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**To preserve and protect.**

When it comes to climate change and its impact - how can we make communities stronger, safer and more resilient while protecting natural resources? That's where we come in. We help clients proactively identify, prevent and resolve floodplain management issues to better assess and manage flood risk.

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CONFERENCE CO-CHAIRS

Michael Mierzwa, a California licensed P.E., is the lead flood management planner for the State of California’s California Department of Water Resources (DWR). He is currently leading the development of the 2017 Central Valley Flood Protection Plan Update (CVFPP Update), which will outline a long-term path for implementing improvements in the State’s Central Valley flood management system. The CVFPP Update is being developed in coordination with key stakeholders, local, state, and federal partner agencies, and the public. Previously, he served as a water management and flood policy advisor to DWR’s Deputy Director for Integrated Water Management. He started his career as a hydrologist, specializing in climate and estuarine modeling, and as a technical editor. His range of expertise includes: planning and design of large-scale water resources systems, supporting and conducting real-time emergency operations, communications and coordination of water management issues with internal and external audiences. He earned a master’s degree in Civil Engineering from University of California, Davis and a bachelor’s degree in Civil Engineering from Texas A&M University. Mr. Mierzwa has also represented California and the United States as a delegate at several domestic and international water management conferences and workshops, most notably at the International Commission on Irrigation and Drainage meetings.

Alicia Kirchner is the Chief of the Sacramento District Planning Division for the U.S. Army Corps of Engineers. The Sacramento District’s area of operation covers parts of eight western states: California, Nevada, Utah, Colorado, Idaho, Arizona, Wyoming and Oregon. Planning Division provides planning, environmental and economic considerations necessary for development of water resource projects, primarily within the USACE mission areas of flood risk management, ecosystem restoration and watershed planning. Planning Division provides environmental compliance and economic support to the U.S. military, primarily supporting NEPA, Section 106 and natural resource management requirements for various installations. Ms. Kirchner has worked with the USACE planning process and programs for the past 26 years, conducting pre- and post-authorization planning studies and developing environmental compliance documents that led to congressional authorization of projects for construction. She has spent much of that time developing decision documents for projects to reduce the risk of flooding to urbanized areas. An area of focus has been on collaborative planning of multiple-objective projects and strategically aligning USACE programs with those of the State of California to revision aging water infrastructure to better meet 21st Century needs.

Bill Busath has over 20 years of experience with the Department of Utilities, and he has the breadth and depth of experience in all utility areas including water, sewer and stormwater. He is a licensed Civil Engineer and received his Bachelor’s and Master’s in Civil Engineering from Sacramento State University.

Bill Busath has over 20 years of experience with the Department of Utilities, and he has the breadth and depth of experience in all utility areas including water, sewer and stormwater. He is a licensed Civil Engineer and received his Bachelor’s and Master’s in Civil Engineering from Sacramento State University.
KEYNOTE SPEAKER BIOGRAPHIES

MG Michael Walsh USA (Ret), a Vice President in Dewberry’s Fairfax, Virginia office, is the director of water resources and coastal resiliency. Mr. Walsh has extensive experience in every aspect of project and program management in the water resources community. He has over ten years executive experience in delivering solutions to flood risk management issues, responding to floods, and developing flood plain management solutions. Mr. Walsh is an expert in all areas related to the United States Army Corps of Engineers Civil Works Program and Emergency Operations.

Prior to Joining Dewberry MG (r) Walsh served as the Deputy Commanding General Civil and Emergency Operations for the U.S. Army Corps of Engineers, Washington D.C., where he was responsible for a $10 billion annual program and supervised all Civil Works activities nationwide and 24,688 employees who operate and maintain infrastructure valued at $232 billion that includes 609 dams, 4,330 recreation areas, 12,000 miles of waterway, and 936 harbors. Mr. Walsh was also a principal advisor to the Chief of Engineers and the Assistant Secretary of the Army and was responsible for USACE emergency response and FEMA support including most recently Hurricane Sandy. Mr. Walsh delivered over $15 billion of structural and non-structural programs to address water resources concerns from ecosystem restoration to comprehensive flood risk reduction systems for major U.S. cities. He was also the presidentially-selected and Senate Confirmed President of the Mississippi River Commission. He oversaw the successful response to Hurricane Isaac and Super Storm Sandy and the immediate actions on the Mississippi River when drought threatened the nation’s barge traffic. The President of the United States was personally engaged in all these actions and Mr. Walsh was the leader who made the Army Corps missions a success. Mr. Walsh is a change agent who has designed, implemented and led the transformation of the Army’s Civil Works Program. It is the most strategic change in the Corps in many decades. Mr. Walsh has been described as a visionary, a leader, and can make things happen in the most challenging environments.

Christopher Cabaldon was first elected Mayor of West Sacramento in 1998, and is currently serving his ninth term. He is the first mayor elected directly by the voters of the city, after serving three terms on the city council. The Sacramento Bee says that “under his leadership, the city has become one of the municipal stars of the region.”

As Mayor, his local and regional leadership on school facilities, effective governance, universal preschool, research-based reform, and workforce/education alignment have resulted in both scholarly recognition and improved student outcomes. One of the nation’s leading mayors on education policy and best practices, he is chair of The Jobs, Education and Workforce standing committee at the U.S. Conference of Mayors.

Mayor Cabaldon’s work on transportation, flood prevention, land use, air quality and climate change, housing, and economic development at the local, regional, and statewide scales has won numerous awards, and has become a model for effective regional collaborative action. He chaired the groundbreaking Blueprint for the Future land use-transportation-air quality project of the Sacramento Area Council of Governments, and the development of all three of the region’s pioneering transportation investment plans since 1998.

An appointee in the administrations of four California governors spanning both political parties, Mr. Cabaldon currently serves as California’s commissioner on the Western Interstate Commission on Higher Education, where he is chair of the Issues Analysis & Research Committee.

Rick Jennings. He was born in Houston, TX and raised in Washington, DC. In 1972, he earned a football and track scholarship to the University of Maryland graduating with a Bachelor of Arts Degree in Criminal Justice.

Drafted in 1976 in the 11th round by the Oakland Raiders Professional Football team, returning punts and kickoffs, The Oakland Raiders won Super Bowl XI with a score of 32–14 over the Minnesota Vikings. Rick bleeds Silver and Black and wears his Super Bowl ring proudly.

From 1980 to 1992, Rick worked as a Sales Representative and eventually Regional Sales Manager for the Xerox Corporation. Since 1997 has served as the Chief Executive Officer of the Center for Fathers and Families (CFF), a non-profit organization dedicated to strengthening families and building communities in Sacramento. CFF serves over 1,800 at-risk youth each day with after school programs and 100 adults weekly with parenting, anger management, domestic violence classes, and health services.

Mr. Jennings was elected to Sacramento City Unified School Board of Directors in 1996. He was re-elected to two more terms serving 12 years representing the youth and parents of the Sacramento region.

Rick was elected to the Sacramento City Council in 2014 to represent District Seven. He represents the communities of Greenhaven, Pocket, the Detroit Boulevard area, Delta Shores as well as large portion of the Valley Hi community. He was named Vice Mayor for the City of Sacramento in January of 2016.
2016 Floodplain Management Association Awards

Floodplain Manager of the Year
Reggie N. Hill, Secretary-Manager, Lower San Joaquin Levee District, Dos Palos, CA

Award for Excellence (2 awards)

Hogg-Owen Award for Meritorious Achievement in the Floodplain Management Association
Fran E. Borcalli, P.E. (retired), Bend, OR

Karl Mohr Distinguished Service Award for National Activities
Dr. Gerald E. Galloway, Jr., Glenn L. Martin Institute Professor of Engineering, and Affiliate Professor, School of Public Policy, University of Maryland, College Park, MD

Communications and Outreach Award
Youth Outreach Award, Clark County Regional Flood Control District, Las Vegas, NV

Goddard Award for Outstanding Article in Floodplain Management (2 awards)
Andrea P. Clark, Esq., Downey Brand LLP, Sacramento, CA and Chris Huxley, TUFLOW, Brisbane, Queensland, Australia

Integrated Flood Management Award
Los Angeles County Department of Public Works, Los Angeles, CA

2016 Conference Committee
Darren Bertrand
Tony Bertrand
Debra Bishop
Gregor Blackburn
George Booth
Bill Busath
Eric Clyde
Kevin Coulton
Ed Curtis
Mark Forest
Vince Geronimo
Pal Hegedus
Cameron Jenkins
Alicia Kirchner
Ken Leep
Maria Lorenzo-Lee
Hunter Merritt
Mike Mierzwa
Becky Money
John Moynier
Mike Nowlan
Connie Perkins
David Pesavento
Ricardo Pineda
Thomas Plummer
John Powderly
Om Prakash
Shayan Rehman
Jeanne Ruefer
Rohin Saleh
Mark Seits
Kelly Sherfey
Eric Simmons
Darren Suen
Marty Teal
Alex Yescas
Felix Yeung
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1ST FLOOR BALLROOM

EXHIBIT HALL
PROGRAM AT A GLANCE

Tuesday, September 6, 2016

7:30 a.m. - 5:00 p.m.
Registration - Regency Ballroom Foyer

7:30 a.m. - 8:25 a.m.
Continental Breakfast – Regency Ballroom Foyer

California Extreme Precipitation Symposium
8:30am - 4:30pm
Location: Regency DEF
Please Note: CEPSYM Requires a separate registration and $100 fee

CONCURRENT WORKSHOPS AND TOUR

10:30 a.m. - 11:30 a.m.
WORKSHOP - Floodplain Design, Construction, and Impacts on Flood Insurance - Big Sur AB

WORKSHOP - HEC-WAT Workshop - Carmel AB

10:30 a.m. - 5:30 p.m.
CA Dept. of Water Resources Floodplain Management Review Course - Golden State AB

1:30 p.m. - 3:00 p.m.
Open Forum with FEMA - Capitol View

3:00 p.m. - 4:30 p.m.
Open House with DWR - Capitol View

1:00 p.m. - 4:00 p.m.
Sacramento Weir Century Tour – Meet in the Hyatt Lobby
(Pre-Registration Required)

1:30 p.m. - 3:30 p.m.
WORKSHOP: Short Listed for that Engineering Project? Innovative and Common Sense Strategies for a Successful Interview - Carmel AB

1:30 p.m. - 5:30 p.m.
WORKSHOP: 2D Dam Break Modeling Using HEC-RAS 5 - Big Sur AB

5:30 p.m. - 7:30 p.m.
Opening Reception and Community Service Project!
Exhibit Hall – Regency ABC

Coastal and Riverine Flood Management
Vulnerability Analysis
Habitat Restoration
Climate Change
Permitting and Compliance

flood management solutions
from concept to completion

ESA

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Wednesday, September 7, 2016

7:30 a.m. - 5:00 p.m.
Registration – Regency Ballroom Foyer

7:30 a.m. - 8:25 a.m.
Continental Breakfast – Regency Ballroom ABC

8:30 a.m.-10:20 a.m.
Plenary: “Building Community Resilience Through Action” - Regency Ballroom DEF

10:20 a.m. - 10:35 a.m.
Break - Exhibit Hall

10:35 a.m. - 11:50 a.m.
Plenary II – Managing California Waters Through Federal, State and Local Cooperation - Regency Ballroom DEF
CRS One-on-One Appointments - Capitol Board Room

11:50 a.m. – 12:30 p.m.
SPECIAL PRESENTATION OF BACKPACKS - Exhibit Hall THANK YOU HDR AND STANTEC!!

12:30 p.m. - 2:15 p.m.
Awards Luncheon, Membership Meeting and Keynote Speaker
Keynote Speaker: - Mayor Chris Cabaldon, City of West Sacramento
- Regency DEF

2:30 p.m. - 3:50 p.m.
CONCURRENT SESSIONS

Panels:
• Agricultural Structures in Floodplains – Developing Collaborative Solutions - Golden State AB
• Forward Focus to Risk-Informed Decision Making – Tahoe

Technical Sessions:
• Methods and Case Studies to Evaluate Flood Risk Reduction Alternatives - Big Sur AB
• Ecohydraulics - Capitol View
• NOAA Atlas 14 and Floodwater for Water Supply - Carmel AB

3:50 p.m. - 4:00 p.m.
Break - Exhibit Hall

CONCURRENT SESSIONS
4:00 p.m. – 5:30 p.m.

Panels:
• Making Your Hazard Mitigation Plans Become Projects – Struggles and Success Stories - Carmel AB
FMA Annual Coastal Committee Meeting - Tahoe

And the Outcome is….More Effective Flood and Water Management - Golden State AB

Technical Sessions:
• Post-Fire Hazard Evaluations - Big Sur AB
• Flood Forecasting Tools - Capitol View

5:45 p.m. - 7:30 p.m.
Grand Reception and Networking
Exhibit Hall – Regency ABC
Poster Session

Thursday, September 8, 2016

7:30 a.m. - 5:00 p.m.
Registration – Regency Ballroom Foyer

7:30 a.m. - 8:25 a.m.
Continental Breakfast – Exhibit Hall

8:00 a.m. - 9:00 a.m.
FMA/ASFPM Chapter Update – Carmel AB

9:00 a.m. – 10:30 a.m.
CONCURRENT SESSIONS

Panels:
• California Building Code and the NFIP - Regency D
• Application of Outcome-Based Planning in CVFPP – Identifying Flood-Specific Outcomes for Proposed Water Management Actions - Golden State AB
• Federal Flood Control Issues – A Legal Perspective: A 2016 Federal Issues Update - Big Sur AB
• Modeling, FEMA Guidelines to Go: 2D or Not 2D – Part 2 - Capitol View

Technical Sessions:
• Coastal – San Francisco Bay - Regency E
• Flood Forecasting the CVFPP 2017 - Regency F
• Local Flood Management Efforts in California - Carmel AB

10:30 a.m.-11:00 a.m.
Break - Exhibit Hall

11:00 a.m. - 12:30 p.m.
CONCURRENT SESSIONS

Panels:
• Flood Protection Projects – Showcase of Regional Flood Control Improvement Projects - Golden State AB
• Cultural Resources and Flood Control Projects: The Federal Handle in Flood Control – Legal and Practical Considerations Regarding Cultural Resources - Big Sur AB
• Improving Community Resilience – Capitol View

Technical Sessions:
• Coastal Flood Risk Analysis and Mitigation - Regency E
• Conservation and Multi-benefit Project Planning in Support of the CVFPP - Regency F
• Riverine Multi-Benefit Projects – Channeling your Flood Protection for the Environment - Carmel AB
Friday, September 9, 2016

7:30 a.m. - 8:30 a.m.
Continental Breakfast – Regency Ballroom Foyer

8:30 a.m. -12:30 p.m.
CFM Examination - Big Sur AB

8:00 a.m. – 12:00 p.m.
FMA’s Introduction to HEC-RAS 5.0 - Tahoe

9:00 a.m. & 11:00 a.m.
Folsom Dam Field Trip – Meet in the Regency Ballroom Foyer for transport to the dam

9:30 a.m. – 10:30 a.m.
CA Silver Jackets Team Meeting - Regency D

9:00 a.m. - 10:30 a.m.
CONCURRENT SESSIONS

Technical Sessions:
- Massive Scale Hazard Identification and Analysis - Regency E
- Alluvial Fan Planning, Guidance and Tools - Regency F
- A Flood of Fishy Issues - Golden State AB
- Flood Warning/Emergency Response - Capitol View
- Multiple Objectives Naturally - Carmel AB

10:30 a.m. – 11:00 a.m.
Break - Exhibit Hall

11:00 a.m. – 12:30 p.m.
CONCURRENT SESSIONS

Technical Sessions:
- Learning from “2D” (Modeling) - Regency F
- Dam Breach, Bypasses and Overflow Area Modeling - Golden State AB
- Mapping Processes and Elements - Capitol View

GUIDED WALKING TOUR – MEET IN THE REGENCY BALLROOM FOYER @ 5:45 P.M.

6:30 p.m. - 9:30 p.m.
Reception at California State Railroad Museum
Buses depart at 5:45 p.m.
DETAILED CONFERENCE PROGRAM

Tuesday, September 6, 2016

7:30am - 5:00pm
Registration
Regency Ballroom Foyer

7:30am - 8:25am
Continental Breakfast
Regency Ballroom Foyer

8:30am - 4:30pm
California Extreme Precipitation Symposium (CEPSYM)
Theme: Future Directions of Weather Forecasting and Reservoir Operations
Speakers will cover:
• NOAA Plans for Improving Forecast Models and Computing Power
• Ensemble Forecasting Replacing Deterministic Forecasting: Why is This Important?
• Research on Atmospheric Rivers to Improve West Coast Predictions
• Importance of Water Vapor and Wind Observations to Predicting Precipitation
• Forecast Informed Reservoir Operations at Lake Mendocino
• Integrating Weather Forecasts into Folsom Reservoir Operations
• Forecast-Coordinated Operations at New Bullards Bar and Oroville Reservoirs
Moderator: Gary Estes, California Extreme Precipitation Symposium
PLEASE NOTE: CEPSYM REQUIRES A SEPARATE REGISTRATION AND $100 FEE

10:30am - 12:30pm
CONCURRENT WORKSHOPS

10:30am - 11:30am
Floodplain Design, Construction, and Impacts on Flood Insurance
Instructor: Joe DelVecchio, Smart Vent Products, Inc.
Floods are the #1 natural disaster in the United States. All 50 states have experienced floods or flash floods. Due to climate change and other factors, flood events are increasing in number and intensity. To protect the health, safety, and welfare of homes and their occupants during a flood event, homes must be built into compliance with local, state, and federal codes and regulations. This course describes floodplains and the potential hazards to buildings. Unless there are flood openings that allow floodwaters to flow into and out of enclosures below the Base Flood Elevation, hydrostatic pressure builds up on the foundation walls and can cause major damage. The course also defines the differences in engineered and non-engineered flood openings and their ability to ensure resilient structures. It explains the differences between wet floodproofing and dry floodproofing techniques, and when they are applicable. It also clarifies the regulations, codes, and standards as they relate to sustaining foundations in flood hazard areas. This course analyzes the role of building compliance in lowering flood insurance rates and what mitigation solutions are available to existing structures.

10:30am -12:30pm
HEC-WAT Workshop
Instructors: Lea Adams, PE and Penni Baker, USACE-HEC
The Hydrologic Engineering Center-Watershed Analysis Tool (HEC-WAT) is a new tool for analyzing water resource and flood risk management projects, using a risk framework that incorporates a systems approach. HEC-WAT integrates several existing tools from the USACE Hydrologic Engineering Center, including HEC-HMS (hydrology), HEC-ResSim (reservoir simulation), HEC-RAS (hydraulics) and HEC-FIA (flood consequences), to support evaluation of both small- and large-scale projects as part of USACE planning and risk evaluation studies. HEC-WAT can be run in two different modes, deterministic and Flood Risk Analysis. The deterministic mode represents a more traditional water resource analysis approach, and uses historical data sets to evaluate existing and future project conditions. The Flood Risk Analysis (FRA) mode is an event-based approach that utilizes Monte Carlo analysis with uncertainty across a wide range of model parameters to support risk analysis computations. Applications of the FRA compute include levee certification studies, dam and levee safety studies, and planning and design studies. The primary objectives of this short course are to provide attendees with an understanding of the purpose and functionality of HEC-WAT, and to demonstrate the model. The workshop agenda includes an overview of the HEC-WAT software, a description of several example applications, a preview of future features, and demonstration of model set up, analysis and interpretation of results.
CA Dept. of Water Resources Floodplain Management Review Course (No CECs for this course)
This full day workshop is intended for non-CFMs who intend to take the CFM exam and reviews floodplain management practices and regulations. The CFM examination is a patented certification by the Association of State Floodplain Managers (ASFPM) focused primarily on FEMA's National Flood Insurance Program. (If you are not a full conference attendee, and would like to attend this workshop, the one-day FMA conference fee is required.)
Note: If you wish to take the CA DWR Floodplain Management Review Course, you must ALSO register separately with DWR at http://water.ca.gov/floodmgmt/lrafmo/fmb/fas/nfip/workshop/dwr.cfm.
If you wish to take the CFM examination, you must register separately with ASFPM at www.floods.org at least 3 weeks prior to the examination. The CFM examination is scheduled on Friday, September 9, at 8:00 a.m. at this conference.
INSTRUCTORS: Ray Lee, Northern Central Region NFIP Floodplain Management Specialist, CA Dept. of Water Resources and Salomon Miranda, PE, MS, Southern Region NFIP Floodplain Management Specialist, CA Dept. of Water Resources
*Nominal fee is required

CONCURRENT WORKSHOPS AND TOUR

Open Forum with FEMA POC - Patrica Rippe
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.

Open House with DWR
Please join us for an overview of the key projects that DWR staff will be sharing during the conference. Posters for DWR projects will be available at the open house.
Moderator: Michael Mierzwa, Lead, Flood Management Planning, CA DWR

Sacramento Weir Century Tour
Please join FMA and DWR in celebrating the 100th anniversary of the Sacramento Weir. Tour will include the Yolo Bypass implementation area, including the west and east levees of the Fremont Weir and the weir itself. The final stop on the tour will be at the Sacramento Weir for a brief history presentation and a commemorative group photo. Tour is limited to 27 participants. Each participant will receive a copy of the photo.

PRE-REGISTRATION REQUIRED
1:00 – Meet in Hyatt Lobby
1:10 – Depart Hyatt
1:50 – Arrive west gate of Fremont Weir
1:50 – 2:10 – Drive across Fremont Weir
2:10 – Depart east gate of Fremont Weir
2:55 – Arrive Sacramento Weir
2:55 – 3:20 – Presentation & photo shoot
3:20 – Depart Sacramento Weir
3:50 – Arrive Hyatt

Short Listed for that Engineering Project? Innovative and Common Sense Strategies for a Successful Interview
Instructor: David Williams, PhD, PE, PH, CFM, CPESC, David T. Williams and Associates
We have all been through the interview process either through applying for a job/promotion or chasing a project. We also often follow established templates that almost everyone uses which result in eye rolling by the interviewers. Get out of this rut and attend this webinar so that you can develop a fresh look for your next interview in pursuit of a project. From the novice to the seasoned professional, you will glean valuable insight of the interview process and you will be anxious to use the techniques for your next interview. Dr. David T. Williams is well known for his lively presentations and success in winning projects. He has over 40 years of experience interviewing for projects as well as having served on numerous selection panels from local to national level projects. He has seen many self-destructing blunders by major engineering companies that could have been avoided by following thoughtful and common sense advice presented in this webinar that are focused on winning engineering projects.
1:30pm - 5:30pm
Big Sur AB

2D Dam Break Modeling Using HEC-RAS 5
Instructors: Sam Crampton, PE, CFM and Ted Cassidy, PE, PH, Dewberry
HEC-RAS 5 has the ability to perform 2-dimensional flow routing. This workshop will provide a hands-on experience on how to perform downstream dam break flow routing using the HEC-RAS 5 2D computational engine. Attendees will learn how to set up 2-dimensional meshes, couple 1D and 2D features, enter breach parameters, perform and troubleshoot unsteady flow computations and perform inundation mapping and animation using RAS Mapper. This workshop is ideal for engineers in both the public and private sectors who have an interest or need to learn HEC-RAS for dam break modeling. The workshop will also be of interest to those wanting to learn more about HEC-RAS 1D/2D unsteady flow modeling for floodplain modeling. Attendees should have a basic understanding of the principles of open channel hydraulics and methods of dam failures and should bring a laptop or tablet with the latest version of HEC-RAS 5 pre-installed. Class material including digital terrain data will be provided at the start of the class on either USB drives or DVDs.

5:30pm - 7:30pm
Exhibit Hall –
Regency ABC

Opening Reception and Community Service Project!
Please help fill over 200 backpacks with school supplies and kid-friendly flood awareness items. Backpacks will be presented on Wednesday morning, September 7, to local leaders for area school children.
Meet in the Exhibit Hall for the Community Service Project

POSTER SESSIONS
Exhibit Hall

Flood Control Channel Management - Quantitative Approach to Evaluate Maintenance Need: Justin Gragg, Environmental Science Associates
Storm Surge Resiliency Planning - Overview and Examples: Kelly Havens, Geosyntec Consultants
Water Data on the Web: Carly Narlesky, MBK Engineers
Wednesday, September 7, 2016

7:30am - 5:00pm
Registration
Regency Ballroom Foyer

7:30am - 8:15am
Continental Breakfast
Exhibit Hall

8:15am

8:30am  - 10:20am
Plenary “Building Community Resilience Through Action”
Regency DEF
Welcome from the Floodplain Management Association Chair: Mary Seits, Executive Director, Floodplain Management Association
Welcome Remarks: Vice Mayor Rick Jennings, City of Sacramento (introduced by David Ford)
Introduction of the Conference Chairs: Mary Seits, Executive Director, Floodplain Management Association
Co-chairs: Bill Busath, Director, Department of Utilities, City of Sacramento
Alicia Kirchner, Chief, Planning Division, USACE
Michael Mierzwa, Lead, Flood Management Planning, CA DWR

Plenary Keynote: - Major General Michael J. Walsh USA (Ret), Dewberry
Major General Walsh previously served as deputy commanding general for civil and emergency operations for the U.S. Army Corps of Engineers, where he was responsible for nearly 25,000 employees who operate and maintain $232 billion worth of infrastructure. One of his proudest accomplishments is delivering the $10 billion hurricane storm damage risk reduction program for the New Orleans area.

10:20am  - 10:35am Break in Exhibit Hall

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WATER RESOURCES ENGINEERING

OUR CLIENTS INCLUDE:
- US Army Corps of Engineers
- Federal Emergency Management Agency
- National Flood Insurance Program
- Participating Communities
- California DWR

SERVICES:
- Floodplain Studies
- Hydrology / Hydraulics
- Numerical Modeling
- Flood Risk Reduction
- Sediment Transport
- Bridge Scour Analysis
- Hydraulic Structure Design
- Flood Forecast & Warning
- Drought Contingency Plans
- Site Specific PMP Studies
- Stream Restoration
- Water Quality & Contaminant Transport Modeling
- Groundwater
- Training and Technical Support

CONTACT: Martin Teal, P.E. P.H., D.WRE (858) 487-9378 or David Curtis, Ph.D. (916) 932-7402
10:35am - 11:50am

**CONCURRENT SESSIONS AND WORKSHOPS**

**Plenary II – Managing California Waters Through Federal, State and Local Cooperation**

Moderator: Stu Townsley, Chief, Operations & Regulatory Division at South Pacific Division

California has many of the challenges that other states have with managing waters, and is also faced with additional challenges due to climate change, varied types of flooding and water supply issues. In order to effectively tackle these challenges, governments will need to increase cooperation and focus on strategic thinking. This plenary session will provide examples of government cooperation, mention initial steps planned to implement the Governor’s California Water Action Plan through recent developments, and reaction to case studies of success/lessons learned by related agencies.

**Panelists:**
- Gary Bardini, Deputy Director, CA DWR
- Kris Tjernell, Special Assistant for Water Policy, CA Natural Resources Agency
- Alicia Kirchner, Chief, Planning Division, USACE SPK
- Jeff Lusk, Director, Mitigation Division FEMA Region IX
- Terri Grant, Principal Engineer, LA County DPW

10:35am - 11:50am

**CRS One-on-One Appointments**

Capitol Board Room

Appointments can be scheduled for any time from 10:45 a.m. to 12:05 p.m. and 2:30 p.m. to 5:30 p.m. Wednesday, September 7. To ensure your first choice of available times, please contact Paul Mason at 661-269-3818 or Pmason@iso.com

Meetings will be held in Capitol Board Room of the Conference Center. Discussion topics could include 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. This will help you find out what is needed for your community to either join the CRS or to improve its current CRS class rating.

11:50am - 12:25pm

**SPECIAL PRESENTATION OF BACKPACKS**

THANK YOU HDR AND STANTEC!!

12:25pm - 2:15pm

**AWARDS LUNCHEON, MEMBERSHIP MEETING and KEYNOTE SPEAKER**

Keynote Speaker: Mayor Chris Cabaldon, City of West Sacramento

2:30pm - 3:50pm

**CONCURRENT SESSIONS**

**Panel: Agricultural Structures in Floodplains – Developing Collaborative Solutions**

Moderator: Mike Inamine, Executive Director, Sutter Butte Flood Control Agency

FEMA Flood Insurance Rate Maps have great potential to affect the sustainability of agriculture in the Sacramento Valley by depicting areas behind levees with expansive and deep floodplains. The result could trigger the mandatory purchase of flood insurance, and the requirement to elevate or flood-proof new and substantially damaged/improved structures. Broad participation and collaboration is needed to describe the situation of California farmers, and to outline cooperative floodplain development solutions for agricultural structures in floodplains, and more affordable flood insurance options. This panel will also reference a GAO report entitled, “National Flood Insurance Program: Additional Guidance on Building Requirements to Mitigate Agricultural Structures’ Damage in High-Risk Areas Is Needed.” Similar situations may soon affect agricultural areas in coastal bay area communities as their flood maps are updated. Please join us in discussing this important floodplain management and flood insurance issue.

**Panelists:**
- Gregor Blackburn, Chief, Mitigation Branch, FEMA – Region IX
- Denise Carter, Benden Farms Co-owner, Colusa County Supervisor
- Ceil Strauss, Chair, ASFPM
- Maria Lorenzo-Lee, Flood Coordination Lead/Policy Advisor-FPM, CA DWR
- James Gallagher, Assembly Member
Panel: Forward Focus to Risk-Informed Decision Making
Moderator: Hunter Merritt, USACE
Addressing the Nation’s dam infrastructure is a weighty task, with far-reaching implications for floodplain management. Join this panel workshop as agency experts in dam safety share unique perspectives on the challenges of risk-informed decision making in the dam safety world. Other topics will include: identification of dam safety issues; prioritization of projects and actions; planning, design, and implementation of projects; and the intersection of dam safety with floodplain management. Participants will walk away with an understanding of the agency viewpoints on the approach to the problems facing the dam safety community.
Panelists: Creg Hucks, USACE
Bob Bezek, FEMA
Andy Mangney, CA DWR
Joe Countryman, CVFPB

Technical Session: Methods and Case Studies to Evaluate Flood Risk Reduction Alternatives
Session Chair: John Powderly, FMA
- DWR CVFPP: An Improved Floodplain Management Approach in Non-Urban Areas Using Non-Structural Actions: Presenter(s): Brian Walker, PE, CFM, Nathan Van Emmerik, PE, CA DWR Co-author(s): Bill Fox, PE, LS, CH2M, Shem Slygar, PE, CA DWR
- Learning from Levees: The Columbia Corridor Accreditation Story: Presenter(s): Sara Morrissey, Colin Rowan, Multnomah County Drainage Districts
- Certification Process for North Indio East Side Dike in the Coachella Valley: Presenter(s): Brady McDaniel, Northwest Hydraulic Consultants Co-author(s): Andrey Shvidchenko, Brent Wolfe, Jimmy Pan, Northwest Hydraulic Consultants; Dan Charlton, Tesfaye Demissie, Mark Johnson, Coachella Valley Water District; Soma Balachandran, GENTERRA and Robert Bezek, FEMA

Technical Session: Ecoholicdraulics
Session Chair: Kevin Coulton, cbec ecoengineering
- Ecoholicdraulics: A Brief History and Contemporary Examples: Presenter(s): Peter Goodwin, President, International Association for Hydro-Environment Engineering and Research and Director, Center for Ecoholicdraulics Research, University of Idaho
- Ecoholicdraulic Design of Salmonid Habitat Enhancement Projects in the Central Valley, California: Presenter(s): Chris Hammersmark, PhD, PE Co-author(s): Ben Taber, PE, cbec ecoengineering; Elizabeth Campbell, PhD., US Fish and Wildlife Service – Anadromous Fish Restoration Program, John Hannon, US Bureau of Reclamation, Joe Merz, PhD, Cramer Fish Sciences, Lilly Allen, Sacramento Water Forum
- Restoration Under Suboptimal Conditions: Examples from Chinook Salmon and Steelhead Projects in the California Central Valley: Presenter(s): Joseph Merz, University of California Santa Cruz, Cramer Fish Sciences
- Homeless in the Creeks: In-Stream Habitat Needs of Salmon and Habitat Improvement Examples from Flood Control and Public Works Projects: Presenter(s): Leslie Ferguson, PE, MS, San Francisco Bay Regional Water Quality Control Board

Technical Session: NOAA Atlas 14 and Floodwater for Water Supply
Session Chair: Clark Barlow, Atkins
- Dry Well as a Low Impact Development (LID) Tool: Presenter(s): Connie Nelson, City of Elk Grove
- Using On-Farm Flood Capture and Recharge to Reduce Flood Damages Downstream: Presenter(s): Scott Vose, Tetra Tech, Inc.
- Why a Local Official Should Review the Precipitation Frequency Atlas (NOAA Atlas 14) Before Project Implementation: Presenter(s): Michelle Iblings, PE, PH, Alameda County Flood Control District

3:50pm - 4:00pm
Break In Exhibit Hall
4:00pm - 5:30pm  
CONCURRENT SESSIONS

4:00pm - 5:30pm  
**Panel: And the Outcome is....More Effective Flood and Water Management**  
*Golden State AB*  
Moderator: Jason Sidley, CA DWR  
Attend this workshop to learn a new perspective on the important work that you do. You will receive valuable information to help you better align your colleagues and stakeholders around common intended outcomes. Most importantly, this information can help you set the stage for more effective flood and water management strategies, and accurate assessment of actual outcomes.  
**Panelists:** Art Hinojosa, CA DWR  
Mitch Avalon, County Engineers Association of California  
Ken Kirby, Evoto Company  
Tim Ramirez, CVFPB

4:00pm - 5:30pm  
**Panel: Making Your Hazard Mitigation Plans Become Projects – Struggles and Success Stories**  
*Carmel AB*  
Moderator: Carl Walker, Senior Civil Engineer, City of Roseville, CA  
The Stafford Act requires natural hazard mitigation planning and FEMA grants may provide funding. Now that your community has defined mitigation measures, how do you go about accomplishing the projects. Mark Rains has managed dozens of home elevation and acquisition projects for Sacramento County. Hannah Lee is right in the middle of programs in Marin County. FEMA and OES have seen many grant funded successes. Carl Walker is the floodplain manager for a CRS Class 1 Community. This panel can help you to find the money so your community can mitigate real problems.  
**Panelists:** Mark Rains, Sacramento County  
Hannah Lee, Marin County  
Robert McCord, FEMA  
Marcia Sully, CA OES

4:00pm - 5:30pm  
**FMA ANNUAL COASTAL COMMITTEE MEETING**  
*Tahoe*  
Moderator: Vince Geronimo, AECOM  
The FMA Coastal Issues Committee (CIC) meets annually to foster communication and dialogue and strengthen working relationships among the professionals engaged in managing and/or protecting coastal floodplains and resources. This year, the CIC will have a full 1.5 hour session, offering more time for participants to collaborate - sharing coastal information, resources, and educational opportunities, and discussing technical concerns or other critical coastal flood risk and floodplain management issues. The CIC has 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 and events. The committee will close with a roundtable discussion to reflect on the recent El Niño season and discuss coastal erosion impacts and community resilience actions that followed.  
All are welcome.

4:00pm - 5:30pm  
**Technical Session: Post-Fire Hazard Evaluations**  
*Big Sur AB*  
Session Chair: Brent Siemer, City of Simi Valley  
- Analysis of Meteorological Events Resulting in Post-Fire Debris Flows on Alluvial Fans - Transverse Ranges, Southern California: Presenter(s): Nina Oakley, Western Regional Climate Center and Desert Research Institute; Jeremy Lancaster, California Geological Survey  
- Post-Wildfire Flood and Debris Flow Hazard Assessment – A Planning Tool: Presenter(s): Mike Kellogg, PG, CFM, GISP, Jon Fuller, PE, RG, CFM, DWRE, JE Fuller/Hydrology & Geomorphology, Inc.  
- A Multi-Agency Approach to Response, Mitigation, and Building Resilience in Small New Mexico Communities Following Large Wildfires: Presenter(s): Stephen Scissons, PE, USACE

4:00pm - 5:30pm  
**Technical Session: Flood Forecasting Tools**  
*Capital View*  
Session Chair: Jeanne Ruefer, TetraTech  
- Probabilistic Flood Risk Modeling using a Framework Approach: Presenter(s): Stephen Blake, DHI Co-author(s): Julien Oliver, Michael Meadows, Colin Robert, DHI  
- How Likely is the River Going to Flood? New River Forecasting Tools for Floodplain Managers to Evaluate the Risk of Flooding: Presenter(s): Alan Haynes, National Weather Service  
- Automated High Water Alarm Inform Floodplain Stakeholders: Presenter(s): David Curtis, PhD, WEST Consultants, Inc.
- Rapid Modeling of In-Season Catastrophic Flood Events: Presenter(s): Hojjat Seyyedi, AON Benfield Co-author(s): Siamak Daneshvaran, Narathip Sutchiewcharn, Yujin Liang, Matthew Schmitt, Bin Pei, AON Benfield

5:45pm - 7:45pm  Grand Reception and Networking  Exhibit Hall – Regency ABC

5:45pm - 7:45pm  POSTER SESSIONS  Exhibit Hall
- Flood Control Channel Management - Quantitative Approach to Evaluate Maintenance Need: Justin Gragg, Environmental Science Associates
- Storm Surge Resiliency Planning - Overview and Examples: Kelly Havens, Geosyntec Consultants
- Water Data on the Web: Carly Narlesky, MBK Engineers

Thursday, September 8, 2016

7:30am - 5:00pm  Registration  Regency Ballroom Foyer

7:30am - 8:25am  Continental Breakfast  Exhibit Hall

8:00am - 9:00am  FMA/ASFPM Chapter Update

9:00am - 10:30am  CONCURRENT SESSIONS

9:00am - 10:30am  Panel: California Building Code and the NFIP
Moderator: Jim Eto, CA DWR (Assisted By Patricia Rippe, FEMA)
The updated CBC will go effective on January 1, 2017. This panel will present basic information needed to understand the flood provisions of the International Codes and ASCE 24, Flood Resistant Design and Construction, Appendix G, and the importance of coordinating local floodplain management ordinances with building codes. Topics may include; differences between the NFIP regulations and the I-Code requirements; questions for communities to answer to know whether and how to modify existing floodplain management regulations to coordinate with the I-Codes; modifications that can be adopted to incorporate higher standards in the I-Codes; roles and responsibilities of the Building Official and the Floodplain Administrator.
Panelists:
- CALBO representative
- John Ingargiola, FEMA-HQ Building Sciences representative
- Local BO
- Local FPA

9:00am - 10:30am  Panel: Application of Outcome-Based Planning in CVFPP: Identifying Flood-Specific Outcomes for Proposed Water Management Actions
Moderator: Michael Mierzwa, Lead, Flood Management Planning, CA DWR and Mary Jimenez, CA DWR
The Central Valley Flood Protection Plan (CVFPP) is being updated in 2017 to drive toward outcome-based planning, consistent with the California Water Action Plan and the state’s Integrated Water Management approach. The 2017 Update will include a framework for identifying and describing the flood-specific intended outcomes of potential Central Valley water management actions. This interactive session is an opportunity for audience members to consider and discuss how an array
of potential management actions may provide flood-specific outcomes and achieve the goals of the CVFPP.

9:00am - 10:30am  
Moderator: Scott L. Shapiro, Downey Brand, Sacramento, CA
Please join this panel to get the latest on Federal legislative and policy developments, including E.O. 11988 and E.O. 13690, chances for a new Water Resources Development Act and implementation of previous WRRDAs, NFIP reauthorization, project funding, and a host of other issues.

**Panelists:**
- Julie Minerva, Principal, Carpi & Clay, Washington DC
- Cheree Peterson, Civil Works Integration Division Chief, USACE SPD, San Francisco
- Anne Sanger, Senior Advisor, Office of Congresswoman Doris Matsui, Sacramento

**9:00am - 10:30am  
Panel: Modeling, FEMA Guidelines to Go: 2D or Not 2D – Part 2**  
**Capitol View**
Moderator: Cameron Jenkins, Atkins
Come to the session to continue the discussions from the last conference. The panel will discuss the current 2D guidelines for modeling and mapping from around the world, how they compare to those in the United States, and what is next.

**Panelists:**
- Thomas Plummer, FMA
- Luis Rodriguez, Director, Assistant Civil Engineer, Engineering and Modeling, FEMA-HQ
- Brian Schalk, Private Consultant
- Yiguo Liang, CADWR
- Scott Hogan, FHWA
- Gary Brown, ERDC

**9:00am - 10:30am  
Technical Session: Coastal – San Francisco Bay**  
**Regency E**
Session Chair: Ann Bechtel, Atkins

- Looking to the Future - San Francisco Bay Area Increased Flooding Scenarios: Presenter(s): Kristen MacDougall, CFM, Mark Lightner, AECOM
- Flood-Resilient Tidal Restoration at the Alviso-Mountain View Ponds: Presenter(s): Latha Chandrasekaran, AECOM Co-author(s): Jeanne Gambino, PE, AECOM, John Bourgeois, South Bay Salt Pond Restoration Project, Brenda Buxton, California Coastal Conservancy
- Adapting to Rising Tides: Getting to Flood Resilience through Collaborative Planning and Capacity Building: Presenter(s): Wendy Goodfriend, San Francisco Conservation and Development Commission, Paul Detjens, PE, Contra Costa County Flood Control and Water Conservation District
- How High Should We Go? - Designing Levee Heights for Waves and Sea Level Rise: Presenter(s): Justin Maynard, Robin Lee, PE, Sarah Rahimi, PE, Schaab & Wheeler

**9:00am - 10:30am  
Technical Session: Flood Forecasting the CVFPP 2017**  
**Regency F**
Session Chair: Hojjat Seyyedi, AON Benfield

- Development of Stage-Frequency Curves in the Sacramento - San Joaquin River Delta for Existing, Sea Level Rise and Climate Change Conditions: Presenter(s): Romain Maendly, PE, CA DWR Co-author(s): Clark Churchill, EIT, Shivcharan (Rummy) Sandhu, Mahesh Gautam, CA DWR; Richard Rachiele, MS, Resource Management Associates
- Development of Stage and Flow-Frequency Curves in the San Joaquin Basin for the 2017 Central Valley Flood Protection Plan Update: Presenter(s): David Arrate, PE, CA DWR Co-author(s): Devinder Dhillion, PE, Shivcharan (Rummy) Sandhu, CA DWR; Chakri Malakpet, PE, CFM, Mary Horvath, PE, CFM, CH2M
• Changing Flood Risks in the Central Valley under Climate Change: Presenter(s): Armin Munewar, CH2M
• Tracking the American River Watershed Flood Threat throughout Water Year 2016: Presenter(s): Ben Tustison, MBK Engineers Co-author(s): Brett Whitin, California-Nevada River Forecast Center; Pete Ghelfi, Sacramento Area Flood Control Association

9:00am - 10:30am
Technical Session: Local Flood Management Efforts in California
Session Chair: Susan Gilson, NAFSMA
• 2015 Floodplain Management Plan for Unincorporated Maricopa County: Presenter(s): Laurie T. Miller, PE, LTM Engineering, Inc.; Mark Frago, AICP, CFM, Flood Control District of Maricopa County
• Collaborative Flood Risk Reduction Projects in the Greater Sacramento Region: Presenter(s): Wilbur Huang, Jason Brabec, Michael Zelazo, CA DWR
• Thousand Palms Flood Control Project – Protection for Desert Communities and the Environment: Presenter(s): Dan Charlton, Coachella Valley Water District; Mark Salmon, Parsons Brinckerhoff
• Challenges in Establishing Floodplain Protection on Upper Berryessa Creek: Presenter(s): Ira Artz, PE, Tetra Tech Co-author(s): Judy Nam, PE, SCVWD; Amanda Cruz, CHMM, USACE; James Manitakos, SCVWD; David Munro, PWS, Tetra Tech

9:00am - 12:30pm
Basic CRS – 200-400 Series: Introduction to the Community Rating System: For Communities interested in joining the Community Rating System
Instructor: Paul Mason
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 main focus of this workshop will be an overview of the 2013 CRS Coordinator’s Manual which is now in effect. 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 83, of California’s 518 NFIP communities have joined the CRS. California CRS communities are saving their residential and business property owners more than $14 million each year.

10:30am - 11:00am
Break in Exhibit Hall
11:00am - 12:30pm
CONCURRENT SESSIONS
11:00am - 12:30pm
Panel: Flood Protection Projects – Showcase of Regional Flood Control Improvement Projects
Moderator: Bill Edgar, CVFPB President
This panel will provide a brief background and description of 5 regional flood control improvement projects that have been completed, are under construction, or are in final design. The variety of improvement alternatives will be highlighted from new levee construction to seepage cutoff wall installation to streambank erosion control. Projects include SAFCA, SBFCA, TRLIA, SJAFCA, and WSAFCA.

11:00am - 12:30pm
Panel: Cultural Resources and Flood Control Projects: The Federal Handle in Sur AB
Flood Control – Legal and Practical Considerations Regarding Cultural Resources
Moderator: Andrea Clark, Downey Brand LLP
Almost all flood control projects require environmental review triggered by a federal agency permit or decision, in which federal agencies must consider the impacts of their proposed actions on the environment, including impacts to archaeological, cultural, and tribal cultural resources. This presentation will build upon the presenters’ introduction to these issues at FMA in 2015, by examining the federal legal requirements for consideration of cultural and tribal resources issues
for flood control projects, including permitting under Section 408 of the Rivers and Harbors Act and Section 404 of the Clean Water Act and National Environmental Policy Act compliance. The presenters will give an overview of federal legal requirements as well as California’s new AB 52 requirements, and offer practical tips on approaching these issues both before and during flood control project construction.

Panelists: Andrea Clark, Downey Brand LLP  
Lisa Westwood, ECORP Consulting

**11:00am - 12:30pm**  
**Panel: Improving Community Resilience**  
Moderator: Lee Frederiksen, HDR Inc.

All communities face natural and human-caused disasters which can result in extensive losses and damages, as well as permanent changes. Between 2000 and 2014, there were between 84 and 242 Presidential disaster declarations each year from the combined effects of floods, hurricanes, tornadoes, earthquakes, fires, and other events. The devastating impacts of these disasters have demonstrated the inability of our communities to withstand and rapidly recover from disasters. Our traditional approach to dealing with hazards needs to be modified in order to make our communities more resilient. This panel will discuss what community resilience is, why resilience planning is important, and what programs are available to assist communities in improving their resilience.

**Panelists:**  
Stephen A. Cauffman, Materials and Structural Systems Division, Engineering Laboratory, National Institute of Standards and Technology  
Craig A. Davis, PhD, PE, GE, Water System Resilience Program Manager, Los Angeles Department of Water and Power  
Mary J. Jimenez, PE, PMP, Chief, Flood Planning Branch Central Valley Flood Planning, CA DWR  
Rohin Saleh, MSCE, PE, Supervising Civil Engineer, Watershed Planning Section, Alameda County Flood Control District

**11:00am - 12:30pm**  
**Technical Session: Coastal Flood Risk Analysis and Mitigation**  
Regency E

- **Climate Change Impacts on Joint Riverine and Coastal Flooding on Calleguas Creek in Ventura County, CA:** Presenter(s): James Gregory, PE, Environmental Science Associates  
  Co-author(s): Lily Verdone, The Nature Conservancy
- **Modeling Sea Level Rise: Planning, Mitigation, Adaptation and Resilience:** Presenter(s): Jimmy O’Brien, PhD, PE, FLO-2D Software, Inc.  
  Co-author(s): Noemi Gonzalez-Ramirez, PhD, FLO-2D Software, Inc.
- **Hydrodynamic Modeling of Flood Hazards for the South Bay Salt Pond Restoration Project:** Presenter(s): Megan Collins, AECOM  
  Co-author: John Bourgeois, Executive Project Manager, South Bay Salt Pond Restoration Project
- **Visualizing and Communicating Flood Risk in Coastal Communities:** Presenter(s): Nicole Metzger, Atkins; Ed Curtis, PE, CFM, FEMA Region IX

**11:00am - 12:30pm**  
**Technical Session: Conservation and Multi-benefit Project Planning in Support of the CVFPP**  
Regency F

- **The Central Valley Flood System Conservation Strategy: An Integrated Approach to Restoring Ecosystem Functions as Part of Flood Management Planning:** Presenter(s): Heidi Hall  
  Co-author(s): Debra Bishop, H. T. Harvey & Associates Ecological Consultants, Stacy Cepello, CA DWR
- **Floodplain Inundation Analyses to Support Multi-Benefit Project Development and Flood Management Planning:** Presenter(s): Jeremy Thomas, CH2M  
  Co-author(s): Mike Roberts, CA DWR; Mark Tompkins, PE, FlowWest
- **Assessing Potential Recreation and Open Space Benefits in the Central Valley of California for the Central Valley Flood Protection Plan:** Presenter(s): Brian Walker, PE, CFM, Douglas Rischbieter, CA DWR  
  Co-author(s): Heather Broome, AICP, Mary Jo Kealy, PhD, CH2M
- **Multi-Benefit Flood Planning in the San Joaquin River Basin-wide Feasibility Study:** Presenter(s): Eric Tsai, PE, CA DWR  
  Co-author(s): Anna Fock, PE, CA DWR, Jeremy Thomas, CH2M
12:30pm - 2:00pm
Lunch and Networking in the Exhibit Hall
Regency ABC

12:30pm - 2:00pm
POSTER SESSIONS
Exhibit Hall
Flood Control Channel Management - Quantitative Approach to Evaluate Maintenance Need: Justin Gragg, Environmental Science Associates
Storm Surge Resiliency Planning - Overview and Examples: Kelly Havens, Geosyntec Consultants
Water Data on the Web: Carly Narlesky, MBK Engineers

2:00pm - 3:30pm
CONCURRENT SESSIONS

2:00pm - 3:30pm
Panel: Comprehensive Levee Maintenance
Moderator: David Pesavento, CA DWR
The level of maintenance required for levees has changed in recent years compared with what was required when many of the levees were built. There are environmental regulations that restrict when, how, and if maintenance can be performed. This panel will discuss some of these challenges as well as opportunities they see for obtaining more stable permitting in the future.
Panelists: Mark List, CADWR
Scott Deal, CADWR
Chris Nuedeck, KSN
Tom Engler, MBK
Clyde Macdonald, Central Valley Flood Protection Board

2:00pm - 3:30pm
Panel: Working Together – Flood Risk, Permitting Requirements and Enhancing the Permitting Process
Moderator: Laura Hollender, CA DWR
This panel will provide the audience with a short introduction to the various regulations that may pertain to flood damage reduction and other projects in the floodplain, describe the processes project proponents may need to complete for authorization/permission of projects, and explore opportunities for enhancing the permitting process.
Panelists: Liz Lee, Regional Water Quality Control Board
Jennifer Hobbs, US Fish & Wildlife Service
Jeff McLain, National Marine Fisheries Service
Kelley Barker, CA Department of Fish & Wildlife
Andrea Buckley, Central Valley Flood Protection Board
Brian Luke/Ryan Larson, USACE
Kate Dadey, USACE

2:00pm - 3:30pm
Panel: Keeping Up With the NFIP
Moderator: Eric Simmons, Engineer, FEMA Region IX
The Biggert-Waters Flood Insurance Reform Act of 2012 (BW-12) was enacted July 6, 2012, followed by the passage of the Homeowner Flood Insurance Affordability Act (HFIAA) on March 21, 2014. The legislation requires changes to all major components of the National Flood Insurance Program (NFIP) including flood insurance, hazard mapping, and grants. Looming next year is reauthorization of the flood insurance. A discussion of FEMA’s Risk Mapping, Assessment and Planning (Risk MAP) work, which provides high quality flood maps and information, planning support, and outreach will be led by Mr. Curtis. An update on the Technical Mapping Advisory Council and other flood mapping initiatives will highlight additional changes to the NFIP. Lastly, Mr. McCord will discuss the latest on FEMA Mitigation grant programs.
Panelists: Edith Lohmann, Flood Insurance Specialist, FEMA Region IX
Ed Curtis, Engineer, FEMA Region IX
Robert McCord, Branch Chief, FEMA Region IX
Luis Rodriguez, Director, Engineering and Modeling, FEMA-HQ

2:00pm - 3:30pm
Technical Session: Riverine Multi-Benefit Projects – Channeling your Flood Protection for the Environment
Session Chair: Scott Dusterhoff, San Francisco Estuary Institute
- Case Studies of Multiple Objective O&M Programs as Examples for DWR Flood Control O&M Program: Presenter(s): Jeremy Thomas, Mitchell Swanson, CH2M, Debra Bishop, H. T. Harvey &
Associates Ecological Consultants

- Project Outreach and Stakeholder Engagement on a Tiny Budget – The Lower Walnut Creek Restoration Example: Presenter(s): Paul Detjens, PE, Contra Costa County Flood Control and Water Conservation District Co-author(s): Scott Dusterhoff, San Francisco Estuary Institute

2:00pm - 3:30pm  
Technical Session: Precipitation, Stream Flows and Extreme Flood Issues  
Session Chair: Mark Wills, Principal Engineer

- Focused Drainage Study for Extreme Storm Events, La Quinta, California: Presenter(s): John McCarthy, CFM, PE, Michael Baker International; Tim Jonasson, City of La Quinta
- Simulating Flooding in Urban Areas Using CHRE2D Model: Presenter(s): Jennifer Duan, PE, KKC Engineering and University of Arizona
- Tools to Validate Hydrologic Models: Presenter(s): Annjanette Dodd, PhD, PE, Kimley-Horn and Associates
- Resilience of Seasonal Streamflow Predictability to Climate Change in the Sierra Nevada: Presenter(s): Minxue He, CA DWR Co-author(s): Mitchel Russo, Michael Anderson, CA DWR

2:00pm - 3:30pm  
Technical Session: Coastal – Hazards and Mapping  
Session Chair: Alex Yescas, Harris and Associates

- Probabilistic Tsunami Hazard Analysis Maps: Risk Reduction Applications in California: Presenter(s): Rick Wilson, California Geological Survey
- California Coastal Flood Modeling and Effects of Sea Level Rise: Relating Future Conditions Coastal Flood Hazards to Existing Conditions FEMA Maps: Presenter(s): Bob Battalio, PE, ESA
- Using the FEMA GeoPlatform to Share Flood Risk Data Online - FEMA California Coastal Analysis and Mapping Project (CCAMP) Open Pacific Coast (OPC): Presenter(s): James Johnston, GISP, CFM, AECOM
  - Using Geostatistical Mapping Techniques to Develop FEMA Non-Regulatory Coastal Data: Presenter(s): Kristen MacDougall, CFM, Darryl Hatheway, CFM, AECOM

2:00pm - 3:30pm  
Technical Session: Yolo Bypass - Modeling  
Session Chair: Ray McDowell, CA DWR

- Application of a New Decision Support Tool for the Rapid Analysis of a Yolo Bypass Widening Scenario: Presenter(s): Chris Bowles, PhD, PE Co-author(s): Chris Campbell and Kevin Coulton, PE, CFM, cbec, inc. eco engineering
- Wallace Weir Fish Rescue Facility: Presenter(s): Barry O’Regan, PE, CFM, Kjeldsen, Sinnock & Neudeck, Inc. Co-author(s): Lewis Bair, PE, Reclamation District 108
- Development and Performance of an HEC-RAS 1D/2D Model of the Yolo Bypass: Presenter(s): Lily Tomkovic, EIT, UC Davis, Co-author(s): William Fleenor, PhD, UC Davis
- Hydrodynamic Modeling in the Yolo Bypass to Support Salmonid Habitat Restoration: Presenter(s): Chris Campbell, MS, cbec, inc, eco engineering, Co-author(s): Rusty Jones, PE, HDR, Inc.; Manny Bahia, PE, California DWR
2:00pm - 3:30pm  
**Technical Session: Current Levee Design and Evaluation Methods and Discussion for Risk and Flood Fighting**  
Session Chair: Ellen Cross, Environmental Science Associates  
- How Much Does Flood Fighting Affect the Probability of Levee Failure?: Presenter(s): Nekane Hollister, CA DWR  
- Using Tolerable Risk Guidelines to Evaluate Flood Risk Management Options: Presenter(s): Lawrence Roth, PE, GE, Arcadis  
  Co-author(s): Jessica Ludy, CFM, Arcadis  
- National and Regional Levee Systems Analysis in the UK and Relevance to USA: Presenter(s): Jonathan Simm, HR Wallingford  
  Co-author(s): Ben Gouldby, David Powers

2:00pm - 5:30pm  
**WORKSHOP:** CRS - 500 - 600 Series: Advanced CRS Requirements: In-Depth Presentation Tahoe on the CRS Requirements  
This workshop will cover in greater detail the 2013 CRS Coordinator’s Manual. More specifically the main CRS Activities that CRS Communities typically apply for. Attendees are encouraged to ask technical questions pertaining to the Activities, share their experiences and ideas on implementing CRS Activities, and suggest how the Program might be improved to encourage greater participation in California, Hawaii, and Nevada.  
Instructor: Paul Mason

3:30pm - 4:00pm  
Break in Exhibit Hall

4:00pm - 5:30pm  
**CONCURRENT SESSIONS**

4:00pm - 5:30pm  
**Panel: Populations at Risk – Management of Development and Floodplains**  
Moderator: David Pesavento, CA DWR  
Over the years more land development has spread into low lying areas in the Sacramento Valley. In more recent years more attention has been focused on the risks and challenges managing this development. The panel will discuss how the current situation was created, how to manage the risk the development brings, and how to manage similar situations in the future.  
**Panelists:**  
Bill Edgar, President, Central Valley Flood Protection Board  
Jeff Harris, Councilmen, City of Sacramento and Chair, Sacramento Area Flood Control Agency  
Tom Stallard, Council Member, City of Woodland

4:00pm - 5:30pm  
**Panel: Flood Risk**  
Moderator: Kristyne Van Skike, CA DWR  
The panel will provide information on State and federal funds available for community flood risk mitigation projects. Programs to be discussed include: Emergency Response Programs (DWR), Small Communities Flood Risk Reduction Program (CA DWR) Hazard Mitigation Grant Program FEMA, Pre Disaster Mitigation funds (FEMA), Flood Mitigation Assistance (FEMA), Community Development Block Grant (CDBG), and Natural Resource Conservation Service (NRCS) Financial Assistance Program.  
**Panelists:**  
Robert McCord, Federal Emergency Management Agency  
Julie Norris, CA Office of Emergency Services  
Jon Diedesch, CA Department of Housing and Community Development (Invited)  
Luis Laracuente, USDA Natural Resources Conservation Service  
Patrick Luzuriaga, CA DWR

4:00pm - 5:30pm  
**Technical Session: When Do The Numbers Lie? H&H Modeling**  
Session Chair: Om Prakash, WEST Consultants, Inc.  
- Floodplain Management: Regional Calibration for Urban Watersheds: Presenter(s): Cheng Soo, PE, CFM, Wood Rodgers, Inc., Gabriel Vallin, Santa Clara Valley Water District  
- Floodplain Management: Remembering Engineering Physics: Presenter(s): Dan Matthies, PE, CFM, Wood Rodgers, Inc.  
- Comparing HEC-RAS v 5.02-D Results with Verification Datasets: Presenter(s): Tom Molls, PE, PhD, DWRE, CFM, David Ford Consulting Engineers, Inc., Gary Brunner, PE, DWRE, MASCE, Hydrologic Engineering Center, USACE
4:00pm - 5:30pm
**Technical Session: Yolo Bypass – Collaboration and Planning**
Session Chair: Chris Bowles, cbc eco engineering
- Yolo Bypass Study for Central Valley Flood Protection Plan: Presenter(s): Eric Tsai, CA DWR
- Collaborative Approach to Joint Planning in the Yolo Bypass/Cache Slough Complex: Presenter(s): Timothy Washburn, JD, Sacramento Area Flood Control Agency; Eric Nagy, LWA
- Balancing life safety with ecological health and economic sustainability: challenging the status quo in the Sacramento River Valley and Delta: Presenter(s): Sara Schultz, USACE
- Yolo Bypass Integration: Presenter(s): Doug Brown, Douglas Environmental

4:00pm - 5:30pm
**Technical Session: The Cost of Flooding**
Session Chair: Eric Clyde, MWH Americas, Inc.
- A Forecasting Model to Estimate the Economic Impacts of Changes in Area Travel and Travel Routing Due to Flood Events: Presenter(s): Edward Granzow, PE, CH2M Co-author(s): Fatuma Yusuf, PhD, CH2M; Brian Walker, PE, CFM, CA DWR
- Assessing Economic Benefits Associated with the BWFS Multi-Objective Flood Planning: Presenter(s): Fatuma Yusuf, PhD, CH2M Hill Co-author(s): Mary Jo Kealy, PhD, Stephen Hatchett, PhD, CH2M Hill; Brian Walker, PE, CFM, CA DWR
- The Need to Address the True Cost of Long-Term Operations, Maintenance, Repair, Rehabilitation, and Replacement of the Flood System: Presenter(s): Chris Williams, P.E., CA DWR, Mark Oliver, CH2M

4:00pm - 5:30pm
**Technical Session: CRS/NFIP – Strategies and the Ins/Outs**
Session Chair: David Willard, Nevada Division of Water Resources
- Estimating ROI to Join the CRS Program: Presenter(s): Stephanie Routh, CFM, Dewberry Co-author(s): Maggie Mathis, CFM, Dewberry
- National Flood Insurance Program: Presenter(s): Amy Itschner, ANFI, PIAM, National Flood Services
- Community Outreach in a Digital Age: Presenter(s): Bruce Bender, CFM, Bender Consulting Services, Inc.
- Communicating Map Changes: Presenter(s): Mary Jo Vrem, Project Manager, FEMA

4:00pm - 5:30pm
**Technical Session: Improved Computing for Your Multi-Benefit Needs**
Session Chair: Samson Haile Selassie, CA DWR
- Large Scale 2D Flexible Mesh Flood Modeling Using GPUs: Presenter(s): Reinaldo Garcia, Hydronia Co-author(s): Pedro Restrepo, Mark Ziemer, Jonathon Thornburg, NOAA NWS; Pilar Garcia-Navarro, Jaier Murillo, Mario Morales, Asier Lacasta, University of Zaragoza, Spain; Ted Rigby, Atkins; Colin Mazengarb, Mineral Resources Tasmania, Australia; Cameron Jenkins, Rienco, Australia
- TUFLOW GPU – Update on the Ongoing Evolution of Flood Modeling for More Informed Catchment and Urban Flood Management: Presenter(s): Chris Huxley, TUFLOW
- Butte Basin Overflow Area: 2D Modeling to Analyze Flood Management and Ecosystem Restoration Actions: Presenter(s): Devinder S. Dhillon, PE, Kanapathippillai (Mathy) Mathiyaraseni, PE, CA DWR Co-author(s): Mahesh Gautham, PE, David Chen, PE, Raj Subedi, PE, CA DWR
GUIDED WALKING TOUR

Mark your calendar for Sept 8, 5:45pm, to join a guided walking tour through the streets of Old Sacramento, facilitated by several of Sacramento’s flood risk experts. The tour will start in front of the mini-donut shop at 900 2nd St in Old Sacramento across the street from the California State Railroad Museum and finish at the California State Railroad Museum. This is a unique opportunity to learn about the founding of the “River City” over 150 years ago and view the imprints of initial efforts to protect Sacramento from flooding. In keeping with the evening’s history theme, a brief presentation will be given at the Railroad Museum describing how our engineering and planning predecessors analyzed flooding and approached managing floodplains both in the Central Valley and in other parts of the U.S. It is very likely it will be hot so please dress and prepare appropriately.

In keeping with the evening’s history theme, two brief presentations will be given at the Railroad Museum. Keven Coulton, with cbec eco engineering, will describe how our engineering and planning predecessors analyzed flooding and approached managing floodplains both in the U.S. and in the Central Valley; Cait Plantaric, with DWR’s Division of Flood Management, will provide information about historic floods on the Sacramento and American rivers and the efforts to manage those floods, including realigning the American River.

California State Railroad Museum and Dinner Reception
9:00am - 10:30am 
**Technical Session: Massive Scale Hazard Identification and Analysis**  
*Regency E*

Session Chair: Jeff Harris, WEST Consultants  
- Modeling to Support Planning, in a Low-Flow, Rapidly Developing Environment in Western Australia: Presenter(s): Mark Britton, DHI Water and Environment Co-author(s): S. Suter, DHI; M. MacKay, Department of Water, Perth, WA; C. Sanford, Metropolitan Redevelopment Authority, Perth, WA  
- Application of the New HEC-RAS 5.0 for Identification of Hazardous Areas in Louisville, Kentucky: Presenter(s): Rachel Sills and Mark Forest, HDR, Inc.; Stephanie Laughlin, Louisville & Jefferson County Metropolitan Sewer District  
- Flexing the System: DWR CVFPP Reconnaissance Reservoir Management Study: Presenter(s): Anna Fock, CA DWR Co-author(s): Nathan Pingel, David Ford Consulting; Robert Leaf, CH2M  
- 2D Hydrologic/Hydraulic Modeling for Urban Drainage Design and Stormwater Master Planning in Clark County: Presenter(s): Harshal Desai, PE, CFM, Brian Rowley, PE, CFM, Atkins; Andrew Trelease, PE, CFM, Clark County Regional Flood Control District

9:00am - 10:30am 
**Technical Session: Alluvial Fan Planning, Guidance and Tools** 
*Regency F*

Session Chair: John Moynier, Stantec  
- Guidance for Channel Grade Stabilization Planning and Design Assessment Tool: Presenter(s): Bruce Phillips, PACE Advanced Water Engineering  
- Using an Integrated Approach to Characterizing Alluvial Fan Flood Hazards - A Case Study on a Highly Managed and Developed Alluvial Fan: Presenter(s): Christina Leonard, MS, GIT, USACE Co-author(s): Lewis Hunter, PhD, PG, Peter Blodgett, PE, John West, PE, Scott Stonestreet, PE, USACE

9:00am - 10:30am 
**Technical Session: A Flood of Fishy Issues**  
*Golden State AB*

Session Chair: Rajat Saha, CA DWR  
- Multi-Benefit Flood Management on Deer Creek, Tehama County, CA: Presenter(s): Mark R. Tompkins, PE, PhD, FlowWest, Co-author(s): John Cain, American Rivers; Paul Brunner, Brunner Engineering and Consulting, Inc.  
- Accounting for Sediment and Geomorphic Processes in the DWR Recommended Option for Yolo Bypass Expansion: Presenter(s): Michael Mierzwa, CADWR Co-author(s): Jeremy Thomas, Mitchell Swanson, CH2M Hill  
- Farms a Floodplain Habitat: A Summary of five Years of Experimental Flooding of Agricultural Land: Presenter: Lynn Takata, CA DWR  
- Tribal Cooperation and Design of a Multi-Objective Fish Passage Structure on Kelsey Creek, California: Presenter(s): Anthony Falzone, CFM, FlowWest; Karola Kennedy, Elem Indian Colony; Sarah Ryan, Big Valley Rancheria Co-author(s): Thomas Smythe, Lake County

9:00am - 10:30am 
**Technical Session: Flood Warning/Emergency Response**  
*Capitol View*

Session Chair: George Booth, Sacramento County  
- DWR CVFPP: Assessing and increasing Mitigation Time Through Non-structural Actions: Presenter(s): Boone Lek, PE, CA DWR Co-author(s): Sami Nall, PE, CA DWR; Nathan Pingel, PE, David Ford Consulting Engineers, Inc.  
- Flood Wave Travel Time Estimates for the North, Central, and San Francisco Bay Hydrologic Region: Presenter(s): Angelique Fabbiani-Leon, CA DWR; Chong Vang, PE, GEI Consultants, Inc. Co-author(s): Mitchel Russo, PE, CA DWR; Mark Fortner, PE, LS, GEI Consultants, Inc.

9:00am - 10:30am 
**Technical Session: Multiple Objectives Naturally**  
*Carmel AB*

Session Chair: Tony Bertrand, City of Sacramento  
- Building a Stream Design Team to Deliver Resilience: Presenter(s): Jeffrey Sickles, PE, CFM, Enginuity Engineering Solutions; Chris Sturm, Colorado Water Conservation Board  
- The Geomorphic Dredge Approach – Using Tidal Hydraulic Geometry Relationships to Design a Dredging Project: Presenter(s): Roger Leventhal, PE, Marin County Flood Control  
• Assessing The Ecological Benefits of Floodplain Restoration Using Targeted Processes, Habitats, Species, and Stressors: Presenter(s): Craig Williams, CA DWR Co-author(s): Michael Yun, Anderson Krygie; Ron Melcer, CA DWR; Mary Jo Kealy, PhD, Kirstin Skadberg, PhD, CH2M, John Hunter, PhD, H.T. Harvey & Associates

10:30am - 11:00am  Break In The Exhibit Hall

11:00am - 12:30pm  CONCURRENT SESSIONS

11:00am - 12:30pm  Technical Session: Learning from “2D” (Modeling)
Regency F

Session Chair: Jai Singh, cbec ecoresourcesengineering

• Evaluating Flood Management on Santa Rosa Creek – Lessons Learned from Integrated Hydrologic and 2D Hydraulic Modeling: Presenter(s): Carlos Diaz, PE, Environmental Science Associates Co-author(s): James Gregory, Elizabeth Andrews, Environmental Science Associates; Chris Delaney, Sonoma County Water Agency

• A Detailed 2D Modeling Approach to Mapping the 1% Coastal Floodplain for Santa Clara County: Presenter(s): Emily Zedler, Tao Shen, Dale Kerper, Santa Clara Valley Water District

• The Coming Flood of 2D Models: Presenter(s): Mitchell Blum, PE, CFM, HDR, Inc.

• Application of two-dimensional capabilities of HEC-RAS 5.0 for current and future flood risk management planning and operations within the Los Angeles County Drainage Area, California: Presenter(s): D.L. Silvertooth, PE, CFM, S.C. Evans, PE, CFM, USACE

11:00am - 12:30pm  Technical Session: Dam Breach, Bypasses and Overflow Area Modeling
Golden State AB

Moderator: Andrea Lobato, DWR

• Dam Breach Study of the Mary Street and Alessandro Dams in Series: Presenter(s): Cameron Jenkins, PE, Atkins Co-author(s): Deborah De Chambeau, PE, Riverside County Flood Control; Joseph Dluzak, PE, GENTERRA Consultants, Inc.; Brian Schalk, PE, CFM, HELM Consultants

• The Delta’s Manhattan Project: Delta Knowledge Improvement Program: Presenter(s): Joel Dudas, CA DWR

• Comparing 1D and 2D Strategies for Modeling the Butte Basin Overflow Area with HEC-RAS v5.0: Presenter(s): Tom Molls, PE, PhD, DWRE, CFM, Ric McCallian, PE, William Sicke, PE, David Ford Consulting Engineers, Inc.

• Integrated HEC-RAS 2D Models for the Sacramento River Basin Floodplains and Bypass Systems for Improved Flood Risk and Ecosystem Management Analyses: Presenter(s): Chakri Malakpet, PE, CFM, CH2M Co-author(s): Yiguo Liang, PE, Rajmani Subedi, PE, PH, CFM, GIS, Ricky Doung, CA DWR; Mary Horvath, PE, CFM, Paul Robinson, CH2M

11:00am - 12:30pm  Technical Session: Mapping Processes and Elements
Capitol View

Session Chair: Joseph Thomas, AECOM

• Re-tooling Resiliency - Managing Floodplains with Floodways: Presenter(s): Michael Nowlan, PE, CFM, Wood Rodgers, Inc.
• 40 ppsm Super-LiDAR for Floodplain Management, Any Benefits?: Presenter(s): Hassan Kasraie, PE, CFM, Kasraie Consulting and Channel Islands Regional GIS Collaborative
• Levee Vulnerabilities Web-Application on FERIX: Presenter(s): Greg Harvey, PE, CA DWR Co-author(s): Jeremy Hill, PE, CA DWR
• Float Your Own Boat - Part Two: The Latest Thinking in Non-NFIP Flood Insurance: Presenter(s): Kathleen Schaefer, PE, CFM, CCRM
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