

ARIZONA FLOODPLAIN
MANAGEMENT ASSOCIATION

AFMA
40
YEARS

FALL 2022 CONFERENCE

CELEBRATING 40 YEARS

October 26 - 28
Wednesday - Friday
8:00 AM - 5:00 PM

Tempe Mission Palms
60 E 5th Street
Tempe, Arizona 85281

Cost: \$350
Additional Dinner
Guests: \$35

Attention CFMs: The conference is 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)

Key Note

Dr. Enrique Vivoni Remote Sensing for Characterization of Water in Arid Floodplains

When and where streamflow occurs in arid regions is critical for environmental regulations, water supply and disaster relief. It is well-known that most dryland rivers are non-perennial and have high streamflow variability in space and time. However, there is a lack of observations to capture the dynamics of these river systems. Here, we present a new approach to determine the presence of streamflow using commercial small satellites which provide almost daily imagery at three-meter resolution. Using this method, we compute streamflow presence over the Hassayampa River in central Arizona over a three-year period. Our results highlight that the flowing fraction of the river varies from season to season and that the fraction of flowing days in the river varies greatly along its total length. We extend this work to the map flood extent from a destructive event in Gila Bend in 2021. These efforts suggests that the imaging capacity of small satellites can improve the detection of streamflow and the flood hazards in dryland rivers as compared to current ground methods.



Friday Field Trip

Granite Reef Dam - Salt River Project

The field trip will focus on Granite Reef Diversion Dam and how it diverts water into the canals, spill events, and how water gets from SRP's reservoirs to city treatment plants. We'll also see the dredging operations at the dam, look at the CAP/SRP inter-connection, discuss the future SRP/CAP inter-connection, and cover many other aspects of SRP's water operations.

Introducing: The AFMA Conference Training Track

New this year - a specialized track made for those looking to gain new skills and attend a multi-day training on Wednesday, Thursday and Friday, while still having all of the networking benefits of attending an AFMA Conference.

The Training Track includes full access to the AFMA Conference, including coffee, snack breaks and provided meals. The schedule runs parallel with the Conference, meaning that Training Track participants will still have the opportunity to network during lunch, and get to know all other conference and class attendees during Thursday evening's dinner.

This track is great for newer hires, EITs, and those who are more interested in work-related training. For class description and pricing see page 5.

Pricing for the training track will vary, depending on the selected class, but will include all of the normal meals and snacks that are included in the general conference schedule for Wednesday, Thursday and Friday.

There will still be additional optional free Wednesday classes, as has been the norm in the past, which are not affected by this new track.

Dining

On Wednesday, Thursday, and Friday, AFMA members will have unlimited access to the venue's Break Stations which include a continental breakfast, hot and cold items, as well as a variety of snacks and drinks from morning until evening. So, don't forget to stop in in the morning for a cup of coffee and a muffin on your way to the Plenary session, or a couple chicken tenders and a soda during your afternoon break.

Room Reservations

[Click Here to Book Your Room](#) Link Closes 10/4/22
The reserved room rate is \$174 / night.

You may initially see \$194 / night upon booking your stay, however, AFMA will be covering \$20 off each night for all attendees to allow for everyone to receive the best experience possible, and attend all conference events.

Scan the QR Code for a
Digital Version of this
Program, and for access to
other important links



CONFERENCE MAPS

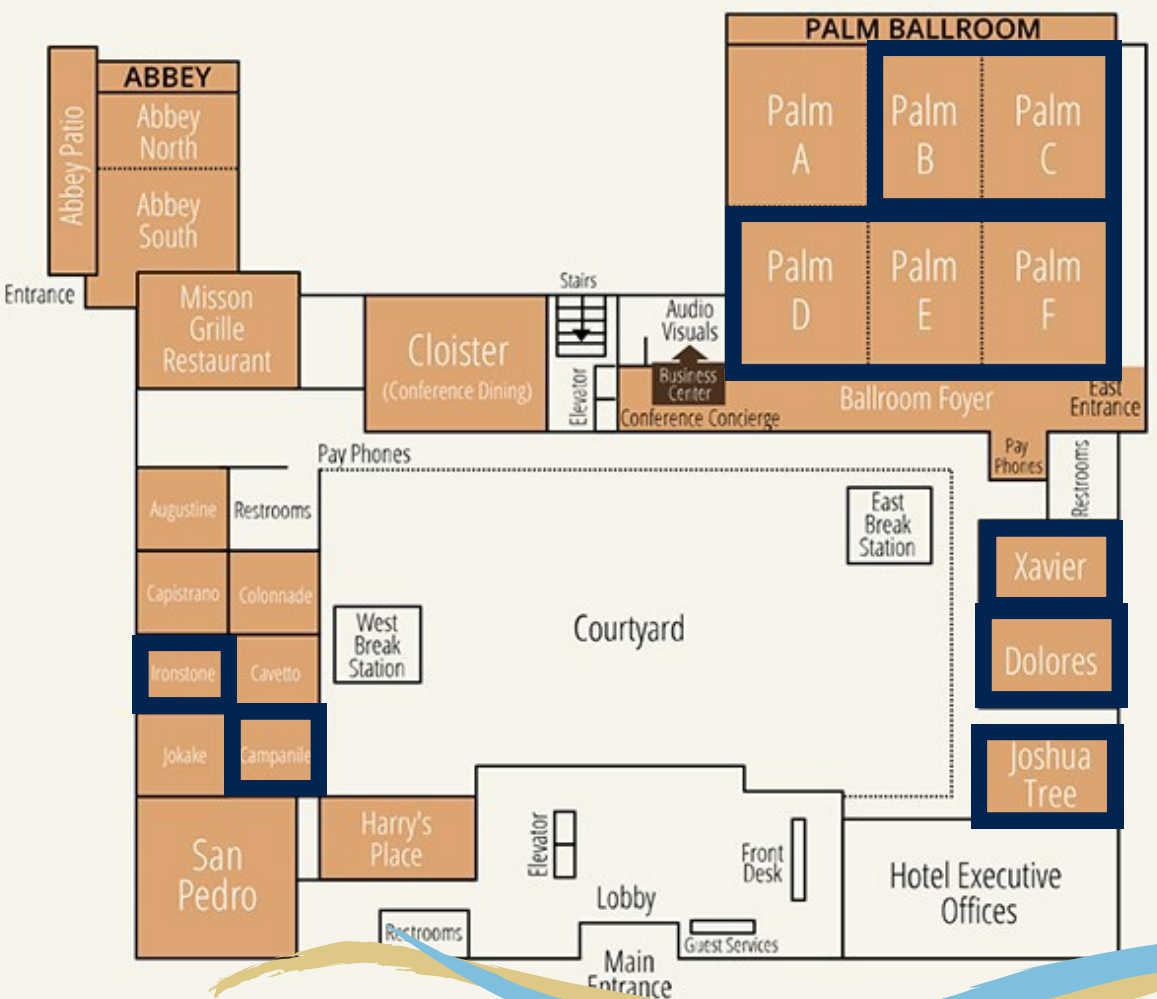
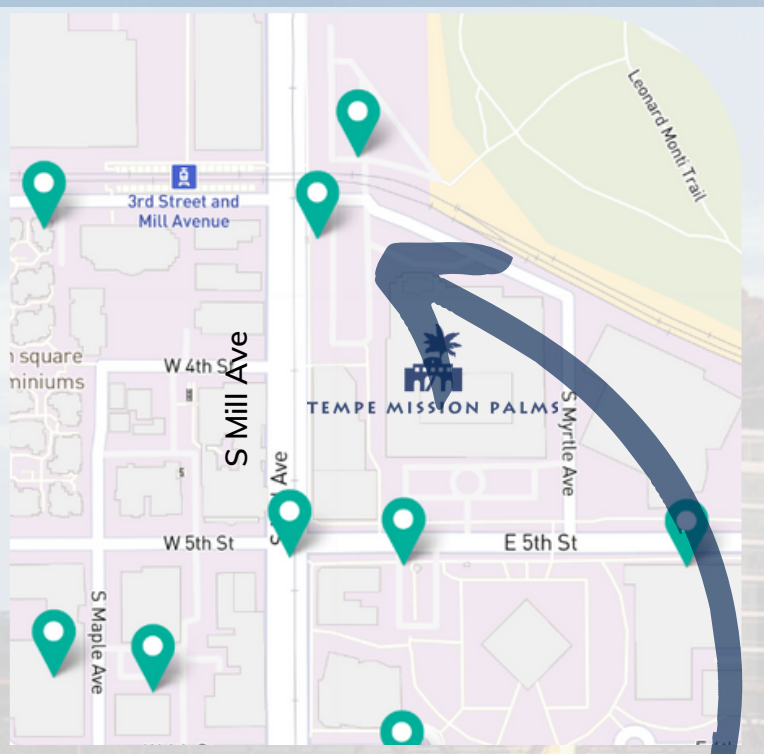
Parking Information

Tempe Mission Palms provides complimentary (tip-based) valet service to all guests staying at the hotel, and to all conference attendees. Parking spaces are limited. There are also several public parking lots surrounding the venue, as noted with a green pin in the image to the right.

Be aware that many of the parking meters on the streets surrounding the venue have 2-hour maximum time limits. We recommend use of the *Park Mobile* app if you chose to park in a time-limited location, which will allow you to extend your time, and give you warnings on your meter expiring.

Address:

Tempe Mission Palms
60 E 5th Street, Tempe, Arizona 85281



Free Parking Code Instructions

Below are the step by step on how to use the pay station:

1. Press any key for main screen
2. Enter stall number
3. Enter (1) for purchase ticket
4. Enter (1) for hourly parking
5. Enter number of hours staying
6. Enter (1-Yes) for coupon code,
7. enter code: **88040**, balance owed will be "0".
8. Optional print receipt – no need to display in vehicle.

SCHEDULE OVERVIEW

WEDNESDAY

8:00 AM

BLOCK 1

10:00 AM

MORNING BREAK

10:30 AM

BLOCK 2

12:00 PM

LUNCH

1:00 PM

BLOCK 3

3:00 PM

AFTERNOON BREAK

3:30 PM

BLOCK 4

5:30 PM

REGISTRATION
& RECEPTION

THURSDAY

8:00 AM

BLOCK 1

10:00 AM

MORNING BREAK

10:30 AM

BLOCK 2

12:00 PM

LUNCH &
POSTER SESSION

1:30 PM

BLOCK 3

3:00 PM

AFTERNOON BREAK

3:30 PM

BLOCK 4

6:00 PM

RECEPTION
& DINNER

FRIDAY

8:00 AM

BLOCK 1

10:00 AM

MORNING BREAK

10:30 AM

BLOCK 2

12:00 PM

LUNCH*

1:00 PM

BLOCK 3

3:00 PM

AFTERNOON BREAK

3:30 PM

BLOCK 4

*Lunch is available to training track attendees.

To-Go lunches are available for Field Trip attendees.

CONFERENCE EVENTS OF NOTE

WEDNESDAY

CFM EXAM | 1:00 PM - 4:00 PM | DOLORES

To take the CFM Exam you must pre-register with ASFPM. [ASFPM CFM Application](#)

**OFFICE HOURS WITH FEMA
| 8:00 AM - 5:00 PM | CAMPANILE**

Schedule a time to meet with 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 & REGISTRATION
| 5:30 PM - 7:30 PM | COURTYARD WEST**

Come check in 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

THURSDAY

**AFMA BUSINESS MEETING
| 11:45 AM | PALM DEF**

All board positions are open for nominations, which are due September 30th. Voting ballots must be submitted by Wednesday, October 26 at the end of the day.

**LUNCH & ASU STUDENT POSTER SESSION
| 12:00 PM - 1:30 PM |
CLOISTER & COURTYARD EAST**

Enjoy lunch with the other Conference Attendees, followed by a walk-through poster session with ASU Civil Engineering students at both the undergraduate and graduate level.

**EVENING RECEPTION & DINNER + JEOPARDY
| 6:00 PM - 9:00 PM |
COURTYARD WEST & PALM B/C**

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.

*All raffle proceeds go directly to the AFMA Scholarship Fund.

WEDNESDAY CLASSES

Free Classes - CECs pre-approved by ASFPM

MORNING

VARIOUS FLOOD WARNING TOPICS IN ARIZONA (3.5 CECS)

Peter Acton, P.E., JE Fuller Hydrology and Geomorphology

Xavier | 8:00 AM - 12:00 PM

This workshop will cover a wide range of flood warning topics spanning across the state. Separate sections will be led by flood warning users and experts, including best practices for maintenance, various approaches to measure hydrometeorological data, good stories, and lessons learned in post-fire environments. The last 40 minutes of the workshop will be dedicated to a round table discussion with an opportunity for each agency in attendance to share updates on their flood warning system with the community.

FLOODPLAIN 101 (3.5 CECS)

AFMA Board Members

Dolores | 8:00 AM - 12:00 PM

Learn all of the requirements of administering FEMA floodplains, the basics of reading and interpreting published floodplain information, and community compliance for participating in the National Flood Insurance Program (NFIP). The specific requirements for local floodplain administrators will be covered, including permitting, violations, record keeping, and substantial damage and improvement.

UNDERSTANDING AND EFFECTIVELY MANAGING CONFLICT-HANDLING MODES (3.5 CECS)

Robert Bezek, PMP

Joshua Tree | 8:00 AM - 12:00 PM

Participants are introduced to five basic conflict-handling modes. They will learn how and when each mode is typically most appropriate and gain eye-opening insight into how overusing or underusing any one mode can create unwanted situations for themselves and for the people around them.

Each participant will take the Thomas-Kilmann Conflict Mode Instrument (TKI) to discover their current preference to the handling of conflict. Objectives of the workshop are to: Expand one's self-awareness related to managing conflict, develop an awareness of others conflict-handling modes, how to assess a conflict situation, and applying some new conflict management skills.

AFTERNOON

FLOODPLAIN MANAGEMENT AND MANUFACTURED HOMES (2 CECS)

Brian Cosson, CFM, Arizona Department of Water Resources

Xavier | 1:00 PM - 3:00 PM

- Task Objective;
- NFIP and State Regulatory Standards;
- Suggested Permitting Steps;
- Inspections;
- Certification and Record Keeping;
- Arizona Manufactured Housing Division (MHD) Authority;
- Diagrams and Photos;

GEOMORPHOLOGY 101 FOR FLOODPLAIN MANAGERS (3.5 CECS)

Mike Kellogg, CFM, R.G., GISP, & Chandler Adamaitis, GIT, JE Fuller Hydrology and Geomorphology

Joshua Tree | 1:00 PM - 5:00 PM

Introduce floodplain managers, engineers, and planners to the basic elements of fluvial geomorphology, and demonstrate how geomorphology can be practically applied to enhance project design and multi-objective management of floodplain corridors.

TRAINING TRACK

See schedule overview for timing of class sessions and breaks

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FLO-2D ADVANCED CHANNEL AND STORM DRAIN MODELING 3-DAY WORKSHOP (\$600) | (12 CECS)

Wednesday - Friday | 8:00 AM - 5:00 PM | Ironstone
Jimmy O'Brien, P.E., Ph.D, Karen O'Brien, FLO-2D Software, Inc.

Please join us for an advanced flood modeling workshop. We will cover model development and review for 1-D Channels and a complex storm drain network. The focus of this course will be to present advanced modeling methods and effective reviewing techniques for hydraulically correct modeling.



THURSDAY PLENARY

Palm D, E, F

Looking for breakfast? Coffee and continental breakfast items available all morning long at the East Break Station

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8:00 AM

Call to Order

8:05 AM - KEYNOTE SPEAKER

Remote Sensing for Characterization of Water in Arid Floodplains

Enrique Vivoni, PhD, Arizona State University

9:00 AM

Statewide In-Depth Evaluation of Storms in AZ

Luciana Kindl da Cunha, PhD, PH, WEST Consultants Inc.

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

Caileen Yu, MS, WEST Consultants Inc.

10:00 AM - MORNING BREAK

10:30 AM

Flood Response vs. Emergency Action Plans:

Out Wickenburg Way, You'll Find Both

Chandra Miller, Flood Control District of Maricopa County

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

& Laurie Miller, P.E., LTM Engineering, Inc.

11:00 AM

Central Region Local Welcome

Corey Woods, Mayor - City of Tempe

11:15 AM

Understanding and Effectively Managing Conflict-Handling Modes

Robert Bezek, PMP

11:45 AM

AFMA Business Meeting

AFMA Board

12:00 PM - LUNCH & STUDENT POSTER SESSION

THURSDAY TRACKS

Don't forget; Reception & dinner to follow the Conference beginning at 6:00 pm

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TECHNICAL TRACK – PALM D

1:30 PM

Hydro Data Mining Tool for Engineering Use and Application

Carlos Carriaga, P.E., CFM, PhD, D.WRE, & Bing Zhao, P.E., PhD, Flood Control District of Maricopa County

2:00 PM

Engineers Without Borders Project in Arizona: Taylor Rodeo Grounds

Zach Whitten, P.E., & Scot Schlund, P.E., Stantec

2:30 PM

Updates to Maricopa County Green & Ampt Infiltration Methodology for Rainfall-Runoff Modeling

Elizabeth Rockwell, P.E., MS, CFM, Flood Control District of Maricopa County

3:00 PM - AFTERNOON BREAK

3:30 PM

Impact of Urbanization and Stormwater Infrastructure on Transmission Loss in A Semiarid Watershed

Gerhard Schoener, PhD, SSCAFCA

4:00 PM

Utility Assessment of Weather Radars to Improve Frequency Analysis of Extreme Precipitation

Nehal Ansh Srivastava, MS, & Giuseppe Mascaro, PhD, Arizona State University

4:30 PM

FCDMC Durango Campus Retrofit: The Valley's Next Frontier of LID Applications

Zach Schmidt, P.E., CFM, & Geoff Brownell, P.E., CFM, Kimley-Horn

PROGRAMS & POLICIES TRACK – PALM F

1:30 PM

Risk Rating 2.0 - Top Myths & Facts

Bruce Bender, CFM, Bender Consulting Services & Tim Murphy, P.E., CFM, Flood Control District of Maricopa County

2:30 PM

FEMA Region IX Updates

FEMA Region 9

3:00 PM - AFTERNOON BREAK

3:30 PM

Assessing the impact of climate change on localized flooding and affected populations

Adriana Arcelay, University of Arizona

4:00 PM

Application of Local Knowledge for Better Characterization and Modeling of Urban Pluvial Flooding

Koorosh Azizi, PhD, Arizona State University

4:30 PM

Areal Rainfall Reduction Factors in the US Southwest Dominated by the North American Monsoon

Kevin J. Strongman, National Weather Service - Tucson

FRIDAY PLENARY

Palm D, E, F

Looking for breakfast? Coffee and continental breakfast items available all morning long at the East Break Station

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8:00 AM

Drone Mapping at the Flood Control District
Joe Wagner, Flood Control District of Maricopa County

9:00 AM

Scour Protection for the Phoenix Drought Pipeline
Matt Hann, P.E., CFM, & Ryan Halligan, P.E., CFM,
Black & Veatch

9:30 AM

Hassayampa River Study Assessing Green Stormwater Infrastructure
for Stormwater Management
Deborah Tosline, R.G., PMP, & Valerie Swick, CFM, PH
U.S. Bureau of Reclamation

10:00 AM - MORNING BREAK

10:30 AM

Aging Infrastructure of High Hazard Dams in AZ
Bernadette Rex, P.E., Stantec

11:00 AM

Ideas to Mitigate Flood Hazards for At-Grade Road Crossings
Geoff Brownell, P.E., CFM, Kimley-Horn and Associates

11:30 AM

Granite Reef Diversion Dam
Andrew Volkmer, P.E., Salt River Project

12:00 PM (2 CECS)*

Granite Reef Diversion Dam Field Trip
Andrew Volkmer, P.E., Salt River Project

*To-Go Lunches Available for Field Trip Attendees

