



**“A New Decade of Resilience through  
Collaboration, Integration and  
Mitigation”**

PRELIMINARY CONFERENCE PROGRAM  
SEPTEMBER 8-11, 2020  
VIRTUAL CONFERENCE

*\*Program Tentative and Subject to Change*

*\*\*Program as of July 31, 2020*

## **Tuesday, September 8, 2020\*\***

8:45 am – 9:00 am    Log in to Hubilo.com

### PLENARY I – COLONEL HANDURA

9:00 AM – 10:30 AM

**Welcome from the Floodplain Management Association:**

Alex Yescas, Chair

Mary Seits, Executive Director

**Welcome Remarks:** Sacramento Vice-Mayor Jeff Harris

**Introduction of the Conference Chairs:** Mary Seits, Executive Director, Floodplain Management Association

**Introduction and Opening Remarks by Co-chairs:**

Hunter Merritt, USACE

Jeremy Arrich, California Department of Water Resources

Shayan Rehman, County of Sacramento

**Keynote Speaker:** Colonel Handura

### TUESDAY MORNING BREAK – EXHIBIT HALL

AND AWARD ANNOUNCEMENT

10:30 AM – 11:00 AM



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**11:00 AM – 12:30 PM CONCURRENT SESSIONS**

**CRS One-on-One Appointments**

**Tuesday 9/8/2020 and Wednesday 9/9/2020**

Appointments can be scheduled with an ISO/CRS Specialist to discuss specifics about your CRS program, to find out what is needed for your community to improve its current CRS classification, or to have a more detailed discussion on joining CRS and the benefits to your community. These personalized meetings are an opportunity to discuss your community’s land use management program, higher regulatory standards, stormwater management program, flood warning system, watershed management program, or any other components of a balanced floodplain management program. To ensure your first choice of available times, please contact Constance Lake at [307. 439.790](tel:307.439.790) / [clake@iso.com](mailto:clake@iso.com).

**PANEL: Keeping Up With the NFIP**

**Tuesday 9/8/2020 11:00am-12:30pm**

**Moderator:** John Powderly, USACE

Please join us for an interactive discussion on the current state of the National Flood Insurance Program (NFIP), hot topics, new tools, strategies, and steps forward. Learn first-hand how FEMA staff is preparing for the future and how it will impact what you do. The panel will provide information about FEMA’s new Building Resilient Infrastructure and Communities (BRIC) program as well as updates on re-authorization, premiums, risk communication, mapping, and other information for local floodplain administrators.

**Panelists:** Edith Lohmann, Flood Insurance Specialist, FEMA Region IX

Eric Simmons, Senior Engineer, FEMA Region IX

Kelly Soule, California NFIP Coordinator, California Department of Water Resources (invited)

Robert McCord, Hazard Mitigation Assistance Branch Chief, FEMA IX

**PANEL: Policy Issues, Barriers, and Challenges: Stepping up to Advance Multi-Benefit Project Implementation through Collaborative Efforts**

**Tuesday 9/8/2020 11:00am-12:30pm**

**Moderator:** Mary Jimenez, California Department of Water Resources

This panel will feature ongoing collaborative efforts by State, Federal, and local agency partners to improve implementation of multi-benefit projects in the Central Valley; including the Yolo Bypass-Cache Slough Partnership and update of the Central Valley Flood Protection Plan and its Conservation Strategy.

**Panelists:** Ruth Darling, CVFPB

Heidi Hall, DWR

Felix Yeung, USACE

Lewis Bair, RD 108

Julie Rentner, River Partners

**PANEL: Forecast-Coordinated Operations Program**

**Tuesday 9/8/2020 11:00am-12:30pm**

**Moderator:** Jeremy Hill, California DWR

In 2005, a multi-agency Forecast-Coordinated Operations (F-CO) Program was launched to ensure releases from the reservoirs to a common river system are coordinated to reduce peak flood flows downstream of the reservoirs and to reduce devastating flood damages. The program was initiated by the State-Federal Flood Operations Center (FOC), State



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Water Project (SWP), Yuba Water Agency (YWA), US Army Corps of Engineers (USACE) and the National Weather Service California-Nevada River Forecast Center (CNRFC). The target river was Feather River where SWP operates the Oroville Dam and reservoir and the YWA operates New Bullards Bar on the Yuba River, a tributary to the Feather River. In 2010, the F-CO program was expanded to the major reservoirs on the San Joaquin system including Don Pedro, New Exchequer, Friant and the Pine Flat reservoirs. F-CO benefits include: enhances communication and coordination among flood control agencies; improves sharing and access to real-time data; improves access and use of multiple weather forecast sources; improves the ability to meet reservoir operating requirements through close coordination with State and federal agencies; and helps provide better flood protection downstream and improved relations with local communities. The F-CO Program will continue to play an important role in the coordinated operation of these reservoir systems. It will continue to be an important tool for reservoir managers as they contend with existing and future operational challenges. This panel will discuss implementation of the F-CO and discuss its application to other similar situations.

**Panelists:** Joe Forbis, Chief, Water Management Section, Sacramento District, U.S. Army Corps of Engineers  
Alan Haynes, Hydrologist in Charge, NOAA/NWS California Nevada River Forecast Center  
John James, Water Operations Project Manager, Yuba Water Agency  
California DWR - TBD

**TECHNICAL SESSION: Leveraging Data**  
**Tuesday 9/8/2020 11:00am-12:30pm**

**Session Chair:**

- **Leveraging local data for more informed planning and flood outreach** – Presenter: Susanna Pho, CFM, Forerunner
- **Flood hazard analysis: Balancing hydrologic complexity and analysis methods** – Presenter: Nathan Pingel, HDR, Inc. Co-Authors: Donna Lee, HDR, Inc.; Brian Walker, USACE; Rob Thompson, USACE
- **Continuous Improvement: Ventura County Leaning out the Journey – CEQA Application to Watercourse Permit Issuance** – Presenter: Shweta Chervu, PE, CFM, Ventura County Public Works Agency Watershed Protection Co-Author: Sergio Vargas, PE, CFM, Ventura County Public Works Agency Watershed Protection

**TUESDAY LUNCH BREAK – EXHIBIT HALL**

**AND AWARD ANNOUNCEMENT**

**12:30 PM – 1:30 PM**

**1:30 PM – 3:00 PM CONCURRENT SESSIONS**

**PANEL: Navigating the Funding Maze for Integrated Water Resilience Projects**

**Tuesday 9/8/2020 1:30pm-3:00pm**

**Moderators:** Maria Lorenzo-Lee, California Department of Water Resources and Victoria LaMar-Haas, CalOES



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Would you benefit from a one-stop website that would help you find state grants based on criteria? Do you know about the latest specifics on hazard mitigation, flood and water grants? What is the process for an IRWM grant and how does it differ from other DWR grants? What do successful grant applications look like?

Understanding and leveraging federal and state grants are key to finding available resources. Join the discussion as the panelists share their responses, latest information and experiences.

A virtual booth in the “exhibit hall” is available for discussing project concepts for specific federal and state funding (in cooperation with the CA Financing Coordinating Committee).

**Panelists:** Janell Woodward, Nevada’s State Hazard Mitigation Officer (pending approval)  
Mark Stadler, IRWM Roundtable of Regions Co-Chair  
Robert Crane, DWR/DFM Flood  
Shivani Bose-Varela (or alternate), CA State Library

**PANEL: Burn Scars as Building Blocks: Lessons Learned from Flood-After-Fire Risk Communications**  
**Tuesday, 9/8/2020, 1:30pm-3:00pm**

**Moderator: M&O Branch, FEMA**

Floods are the most common and costly natural hazard in the nation. After a wildfire, flood risk increases significantly. This session will share best practices developed in support of Flood-After-Fire marketing and outreach efforts at the national, regional and state level that aim to raise awareness of flood-after-fire risks to help affected communities understand the importance of purchasing flood insurance. In this collaborative session, the NFIP Marketing and Outreach Branch will share best practices developed through its Flood-After-Fire campaign. Notably, we’ll spotlight the tools and tactics created to best equip community stakeholders as they communicate the increased threat of flood-after-fire with the public.

**Panelists:** Olivia Humilde, FEMA  
CA Department of Water Resources Representative, TBD  
FEMA Region IX Representative, TBD

**TECHNICAL SESSION: Local, State and Federal Regulatory and Policy Issues**  
**Tuesday 9/8/2020 1:30pm-3:00pm**

**Session Chair: Mike Mierzwa, California DWR**

- **Introduction of the 2020 Updates to the State of California Model Floodplain Management Ordinances, Higher Standards, and Quick Guide as related to the National Flood Insurance Program** – Presenters: Kelly Soule, Annetonette Duncan and Salomon Miranda, California DWR
- **Levee Accreditation 65.10 Requirements Do’s and Don’ts for Applicants and Reviewers** – Presenter: Paul Glenn, PE, PG, CDM Smith
- **Turning the Ship: How Shady Cove survived probation, and how you can avoid it** – Presenter: Becca Fricke-Croft, Atkins Global

**TECHNICAL SESSION: Flood Forecasting: Accurate Development of Model Data**  
**Tuesday 9/8/2020 1:30pm-3:00pm**

**Session Chair: Millicent Cowley-Crawford, Woodard & Curran**

- **Statistical Analysis of Historic Storm Events to Develop a Rainfall Based Flood Warning Formula for Marin County, California** – Presenter: Roger Leventhal, PE, Marin County Flood Control District



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- **Accurate rainfall and predictive flood modeling** – Presenter: Baxter Vieux, Vieux & Associates Inc.
- **Determination of Green and Ampt Infiltration Parameters for the State of Nevada** - Presenter: Nathanael Vaughan, JE Fuller Hydrology & Geomorphology

**TECHNICAL SESSION: Geomorphic Stabilization Evaluation**

**Tuesday 9/8/2020 1:30pm-3:00pm**

**Session Chair:** Jeanne Ruefer, HWC, Inc.

- **Truckee River Flood Management: Evaluating Downstream Geomorphic Impacts of Flood Control Projects** – Presenter: Dragoslav Stefanovic , PhD, PE, DWRE HDR, Inc.
- **Scour Depth Analysis for Controlled River Systems:** Presenter - Yunsheng Su, PhD. PE, MASCE, DWRE, CFM, Ventura County Watershed Protection District
- **Low Flow Channel Along the Arroyo Las Positas in Livermore, CA** – Presenters: Edward Reyes, PE, City of Livermore and Drew Engstrom, QSD CPESC, Alameda County Resource Conservation District

TUESDAY AFTERNOON BREAK – EXHIBIT HALL

AND AWARDS ANNOUNCEMENT

3:00 PM – 3:30 PM

**3:30 PM – 5:00 PM CONCURRENT SESSIONS**

**PANEL: Post-Fire Watershed Mitigation**

**Tuesday 9/8/2020 3:30pm-5:00pm**

**Moderator:** MD Haque, California Department of Water Resources

This panel will feature ongoing efforts to improve our understanding and mitigation of post-wildfire watershed flash flood and debris flow impacts. This session will bring together four industry leaders to share their observations and perspectives on the current state of the practice and needed improvements for California to adapt to potential floodplain impacts in a changing climate.

**Panelists:** Nina Oakley – CW3E

Don Lindsay – CGS or Drew Coe - CAL FIRE

Jason Kean or Dennis Staley – USGS

Jeremy Lancaster - CGS

**TECHNICAL SESSION: Multi-Objective, Multi-benefit**

**Tuesday 9/8/2020 3:30pm-5:00pm**

**Session Chair:** Antionette Stein, FEMA

- **Developing a Programmatic Approach to Managing Waterways for Streamlined Maintenance and Operations** – Presenters: Vipul Joshi and Carey Fernandes, Dudek Co-authors: Bethany Bezak and Christine Rothman, City of San Diego; Kyle Dahl – US Army Corps of Engineers; Matt O’Malley – Coastkeeper;



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- **Large Scale Floodplain Rearing Habitat Rehabilitation: Southport Levee Setback** – Presenter: Chris Bowles, cbec eco engineering; Co-authors: Sam Diaz and John Stofleth, cbec eco engineering, Paul Dirksen, West Sacramento Area Flood Control Agency
- **Incorporating Multi-Objective Flood Management Projects into Groundwater Sustainability Plans developed under California’s Sustainable Groundwater Management Act** – Presenter: Brian Van Lienden, Woodard & Curran

**TECHNICAL SESSION: Coastal/Delta Floodplains and Flood Risk Management**

**Tuesday 9/8/2020 3:30pm-5:00pm**

**Session Chair:** Patrick Luzuriaga, California DWR

- **Adapting to Sea Level/Stream Level Rise: Case of Pajaro Dunes on Monterey Bay** – Presenter: Will Price, University of the Pacific
- **The next generation of the San Francisco Bay-Delta Community Model: public domain modeling in support of flood protection and forecasting** – Presenter: Kees Nederhoff, Deltares USA; Co-authors: Babak Tehranirad, Liv Herman, Li Erikson, Patrick Barnard, Mick van der Wegen, Rohin Saleh
- **Integrating Tidal Outfall Control into Flood Storage Modeling in the San Joaquin Delta** – Presenter: Ron Rovanssek, PhD, PE, and Alan Bowers, MS, PACE Advanced Water Engineering

**TECHNICAL SESSION: Modeling Produces Results**

**Tuesday 9/8/2020 3:30pm-5:00pm**

**Session Chair:** Brent Siemer, City of Simi Valley

- **Evaluating a Secondary Levee** – Presenters: Chris Ferrari, GEI Consultants Co-authors: Rosa Millino and Neal Joyce, City of Sacramento Department of Utilities
- **Improving 2D Model Calibration and Validation Assessment Using Remote Sensing** – Presenter: John Pritchard, PE, CFM, Environmental Science Associates (ESA) Co-authors: Suzanne Goldstein, Environmental Science Associates (ESA), Nate Cheshier, Environmental Science Associates (ESA)
- **TULE RIVER SPILLWAY ENLARGEMENT** – Presenters: Ike Pace, Tetra Tech and Mostafa Mostafa, PE, USACE

**5:00 PM – 6:00 PM TRIVIA GAME NIGHT WITH VINCE!!**



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## **Wednesday, September 9, 2020**

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### **PLENARY II**

**“Insurance Innovations: It’s not your Grandmother’s Flood Insurance”**

**9:00 AM – 10:30 AM**

#### **PLENARY II: “Insurance Innovations: It’s not your Grandmother’s Flood Insurance”**

**Moderator:** Kathy Schaefer, UC Davis

This session continues the conversation started in last year’s plenary sessions. Last year’s keynote speaker F. Martin (Marty) Ralph, summarized key advancements in flood forecasting that support West Coast flood risk management initiatives. CW3E and California’s “Atmospheric River Research, Mitigation and Climate Forecasting Program” are providing data and science that are advancing our understanding of the role of Atmospheric Rivers in California’s flood losses. Data is at the core of the insurance industry, and advancements in climate science are just one component of the data innovations sweeping the insurance industry.

This session will highlight other changes and advancements in technology that are revolutionizing the flood insurance industry. Machine learning, automation, predictive analytics, Internet of Things (IoT), Blockchain technology, and artificial intelligence (AI) are revolutionizing the flood insurance industry. Furthermore, federal banking regulations have been revised to make it easier for banks to accept private flood coverage for federally backed home loans. As a result of these advancements and changes, private flood insurance has been steadily growing. In 2018, private insurers wrote an estimated \$623 million in direct premiums. Flood insurance, once considered an uninsurable risk, is now being written by over 60 insurers.

This session will bring together four of the industry thought leaders to share their observations and perspectives on what these changes mean for California’s floodplain managers.

**Panelists:** Roger Grenier – AIR  
Nancy Watkins – Millman  
Bruce Bender – Bender Consulting  
Leonard Shabman – Resources for the Future

**WEDNESDAY MORNING BREAK - EXHIBIT HALL**

**AND AWARDS ANNOUNCEMENT**

**10:30 AM – 11:00 AM**

**11:00 AM – 12:30 PM CONCURRENT SESSIONS**

**PANEL: Mentoring, Emerging Professionals and Floodplain Management**

**Wednesday 9/9/2020 11:00am-12:30pm**

**Moderator:** Megan LeRoy, KSN Inc.





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Calling all emerging professionals (and their mentors)! Come join us for a panel discussion with emerging professionals working in flood management. Emerging professionals will share their experiences related to professional development, leadership opportunities, lessons learned, and much more. They will also discuss expectations and opportunities for mentoring, training, and increased responsibility, and the roles employers, fellow floodplain professionals, and Floodplain Management Association could and should play in providing those opportunities. The panel will include representatives from the private sector, state agencies, and federal agencies.

**Panelists:** Jose Lara, Mitigation and Dam Safety Branch Chief, CalOES  
Melissa Weymiller, Project Manager, USACE  
Morgan O’Brien, Senior Engineer, CA DWR  
Madeline Baker, Project Manager, Larsen Wurzel and Associates

**OPEN FORUM WITH FEMA**

**Wednesday 9/9/2020 11:00am-12:30pm**

Please join FEMA staff to discuss mapping needs, grant opportunities and compliance of development regulations during this open forum drop-in discussion. FEMA staff will be available to field your questions and direct you to the appropriate resources to address your concerns.

**A Path to Permitting Success for Multi-Benefit Projects**

**Wednesday 9/9/2020 11:00am-12:30pm**

**Moderator:** Debra Bishop, H. T. Harvey & Associates

Implementation of large flood control infrastructure projects, such as levee setbacks, can deliver multiple benefits by including ecosystem restoration that may not be feasible as a separate action. These multi-benefit projects create excellent opportunities to support the recovery of special-status fish and wildlife species that depend on riparian, riverine, and floodplain habitats. But how do we effectively promote these coordinated recovery actions among stakeholders? How can we more deeply engage the regulatory agencies in flood control planning, expedite the standard ESA/CESA review process, and align projects more closely with the delivery of recovery actions? In 2019, the California Natural Resources Agency launched the Cutting Green Tape Initiative to improve permitting and funding efficiencies for ecosystem restoration and natural resource stewardship. This panel will discuss implementation of the recommendations under this initiative and explore their applications to multi-benefit flood control projects. The panelists will also discuss what their agencies are doing to create efficiencies in permitting and regulatory compliance for multi-benefit projects that include ecosystem restoration elements.

**Panelists:** Dr. Jennifer Norris, CA Natural Resources Agency;  
Kelley Barker, CA Department of Fish and Wildlife  
Julie Rentner, River Partners

**TECHNICAL SESSION: Management Planning and Financing**

**Wednesday 9/9/2020 11:00am-12:30pm**

**Session Chair:** Ann Bechtel, CDM Smith, Inc.

- **How to partner with the Army Corps: An overview of USACE Programs & Authorities** – Presenters: Erin Maloney and Melissa Weymiller, USACE
- **Affordable Community Based Flood Insurance Program & Potential Flood Risk Reduction Financing for Sacramento River Delta Legacy Communities** – Presenters: Kathleen Schaefer, PE, CFM, UC Davis ; Joe Tootle, GE, ENGeo; Jeffery Twitchell, PE, GEI; Mark Neibur, CPCU, ARM, RF, Epic Brokers
- **How to fund a \$15.5 Million Capital Improvement Plan with a \$4.5 Million Budget** – Presenters: Rebecca Crow PE & Brett Vivyan PE, GHD Co-author: Merritt Perry, City of Fortuna





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**TECHNICAL SESSION: Covid/Pandemic Adaptation**

**Wednesday 9/9/2020 11:00am-12:30pm**

**Session Chair:**

- **Analysis of the Challenges of and Mitigations for Preparing for and Responding to Flood Emergencies During a Global Pandemic Scenario** – Presenter: KC Richmond and Elizabeth Bryson, CA DWR
- **COVID-19 Cash Crisis: What Floodplain Management Agencies Need to Do to Maintain Funding During and After Shelter-in-Place!** – Presenter: John Bliss, SCI Consulting Group; Co-author: Jerry Bradshaw, PE, SCI Consulting Group

**WEDNESDAY LUNCH BREAK – EXHIBIT HALL AND  
AWARDS ANNOUNCEMENT  
12:30 PM – 1:30 PM**

**1:30 PM – 3:00 PM CONCURRENT SESSIONS**

**PANEL: Homeless Population in Flood Control Facilities**

**Wednesday 9/9/2020 1:30pm-3:00pm**

**Moderator:** Abigail Mayrena, P.E., CFM, Clark County Regional Flood Control District, Las Vegas, NV

Presentations & discussion on homeless population in flood control facilities including engineered structures, natural channels, and associated open spaces. Panelists will discuss their experiences during COVID19, challenges, and lessons learned in dealing with encampments in their jurisdiction’s flood control facilities, as well as public health, safety considerations, maintenance operation protocol and cost.

**Panelists:** Michael Aguilar, P.E., Project Manager, Field Engineering/Road Maintenance, County of San Diego Department of Public Works

Rusty Barker, M.S., P.E., Flood Control Civil Engineer, Santa Cruz County Department of Public Works

Bene’ Da Silva, Engineering Assistant, Marin County Flood Control Department of Public Works

Hunter Merritt, Water Resources Planner, Public Involvement Specialist Silver Jackets Deputy U.S. Army Corps of Engineers Sacramento District

Kevin King, General Manager, Reclamation District No. 1000

Darren Suen, P.E., P.M.P., Principal Engineer/Policy Advisor - CA Central Valley Flood Protection Board

**PANEL: Climate Change: Sierras to the Valley – How to Plan, Design and Fund a Project that Won’t Be Obsolete the Day You Cut the Ribbon**

**Wednesday 9/9/2020 1:30pm-3:00pm**

**Moderator:** Shayan Rehman, Sacramento County

The 2017 CA Department of Water Resources Central Valley Flood Protection Plan (CVFPP) published climate change projections for the Sacramento and San Joaquin River Basins. The Urban Levee Design Criteria (ULDC) requires that climate change be considered during the planning of flood control improvements. As local agencies are developing their regional flood control plans, they are seeking guidance on how to utilize the climate change flows as part of their plans. Additionally, the local agency’s desire to work with CA DWR to peer review the climate change analysis, revisit the hydrology in the 2022 CVFPP, and shift the conversation about climate change from flow to risk assessment.

**Panelists:** Mike Anderson, California Department of Water Resources

Chris Elias, San Joaquin Area Flood Control Agency

Dave Peterson, Peterson Brustad Inc.



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Joe Countryman, CVFPB Member and Former President of MBK Engineers

**PANEL: Keeping Flood Infrastructure Projects and Maintenance Going During Times of Crisis: A Legal Perspective  
Wednesday 9/9/2020 1:30pm-3:00pm**

**Moderator:** Andrea Clark, Downey Brand

This panel will draw on the experience of floodplain management and levee construction agencies and their counsel during this year’s coronavirus crisis to examine the unusual set of circumstances they faced, and how they responded to and ultimately prioritized public safety in a time of legal and operational uncertainty. The speakers will offer lessons learned in the areas of employment, liability, public works construction and operational continuity, and will offer insight into how agencies can best position themselves for future disasters and times of uncertainty.

**Panelists:** Andrea Clark, Downey Brand  
Elizabeth Stallard, Downey Brand

**TECHNICAL SESSION: Collaboration and Outreach Methods**

**Wednesday 9/9/2020 1:30pm-3:00pm**

**Session Chair:** Aaron Wu, California DWR

- **FEMA: Empowering Local Discussions About Flood Risk** - Presenter: Peter Herrick, Jr., FEMA
- **Hamilton City: Multi-Benefit Project Under Federal-State-NGO-Small Community Collaboration** – Presenter: Adam Riley, P.E., Larsen Wurzel & Associates, Inc.
- **Collaboration Leads to Phase 1 Construction of the Hallwood Side Channel and Floodplain Restoration Project on the Lower Yuba River** – Presenter: April Sawyer, cbec eco engineering; Co-authors: Chris Hammersmark and Sam Diaz, cbec eco engineering; Paul Cadrett, United States Fish and Wildlife Service, Anadromous Fish Restoration Program; Joe Merz, Kirsten Sellheim, and Philip Colombano, Cramer Fish Sciences; Aaron Zettler-Mann, South Yuba River Citizens League; Jeff Matthews, Yuba Water Agency; Rick Reinhardt, MBK Engineers; Doug Handen, The Handen Company

**WEDNESDAY AFTERNOON BREAK – EXHIBIT HALL**

**AND AWARDS ANNOUNCEMENT**

**3:00 PM – 3:30 PM**

**3:30 PM – 5:00 PM Concurrent Sessions**

**PANEL: Emergency Action Planning and Management**

**Wednesday 9/9/2020 3:30pm-5:00pm**

**Moderator:** Mark Seits, HDR, Inc.

We want to continue the dialogue on Dam Safety and Emergency Action Plans we’ve had over the last two conferences. This year, however, we want to expand the discussion to include a broader discussion on emergency management for flood-related facilities (not just dams). We will include an update from DSOD and OES on the Dam Inundation Mapping and EAP programs (“where are we now?” and “what did we learn?”), but also look from the Regulatory, Flood Control Agency and Community perspectives at “what do we do now?” Discussion will include potential relevant changes to the Community Rating System, as well.

**Panelists:** Jose Lara, CPP - CA OES



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George Booth, P.E., CFM - Sacramento County Department of Water

Resources

Jill Ritzman - Cameron Park Lake Dam

**TECHNICAL SESSION: Better than Best Practices**

**Wednesday 9/9/2020 3:30pm-5:00pm**

**Session Chair: Silvia Reynoso, California DWR**

- **Restoration Beyond Mitigation in a Flood Protection Project** – Presenter: Melissa Moore, Valley Water and Timothy Harrison, PE, LEED AP, Woodard & Curran, Inc. Co-author: Collette Frawley, PE, Valley Water
- **Envision Verification Celebrates the Southport Levee Improvement Project’s Synthesis of Best Practices and Innovation to Transform Flood Protection into Multi-Benefit Infrastructure** – Presenter: Jennifer Ninete, ENV SP, STP, HDR, Inc.
- **Learning from Past Designs to Improve Habitat Enhancing Features of Bank Repairs** – Presenter: Sam Diaz, cbec eco engineering Co-authors: Emily Tozzi, Steve Chainey, Peter Buck

**TECHNICAL SESSION: Resilience Planning and Design**

**Wednesday 9/9/2020 3:30pm-5:00pm**

**Session Chair:**

- **Community Resilience: Striving For Community Resilience – Planning, Regulatory Environment, And Assessment** – Presenters: Rob Flaner, CFM and Steve Parker, MA, Tetra Tech
- **Increasing the Resiliency of Earthen Flood Defense Structures with HPTRM Reinforced Vegetation** – Presenters: Jeff Hoilman, PE, CPESC and Drew Loizeaux, PE, Propex Operating Company, LLC
- **Butano Creek Channel Reconnection and Resilience Project** – Presenters: Jai Singh, Chris Hammersmark and Sam Diaz, cbec eco engineering

**PANEL: Headwaters to Floodplains (H2F): Flood Safety Partnership**

**Moderator:** Mike Mierzwa, California Department of Water Resources

The Headwaters to Floodplains: Flood Safety Partnership (H2F) is a cooperative effort between federal, state, and local agencies to reduce the risk and consequences of flooding in California. It promotes using an entire watershed approach to flood management and flood safety preparedness. During this game-show-style session, hear from experts about current realities and new opportunities associated with looking at flood management and flood safety preparedness through a “headwaters to floodplains” perspective, including projects that demonstrate the value of partnership.

**Panelists:** Mike Mierzwa, California Department of Water Resources

Brent Siemer, Simi Valley

Gregor Blackburn, FEMA Region IX

Jose Lara, California Governor’s Office of Emergency Services (Cal OES)

**Wednesday 9/9/2020 5:00 PM – 6:00 PM GAME NIGHT WITH H2F**



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## **Thursday, September 10, 2020**

8:45 AM – 9:00 AM LOG ON TO HUBILO.COM

### **PLENARY III**

**MARK GHILLARUCCI – CALIFORNIA OES**

**9:00 AM – 10:30 AM**

**THURSDAY MORNING BREAK – EXHIBIT HALL  
AND AWARDS ANNOUNCEMENT**

**10:30 AM – 11:00 AM**

### **11:00 AM – 12:30 PM CONCURRENT SESSIONS**

#### **PANEL: Lessons from COVID-19 for Flood Emergency Planners and Responders**

**Thursday 9/10/2020 11:00am-12:30pm**

**Moderator:** Elizabeth Ramos, KSN Inc.

*“Under pressure, you don’t rise to the occasion, you sink to the level of your training. That’s why we train so hard.” -*

LTC (Ret) Dave Grossman

The recent COVID-19 event has demonstrated the importance of being prepared, actively planning, and exercising those response plans to ensure they are effectively implemented during never-before-experienced emergencies. Panelists will discuss lessons revealed during the unprecedented COVID-19 event that can be applied to flood emergency planning and response – including the importance of training. Discussion will include what engineers, emergency planners, response partners, as well as state and local leaders can do to better prepare today for an event tomorrow.

**Panelists :** Dana Carey | Office of Emergency Services Manager (Yolo County Office of Emergency Services)

Christopher Neudeck, PE | Principal (Kjeldsen, Sinnock & Neudeck, Inc.)

Calvin Curtin | Emergency Preparedness Coordinator (Turlock Irrigation District)

Mr. Russell Ryan, PE | Senior Engineer (Metropolitan Water District)

Representative from CalOES

#### **OPEN FORUM WITH CA, NV (AND HI pending) State and Local Floodplain Managers**

**Thursday, 9/10/2020 11:00am-12:30pm**

Please join us for an overview of the key projects and updates from staff representing multiple state and local agencies with floodplain management responsibilities. Agencies hosting the open house include: NV DWR, CA DWR, CalOES (invited), CVFPB (invited), CGS (invited).

#### **TECHNICAL SESSION: Levee Certification Issues**

**Thursday, 9/10/2020 11:00am-12:30pm**



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**Session Chair:**

- **Geotechnical Investigation of Constructed Slag Cement-Cement-Bentonite Levee Seepage Cutoff Walls** – Presenter: Meredith Beswick, PG, PE, Kleinfelder Co-authors: Khaled Chowdhury, PhD, PE, GE, USACE; Joseph Waltz, PE, USACE; Kenichi Soga, PhD, University of California, Berkeley; Timothy Williams, PE, GE, Kleinfelder
- **Evaluating Existing Revetment on the Lower American and Lower Sacramento Rivers** – Presenter: Matthew Weber, cbec eco engineering Co-authors: Sam Diaz and Chris Bowles, cbec eco engineering
- **Levee Tree Assessment** – Presenter: Cassandra Musto, CA DWR

**TECHNICAL SESSION: 2D Modeling: Roadway to Floodway**  
**Thursday, 9/10/2020 11:00am-12:30pm**

**Session Chair:**

- **FEMA 2D modeling with Floodways: 2 Case studies** – Presenter: Ferrin Affleck, PE PMP CFM, Atkins Global Co-authors: Namrata Batra, PHD, PE, CFM and Soumya Sagarika, PE, CFM, Atkins Global
- **Conversion of a regional FLO-2D model to HEC-RAS 2D to support roadway design** – Presenter: Mary Horvath, NCE
- **Methods for Delineating and Evaluating Floodways in 2D Models** – Presenter: Scott Hogan, PE, Federal Highway Administration

**TECHNICAL SESSION: Multibenefit projects in the Delta: Achieving flood control objectives while enhancing habitat**  
**Thursday, 9/10/2020 11:00am-12:30pm**

**Session Chair:**

- **Local Perspective** – Presenter: Regina Espinoza, District Manager, Bethel Island Municipal Improvement District
- **Engineer’s Role** – Presenter: Mike Mirmazaheri, PE, CFM, Senior Project Manager, GEI Consultants, Inc.
- **Ecosystem Success Story** – Presenter: Randy Mager, PhD, Senior Environmental Scientist, Delta Ecosystem Enhancement, Department of Water Resources

**THURSDAY LUNCH BREAK – EXHIBIT HALL  
AND AWARDS ANNOUNCEMENT  
12:30 PM – 1:30 PM**

**1:30 PM – 3:00 PM CONCURRENT SESSIONS**



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**PANEL: Encroachment Permits and the 408 Authorization Process in the Central Valley**

**Thursday, 9/10/2020 1:30pm-3:00pm**

**Moderator:** Michael Wright, Chief Engineer, Central Valley Flood Protection Board

The Central Valley Flood Protection Board (CVFPB) is the State regulatory agency responsible for ensuring that appropriate standards are met for the construction, maintenance, and protection of the flood control system that protects life, property, and wildlife habitat in California's vast and diverse Central Valley from the devastating effects of flooding. CVFPB issues encroachment permits and works with other agencies, such as the U.S. Army Corps of Engineers (USACE), to improve the flood protection structures, enforces removal of problematic encroachments, and keeps watch over the Central Valley's continually improving flood management system. In this panel, we will discuss the CVFPB permitting process for small and large encroachments, USACE's 408 authorization process and hear from a local flood control agency on their experience of obtaining CVFPB encroachment permits and USACE 408 authorizations. Panelist will also explain the process for federally authorized flood control projects while acting as the federal and non-federal sponsor. The panel will include speakers from CVFPB, USACE, and a local flood control agency.

**Panelists:** Ryan Larson, Chief, Levees and Channels Branch, USACE-Sacramento

Gary Lemon, Chief, Permitting Section, CVFPB

Greg Harvey, Chief, Plan Implementation & Compliance Branch, CVFPB

Michael Bessette, Executive Director, Sutter Butte Flood Control Agency

Paul Dirksen, Flood Protection Planner, West Sacramento Flood Control Agency

**PANEL: A Higher View: Non-structural Mitigation - Home Elevation Program**

**Thursday, 9/10/2020 1:30pm-3:00pm**

**Moderator:** Carl Walker, Harris & Associates

Home elevations – Panel members will discuss their experiences related to local jurisdiction approval of a home elevation program, funding (grants), who pays the match if a grant is secured, working with funding agencies (FEMA/Cal OES), employing a consulting firm to assist with the program, community outreach, webpage development, working with architects/engineers/contractors, CRS impact, and more. Ample time will be given for answering questions to the panel members for those attending.

**Panelists:** George Booth, Sacramento County

Hannah Lee, Marin County

Eric Scheetz, Washoe County

Marc Chandler, Sonoma County Community Development Commission

**TECHNICAL SESSION: Lessons Learned from Recent Disasters**

**Thursday 9/10/2020 1:30pm-3:00pm**

**Session Chair:** Marill Jacobson, California DWR

- **Roll'n on the River – Park Remediation:** Presenter - Rev. W. B. Smith, P.E., CFM, HISINC, LLC
- **Planning for Floods after Fires: Lessons Learned from the 2018 Montecito Debris Flows:** Presenter - Anna Serra-Llobet, UC Berkeley Co-authors - John Radke, Sarah Lindbergh, G. Mathias Kondolf, Alev Bilginsoy, Yiwen Chen, Dana Clark, Adam Dickenson, Kendal Harris, Ying Chik, Xiaoyue Wang, and Shauna Wright, UC Berkeley
- **City of Livermore Lessons Learned while Implementing the City Stream Maintenance Program, to Maintain Creeks and Repair Trails Damaged by 2017 Storms, while complying with FEMA Public Assistance Requirements:** Presenter – Pamela Lung, PE, CFM, Senior Civil Engineer, City of Livermore





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**TECHNICAL SESSION: Opportunities Assessments**

**Thursday 9/10/2020 1:30pm-3:00pm**

**Session Chair:**

- **Tijuana River Valley Needs and Opportunities Assessment: Strategies to Address Sediment and Flood Impacts:**  
Presenter: Mark Seits, PE, CFM, HDR Inc. Co-authors: Alex Yescas, PE, CFM, ENV SP, HDR Inc.; Deborah Mosley, Crystal Benham, Sheri McPherson – County of San Diego
- **Filling the Salmonid Rearing Habitat Deficit on the Lower American River, California:** Presenter – Chris Hammersmark and Nick Southall, cbec eco engineering Co-authors - Michael Founds, MS, cbec eco engineering; Lilly Allen, Sacramento Water Forum, City of Sacramento; Joseph Merz, PhD, Cramer Fish Sciences
- **Delta Flood Support System (DFSS) Tool** – Presenter: Chris Ferrari PE, CFM – GEI Consultants, Emilia Wisniewski, PE, Department of Water Resources and Matt Hawkins, Sacramento County Office of Emergency Services

**WORKSHOP: CRS 101 Workshop: Introduction and Basics to the Community Rating System**

**Thursday 9/10/2020 1:30pm-3:00pm**

**Instructors:** Constance Lake, CFM, ISO/CRS Specialist

This workshop will cover the requirements to join the Community Rating System (CRS) Program, an overview of the prerequisites and documentation requirements for most of the CRS activities most commonly receiving credit when a community joins the program, and the CRS points that a community can work towards to achieve a CRS Rating. The focus of this workshop will be an overview of the 2017 CRS Coordinator’s Manual. The CRS provides annual flood insurance premium discounts in those communities that implement floodplain management activities above and beyond the minimum requirements of the National Flood Insurance Program (NFIP). The CRS has been proven to help motivate elected officials and residents to support flood protection programs. To date 95, of California’s 526 NFIP communities have joined the CRS. California CRS communities are saving their residential and business property owners more than \$14.8 million each year.

**THURSDAY AFTERNOON BREAK – EXHIBIT HALL  
AND AWARDS ANNOUNCEMENT  
3:00 PM - 3:30 PM**

**3:30 PM – 5:00 PM CONCURRENT SESSIONS**

**PANEL: Challenges in Levee Maintenance in the Sacramento River Valley, San Joaquin Valley, and Delta**

**Thursday 9/10/2020 3:30pm-5:00pm**

**Moderator:** Gilbert Cosio, MBK Engineers, Inc.

This panel will provide an overview of the different challenges faced by levee maintaining agencies across California, from the from the Sacramento River Valley, San Joaquin Valley, and Delta Region. The panel will share how they navigate these challenges, and what short term and long term measures they’re taking to address these challenges. This panel will introduce a breadth of topics, from challenges with limited funding and creative ways for successful partnerships through programs such as the Sustainable Groundwater Management Act (SGMA).

**Panelists:** Meegan Nagy, PE | Deputy General Manager (Reclamation District 108, Sacramento River West Side Levee District, Knights Landing Ridge Drainage District)  
Reggie Hill | General Manager (Lower San Joaquin Levee District)  
Kevin King | General Manager (Reclamation District 1000)





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**PANEL: Urban Flooding & Stormwater Management**

**Thursday 9/10/2020 3:30pm-5:00pm**

**Moderator:** Brian Walker, City of Roseville

Urban flooding is flooding that occurs in a densely populated area. Whatever the specific cause(s) of inundation—thunderstorms, hurricane, river or creek overflow, groundwater seepage, infrastructure failure – stormwater systems are overwhelmed, and water accumulates in the paved over, built up urban environment with nowhere to go. Come and learn from **Urban Flooding & Stormwater Management** panel experts regarding current thought on the severity of the challenges facing U.S. urban communities, modern approaches to addressing these problems, and modeling and insurance implications. In the Q&A session, ask your questions (e.g. What are next steps if the U.S. infrastructure and urban environment is built beyond our ability to properly maintain? Do we downsize?).

**Panelists:** David Evans, Milliman Flood insurance and modeling expert

Dr. Sam Brody, Texas A&M, Director of Center for Texas Beaches & Shores (Invited)

Chad Berginnis, ASFPM Executive Director

**WORKSHOP: CRS Advanced Workshop**

**Thursday 9/10/2020 3:30pm-5:00pm**

**Instructors:** Constance Lake, CFM, ISO/CRS Specialist

This workshop will cover in greater detail specific activities that most advanced class CRS communities apply for. This will include some elements within the 2017 CRS Coordinator’s Manual from Activities 330, 370, 430, 450, 540, the 600 series and the CRS Coordinator’s Manual - 2021 Addendum. Other activities and elements can be considered if time allows and participants are willing. Attendees are encouraged to ask technical questions pertaining to specific CRS Activities, as well as share their experiences and ideas on implementing CRS Activities and suggest how the CRS Program might be improved to encourage greater participation in California, Hawaii, and Nevada.

**TECHNICAL SESSION: 2022 CVFPP Update**

**Thursday, 9/10/2020, 3:30pm-5:00pm**

**Session Chair:**

- **Reservoir vulnerability analysis: Impacts of climate change on reservoir operations in the Central Valley for Central Valley Flood Protection Plan Update** - Presenters: Darren Bonfantine, DWR and Nathan Pingel, HDR, Inc.
- **Assessment of Watershed Responses to Climate Change for 2022 Central Valley Flood Protection Plan Update** - Presenters: Romain Maendly, DWR and Kwabena Asante, GEI Consultants, Inc.
- **Flood consequence analysis: Enhancements to flood consequence analysis for 2022 Central Valley Flood Protection Plan Update** - Presenters: Stephen Cowdin, DWR; Nathan Pingel and Joanna Leu, HDR, Inc.

**Thursday, 9/10/2020 5:00 PM – 6:00 PM TRIVIA GAME NIGHT WITH VINCE!!**



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## **Friday, September 11, 2020**

8:45 AM – 9:00 AM LOG ON TO HUBILO.COM

### **9:00 AM – 10:30 AM CONCURRENT SESSIONS**

#### **WORKSHOP: The Dam EAP Workshop**

**Friday, 9/11/2020, 9:00am-10:30am**

**Instructors:** Jose Lara, Kasmira Kit, and Kendall Skillicorn, Cal OES

The Dam EAP workshop will give dam owners, emergency managers, and consultants the information and tools they need to draft a dam Emergency Action Plan that meets the requirements of California Senate Bill 92. During this 3-hour workshop, we will cover:

- Essential elements of an EAP
- Importance of outreach and partnership
- Review and approval process
- Common pitfalls
- Best practices

Please join us to make California better prepared for its next dam emergency.

#### **Modeling and Mapping Committee Meeting**

**Facilitated by: Thomas Plummer, Civil Solutions**

**Friday, 9/11/2020, 9:00am-10:30am**

The FMA Modeling and Mapping Committee (MMC) meets annually to discuss modeling and mapping issues and strengthen working relationships among the professionals who do modeling and mapping of floodplains. This year the MMC will discuss current modeling and mapping issues, and consider goals for the coming year and beyond. **All are welcome.**

#### **Emerging Professionals and Mentor/Mentee Session**

**Facilitated by: Megan LeRoy, Wendy Wang, Jose Lara, Melissa Weymiller, Morgan O'Brien**

**Friday, 9/11/2020, 9:00am-10:30am**

The FMA Emerging Professionals Committee meets monthly to provide networking opportunities and mentorship opportunities. Emerging Professionals are those who are new to floodplain management for the first 10 years in floodplain management. Emerging Professionals are always looking for mentors or those who are “young” at heart. **All are welcome!**

#### **WORKSHOP: The Water Resources Engineer as Expert Witness**

**Friday, 9/11/2020, 9:00am-10:30pm**

**Instructor:** Rick Van Bruggen, WRCS, Inc.

The role of the expert witness in litigation support and trial testimony will be discussed in this Workshop, particularly as it relates to Floodplain Managers and Water Resources Engineers who are called to testify. Various methods for being an effective expert, both in dealing with attorneys, and providing more effective and memorable testimony to the



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judge and jury at trial, will be explored. The process of delivery of testimony will be discussed in the context of the expert being the teacher, and the jury his class. A number of persuasive strategies for making complex technical concepts more understandable will be presented, and the application of proper ethics throughout the expert witness engagement process will be discussed, by way of examples in the field of water resources engineering.

**WORKSHOP: eLOMA - A Collaborative Tool for Licensed Professionals, Communities, and FEMA**

**Friday, 9/11/2020, 9:00am-10:30am**

**Instructor:** David Mummert, Michael Baker International

The Federal Emergency Management Agency’s (FEMA) eLOMA (Electronic Letter of Map Amendment) tool provides licensed land surveyors and professional engineers with an internet-based system to submit a variety of LOMA requests as a faster alternative to using the standard application process. The eLOMA tool is available to any licensed professional who registers through FEMA's Mapping Information Platform (MIP), which is located online at <https://hazards.fema.gov>. This presentation will:

- Provide a summary of the eLOMA tool.
- Outline improvements to the eLOMA process such as the expansion of accepted request types and application tracking via the new user workbench.
- Highlight plans for future user trainings and web-based learning opportunities.
- Provide insight into how the accuracy of eLOMA submittals correlates directly to audit frequency.
- Discuss the steps necessary to achieve eLOMA Super User status to reduce the number of audited submittals.

**MORNING BREAK – EXHIBIT HALL  
AND AWARDS ANNOUNCEMENT  
10:30 AM – 11:00 AM**

**11:00 AM – 12:30 PM CONCURRENT SESSIONS**

**WORKSHOP: Floodproofing: Floodplain Design, Construction, and Impacts on Flood Insurance**

**Friday, 9/11/2020, 11:00am-12:30pm**

**INSTRUCTORS:** Clay Goodrich, Floodproofing.com

This course provides insight into the importance of proper foundation flood vents and dry floodproofing techniques for buildings located in a flood zone. It will identify FEMA Technical Bulletins 1, 2, and 3, the National Flood Insurance Program, ASCE 24, ICC, and Building Code regulations and standards as they relate to sustaining foundations and overall business continuity in flood hazard areas. The course will also analyze the role of building compliance in securing lowering flood insurance rates and what mitigation solutions are available for both residential and non residential structures. After the course, participants will have a thorough understanding of floodproofing options and the important role they play in designing a sustainable structure.



**WORKSHOP: Elevation Certificates. The proper way to complete and review FEMA’s Elevation Certificate for floodplain management and for CRS**

**Friday, 9/11/2020, 11:00am-1:00pm**

**Instructor:** Becca Fricke-Croft, CFM – Atkins North America

This workshop will go through the Elevation Certificate section by section to help participants verify forms are being completed correctly by both licensed professionals and local community officials. Specific focus will be applied to building diagrams since they are very important in floodplain management at the local level and insurance rating by the NFIP. The workshop will also cover the proper steps to reviewing ECs for compliance with floodplain management regulations and for credit under the Community Rating System.

**WORKSHOP: New Innovative Technology: QGIS**

**Friday, 9/11/2020, 11:00-12:30pm**

**Instructor:** Clark Barlow, Atkins

Geographic Information Systems (GIS) provide a powerful platform to view, manage, and manipulate geospatial data. Though powerful, the licensing fees for proprietary GIS software can be burdensome. Join us as we discuss a growing trend in the water resources/GIS community – QGIS. QGIS is a free, open source GIS software that has become a popular alternative to other proprietary platforms, not just as a data visualizer, but also as a pre and post-processor for multiple water resources applications. The presentation will introduce QGIS and discuss the tools that are helping engineers around the world improve their efficiency and bottom line. Whether you’re new to GIS or an experienced user, come be empowered by learning the data management, visualization, analysis, scripting, and many other capabilities QGIS offers.

**CALIFORNIA, NEVADA AND HAWAII SILVER JACKETS**

**Friday, 9/11/2020, 11:00am-1:30pm**

**Silver Jackets Annual Meeting**

Have you wondered how you could get multiple agencies working together to support your community? If so, come to the Annual Silver Jackets Virtual Meeting to learn more about all the great things the California and Nevada Silver Jackets Teams are working on. We will discuss this year's accomplishments. We look forward to hearing what is important to you, and what you would like to see the team accomplish next year. We hope our colleagues in Hawaii will be able to make the meeting too, and that it will serve as inspiration to initiate their Silver Jacket's team.

**Leads: Rachael Orellana and Hunter Merritt, USACE; Chris Williams and Hillary Mann, CA DWR**

**FMA COASTAL ISSUES COMMITTEE MEETING**

**Friday, 9/11/2020, 11:00am-12:30pm**

**Moderator:** Vince Geronimo, PE, CFM

The FMA Coastal Issues Committee (CIC) meets annually to foster communication and dialogue and strengthen working relationships among the professionals engaged in managing and protecting coastal floodplains and resources. The CIC meeting is an interactive opportunity for participants to collaborate on emerging coastal issues, share coastal information, resources, and educational opportunities, and discuss technical concerns or other critical coastal flood risk and floodplain management issues. The CIC has also invited representatives from local, regional, state and Federal agencies to provide updates on their coastal program or services milestones, provide policy reminders, or share information on upcoming meetings, events, or grant opportunities.



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***SAVE THE DATE***

***September 7-10, 2021***

***2021 FMA ANNUAL CONFERENCE***

***THE WESTIN BONAVENTURE***

***LOS ANGELES, CALIFORNIA***