

ARIZONA FLOODPLAIN MANAGEMENT ASSOCIATION

Fall 2021 Conference

October 27 - 29, 2021

Wednesday - Friday

Sedona, Arizona

KEYNOTE SPEAKER DR. VICTOR BAKER

Megafoods on Earth and Mars

Dr. Baker is a Regents' Professor of Hydrology and Atmospheric Sciences, Geosciences, and Planetary Sciences at the University of Arizona.

His research concerns paleoflood hydrology, geomorphic features on Mars and Venus, catastrophic Pleistocene megaflooding in the northwestern U.S. and central Asia, and history/philosophy of Earth and planetary sciences.



**CONFERENCE
COST:
\$300**

Includes Thursday Dinner
Additional Dinner Guests:
\$35



1752 State Route 179, Sedona AZ 86336

Room rate of \$142 or \$162 (plus taxes and fees)
available at the Poco Diablo Resort

Reserve your room by calling (928) 203-5923
or reserve your room online by following this link:

[AFMA Room Reservation Link](#)

Identify yourself as part of the Arizona Floodplain
Management Association Conference (AFMA)

Cutoff for guest room registration to receive the
rate is October 6, 2021

Attention CFMs: The conference has been pre-approved for CECs by ASFPM
(Thursday conference 6 CECs, Friday conference 3 CECs)

Class and field trip CECs – see descriptions for the pre-approved CECs

ARIZONA FLOODPLAIN MANAGEMENT ASSOCIATION

Fall 2021 Conference - Wednesday October 27

SCHEDULE

MORNING CLASSES

FLO-2D / QGIS URBAN MODELING TRAINING

8:00 - 12:00 Phoenix Room
Karen O'Brien, FLO-2D Software, Inc

BREAK
10:00 - 10:30

HEC-RAS 2D TRAINING

8:00 - 5:00* Flagstaff/Tucson Room
Brian Wahlin, P.E., PhD, D.WRE, WEST Consultants, Inc
*Part One
Class to continue after lunch

Lunch - Vista Patio & Sunset Terrace 12:00 - 1:00

AFTERNOON CLASSES

LIONS (FLOOD RESPONSE PLANS), TIGERS (EMERGENCY ACTION PLANS) AND BEARS (FLOOD EXERCISES), OH MY

1:00 - 5:00 Phoenix Room
Stephanie Gerlach, P.E., MEP, & Chandra Miller, CFM,
Flood Control District of Maricopa County

BREAK
3:00 - 3:30

HEC-RAS 2D TRAINING

8:00 - 5:00* Flagstaff/Tucson Room
Brian Wahlin, P.E., PhD, D.WRE, WEST Consultants, Inc
*Part Two

SPECIAL EVENTS

CERTIFIED FLOODPLAIN MANAGER (CFM) EXAM

1:00 - 4:00 Cottonwood Room
Must Pre-Register with ASFPM

FEMA & ADWR VIRTUAL OFFICE HOURS

8:00 - 5:00 Executive Meeting Suite
Michael Bishop, FEMA Region IX & Michael Shelton, ADWR

EVENING RECEPTION AND CONFERENCE REGISTRATION

5:30 - 7:30 Vista Patio & Sunset Terrace
Appetizers and Cash Bar

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CLASS DESCRIPTIONS

FLO-2D / QGIS URBAN MODELING TRAINING

(8:00AM - 12:00PM, 3.5 CECS)

Karen O'Brien, FLO-2D Software, Inc

This is a hands-on training class on how to acquire, import and build data files for the FLO-2D flood routing software using QGIS and the FLO-2D Plugin. The software and data will be provided on training day and in the weeks leading up to the training day. New processing techniques are included in this class. This will be an excellent opportunity to learn FLO-2D, brush up on some GIS skills, and find out what's new with the software. The training will include grid development, elevation tools, storm drain interface, channels, culverts, buildings and walls. New tools will cover elevation sampling methods, wall modeling methods, new storm drain tools and hydraulic structure methods.

HEC-RAS 2D TRAINING

(8:00AM - 5:00PM, 6 CECS)

Brian Wahlin, P.E., Ph.D, D.WRE, WEST Consultants, Inc

The current version of HEC-RAS (6.0) introduces several key and important new features that can benefit modeling of complex river environments and improve our ability to develop accurate floodplain limits. The purpose of this one-day training class is to introduce experienced HEC-RAS users to the major new features of the software. Through attendance, course participants will:

- Learn new features of RASMapper
- Understand modeling details associated with 2D bridges, spatial rainfall, and spatial infiltration data
- Gain hands-on experience implementing the new features through practical computer workshops

LIONS (FLOOD RESPONSE PLANS), TIGERS (EMERGENCY ACTION PLANS) AND BEARS (FLOOD EXERCISES), OH MY

(1:00PM - 5:00PM, 3.5 CECS)

Stephanie Gerlach, P.E., MEP, Chandra Miller, CFM, Flood Control District of Maricopa County

The National Flood Insurance Program Community Rating System Coordinator's Manual states that a community must have a flood warning and response plan that includes response actions and who is affected (Activity 610). They also must have emergency action plans that cover both levees and dams (Activities 620 and 630). All activities require a flood exercise. A flood exercise is a simulation of possible flood scenarios to test plans, procedures, equipment and knowledge. The purpose of the class is to provide information on the development of various plans that help create a comprehensive flood warning program. The class will also provide information on exercises such as why exercise, exercise types, planning, and types of documents. The class will also include a short table top exercise.

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EVENT DESCRIPTIONS



CFM Exam - 1:00p - 4:00p

Cottonwood Room

The ASFPM Certified Floodplain Manager (CFM) exam will be proctored.

To take the exam, you must pre-register through ASFPM.

Please see the link below for more information:

[ASFPM CFM Application](#)

FEMA & ADWR Virtual Office Hours - 8:00a - 5:00p

Executive Meeting Suite

Schedule a time to meet with Michael Bishop 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.



FEMA



Evening Reception & Registration - 5:30p - 7:30p

Vista Patio & Sunset Terrace

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 Night Dinner is On Your Own

A Note on COVID

The AFMA Board is closely following state and local guidance while proceeding optimistically with the planning of a fully in-person conference that aligns with the latest CDC guidelines. Masks may be mandatory or highly recommended during the conference. We will continue to adjust accordingly as the situation evolves.

ARIZONA FLOODPLAIN MANAGEMENT ASSOCIATION

Fall 2021 Conference - Thursday October 28

SCHEDULE

Breakfast - Vista Patio & Sunset Terrace 7:00 - 8:00

Conference Center	8:00 - 8:05	Call to Order
	8:05 - 8:15	Local Welcome Sandy Moriarty, Mayor of Sedona
	8:15 - 9:45	Megafoods on Earth and Mars Dr. Victor Baker, University of Arizona
	9:45 - 10:15	Break
	10:15 - 10:45	Oak Creek Watershed Post-Fire Analysis Joe Loverich, P.E., CFM, & Matthew Scragg, EIT, JE Fuller Hydrology and Geomorphology, Inc
	10:45 - 11:15	City of Prescott Cooperating Technical Partners Flood Risk Project Brian Schalk, P.E., Holistic Engineering and Land Management & Jeff Low, CFM, City of Prescott Public Works
	11:15 - 11:45	AFMA Business Meeting

Tree Planting Ceremony & Lunch - Vista Patio & Sunset Terrace 11:45 - 1:30

Track A - Flagstaff/Tucson Room	1:30 - 2:00	It's a Brave New World: 2D Modeling and FEMA Policies Linda Potter, P.E., CFM, Atkins North America, Inc
	2:00 - 2:30	Watershed/Urban Interface - Getting the Flood Timing Right! Jimmy O'Brien, P.E., PhD, FLO-2D Software, Inc / Riada Engineering, Inc
	2:30 - 3:00	City of Clovis Floodplain Mapping with RAS-2D Zach Whitten, P.E., & Amelia Ochsenbein, P.E., Stantec
	3:00 - 3:30	Break
	3:30 - 4:00	Connecting a 2D Hydraulic Model to a 1D Hydraulic Model - Is This Even Possible? Andrew Daus, CFM, ENV SP, WEST Consultants, Inc
	4:00 - 4:30	2D Probabilistic Approach to Develop Graduated Flood Hazard and Risk Data Alejandro Riano, P.E., AECOM
	4:30 - 5:00	Mitigating Problematic Flooding in Apache Junction through Stormwater and Sediment Capture Matt Hann, P.E., CFM, Black & Veatch

Track B - Phoenix Room	1:30 - 2:00	Clipper Wash Erosion Mitigation Project - Gabion Groynes Kevin Horton, P.E., CFM & Brian Bucholtz P.E., CFM, Lyon Engineering & Surveying, Inc
	2:00 - 2:30	The History of Lacey's Scour Equation Brian Wahlin, P.E., PhD, D.WRE, WEST Consultants
	2:30 - 3:00	Sun Valley ADMP Trials & Tribulations to Public/Stakeholder Outreach; or trying to give cats a bath! Mark Frago, CFM, AICP & Theresa Pinto CFM, AICP, PMP, Flood Control District of Maricopa County
	3:00 - 3:30	Break
	3:30 - 4:00	El Rio Confluence Lake - A Concept Study, the continued implementation of the El Rio WCMP Hasan Mushtaq, P.E., CFM, PhD, PMP, Flood Control District of Maricopa County & Kevin Kugler, AICP, Michael Baker International
	4:00 - 4:30	Upper Clear Creek Pre-Wildfire Planning Study Drew Beck, P.E., CFM Matrix Design Group
	4:30 - 5:00	Loose Ended Levees? Levee Certification Process & Emergency Action Plans - Case Study in Phoenix Hasan Mushtaq, P.E., CFM, PhD, PMP & Frank Brown, P.E., CFM, PACP, Flood Control District of Maricopa County

Evening Reception & Dinner - Vista Patio & Sunset Terrace 6:00 - 9:00

ARIZONA FLOODPLAIN MANAGEMENT ASSOCIATION

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EVENT DESCRIPTIONS



Tree Planting Ceremony 11:45a - 12:15p

Beverly Babb, Az Community Tree Council

Poco Diablo Resort wants to honor the important work of AFMA and all that we do to protect our communities across the state of Arizona.

In recognition of the expertise and protection that we offer our communities, the resort has planned a commemorative tree-planting ceremony in partnership with the Az Community Tree Council. Conference attendees may gather before lunch on October 28th to participate in and witness the tree planting ceremony to honor AFMA for the many ways we nourish and protect our lands, and the AFMA Board will have a hands-on role in planting the tree with the assistance of the AZ Community Tree Council. This tree will represent a lasting legacy of the roots of AFMA throughout our state.

Evening Reception and Dinner + Raffle and Silent Auction 6:00p - 9:00p

The night will begin with a reception and cash bar.

The plated dinner will be served at 7:00p.

Raffle tickets will be sold before and during dinner with a prize and gift card drawing at the end of the night. The silent auction bidding will be open all day Thursday, until dinner begins.

We are in need donations for the silent auction. Unique and thoughtful items are all welcome.

Silent auction items may be dropped off with Ryan Sauer at Entellus at: 3033 N. 44th St, Ste 250, Phoenix, AZ 84018 or brought to registration.

Contact Ryan Sauer at rsauer@entellus.com or (602)-889-4456 for questions and more information.

All raffle and silent auction proceeds go directly to the AFMA Scholarship Fund.



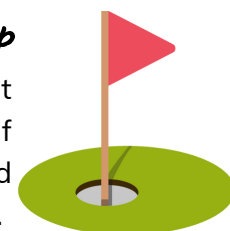
Stargazing 8:30p - 10:00p

Dennis Young, Professional Field Astronomer

After dinner, Dennis Young, who is professional field astronomer, will provide an informative and awe-inspiring view of the brilliant Sedona night sky. Dennis has designed a powerful telescope that he brings onsite at Poco Diablo Resort to view visible planets and formations in the night sky, and describe to participants fascinating information about the galaxy and planets. Small groups from AFMA will be able to flow through viewing the telescope and other night vision gadgets and ask questions during this stargazing experience. Many previous groups have been excited to view Venus or the rings of Saturn or formations on the moon as some of the highlights of their stargazing experience, depending on the season and what is visible in the Sedona night sky.

Night Golf 8:30p - 10:00p

A group of up to 45 players on 9 teams will be able to play a shot-gun game of Night Golf on the 9-hole Executive Golf Course. Players will be given glow in the dark golf balls & necklaces, and swing for glow in the dark flag markers during this fun and unique night golf event.



ARIZONA FLOODPLAIN MANAGEMENT ASSOCIATION

Fall 2021 Conference - Friday October 29

SCHEDULE

Breakfast - Vista Patio & Sunset Terrace 7:00 - 8:30

Conference Center

8:30 - 9:00	Yavapai County - Post-Wildfire Flood and Debris - Flow Assessment Ann Youberg, PhD, Arizona Geological Survey , & Matthew Scragg, EIT, JE Fuller Hydrology and Geomorphology, Inc
9:00 - 9:30	Risk Rating 2.0 Edie Lohmann, CFM, MBA, ANFI, FEMA Region IX
9:30 - 10:00	What Civil & Environmental Engineering Students are Learning Today at NAU Kyle Julle, EIT, Northern Arizona University
10:00 - 10:30	Break
10:30 - 11:00	Update on USACE Activities and Programs in Arizona Mike Luecker, P.E., US Army Corps of Engineers
11:00 - 11:30	FEMA Region IX Update Michael Bishop, FEMA Region IX
11:30 - 12:00	Soldier Wash Channel Improvements and Coffee Pot Drainage Basin Improvements Rob Lyons, P.E., JE Fuller Hydrology and Geomorphology, Inc , & David Peck, EIT, City of Sedona (Retired)
12:00 - 12:30	Box Lunches To Go
12:30 - 3:00	Storm Water CIP Field Trip

Storm Water CIP Field Trip (Soldier Wash Channel Improvements, Coffee Pot Drainage Basin Improvements, and Optional Sugar Loaf Trail Hike) *(1.5 CECs)*

The storm event on September 10, 2009 flooded several residents within the Coffee Pot Basin and created millions of dollars in damage to Tlaquepaque business owners and patrons. The City engaged in drainage studies, design, and construction of flood protection systems for both areas to mitigate the flooding hazard.

The fall weather should be mild. Suggested attire is casual or business casual. Total walking distance is estimated to be less than ½ a mile cumulatively.

Optional hike participants should wear comfortable hiking attire. Suggest staying hydrated, bringing water, sunscreen, hat, and sunglasses.

IT IS MANDATORY THAT FIELD TRIP PARTICIPANTS CARPOOL TO MINIMIZE VEHICLES



FRIDAY FIELD TRIP DETAILS

Soldier Wash Channel Improvements (Stop #1)

Tlaquepaque Arts & Shopping Village West Parking Lot in-between Tlaquepaque and the Los Abrigados Resort - 336 AZ-179, Sedona, AZ 86336

Google Maps Link <https://goo.gl/maps/P9uGJrUc2zPAdS5C9>

Coffee Pot Drainage Basin Improvements (Stop #2)

Basha's Grocery Store (back loading dock area, north of building)

Google Maps Link <https://goo.gl/maps/xB1zkrRhp8vDdwWi6>

Coffee Pot Drainage Basin Improvements (Stop #3)

Cul-de-sac on Kinsey Ct (Kinsey Ct & Farmer Brothers Dr)

Google Maps Link <https://goo.gl/maps/1FXipp8JpALPgb2U7>

Sugar Loaf Trail Hike (Stop #4 OPTIONAL)

An optional hike will be offered up the Sugar Loaf Trail after the field visit at the Coffee Pot sediment basin. The hike will take approximately 1-hour to complete. The hike is ranked "Easy" on alltrails.com. The starting elevation is approximately 4560 at the trailhead and elevation 4910 at the Sugar Loaf Summit. See below.

<https://www.alltrails.com/trail/us/arizona/sugarloaf-loop-trail>

https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3851975.pdf

