	

***Please note that FEMA speakers as well as others are subject to change based on emergency deployments.**



Friday, November 3rd

Grand Ballroom

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7:00 to 8:00	Board of Directors Meeting in the Executive Board Room
7:00 to 8:30	Breakfast Buffet in the Grand Ballroom
8:30 to 9:00	Upper Santa Cruz River Risk MAP project / HEC-RAS 2D Ian Sharp, JE Fuller Hydrology & Geomorphology, Inc.
9:00 to 9:30	Starting from Scratch - La Paz County ALERT2 System Linda Potter, Atkins, Peter Acton, JE Fuller Hydrology & Geomorphology, Inc.
9:30 to 10:00	Flagstaff Green Stormwater Infrastructure Watershed Management Plan Kieran Sikdar, Watershed Management Group, Amanda Richardson, City of Flagstaff
10:00 to 10:30	<i>Break</i>
10:30 to 11:00	Avulsion Frequency in Maricopa County Erika Groh, ASU Geology Student, JE Fuller Hydrology & Geomorphology, Inc.
11:00 to 11:30	To FLO-2D or Not to FLO-2D 2.0 Ann Moynihan, Pima County Regional Flood Control District
11:30 to 12:00	Flood Risk Reduction Study for Munds Park Scott Ogden, Joe Loverich, JE Fuller Hydrology and Geomorphology, Inc.
12:30 to 3:30	Field Trip – Picture Canyon Restoration Tour

Field Trip: (3 CECs)

Picture Canyon Restoration Tour

Malcom Alter, Friends of the Rio

Allen Haden, Ecologist of Natural Channel Design, Inc.

Picture Canyon Natural and Cultural Preserve is located in northeast Flagstaff. The City of Flagstaff acquired the 478-acre Preserve from the Arizona State Land Department in 2012 with funding from the 2004 voter-approved Open Space bond and a Growing Smarter Grant from Arizona State Parks.

It is a natural and cultural amenity to northern Arizona. An agreement with the nearby Wildcat Hill Wastewater Treatment Plant ensures a year-long water source, providing critical riparian habitat for wildlife and songbirds. The Northern Sinagua occupied the area between 700 and 1300 A.D. and there are significant cultural and archaeological resources present on the property.

The restoration of Picture Canyon required extensive invasives removal and an aggressive revegetation plan to restore the natural floodplain function and beauty of this area. Picture Canyon was presented as a field trip to AFMA in 2010 during its early stages of construction. Today Picture Canyon is a vibrant and healthy riparian community and recreation opportunity for Flagstaff, and it serves as a success story that severely degraded floodplains can indeed be restored and maintained if it is valued by the community.

