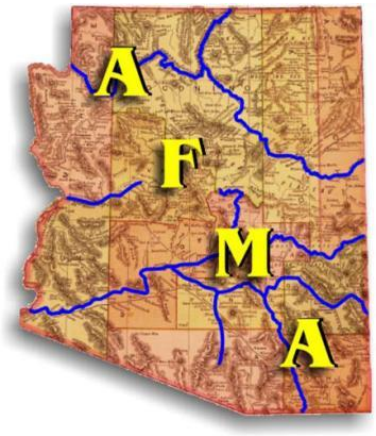
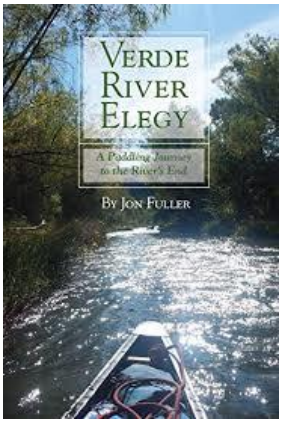
Arizona Floodplain Management Association
Spring 2019 Conference



Keynote Speaker – Jon Fuller

Author:
Verde River Elegy

- Published Author and Avid Canoe Enthusiast
- Join us to hear about Jon's epic solo canoe trip on the Verde River from the headwaters to the Salt River, the longest recorded trip down the Verde River.



May 1-3, 2019

Prescott, Arizona

Prescott Resort and Conference Center

Conference Cost: $300, Includes Thursday Dinner (Additional Dinner Guests: $35)

1500 Highway 69, Prescott, AZ 86301

Prescott Resort and Conference Center
(Photo courtesy of Jack Moody)

Note: Room rate of $109 (plus taxes and fees) available at Prescott Resort and Conference Center.

Reserve your room by calling (800) 967-4637.

Identify yourself as part of the *Arizona Floodplain Management Association* Conference

Cutoff for guest room registration to receive the rate is April 9, 2019.

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
Spring 2019 Conference

Wednesday, May 1st

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

Room	Verde	Copper Basin	Arizona	Prescott
8:00 AM		Stream Bank Stabilization	FLO-2D Software Urban Drainage and Design Workshop	Office Hours with FEMA & ADWR: (By Advance Appointment Only, See Page 5 for Additional Information)
8:30 AM				
9:00 AM				
9:30 AM	Ethics for Professionals			
10:00 AM				
10:30 AM				
11:00 AM				
11:30 AM				
Noon	*Lunch – Provided by AFMA (Sedona)*			
12:30 PM				
1:00 PM	Riprap Design for Standard Applications	Stream Bank Stabilization	CFM Exam (Must pre-register with ASFPM)	Office Hours with FEMA & ADWR: (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 Granite Mountain (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 the Arizona Room)

Arizona Floodplain Management Association
Spring 2019 Conference

Wednesday, May 1st

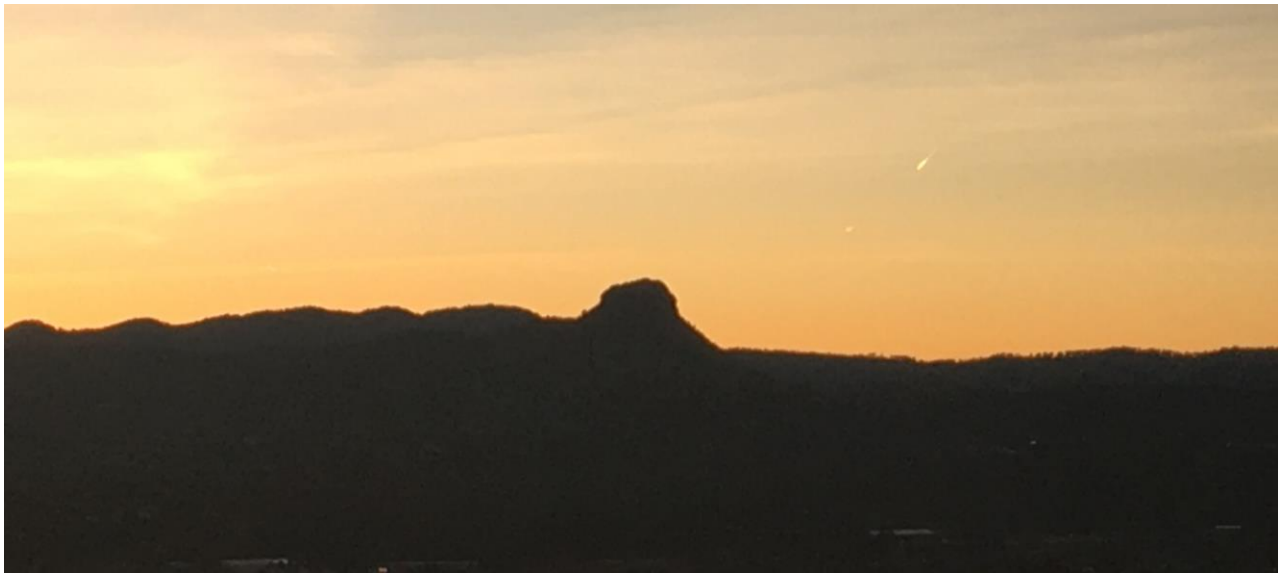
Description of Classes – Wednesday, May 1st

Ethics for Professionals, (9:30 am - 11:30 am, 2 CECs)
David T. Williams, PhD, P.E., CFM, CPESC, David T. Williams and Associates
Every day you face decisions that have ethical implications. And while the safety of the organization and the public is every professional's primary concern, time, personal, and resource pressures can often challenge these commitments. Taking a proactive approach to workplace ethics is the best course to mitigate this risk, avoid legal implications, and build a working atmosphere of integrity, trust, and purpose.

Join David Williams to explore the challenge of workplace ethics and how to take a proactive stance, how to develop an effective and sustainable set of guidelines for organization, the difference between a Code of Conduct and a Code of Ethics, and best practices in dealing with ethically challenging situations.

In this presentation, we'll discuss how to develop a strong and sustainable set of workplace ethics and guidelines designed to mitigate ethics creep, avoid legal implications, and build a solid, ethical foundation for a healthy workplace culture. We'll explore common ethical topics and challenges, and will detail the best practices when faced with ethically challenging situations. Additionally, we'll discuss the difference between a Code of Conduct and a Code of Ethics, and finally, we will review several effective example Codes of Ethics for both working professionals and public officials.

Riprap Design for Standard Applications, (1:00 pm - 5:00 pm, 3.5 CECs)
Nathanael Vaughan, P.E. and Rob Lyons, P.E., CFM, JE Fuller Hydrology and Geomorphology, Inc.
This course will cover a variety of topics associated with riprap design and construction. Through a review of the evolution of riprap design theory and practice, participants will develop a strong fundamental understanding of the variables involved in appropriately sizing riprap for a variety of conditions. Examples of design methods/standards from multiple jurisdictions will provide a composite view of the current state of riprap design practice.
Examples of common applications and failure cases will allow participants to better apply appropriate riprap revetments in their design. Specific application cases such as bank revetment, culvert outlet protection, and bridge scour countermeasures will aid participants in selecting appropriate scour and erosion protection measures for their projects. Riprap specifications including sizing conventions, quality, and placement will also be addressed.
Exercises will emphasize the fusion of hydraulic analysis and riprap design.



Thumb Butte
(Photo courtesy of Jack Moody)

Wednesday, May 1st

Arizona Floodplain Management Association
Spring 2019 Conference

Description of Classes – Wednesday, May 1st

Streambank Stabilization for Restoration and Flood Control Projects, (8:00 am - 5:00 pm, 7.5 CECs)
Brent Travis, PhD, P.E., WEST Consultants, Inc.
This one-day course will focus on streambank stabilization techniques for both restoration and traditional flood control projects. Traditional hard structural-type channel bank stabilization techniques will be discussed (using rock riprap, gabions, articulated concrete blocks) as well as re-directive techniques including bendway weirs, rock vanes, and spur dikes. The applicability and limitations of the various techniques are described, and course participants will develop the necessary skills to quantitatively predict scour depth at the bank and use this to provide the critically important toe protection. Workshops accompanying the lectures provide practical application experience in streambank stabilization design. Through this class participants will:

- Gain insight on the causes of streambank failure and erosion
- Understand concepts of channel stability and its assessment
- Review the fundamentals of stream systems and channel processes
- Understand when streambank stabilization may be required
- Obtain guidance on re-directive techniques for streambank stabilization
- Learn primary means used for streambank stabilization and how to select a streambank protection method
- Receive guidance on establishing limits of streambank protection
- Review design approaches to streambank stabilization for restoration and flood control
- Gain insight into stream channel design
- Learn how to predict total scour for toe scour protection
- Learn the essentials of riprap design (includes WEST's professional riprap design software RDS, at no charge)

FLO-2D Software Urban Drainage and Design Workshop, (8:00 am – 12:00 pm, 3.5 CECs)
Karen O'Brien, FLO-2D Software, Inc.
This presentation will be a review of the Flood Control District of Maricopa County's Hydrology and Hydraulics practices for Area Drainage Master Plans and general urban modeling guidelines using FLO-2D. Over the past year, several modeling methods have been outlined and refined for flood routing project development. These include methodology for rainfall and infiltration, walls and levees, rivers and channels, buildings and streets, storm drain systems and walls.

Ft. Whipple / VA Hospital
(Photo courtesy of Jack Moody)

Wednesday, May 1st

Arizona Floodplain Management Association
Spring 2019 Conference

Wednesday, May 1st Events

CFM Exam (1:00 pm to 4:00 pm, must pre-register with ASFPM) Located in the Arizona 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: Prescott Room (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 issues in your community. Contact Mike Shelton at ADWR to schedule an appointment. meshelton@azwater.gov or 602-771-8428.

Evening Reception and Registration (5:30 pm to 7:30 pm) In the Granite Mountain Room
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.

Sharlot Hall Museum
(Photo courtesy of Jack Moody)

Arizona Floodplain Management Association
Spring 2019 Conference

Thursday, May 2nd

Plenary Session (Sedona – Verde)	**7:00 to 8:00**		***Breakfast in the Clarkdale/Cottonwood***
	8:00 to 8:05		**Call to Order and Announcements**
	8:05 to 8:15		**Local Welcome by Supervisor Randy Garrison,** Chair, Yavapai County Board of Supervisors
	8:15 to 9:15		**Verde River Elegy** Jon Fuller, Author
	9:15 to 10:00		**Tribal Resilience & Adaptation Planning in the Face of Climate Change** Nikki Cooley, M.S., Institute of Tribal Environmental Professionals @ Northern Arizona University
	10:00 to 10:30		**Break**
	10:30 to 11:00		**2019 Flooding and Runoff in Navajo County and the Little Colorado River** Sandy Phillips, P.E., CFM, Navajo County; Linda Potter, P.E., CFM, Atkins North America, Inc.
	11:00 to 11:30		**Willow Creek Bridge Repairs on Iron Springs Road in Prescott** Dan Cherry, P.E., CFM, Yavapai County Public Works
	11:30 to Noon		**Business Meeting and Board Introductions**
Noon to 1:30 ***Lunch - Provided by AFMA in the Clarkdale - Cottonwood***			
Afternoon Concurrent Sessions	**1:30 to 2:00**	**Technical Track Sedona**	**Detention/Debris Basin Design for Development in Wildfire Prone San Gabriel Mountains** Alissa Miller, P.E., CFM; Brent Travis, PhD, P.E., WEST Consultants Inc.
	2:00 to 2:30		**PC-HYDRO Hydrologic Modeling Software: A Comprehensive Evaluation** Brent Travis, PhD, P.E., WEST Consultants, Inc.; Jacob Prietto, CFM, Pima County RFCD
	2:30 to 3:00		**Mapping Surface Water Change in California's Central Valley Using Stream Gage and Satellite Data** Jessica Walker, PhD, US Geological Survey
	3:00 to 3:30		***Break***
	3:30 to 4:00		**FLO-2D Dam Breach Analysis for White Tanks FRS No. 4** Justin Beeler, P.E., CFM; Paul Buss, EIT, Atkins North America, Inc.
	4:00 to 5:00		**Drop Structures: Design Analysis, Installation Guidelines and Case Studies in Arizona** Stefano Rignanese, M.S.; Carlos Andrade, Maccaferri Inc.
	1:30 to 2:00	**Programs and Policies Track Verde**	**Williams Post-Fire, Pre-Disaster Plan** Joe Loverich, P.E., CFM, JE Fuller Hydrology and Geomorphology
	2:00 to 2:30		**Cottonwood, Arizona - Self-Managing our Flood Destiny** Robert Winiecke, P.E., CFM, City of Cottonwood
	2:30 to 3:00		**"DEMA's Grant Programs"** Lucrecia Hernandez, Arizona Division of Emergency Management
	3:00 to 3:30		***Break***
	3:30 to 4:00		**FEMA Update** Ed Curtis, P.E., CFM, FEMA
	4:00 to 4:30		**Transforming Flood Insurance Rating – NFIP's Risk Rating 2.0 and More** Bruce Bender, CFM, Bender Consulting Services, Inc.
	4:30 to 5:00		**NFIP and CRS implications on Development that Doesn't Require a Building Permit** Kelli Sertich, AICP, CFM, Flood Control District of Maricopa County
Dinner 6:00 to 9:00			**Dinner and Activities in the Clarkdale - Cottonwood** Reception beginning at 6:00, no host bar, Dinner at 7:00, Silent Auction and Raffle

Arizona Floodplain Management Association
Spring 2019 Conference

Friday, May 3rd

Sedona-Verde

7:00 to 8:00	**Board of Directors Meeting in the Chino Room**
7:00 to 8:30	**Breakfast Buffet in the Clarkdale - Cottonwood**
8:30 to 9:00	**A Yavapai Co. Public Works Solution to Severe Dirt Road Shoulder Erosion Due to Heavy Runoff** Bruce Connolly, P.E., CFM, Yavapai County Public Works
9:00 to 10:00	**Using Low Impact Development (LID) to Manage and Optimize Storm Flows** Deborah Tosline, R.G., US Bureau of Reclamation
10:00 to 10:30	***Break***
10:30 to 11:00	**Arizona Department of Environmental Quality Assumption of the Section 404 Program** David Lelsz, PhD, Arizona Department of Environmental Quality
11:00 to 11:30	**Flood Control District of Maricopa County Dam Safety Program** Tom Renckly, P.E., Flood Control District of Maricopa County
11:30 to 12:00	**Acker Park Regional Detention Basin** - Jeff Low, CFM, City of Prescott Public Works; Marc DuBroy, P.E., CFM, DuBroy Engineering, LLC; Richard Aldridge, P.E., CivilTec
12:30 to 3:30	**Field Trip** - **Acker Park Regional Detention Basin** - Jeff Low, CFM, City of Prescott Public Works; Marc DuBroy, P.E., CFM, DuBroy Engineering, LLC; Richard Aldridge, P.E., CivilTec

<u>Acker Park Regional Detention Basin Field Trip:</u>
(2 CECs)

The Acker Detention Basin was constructed in 2017 and was designed to reduce discharges downstream into Virginia Street Wash and increase stormwater quality. Virginia Street Wash has been encroached upon by development since the 1910s and hundreds of structures are within the designated FEMA Special Flood Hazard Area. The construction of the Acker Detention Basin has reduced the discharge downstream up to 50%. Currently the City of Prescott is constructing the Washington Avenue and Goodwin Street reconstruction project, which will replace a 1933 Work Progress Administration (WPA) undersized culvert in the watercourse. The City currently has a new flood study budgeted for Virginia Street Wash to be completed next year, which should remove a significant amount of residential structures from the designated floodplain area.